UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
FORM 10-K

(Mark One)

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2020

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from to .

Commission file number: 001-39212

PPD, Inc.

(Exact name of registrant as specified in its charter)

Delaware	**45-3806427**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

929 North Front Street, Wilmington, North Carolina 28401
(Address of Principal Executive Offices) (Zip Code)
910-251-0081
Registrant's telephone number, including area code

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	**Trading Symbol(s)**	**Name of each exchange on which registered**
Common Stock, par value $0.01 per share	PPD	The NASDAQ Stock Market LLC (Nasdaq Global Select Market)

Securities registered pursuant to section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.
Yes ☐ No ☒

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act.
Yes ☐ No ☒

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports); and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	☐	Accelerated filer	☐
Non-accelerated filer	☒	Smaller reporting company	☐
		Emerging growth company	☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. Yes ☐ No ☒

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes ☐ No ☒

The aggregate market value of the common stock held by non-affiliates of the registrant, based upon the closing sale price as reported on Nasdaq on June 30, 2020, the last business day of the registrant's most recently completed second quarter, was approximately $1,849.2 million. For purposes of this computation, shares of the registrant's common stock held by affiliates, including executive officers, directors and certain holders known to the registrant, have been excluded.

As of February 19, 2021, the registrant had outstanding 350,309,157 shares of common stock.

DOCUMENTS INCORPORATED BY REFERENCE

No items are incorporated by reference into this Annual Report on Form 10-K.

PPD, INC.
ANNUAL REPORT ON FORM 10-K
FOR FISCAL YEAR ENDED DECEMBER 31, 2020
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FORWARD-LOOKING STATEMENTS AND RISK FACTOR SUMMARY

This Annual Report on Form 10-K contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the "Securities Act"), and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). Such forward-looking statements reflect, among other things, our current views with respect to, among other things, the following: our current expectations and anticipated results of operations, our financial performance, the impact from the novel coronavirus disease ("COVID-19") pandemic, the continued reliance of the biopharmaceutical industry on outsourcing to contract research organizations ("CROs"), the continued growth in research and development spending in the biopharmaceutical industry, estimated growth rates in addressable markets, and our ability to effectively recruit, train, develop and retain talented individuals. These forward-looking statements are subject to known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements, market trends or industry results to differ materially from those expressed or implied by such forward-looking statements. Therefore, any statements contained herein that are not statements of historical fact may be forward-looking statements and should be evaluated as such.

These statements often include words such as "anticipate," "expect," "suggest," "plan," "believe," "intend," "project," "forecast," "estimates," "targets," "projections," "should," "could," "would," "may," "might," "will," and other similar expressions. We base these forward-looking statements on our current expectations, plans and assumptions that we have made in light of our experience in the industry, as well as our perceptions of historical trends, current conditions, expected future developments and other factors we believe are appropriate under the circumstances at this time, including the impact from the COVID-19 pandemic. As you read this Annual Report on Form 10-K, you should understand that these statements are not guarantees of performance or results. The forward-looking statements contained herein are subject to and involve risks, uncertainties and assumptions and you should not place undue reliance on these forward-looking statements. Although we believe that these forward-looking statements are based on reasonable assumptions at the time they are made, actual results might differ materially from those expressed in the forward-looking statements. In evaluating forward-looking statements, current and prospective shareholders should specifically consider various factors, including the risks listed below and those outlined under Part I, Item 1A, "Risk Factors," in this Annual Report on Form 10-K.

We are providing the following summary of the risk factors contained in this Annual Report on Form 10-K to enhance the readability and accessibility of our risk factor disclosures. We encourage you to carefully review the full risk factors contained in this Annual Report on Form 10-K in their entirety for additional information regarding the material factors that make an investment in our securities speculative or risky. Some of the factors, risks and uncertainties that might materially affect the forward-looking statements contained herein and may make an investment in our securities speculative or risky include, but are not limited to, the following:

- any failure of our backlog to accurately predict or convert into future revenue;
- the fact that our customers can terminate, delay or reduce the scope of our contracts with them upon short notice or with no notice;
- the impact of industry, customer and therapeutic area concentration;
- consolidation amongst our customers, and the potential for rationalization of the combined drug development pipeline, resulting in fewer products in clinical development;
- our ability to accurately price our contracts and manage our costs associated with performance of such contracts;
- any failures in our information and communication systems, including cybersecurity breaches, impacting us or our customers, clinical trial participants or employees;
- our dependence on our technology network, and the impact from upgrades to the network;
- any failure to perform services in accordance with contractual requirements, regulatory standards and ethical standards;
- our ability to access clinical research sites, attract suitable investigators or enroll a sufficient number of patients (including as a result of the COVID-19 pandemic) for our customers' clinical trials;
- any failure by us to comply with numerous privacy laws;
- our ability to keep pace with rapid technological changes that could make our services less competitive or obsolete;
- our ability to recruit, retain and motivate key personnel, including the loss of any key executive who becomes seriously ill with COVID-19;

- our dependence on third parties for critical goods and support services, including a significant impact from the COVID-19 pandemic on our suppliers;
- any violation of laws, including laws governing the conduct of clinical trials or other biopharmaceutical research, and anti-corruption laws, such as the U.S. Foreign Corrupt Practices Act and the United Kingdom Bribery Act of 2010;
- competition between our existing and potential customers and the potential negative impact on our business;
- our management of business restructuring transactions and the integration of acquisitions;
- risks related to the drug and medical device development services industry that could result in potential liability that could affect our business, reputation and financial condition;
- any failure of our insurance to cover the potential liabilities, including indemnification obligations, associated with the operation of our business and provision of services and changes to our insurance coverage;
- our use of biological and hazardous materials, which could violate law or cause injury or death, resulting in liability;
- international or U.S. economic, currency, political and other risks, such as those from the COVID-19 pandemic;
- disruptions to our operations by the occurrence of a natural disaster, pandemic (such as the COVID-19 pandemic), or other catastrophic events;
- the current and uncertain future impact from the COVID-19 pandemic on our business, growth, reputation, prospects, financial condition, results of operations (including components of our financial results), cash flows and liquidity;
- changes in tax laws, such as U.S. tax reform, or interpretations of existing tax laws;
- economic conditions, import/export implications and regulatory changes relating to the United Kingdom's exit from the European Union;
- any inability to adequately protect our intellectual property or the security of our systems and the data stored therein;
- our investments in third parties, which are illiquid and subject to loss;
- the substantial value of our goodwill and intangible assets, which we might not fully realize, resulting in impairment losses;
- difficult and volatile conditions in the capital and credit markets and in the overall economy, including those caused by the COVID-19 pandemic;
- the fragmented and highly competitive nature of the drug development services industry;
- changes in trends in the biopharmaceutical industry, including decreases in research and development spending and outsourcing;
- the potential adverse effect that the political, economic and/or regulatory influences and changes impacting the United States and international healthcare industry could have on both our customers' and our businesses, including as a result of healthcare reform;
- any patent or other intellectual property litigation we might be involved in;
- risks related to our indebtedness;
- risks related to ownership of our common stock;
- the significant influence certain stockholders have over us; and
- other factors beyond our control.

These cautionary statements should not be construed by you to be exhaustive and are made only as of the date hereof. We undertake no obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.

When we use the terms "PPD," the "Company," "we," "us" or "our" in this Annual Report on Form 10-K, we mean PPD, Inc. and its subsidiaries on a consolidated basis, unless the context indicates otherwise.

WEBSITE AND SOCIAL MEDIA DISCLOSURE

We use our website (www.ppd.com) and our corporate Facebook, LinkedIn, and Twitter accounts as channels of distribution of Company information. The information we post through these channels may be deemed material. Accordingly, investors should monitor these channels, in addition to following our press releases, Securities and Exchange Commission (the "SEC") filings and public conference calls and webcasts. The contents of our website and social media channels are not, however, a part of this Annual Report on Form 10-K.

TRADEMARKS AND SERVICE MARKS

All trademarks, trade names, product names, graphics and logos of PPD contained herein are trademarks or registered trademarks of PPD, Inc. or its subsidiaries, as applicable, in the United States and/or other countries. All other party trademarks, trade names, product names, graphics and logos contained herein are the property of their respective owners. The use or display of other parties' trademarks, trade names, product names, graphics or logos is not intended to imply, and should not be construed to imply, a relationship with, or endorsement or sponsorship of PPD, Inc. or its subsidiaries by such other party. Solely for convenience, we may refer to trademarks in this Annual Report on Form 10-K without the TM and ® symbols. Such references are not intended to indicate, in any way, that we will not assert, to the fullest extent permitted by law, our rights to our trademarks. To the extent other trademarks appear in this Annual Report on Form 10-K, they are the property of their respective owners.

INDUSTRY AND MARKET DATA

Market data used throughout this Annual Report on Form 10-K is based on management's knowledge of the industry and the good faith estimates of management. All of management's estimates presented herein are based on industry sources, including analyst reports and management's knowledge. We also relied, to the extent available, upon management's review of independent industry surveys and publications prepared by a number of sources and other publicly available information. We are responsible for all of the disclosure in this Annual Report on Form 10-K and while we believe that each of the publications, studies and surveys used throughout this Annual Report on Form 10-K are prepared by reputable sources and are generally reliable, we have not independently verified market and industry data from third-party sources. All of the market data used in this Annual Report on Form 10-K involves a number of assumptions and limitations and therefore is inherently uncertain and imprecise, and you are cautioned not to give undue weight to such estimates. Projections, assumptions and estimates of our future performance and the future performance of the industry in which we operate are necessarily subject to a high degree of uncertainty and risk due to a variety of factors, including those described in "Risk Factors," in Part I, Item 1A of this Annual Report on Form 10-K and elsewhere in this Annual Report on Form 10-K. These and other factors could cause results to differ materially from those expressed in our estimates and beliefs and in the estimates prepared by independent parties. In addition, certain of these publications, studies, surveys, and market data that are included in this Annual Report on Form 10-K were published before the global COVID-19 pandemic and therefore do not reflect any impact of the COVID-19 pandemic on any specific market or globally.

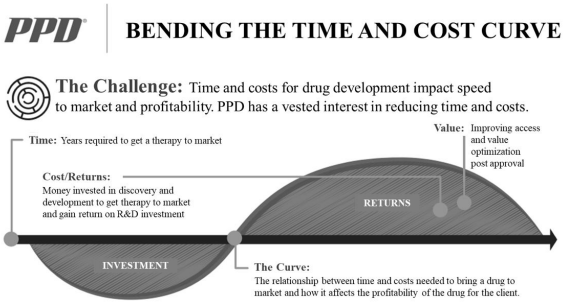
Part I

Item 1. Business

Our Company

We are a leading provider of drug development services to the biopharmaceutical industry, focused on helping our customers bring their medicines and other treatments to patients around the world. We have been in the drug development services business for 35 years, providing a comprehensive suite of clinical development and laboratory services to pharmaceutical, biotechnology, medical device and government organizations, as well as other industry participants. We have deep experience across a broad range of rapidly growing areas of the drug development industry and engage with our customers through a variety of commercial models, including both full-service and functional service partnerships and other offerings tailored to address the specific needs of our customers. We have two reportable segments, Clinical Development Services and Laboratory Services.

Our purpose and mission are to improve health by helping our customers deliver life-changing therapies to patients. We pursue our purpose and mission through our clinical development and laboratory services and our strategy to bend the cost and time curve of drug development and optimize value for our customers.



Our customers benefit from accelerated time to market because it results in lengthened periods of market exclusivity, and our real-world evidence solutions support the superior efficacy and value of their novel therapies. We believe our medical, scientific and drug development expertise, along with our innovative technologies and knowledge of global regulatory requirements, help our customers accelerate the development of safe and effective therapeutics and maximize returns on their research and development ("R&D") investments.

Our service offerings include both clinical development and laboratory services. Our clinical development services include all phases of development (i.e., Phases I-IV), peri- and post-approval and site and patient access services. Our laboratory services offer a range of high-value, advanced testing services, including bioanalytical, biomarker, vaccine, good manufacturing practice ("GMP") and central laboratory services.

We have developed significant expertise in the design and execution of complex global clinical trials, a result of conducting studies on global, national, regional and local levels across a wide spectrum of therapeutic areas for 35 years and in over 100 countries. Our customers entrust us to design, execute and deliver results on some of the most critical aspects of the drug development process for the key assets in their pipelines. In 2019, we were involved in 87 drug approvals. As of December 31, 2020, we had more than 26,000 employees worldwide, approximately 5,200 of whom hold advanced degrees, and we had locations in 46 countries.

Our deep understanding of the drug development process has allowed us to effectively invest in and evolve our service offerings to meet the needs of our customers. Examples of some of our recent initiatives and investments include:

- *Innovative site and patient access*. We have developed differentiated capabilities that meaningfully address two of the biggest challenges that our customers face: patient enrollment and site performance. Since 2013, we have deployed over $600 million making strategic acquisitions and bringing together complementary capabilities to create a delivery model which would be difficult to replicate. Through our Accelerated Enrollment Solutions ("AES") delivery model, we focus on meeting the unique feasibility, site start-up and patient recruitment needs of each study. We address these complex needs by leveraging (i) large data sets, including identified and consented personal data and (ii) our global site network spanning five continents.We believe our AES delivery model (i) represents the industry's largest aggregation of fully identified data on individuals who have provided their consent and indicated an interest in participating, or have participated, in clinical trials, and (ii) represents one of the world's largest wholly-owned vaccine site networks. In 2020, AES developed and deployed an innovative technology platform to prescreen clinical trial patients online, in real time and worldwide, without having to visit a clinical research site in person, allowing the clinical trials that AES supports to continue largely uninterrupted during the COVID-19 pandemic. Our AES delivery model allows us to support our customers in meeting their aggressive enrollment milestones and in improving diversity representation within trials.
- *Innovative peri-and post-approval studies*. Our customers require evidence-based solutions to help them demonstrate the real-world effectiveness, safety and value of newly approved therapies, which are essential to optimize the commercial potential of their products. Since 2015, we have invested over $200 million to enhance our peri- and post-approval services and have significantly expanded our capabilities in this growing area, providing our customers with service offerings in areas such as (i) market access, (ii) health economics modeling and (iii) patient-centered research. During 2020, in connection with new COVID-19 vaccines and therapeutic studies, we leveraged our scientific expertise and data to optimize and adapt study design and site selection to account for new and emerging COVID-19 pandemic hotspots. These capabilities continue to be important as our customers pursue post-approval safety studies, especially for vaccines, including in connection with the COVID-19 pandemic.
- *Expanded digital clinical trial capabilities*. In response to the COVID-19 pandemic, we collaborated with two of our investees, Science 37, Inc. and Medable, Inc., to enable the application of digital technologies to the clinical trial process, to reduce patient burden, and to remove inefficiencies. In furtherance of these objectives, we expanded our suite of digital trial solutions by combining operational solutions such as direct-to-patient and direct-from-patient models incorporating home health care nursing, study drug administration, sample collection and the pickup and return of study materials, and by providing digital solutions such as eConsent, telemedicine, devices and wearables, and electronic clinical outcome assessments ("eCOA"), including electronic patient reported outcomes ("ePRO"). These capabilities have allowed us to offer trial continuity for customers through the pandemic, even as site access was disrupted, and in the year ended December 31, 2020, we supported more than three times as many digital and virtual studies than we did in the prior comparable period, before the pandemic. We believe we are a leader in helping our customers leverage these technologies for their clinical development programs.
- *Advanced laboratory services*. In response to strong customer demand for our services, we have invested over $200 million since 2015 to significantly increase the size and operating capacity of our laboratory facilities, acquire innovative laboratory equipment, expand our test menus and build out differentiated information technology ("IT") systems and laboratory automation.
- *Purpose-built PPD Biotech*. Over the past five years, we pioneered the development of a new model to address the specific needs of the biotechnology sector.
- *Targeted geographic expansion.* We maintain a strong presence of experienced professionals in all key regions and countries necessary to support our customers' global drug development programs. In response to the growing importance of conducting global studies that include cohorts in Japan and China and the opportunity to serve local customers in those geographies with their global drug development needs, we have significantly increased the size and scale of our operations in those countries while maintaining the quality and operating standards demanded by our customers and regulatory authorities alike.

We believe these investments in our businesses and our innovative solutions have enhanced the strength of our clinical development and laboratory services and further differentiated our offerings from other clinical development organizations, increasing our total addressable market and providing us with meaningful competitive advantages and growth opportunities.

Our Industry

The drug development process involves the testing of drug candidates to demonstrate safety and efficacy in order to meet regulatory requirements. Developing new drugs for the treatment of human disease is an extremely expensive, complex, high-risk and time-consuming process. Bringing a new drug or medical device to market can take up to 15 years and cost $2.5 billion or more.

The drug development process consists of two stages: pre-clinical and clinical. In the pre-clinical stage, the new drug candidate is tested in vitro and in vivo in animals, generally over a one- to three-year period, to assess and optimize potential use in humans. After successful pre-clinical testing and receipt of required regulatory authorizations, the new drug candidate can be advanced to the clinical development stage, which involves testing in humans. We do not participate in the pre-clinical market.

The clinical stage is the most time-consuming and expensive part of the drug development process. In the context of the U.S. regulatory framework, during the clinical stage, the drug candidate undergoes a series of tests in humans, including healthy volunteers, as well as participants with the targeted disease or condition. Human trials usually start on a small scale to assess safety, efficacy and dosage (Phase I-II) and then expand to larger trials (Phase III) to test efficacy and safety in the target population. Phase IV, or post-approval clinical trials, involve monitoring or verifying the risks and benefits of a drug product. Real-world data and evidence studies, meaning data and evidence gathered outside of the context of clinical trials, are often used to assess usage, potential benefits or risks, safety, effectiveness and health economics to achieve successful market access and product uptake. The clinical drug development process and regulatory frameworks in other countries can vary from the United States framework, but in many ways are substantially similar.

Our Markets

As of December 31, 2020, our total addressable market was estimated to be approximately $55.0 billion, consisting of (i) clinical development services and (ii) laboratory services. We believe the market for Phases I–III clinical development services and Phase IV / peri- and post-approval clinical development services to be approximately $33.0 billion as of December 31, 2020 and anticipate that phases within this market will grow at average annual growth rates of approximately 6-9%. In addition, our AES delivery model allows us to participate in the economics and growth of the investigator and patient recruitment services market of clinical development services that otherwise would represent pass-through revenues, as it does for most other CROs. We believe this market to be approximately $11.0 billion as of December 31, 2020, and anticipate it will grow at an annual growth rate of approximately 6-7%. In addition to competing in the CRO market, through our strategic investments we have strengthened our position in the laboratory services market. We believe the laboratory services market, which includes both advanced testing services and central laboratory services, to be approximately $11.0 billion and anticipate it will grow at an annual growth rate of approximately 7-8%.

We believe there are five key trends affecting our end markets that will create increasing demand for our offering of services:

- *Growth in R&D spending*. Biopharmaceutical companies must continually invest in drug development in order to create innovative new therapies or use existing drugs to treat new indications, to address unmet medical needs and to replace lost revenues when their currently marketed drugs lose patent protection.
- *Increased levels of outsourcing by biopharmaceutical companies*. As biopharmaceutical companies continue to seek ways to reduce clinical development costs and focus resources on core competencies, we believe they will continue to increase the amount of clinical development work they outsource to CROs. Drivers of increased outsourcing include:
    - biopharmaceutical companies' desire for flexible cost structures and focus on core competencies;
    - experience, expertise, capability and value provided by CROs;
    - difficulty conducting large, global and complex clinical trials required by the current regulatory environment;

- ability to generate real-world data and evidence; and
- desire to address declining R&D productivity by utilizing more efficient means of conducting clinical trials.

- *Increased complexity in clinical development.* Clinical trials continue to increase in complexity due to a confluence of factors including, but not limited to, (i) new therapeutic modalities, (ii) the collection of more clinical trial endpoints, (iii) more specific patient inclusion/exclusion criteria, (iv) ever-changing regulatory requirements and (v) an expansion of evidence generation methods, such as electronic patient-reported outcomes and virtual clinical trials. All of these factors result in more complex trial design, challenges in enrolling protocol-eligible patients, longer duration of clinical trials and greater overall clinical trial cost. As a result, we expect biopharmaceutical companies to increasingly seek partners that have the experience and expertise to conduct cost-effective clinical studies. In particular, we believe large CROs who possess scale, geographic reach and differentiated capabilities to manage the complexity of clinical trials will continue to grow at a higher rate and take market share versus the overall industry.
- *Biotechnology sector growth.* The U.S. biotechnology sector has grown rapidly over the last decade and has emerged as a key customer segment for the drug development services industry. The rate of biotechnology companies' R&D spending growth has been higher than that of traditional pharmaceutical companies in recent years. This has largely been fueled by a robust funding environment, both public and private, with over $250 billion of capital raised for biotechnology companies in the last three years. Many biotechnology companies are smaller, discovery research-focused organizations that do not find it economically attractive to invest in the infrastructure and personnel necessary to conduct their clinical development programs on their own, and we believe they will continue to rely on CROs, like us, for their global drug development needs.
- *Increasing importance to prove value of new therapies.* As participants in the healthcare industry are increasingly focused on managing costs, biopharmaceutical companies need to find alternatives to align market constituents on the value of their treatments. The ability to perform peri- and post-approval studies to transform real-world data (such as medical claims data or electronic medical records) into real-world evidence provides biopharmaceutical companies a solution to quantify the value of new therapies to market constituents. Real-world data and evidence enable biopharmaceutical companies to develop better therapies and optimize the commercial potential of their new therapies. With increased R&D activity and competition among newly approved therapies in similar indications, we anticipate the continued adoption of real-world data and evidence to demonstrate the value of new medicines.

Our Competitive Strengths

The drug development services industry is highly competitive, consisting of hundreds of small, limited-scope service providers and a limited number of large full-service global development companies. While the industry has seen an increasing level of consolidation over the past several years, largely driven by the larger full-service providers, it remains highly fragmented. Our Clinical Development Services segment competes primarily with a small number of other global, full-service CROs, although we also compete against small and medium-sized niche CROs, in-house R&D departments of biopharmaceutical companies, universities and teaching hospitals. Our Laboratory Services segment competes primarily with the laboratory businesses of other large CROs, large global laboratory organizations, specialty laboratories and in-house laboratories of biopharmaceutical companies.

We believe we are well-positioned to serve the global biopharmaceutical industry in obtaining the approval for, and maximizing the market access and value of, their new medicines. We differentiate ourselves from others in our industry through our competitive strengths, which include:

Leading Drug Development Expertise with Scale and a Long Track Record of Excellence

We are one of the world's largest providers of clinical development services, with the scale to leverage investments in capabilities and innovative solutions to serve the increasingly complex and diverse needs across our extensive customer base. We have developed our scale, capabilities and track record of quality and innovation over a 35-year history, earning us a reputation as a leading global partner to the most sophisticated biopharmaceutical companies. We believe the combination of our scale, expertise, track record and innovative offerings positions us to continue to grow and take market share within the industry.

Differentiated Clinical Development Services

Building on our solid foundation, we have invested over $1.0 billion in recent years to further strengthen our competitive position through differentiated clinical development solutions designed to address our customers' needs and bend the time and cost curve of their clinical trials. Our key clinical development investments improve trial feasibility, shorten study start-up timelines, accelerate enrollment, improve site performance, reduce the time and cost of monitoring trial sites and establish the value of new medicines. We have leveraged these and other capabilities during the COVID-19 pandemic to mitigate challenges posed to clinical trials and progress research for our customers.

Comprehensive and Growing Laboratory Services

We own and operate an integrated and scaled suite of laboratory services. We offer a range of high-value, advanced testing services. We believe our scientific employee base with advanced degrees provides us with a competitive advantage – of our approximately 690 laboratory services scientists with advanced degrees, approximately 220 have PhDs and approximately 500 have MSs. We also believe we are differentiated from other laboratory providers by our global scale and the comprehensiveness of our service offering and focus on servicing the research needs of the biopharmaceutical industry. The ability to integrate patient data from the clinical trial and associated laboratory results has also contributed to increased customer wallet share. Our laboratory facilities have repeatedly been successfully audited by customers and regulatory authorities, and our track record of quality has significant reputational value. We believe we are one of the leading providers in each of the GMP, bioanalytical and central laboratory services sectors as well as in the growing vaccines market.

Large and Growing Diversified Customer Base

Our leading capabilities are evidenced by the quality, scale and diversity of our customers. Over the past five years, we have provided services to all of the top 50 biopharmaceutical companies in the world, as ranked by 2019 R&D spending, small and mid-size pharmaceutical companies and over 300 biotechnology customers as well as government, academic and non-profit organizations. We have long-standing relationships with our customers as demonstrated by having provided services for a decade or more to nine of our top ten customers by revenue for the year ended December 31, 2020. These relationships tend to have larger and longer-term contracts, which provide stability and visibility to our revenues. In addition, our customer base continues to grow and is very diverse, spanning key geographies, therapeutic areas and clinical stages of development. This diversity enables us to continuously develop and refine our expertise and enhance our ability to bend the cost and time curve of drug development and optimize value for our customers. We have also strategically positioned ourselves to benefit from the rapid growth of the biotechnology market through the formation and build-out of PPD Biotech.

Experienced, Highly Technical Organization with a Culture of Excellence and Industry-Leading Retention

We are led by an experienced and talented team of individuals who collectively have extensive experience in the CRO and biopharmaceutical industries and have first-hand knowledge of the challenges our customers face. We believe the technical and therapeutic expertise of our dedicated employees provides us with a competitive advantage—of our more than 26,000 employees as of December 31, 2020, approximately 5,200 hold advanced, masters or equivalent degrees, including over 1,000 MDs and PhDs. In recent years, we have made significant investments to build capabilities to effectively recruit, train, develop and retain talented individuals and teams. Our consistent focus on talent and culture has contributed to both overall retention and retention in key operational roles, such as project managers, that is significantly ahead of industry averages. For additional information, see "—Human Capital Resources."

Disciplined Operational and Financial Approach

We have strategically oriented our business towards the largest and highest growth areas of the drug development services market, including key therapeutic areas, the biotechnology end market and peri- and post-approval services, in order to position ourselves to win high value-add business. Our operating model is focused on providing our customers with a mix of full-service contracts and select functional service provider ("FSP") commercial arrangements in differentiated value-add areas. We have also leveraged our track record of operational discipline and expertise around contract pricing and backlog policy to create a highly visible and stable revenue base. Furthermore, we have focused our operations on key initiatives, including optimal utilization of billable staff and prudent cost management. Our positive historical operating results have allowed us to deploy significant capital into our business through strategic investments and acquisitions while also returning capital to our stockholders. We believe our strong financial profile demonstrates the quality and efficiency of our operating model and positions us for continued growth.

Our Growth Strategy

The key elements of our growth strategy to help our customers bend the cost and time curve of drug development include:

Further Strengthen Our Offerings in Existing and New Markets

Our global footprint, scale, integrated systems and deep scientific expertise enable us to conduct complex, multi-center clinical trials simultaneously throughout the world. We have a well-established presence in all of the major biopharmaceutical markets, including the United States, Europe and Asia, with over 4,400 professionals as of December 31, 2020 in Asia and scale and differentiation in Japan and China, two countries of increasingly strategic importance for drug development programs. We plan to further strengthen our leadership position by investing in geographies that are critical to address the needs of our customers and their drug development pipelines.

Expand Leading Therapeutic Expertise in Existing and Novel Areas

We have amassed deep scientific expertise in the largest and fastest growing therapeutic areas. In addition, we have developed specific capabilities in disciplines that cross therapeutic areas, such as rare diseases, vaccines and a broad array of chronic conditions. A significant amount of total R&D spend on late stage clinical trials continues to be related to hematology/oncology and chronic conditions, which are two areas in which we have significant experience and expertise.

In response to the COVID-19 pandemic, biopharmaceutical and biotechnology companies and government agencies have made significant investments to develop vaccines and anti-viral therapies to prevent and treat COVID-19 infections. We have significant global experience and expertise in infectious disease studies, and differentiated clinical and laboratory capabilities for vaccines trials, enabling us to support companies and government agencies across these programs. As of December 31, 2020, we won more than 140 awards related to treating or combating the spread of COVID-19 with anti-viral therapies and vaccines across both our segments. Additionally, we have enrolled over 75,000 patients in COVID-19 clinical trials to date.

We are also conducting work in growing areas of R&D innovation, such as immuno-oncology, cell and gene therapy, monoclonal antibodies, antibody drug conjugates (“ADCs”), ribonucleic acid (“RNA”) interference, messenger RNA and others. We intend to continue investing in our scientific and operational capabilities to further strengthen our leadership position in key therapeutic areas and position ourselves to take advantage of the evolving trends in the biopharmaceutical industry.

Build Upon Our Existing Dedicated Biotech Offering

Biotechnology companies focused on new and complex therapies have accounted for a large portion of new drug approvals and have driven significant growth in related R&D spending over the last few years. Large biopharmaceutical companies have had to fill gaps in their pipelines through strategic collaborations with, and acquisitions of, biotechnology companies, further increasing growth in the number of innovative, complex and global clinical trials. We were at the forefront of realizing these trends and formed our dedicated PPD Biotech model in 2014. Since 2015, we have more than doubled PPD Biotech annual authorizations and grown revenue by over 80%. We continue to leverage our sophisticated customer development activities within PPD Biotech, which include early identification of novel molecules and extensive pre-trial consultative advisory engagement with customers, to optimally position ourselves to win new business. PPD Biotech’s success is evidenced by the increase in our win rates from biotechnology companies whereby we have increased our average win rate from approximately 26% in 2016 to over 40% in 2020. We believe that our track record of serving biotechnology companies through our PPD Biotech model has earned us a reputation as the strategic partner of choice.

Increase Use of Our Innovative Site Network and Patient Enrollment Platform

Through our AES delivery model, we have developed an approach to directly serve our customers' needs by addressing patient enrollment and site performance challenges, which are two of the biggest challenges our customers face in clinical development. We believe our integrated strategy of combining technology with our large aggregation of identified and consented data and our global site network is the ideal approach to serving our customers. To date, AES has played a critical role in completing some of the most important and complex clinical trials for our customers. In response to the COVID-19 pandemic, AES deployed an innovative technology platform to prescreen clinical trial patients remotely, in real time and worldwide, without having to visit a clinical research site in person, allowing AES sites to expand patient reach. We plan to continue to build out our AES capabilities and further strengthen the value propositions we offer and deliver to our customers through this differentiated model.

In addition to providing us with a competitively advantaged asset, our AES delivery model is financially attractive as it allows us to participate in the economics and growth of the market for investigator and patient recruitment services that otherwise would represent pass-through revenues, as is the case for most other CROs.

Capitalize on our Growing Laboratory Segment

Our laboratory services offering is focused on the high-growth, innovative segment of laboratory services through its diverse range of high-value, advanced testing services. As an example, we have developed a significant and growing number of assays to address the testing needs of gene therapy, and several molecular, serology and functional assays that we believe will be critical to the success of COVID-19 vaccine trials. We also continue to expand our global laboratory services footprint. For example, we are in the process of opening a new laboratory in Suzhou, China, offering bioanalytical, biomarker and vaccine services, which we expect will be fully operational in 2021. Our Laboratory Services segment represents approximately 18.7% of our 2020 revenues and increased approximately 29.5% for the year ended December 31, 2020 as compared to the same period in 2019. It also affords us significant operating leverage and diversification, and provides higher backlog visibility and related conversion rates. Our Laboratory Services segment allows us to provide integrated offerings to customers that need both clinical development and laboratory services.

Continue to Invest in Innovation

We have consistently been, and are committed to, investing our time and resources into the improvement and expansion of our capabilities and service offerings. We continually assess the need to add new and innovative capabilities to reduce the cost and time required to generate evidence for our customers' product candidates. We believe that the biopharmaceutical industry is constantly evolving, and we are focused on evaluating opportunities in a disciplined manner that is both capital efficient and flexible in approach. For instance, during the COVID-19 pandemic, remote site monitoring and digitally enabled patient engagement capabilities, two capabilities that PPD has developed and invested in, became more widely adopted by customers. In addition, we are adept at successfully identifying and executing on acquisitions, joint ventures and strategic venture investments to pursue and amplify nascent technologies and capabilities for our customers' benefit, as evidenced, for example, by our investments in Science 37, Inc. and Medable, Inc.

Our Services

We are a leading provider of drug development services to the biopharmaceutical industry, offering comprehensive, integrated clinical development and laboratory services to our customers. We provide our services through our Clinical Development Services and Laboratory Services segments. Within each segment, we offer numerous services and solutions for our customers, and across segments our offerings are complementary so that customers may optimize their development programs and maximize value and outcomes by accessing our full suite of offerings.

Clinical Development Services

Our Clinical Development Services offerings span the lifecycle of clinical product development and include:

Product development and consulting services

We specialize in developing integrated product development strategies that provide biopharmaceutical companies with interdisciplinary preclinical, chemistry, manufacturing and controls, clinical and regulatory road maps for the development and marketing of their products and product candidates through the global product life cycle. Our services are designed to speed our customers' product candidates to market with reduced operational risk and increased visibility of reimbursement and commercial potential. Our team of physicians, scientists, regulatory professionals and biostatisticians with pharmaceutical expertise offers specialized guidance across all major therapeutic areas, including oncology, cardiovascular disease and critical care, neurology and psychiatry, infectious diseases, inflammatory and metabolic diseases and across a range of specialized disciplines, including cell and gene therapies, vaccines, biosimilars, pediatrics and rare diseases.

Early development services

We provide comprehensive support to early clinical development programs, including Phase I trials. We conduct early-phase studies at in-patient clinical facilities in Austin, Texas, Las Vegas, Nevada and Orlando, Florida. We complement these Phase I clinical research units with a global network of affiliated clinical trial sites which provide access to numerous special populations and disease indications and a fully integrated early development services team that provides streamlined program management, clinical monitoring, data management, biostatistics, clinical pharmacology, medical writing, regulatory and pharmacovigilance support. We have particular experience in the conduct of first-in-human studies and have specialized capabilities for laboratory assessments, including advanced flow cytometry, allowing rapid measurement of cell surface biomarkers. We also have capabilities to conduct glucose clamp and other endocrinology and metabolic study assessments.

Phases II-IV clinical trial management

We provide full service protocol management for Phases II-IV clinical research studies for investigational new drugs, biologics and medical devices. The core of our Clinical Development Services offering is a comprehensive global suite of services for Phases II-IV clinical trials. These services include:

- Protocol design;
- Clinical trial strategic feasibility and investigator site selection;
- Project management;
- Site study startup activities;
- Patient recruitment
- Clinical monitoring and data capture;
- Data management;
- Biostatistics;
- Safety medical monitoring/pharmacovigilance;
- Regulatory affairs;
- Medical writing;
- Global clinical supplies – including depots in Kiev, Ukraine; Moscow, Russia; Johannesburg, South Africa; and Athlone, Ireland;
- eClinical services;
- Quality assurance; and
- Virtual and digitally enabled trial solutions.

We provide these services under a variety of outsourcing models, including the traditional full-service model for which we provide all or substantially all of these services to our customers by trial or asset. We also offer our services through an FSP model in which we provide specific services by function ranging from staff augmentation to functional services across multiple trials, globally or by region. We are able to provide bespoke offerings with tailored services that are flexible and innovative to meet the specific needs of our customers.

In addition to managing trials for biopharmaceutical and biotechnology customers, we also provide clinical trial services to the U.S. government, including the National Institute of Allergy and Infectious Diseases ("NIAID") under the National Institute of Health. We provide support to the NIAID Division of AIDS, including monitoring services at domestic and international sites, laboratory audits, Good Laboratory Practice ("GLP") training and quality management, biostatistics and data management. We also support other U.S. government research priorities, such as developing a vaccine for the Zika virus and assisting in the development of a vaccine for COVID-19 and the ongoing development of COVID-19 therapies, through subcontracts with other U.S. government contractors.

We have extensive expertise and experience in numerous therapeutic areas, including oncology/hematology, infectious diseases, vaccines, respiratory diseases, metabolic/endocrine, neuroscience, pediatric, cardiovascular, analgesia, gastroenterology, rare diseases, and general medicine including chronic ambulatory conditions.

Accelerated Enrollment Solutions

Our AES business unit includes a unique-in-industry patient recruitment capability, coupled with a large independent network of dedicated clinical research investigator sites. Through AES, we offer services to complement the traditional site selection model, speeding study enrollment through efficient and predictive centralized recruitment while leveraging our network sites exclusively or in conjunction with independent investigators. This model allows us to identify patients who may benefit from specific trial participation at significantly higher rates than a traditional site model alone. Our SynexusPlus offering is an adaptable solution that allows us to provide more patients per site, with faster study startup and a reduction in the number of sites using a results-based single-price-per-patient model. SynexusPlus may be combined with our core global clinical trial management services to create PatientAdvantage, a fully outsourced trial solution that is designed to offer patient enrollment and budget certainty, as well as speed and cost savings, through streamlined contracting terms, capitated budget constructs, fewer sites and reduced recruiting time.

Peri- and post-approval services

Through this offering, we provide real-world research and evidence-based solutions to demonstrate the real-world effectiveness, safety, and value of biopharmaceutical and biotechnology products. We provide our customers with critical scientific expertise and insight across the development continuum of a product, from early development through loss of exclusivity, with a primary focus on demonstrating the real-world effectiveness, safety and value of treatments. We specialize in engaging with key market constituents early in the development process to create an evidence strategy that will meet the needs of all relevant stakeholders.

Medical communications

We provide industry inbound and outbound peri- and post-approval contact center solutions focused on medical and clinical support to the biopharmaceutical industry. Our multidisciplinary team, consisting of highly trained health care professionals, including physicians, pharmacists, nurses and life science graduates, provides medical and technical information to our customers' patients with a focus on compliance, quality and delivery of what we believe to be best-in-class customer experiences. We support full portfolios of marketed products, providing local language expertise as well as a global reach. Live customer question and answering services are provided in multiple languages covering the major markets in which our customers sell their pharmaceutical products. Using dedicated teams, our programs are customized and flexible to meet each customer's evolving needs.

Laboratory Services

We own and operate an integrated and scaled suite of laboratory services. We offer a range of high value, advanced testing services, including bioanalytical, biomarker, vaccines, GMP and central laboratory infrastructure to support R&D. Throughout the drug development cycle, our customers benefit from global, comprehensive laboratory services. Our laboratory services accelerate drug development for small molecules, biologics and cell and gene therapies which we believe allows customers to make faster decisions about their products. We believe we are one of the leading providers in each of the GMP, bioanalytical and central laboratory services sectors, as well as in the growing vaccines market.

Bioanalytical laboratory services

We provide bioanalytical services through our highly automated locations in Richmond, Virginia and Middleton, Wisconsin that are designed to be compliant with GLPs. Our bioanalytical laboratories analyze drug and metabolite concentrations from biological fluid and tissue samples within preclinical and human clinical studies. Our bioanalytical methods include: liquid chromatography combined with mass spectrometry ("LC-MS") and high-resolution mass spectrometry, high performance liquid chromatography, ligand-binding, enzyme-linked immunosorbent assay, radioimmunoassay, flow cytometry and cell-based assay support. Our bioanalytical laboratories support the complete service necessary for biologic, small molecule, oligonucleotide and cell and gene therapy development. This includes pharmacokinetic evaluation of the therapeutic agent, immunogenicity testing to determine the presence of antibodies, and cell-based assays to determine the neutralizing antibody effect of the antibodies. We have the proven ability to handle an increasingly diverse range of large molecules, which include therapeutic peptides, monoclonal antibodies and ADCs, as well as new areas such as glycans and biotransformation.

Biomarker laboratory services

Our biomarker laboratory core facility is located in Richmond, Virginia. The laboratory is closely aligned with both the central laboratories and bioanalytical laboratories to provide customized solutions for biomarker projects. The capabilities include LC-MS, ligand binding, flow cytometry and molecular genomics. Our technologies and applications enable the biomarker laboratory to develop or transfer methods and either perform sample analysis within the biomarker laboratory or transfer validated methods to the central laboratory or Phase I clinic as needed.

Vaccine science services

We perform testing for vaccines in our dedicated facility located in Richmond, Virginia. Our scientists perform immunogenicity testing to evaluate the efficacy of vaccines in inducing cellular and humoral immune responses and employ molecular detection methods, such as polymerase chain reaction testing to detect the absence of pathogens or to characterize attenuated vaccine strains following administration of a vaccine. Our service offering also includes providing dedicated laboratory space to conduct complex proprietary assays in support of multiple vaccine programs.

GMP laboratory services

We provide early preclinical development through post-approval testing services and product analysis laboratory services through our locations in Middleton, Wisconsin and Athlone, Ireland that are designed to be compliant with GMPs. Our product analysis services include analytical method development and validation, stability and quality control testing of product and pharmaceutical ingredients and impurities characterization for small molecules and biologics for all dosage forms, as well as analytical testing of biopharmaceuticals, inhalation devices and cell and gene therapies. Our Athlone laboratory offers the advantage of proximity to our growing number of European customers and allows us to conduct release testing of products to be marketed in Europe for our global customers.

Central laboratory services

With facilities in Highland Heights, Kentucky, Brussels, Belgium, Singapore and Shanghai, China, our central laboratories provide highly standardized safety and biomarker testing services with customized results databases for our customers. We focus on providing long-term, large-scale studies where laboratory measurement of clinically relevant endpoints is critical. Our central laboratories utilize the same standard operating procedures and maintain identical instruments in every facility. All of our facilities are College of American Pathologists ("CAP") accredited, and National Glycohemoglobin Standardization Program ("NGSP") and Centers for Disease Control and Prevention ("CDC") lipid standardization survey ("LSP") certified. All our facilities run the same CAP proficiency tests on a quarterly basis. In addition to these industry quality standards, we run our own unique global laboratory assay standardization survey program monthly on our most common analyses, ensuring continuity and consistency of data at all stages of a clinical project. We also standardize data collection and reporting on a global basis utilizing the same software platform, our Preclarus central laboratory database. This platform provides real-time data and eliminates the need to merge data sets from different regions. Our laboratories provide on-site biorepository services that enable storage and archiving of samples for future testing, including specialized biomarker testing of specific patient populations to speed drug discovery and development efforts. In 2018, we formed a global strategic alliance for pathology and molecular testing solutions with NeoGenomics to provide a fully integrated global pathology and molecular testing solution to our customers, further expanding our central laboratory services related to oncology clinical trial activities.

Intellectual Property

In the course of conducting our business, we have developed, and continue to develop and use proprietary software, systems, processes, databases and other intellectual property. We seek to protect our proprietary and confidential information and trade secrets through confidentiality agreements with employees, customers and other third parties, as well as administrative and technical safeguards. We rely on patent, copyright and trademark laws, as may be appropriate and applicable, to protect our other intellectual property rights. For example, we have applied for and/or obtained and maintain registration in the United States and other countries for numerous trademarks, including PPD®, PPD Biotech®, PPD Laboratories® and Preclarus®. We also enter into agreements with third-parties for the license and use of their intellectual property, although no one such license is considered to be material to the business as a whole. We do not have any material patents.

Government Regulation

Regulation of Drugs and Biologics

The development, testing, manufacturing, labeling, storage, approval, promotion, marketing, distribution and post-approval monitoring and reporting of pharmaceutical, biological and medical device products are subject to rigorous regulation by numerous governmental authorities in the United States at the federal, state and local level, including the United States Food and Drug Administration ("FDA"), as well as those of other countries, such as the European Medicines Agency (the "EMA") in the European Union, the Medicines and Healthcare products Regulatory Agency (the "MHRA") in the United Kingdom, the National Medical Products Administration ("NMPA") in China and the Pharmaceuticals and Medical Devices Agency ("PMDA") in Japan. These regulations apply to our customers and are generally applicable to us when we are providing services to our customers, either as a result of their direct applicability, through a transfer of regulatory obligations from our customers, or as a consequence of acting as local legal representative on behalf of our customers in a particular country or countries. Consequently, we must comply with all relevant laws and regulations in the conduct of our Clinical Development Services and Laboratory Services segments. The following discussion describes the role of the FDA in the clinical drug development process in the United States. Clinical trials conducted outside the United States are subject to the laws and regulations of the country where the trials are conducted. These laws and regulations might not be similar to the laws and regulations administered by the FDA and other laws and regulations regarding the protections of patient safety and privacy and the control of study pharmaceuticals, medical devices or other materials. FDA laws and regulations may apply to clinical studies conducted outside the United States if, for example, such studies are conducted under an investigational new drug application ("IND") or offered as support for an IND. However, some regions and countries do not allow for clinical trials to be conducted under foreign country legislation. Therefore, the FDA may waive certain requirements such as the institutional review board ("IRB") requirements for a foreign institutional review board/independent ethics committee ("IRB/IEC") that operates in accordance with Good Clinical Practice ("GCP") but may not meet may not meet all the IRB requirements contained in Title 21 Part 56 of the United States Code of Federal Regulations.

Prior to commencing human clinical trials in the United States, a company developing a new drug must file an IND with the FDA. The IND must include information about pre-clinical tests, manufacturing and control data, and a study protocol for the proposed clinical trial of the drug in humans. If the FDA does not object in writing within 30 days after filing, the IND becomes effective and the clinical trial may begin. A separate submission to an existing IND must also be made for each successive clinical trial conducted during product development. Each clinical trial must be conducted in accordance with an effective IND. Similarly, the development of new medical devices in the United States requires an investigational device exemption application ("IDE"), unless exempt, prior to conducting human clinical trials. For therapeutic and diagnostic products that combine drugs, devices, and/or biological products, these are considered combination products. The FDA will make a determination based on the prior mode of action as to which FDA center will take the lead on the review. Nonetheless, due to the nature of combination products, there can still be differences in regulatory pathways for each component. These differences can impact regulatory processes for all aspects of product development and management, including pre-clinical tests, clinical studies, manufacturing and control data as well as adverse event reporting.

The study protocol must also be reviewed and approved by an IRB/IEC for each principal investigator's site in which a study is proposed to be conducted and each IRB/IEC may impose additional requirements on the conduct of the study in its institution. IRB/IECs have the authority to review, approve and monitor clinical trials, and clinical trials are subject to oversight by IRB/IECs. The industry standard for the conduct of clinical trials is embodied in the FDA's regulations for IRB/IECs, investigators and sponsor/monitors, which regulations collectively are termed GCP by industry, and the GCP guidelines issued by the International Council for Harmonisation of Technical Requirements for Pharmaceuticals for Human Use ("ICH"), which have been agreed upon by industry and regulatory representatives from the United States, the European Union and Japan. GCP requirements address, among other things, IRBs, qualified investigators, informed consent, recordkeeping and reporting. Regulatory authorities enforce GCP requirements through periodic inspections, and violations of GCP requirements could result in enforcement actions including the issuance of warning letters, civil penalties, product recalls, criminal prosecutions or debarment from involvement in the submission of New Drug Applications/Biologics License Applications ("NDAs" and "BLAs," respectively). Our global standard operating procedures are written in accordance with all applicable FDA, EMA, MHRA, NMPA, PMDA, ICH and GCP requirements. This enables our work to be conducted locally, regionally and globally to standards that meet all currently applicable regulatory requirements. We must also maintain records and documentation in compliance with applicable regulatory requirements for each study for auditing by the customer and regulatory authorities.

In order to comply with GCP and other regulations, sponsors of clinical trials must, among other things:

- comply with specific requirements governing the selection of qualified investigators;
- obtain specific written commitments from the investigators;
- obtain IRB/IEC review and approval of the clinical trial;
- verify that appropriate patient informed consent is obtained before the patient participates in a clinical trial;
- ensure adverse drug reactions resulting from the administration of a drug or biologic during a clinical trial are medically evaluated and reported in a timely manner;
- monitor the validity and accuracy of data;
- maintain records regarding drug or biologic dispensing and disposition;
- instruct investigators and study staff to maintain records and reports; and
- permit appropriate governmental authorities access to data for review.

If a clinical trial is not conducted in accordance with regulatory requirements, the applicable regulatory agency may require that a clinical trial be modified, suspended or terminated, and we or our customers may be subject to a variety of sanctions. For example, violations could result, depending on the nature of the violation and the type of product involved, in the issuance of a warning or untitled letter, suspension or termination of a clinical study, refusal of the FDA to approve clinical trial or marketing applications or withdrawal of such applications, injunction, seizure of investigational products, civil penalties, criminal prosecutions, or debarment from assisting in the submission of new drug applications. IRBs may also suspend or terminate research not conducted in accordance with IRB requirements or that has been associated with unexpected serious harm to subjects. See Item 1A, "Risk Factors—Risks Related to Our Business—If we fail to perform our services in accordance with contractual requirements, regulatory standards and ethical considerations, we could be liable for significant costs or penalties and our reputation could be harmed," included elsewhere in this Annual Report on Form 10-K for additional information.

After receiving IRB/IEC approval, clinical trials usually start on a small scale to assess safety and then expand to larger trials to test both efficacy and safety in the target population. The trials are generally conducted in three phases (Phases I, II and III), which may overlap or be combined, although the FDA may require, or sponsors may voluntarily conduct, a fourth phase of clinical trials (Phase IV) as a condition of approval or to obtain additional data on the product under investigation, respectively. After the successful completion of the first three clinical phases, a company requests approval for marketing its product by submitting an NDA for a drug or a BLA for a biologic product. NDAs/BLAs are comprehensive filings that include, among other things, the results of all preclinical and clinical studies, information about how the product will be manufactured, additional stability data and proposed labeling. The FDA's review may last from several months to several years. Once the NDA/BLA is approved, the product may be marketed in the United States, subject to any conditions imposed by the FDA as part of its approval. The FDA may require a Risk Evaluation and Mitigation Strategy ("REMS"). REMS may be required by the FDA for a product where serious safety concerns exist in order to help ensure the benefits of the product outweigh its risks. All marketed products require post-marketing safety surveillance.

Regulation of Testing Facilities

Laboratories such as ours that provide information included in INDs, NDAs, BLAs and other regulatory submissions must conform to regulatory requirements designed to ensure the quality and integrity of the testing process and data. For example, our bioanalytical laboratories follow the GLP requirements adopted by the FDA, the Ministry of Health in the United Kingdom and by similar regulatory authorities in other countries, as applicable. Our product analysis laboratories follow the GMP requirements adopted by the FDA and by similar regulatory authorities in other countries. Both GLPs and GMPs require standardized procedures for all equipment, processes and analytical tests, for recording and reporting data, and for retaining appropriate records. To help ensure compliance with GLPs and GMPs, we have established standard operating procedures, working practice documents and processes, and have quality assurance personnel at our laboratory facilities to audit test data and inspect testing procedures, laboratory equipment and facilities.

In addition, laboratories that analyze human blood or other biological samples for the diagnosis and treatment of study subjects must comply with the Clinical Laboratory Improvement Act (the "CLIA"). The CLIA requires laboratories to meet staffing, proficiency and quality standards, and governs laboratory accreditation, inspection and certification. Our testing facility in Austin, Texas and our central laboratory in Highland Heights, Kentucky are CLIA-certified. A failure to comply with CLIA requirements may expose laboratories to civil and criminal penalties, including fines, imprisonment, and exclusion from federal healthcare programs. Non-compliant laboratories may also have their CLIA certificate suspended, limited, or revoked. These laboratories are also subject to applicable U.S. state laboratory requirements and to accreditation bodies governing their testing and reporting functions, including the CAP, CDC LSP and NGSP. Our central laboratories in Highland Heights, Kentucky, Brussels, Belgium, Singapore and Shanghai, China are all accredited by CAP. See Item 1A, "Risk Factors—Risks Related to Our Business—If we fail to perform our services in accordance with contractual requirements, regulatory standards and ethical considerations, we could be liable for significant costs or penalties and our reputation could be harmed," included elsewhere in this Annual Report on Form 10-K for additional information.

Regulation of Personal Information

We hold confidential personal health and other information relating to persons who have been, are and may in the future be involved in clinical trials or otherwise. The possession, retention, use and disclosure of such information is highly regulated, both in the United States and the other jurisdictions we are subject to, including but not limited to, applicable regulations arising from the Health Insurance Portability and Accountability Act of 1996 ("HIPAA"), as amended by the Health Information Technology for Economic and Clinical Health Act ("HITECH"), and the Privacy, Security and Breach Notification Rules, 45 C.F.R. Parts 160-164, that implement those laws; U.S. state privacy, security and breach notification and healthcare information laws; and the E.U. General Data Protection Directive (the "GDPR") and the U.K. Data Protection Act 2018.

We do not consider our service offerings to generally cause us to be subject to HIPAA as a directly covered entity; however, there are some limited circumstances where we enter into business associate agreements.

We endeavor to embrace sound information protection practices and have implemented data protection agreements with our customers, affiliates and vendors which establish safeguards regarding the creation, receipt, maintenance and transmission of protected personal information. We maintain a global privacy policy and employ dedicated privacy professionals who work closely with our senior executive leadership as part of our efforts to address applicable privacy laws.

See Item 1A, “Risk Factors—Risks Related to Our Business—We are subject to numerous privacy and data security laws and our failure to comply with those laws could cause us significant harm,” included elsewhere in this Annual Report on Form 10-K for additional information.

Other Regulations

We are also subject to numerous additional national laws, rules and regulations, including those enforced by the following U.S. agencies:

- Occupational Safety and Health Administration;
- Nuclear Regulatory Commission;
- Environmental Protection Agency;
- Department of Transportation;
- International Civil Aviation Organization;
- Department of Health and Human Services; and
- U.S. Drug Enforcement Administration (the “DEA”).

Our laboratories registered with the DEA may receive and manage controlled substances for research purposes. The DEA regulates controlled substances under the Controlled Substances Act, the Controlled Substances Import and Export Act and other laws and the regulations that implement such laws. The DEA requirements include obligations related to recordkeeping, security, handling, diversion and disposal of controlled substances. If we fail to comply with the DEA requirements regarding controlled substances, our registration may be suspended or revoked or renewal of our registration may be denied, and we may be subject to civil or criminal penalties, injunctions or other enforcement actions. Our laboratories listed below are registered with the DEA:

- clinical pharmacology units in Austin, Texas and Las Vegas, Nevada;
- bioanalytical laboratories in Middleton, Wisconsin and Richmond, Virginia; and
- GMP laboratory in Middleton, Wisconsin.

Our laboratory in Athlone, Ireland is registered with the Irish Health Products Regulatory Authority and may receive and manage controlled substances.

We also must comply with other related international, federal, state and local regulations that govern the use, handling, disposal, packaging, shipment and receipt of certain drugs or unknown compounds, chemicals and chemical waste, toxic substances, biohazards and biohazard waste, and radioactive materials and radioactive waste. In order to comply with these regulations, we have established standard operating procedures, and provide appropriate equipment and training to our employees involved in these activities. See Item 1A, “Risk Factors—Risks Related to Our Business—Our business uses biological and hazardous materials, which are regulated by various laws. As such, we are exposed to liabilities for violations of those laws and claims for personal injury or death that could materially adversely affect our business,” included elsewhere in this Annual Report on Form 10-K for additional information.

Any failure on our part to comply with applicable regulations could result in the termination of ongoing research, the disqualification of data for submission to regulatory authorities, fines and other sanctions, as well as liability to our customers. Furthermore, any issuance of a notice of finding by a governmental authority against either us or our customers, based upon a material violation by us of any applicable regulation, could materially and adversely affect our reputation and business.

Healthcare Reform

In the United States and certain foreign jurisdictions there have been, and we expect there will continue to be, a number of legislative and regulatory changes to the healthcare system that could affect the pharmaceutical industry, which, in turn, could affect our business. In March 2010, the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act (collectively, the "ACA"), was signed into law. The ACA contains a number of provisions of particular importance to the pharmaceutical industry, including those governing enrollment in federal healthcare programs, reimbursement adjustments and fraud and abuse changes. Additionally, the ACA creates a new Patient-Centered Outcomes Research Institute to oversee, identify priorities in and conduct comparative clinical effectiveness research and establishes a Center for Medicare Innovation at the Centers for Medicare and Medicaid Services to test innovative payment and service delivery models to lower Medicare and Medicaid spending, potentially including prescription drug spending.

Since its enactment, there have been judicial and Congressional challenges to certain aspects of the ACA, and we expect there will be additional challenges and amendments to the ACA in the future. For example, in December 2019, the U.S. Court of Appeals for the Fifth Circuit ruled that the ACA's individual mandate is unconstitutional because the Tax Cuts and Jobs Act modified the individual mandate so that it could no longer constitute a tax and remanded the case to a U.S. district court in Texas to determine if the remainder of the ACA is severable from the individual mandate. On March 2, 2020, the United States Supreme Court granted the petitions for writs of certiorari and held oral arguments on November 10, 2020. Pending a final decision, which is expected by mid-2021, the ACA remains in effect, but it is unclear at this time what the effect of this decision will have on the ACA and our business. Litigation over the ACA is likely to continue, with unpredictable and uncertain results. Legislative changes have been proposed and adopted since the ACA was enacted, including aggregate reductions of Medicare payments to providers of 2% per fiscal year and reduced payments to several types of Medicare providers. However, the Coronavirus Aid, Relief and Economic Security Act ("CARES Act"), and the Consolidated Appropriations Act, 2021, suspended the 2% Medicare sequestration payment reduction from May 1, 2020 through March 31, 2021, but extended sequestration through 2030. Moreover, there has recently been heightened governmental scrutiny over the manner in which manufacturers set prices for their marketed products, which has resulted in several Congressional inquiries, and proposed and enacted legislation and regulations designed, among other things, to bring more transparency to product pricing, review the relationship between pricing and manufacturer patient programs, and reform government program reimbursement methodologies for drug products. Individual states in the United States have also become increasingly active in implementing regulations designed to control pharmaceutical product pricing, including price or patient reimbursement constraints, discounts, restrictions on certain product access, and marketing cost disclosure and transparency measures, and, in some cases, mechanisms to encourage importation from other countries and bulk purchasing. Furthermore, there has been increased interest by third-party payors and governmental authorities in reference-pricing systems and publication of discounts and list prices. Any of these judicial, legislative or regulatory developments could harm our customers' businesses, which could cause them to reduce their spending on research and development, which, in turn, could negatively impact our business.

Anti-Corruption Laws and Regulations

We are subject to various U.S. and non-U.S. anti-corruption laws, including the U.S. Foreign Corrupt Practices Act (the "FCPA") and the U.K. Bribery Act 2010 (the "Bribery Act"). The FCPA and the Bribery Act prohibit us and our officers, directors, employees and third parties acting on our behalf, including agents, from corruptly offering, promising, authorizing or providing anything of value to a "foreign official" for the purposes of influencing official decisions or obtaining or retaining business or otherwise obtaining favorable treatment. The FCPA further requires us to make and keep books, records and accounts that accurately reflect transactions and dispositions of assets and to maintain a system of adequate internal accounting controls. The Bribery Act also prohibits "commercial" bribery and accepting bribes.

Our global business operations also must be conducted in compliance with applicable export controls and economic sanctions laws and regulations, including those administered by the U.S. Department of the Treasury's (the "U.S. Treasury") Office of Foreign Assets Control, the U.S. Department of State, the U.S. Department of Commerce, the United Nations Security Council, the European Union, Her Majesty's Treasury and other relevant sanctions authorities.

Violations of these anti-corruption laws or export controls and economic sanctions laws and regulations, or even allegations of such violations, could disrupt our business and result in a material adverse effect on our reputation, business, results of operations, financial condition and/or cash flows. For example, violations may result in criminal or civil penalties, disgorgement of profits, related stockholder lawsuits and other remedial measures, and companies that violate these laws can be debarred by the U.S. government and lose U.S. export privileges. Future changes in anti-corruption, export control or economic sanctions laws, regulations or enforcement could also result in increased compliance requirements and related costs which could have a material adverse effect on our business, results of operations, financial condition and/or cash flows.

Human Capital Management

Our key human capital management objectives are to recruit, develop and retain the highest quality talent in order to be the employer of choice in the CRO industry. To support these objectives, our human resources programs are designed to attract and develop talent to enable employees to succeed in their roles and afford them opportunities for development, reward employees through competitive pay and benefit programs and enhance our culture through efforts aimed at making the workplace more engaging and inclusive.

We strive to develop talent through our commitment to, and investment in, learning and development. Our holistic approach to training incorporates a multitude of training and development programs, including job-specific modules and programs related to personal career growth, leadership and manager development, including online, instructor-led and on-the-job learning formats. In addition, we offer training to our entry-level professionals through our Clinical Research Assistant Academy, an internal, seven-week training program that incorporates a variety of learning formats to provide attendees a solid knowledge in monitoring and a network of resources. In 2020, this employee-training course was awarded the Brandon Hall Gold Award by the Brandon Hall Group Human Capital Management Excellence in Learning Awards.

In order to recruit, develop and retain the highest quality talent, we are committed to providing market-competitive pay and benefits. Our suite of benefits include, among others, comprehensive health insurance coverage for employees, parental leave to new parents for birth and adoption of a child, and mental and behavioral health resources, including on-demand access to the Employee Assistance Program for employees and their dependents. In addition, in order to foster a stronger sense of ownership and align the interests of our employees with those of our stockholders, long-term equity-based incentives are provided to eligible employees, and all part-time and full-time employees are eligible for our annual performance-based cash incentive program which rewards individuals for achievement of company and personal goals. We also pursue pay equity, including equal pay for equal outcomes, as well as for gender, racial and other diverse populations (including all protected classes).

Finally, we are committed to enhancing our culture by making the workplace more engaging and inclusive. We recognize that our diversity makes our business stronger and strive to be an inclusive organization where colleagues can be their authentic selves and grow their careers. Our business resource groups, such as WEN (Women’s Empowerment Network), PRIDE Business Resource Group, and BOLD (Black Organization for Leadership Development) help us attract and retain a diverse workforce by fostering inclusion, encouraging open dialogue and creating an opportunity for personal and professional development.

Our investment in these areas has been recognized by industry publications. In 2020, for the ninth consecutive year, we received honors from *Training* magazine for our employee training and development programs while *Forbes* magazine named us to their list of America’s Best Employers in the large company category in 2018 and 2019. We have also received regional awards for these efforts, such as *Forbes* magazine naming us to their list of America’s Best-in-State Employers for North Carolina in 2020, and *Great Place to Work* naming us as one of the Best Workplaces in Greater China.

Our consistent focus on talent and culture has contributed to both overall retention and retention in key operational roles, such as project managers, that is significantly ahead of industry averages. Our low turnover rates in key operational roles, including during the COVID-19 pandemic, provide our customers consistency in their study teams and is an important differentiator for us. For example, our project manager turnover rates have ranged from 7.6% in 2018 to 6.2% in 2020, and have consistently trended below industry averages.

We believe that our attraction and retention of employees with technical and therapeutic expertise also provides us with a competitive advantage—of our more than 26,000 employees as of December 31, 2020, approximately 5,200 hold advanced, masters or equivalent degrees, including over 1,000 MDs and PhDs. As a result, we have industry-shaping domain expertise and thought leadership, including in key areas such as product development strategy, protocol design, outcomes and patient-centered research and health economics.

As of December 31, 2020, we employed more than 26,000 employees. Approximately 54% of our employees are located outside of the United States, primarily in Europe and Asia. Voluntary workforce turnover (rolling 12-month attrition) was at an industry-leading level of 9.7% as of December 2020. At the end of fiscal year 2020, our global workforce was 29% male and 71% female, and women represented 39% of our leadership (defined as vice president level and above). In the U.S., ethnicity of our workforce was 68% White, 12% Asian, 11% Black, 6% Hispanic and 2% other.

Backlog and Authorizations

We manage and assess our business in part based on the performance of our consolidated business using a number of metrics including backlog and net authorizations. See Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations—How We Assess the Performance of Our Business," and "Management's Discussion and Analysis of Financial Condition and Results of Operations—Net Authorizations and Backlog," included elsewhere in this Annual Report on Form 10-K for additional information.

Indemnification and Insurance

Our business exposes us to potential liability including, but not limited to, potential liability for (i) breach of contract or negligence claims by our customers, (ii) non-compliance with applicable laws and regulations and (iii) third-party claims in connection with our performance of drug development services (for example, patient claims for personal injury). In certain circumstances, we may also be liable for the acts or omissions of others, such as suppliers of goods or services.

We attempt to manage our potential liability to third-parties through contractual protection (such as indemnification and limitation of liability provisions) in our contracts with customers and others, and through insurance. The contractual indemnification provisions vary in scope and generally do not protect us against all potential liabilities, such as liability arising out of our gross negligence or willful misconduct. In addition, in the event that we seek to enforce such an indemnification provision, the indemnifying party may not have sufficient resources to fully satisfy its indemnification obligations or may otherwise not comply with its contractual obligations.

We generally require our customers and other counterparties to maintain adequate insurance, and we currently maintain errors, omissions and professional liability insurance coverage with limits we believe to be appropriate. This insurance generally provides coverage for vicarious liability due to the negligence of the investigators who contract with us, as well as claims by our customers that a clinical trial was compromised due to an error or omission from us. The coverage provided by such insurance may not be adequate for all claims made and such claims may be contested by applicable insurance carriers.

Available Information

Our website address is www.ppd.com, and our investor relations website is located at investors.ppd.com. Information on our website is not incorporated by reference herein. We will make available on our website, free of charge, our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and any amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act, as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC. The SEC maintains an Internet site (http://www.sec.gov) containing reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC.

Item 1A. Risk Factors

We operate in a rapidly changing environment that involves a number of risks, some of which are beyond our control. You should consider carefully the risks and uncertainties described below together with the other information included in this Annual Report on Form 10-K, including our audited consolidated financial statements and related notes included elsewhere in this Annual Report on Form 10-K, in evaluating our company. The occurrence of any of the following risks may materially and adversely affect our business, financial condition, results of operations and future prospects.

Risks Related to Our Business

Our backlog might not accurately predict our future revenue, and we might not realize all or any part of the anticipated revenue reflected in our backlog.

Our backlog represents anticipated direct revenue for work not yet completed or performed (i) under signed contracts, letters of intent and, in some cases, awards that are supported by other forms of written communication and (ii) where there is sufficient or reasonable certainty about the customer's ability and intent to fund and commence the services within six months. We adjust backlog for foreign currency fluctuations and exclude revenue that has been recognized as revenue in our statements of operations. Once work begins, we recognize direct revenue over the life of the contract based on our performance of services under the contract. Contracts have been, and may in the future be, terminated or delayed by our customers or regulatory authorities for reasons beyond our control, including due to the COVID-19 pandemic. To the extent projects are delayed, the anticipated timing of our direct revenue could be materially affected.

In the event a customer terminates a contract, we are generally entitled to be paid for services rendered through the termination date and for services provided in winding down the project. However, we are generally not entitled to receive the full amount of revenue reflected in our backlog in the event of a contract termination. The duration of the projects in our backlog, and the related revenue recognition, ranges from several months to many years. A number of factors may affect backlog and the revenue generated from our backlog, including:

- the size, complexity and duration of projects;
- the cancellation or delay of projects; and
- changes in the scope of work during the course of a project.

Our backlog at December 31, 2020 was $8,187.9 million compared to a backlog of $7,066.3 million at December 31, 2019, both on a historical basis. Although an increase in backlog will generally result in an increase in future revenue to be recognized over time (depending on future contract modifications, contract cancellations and other adjustments), an increase in backlog at a particular point in time does not necessarily correspond to an increase in revenues during a particular period. The timing and extent to which backlog will result in revenue depends on many factors, including the timing of commencement of work, the rate at which we perform services, scope changes, cancellations, delays, receipt of regulatory approvals and the nature, duration, size, complexity and phase of the studies. In addition, delayed projects remain in backlog until they are cancelled. As a result of these factors, our backlog is not necessarily a reliable indicator of future direct revenue and we might not realize all or any part of the direct revenue from the authorizations in backlog as of any point in time.

The majority of our customers' contracts can be terminated, delayed or reduced in scope upon short notice or no notice.

Most of our contracts may be terminated by the customer upon 30 to 90 days' notice. Customers terminate, delay or reduce the scope of their contracts for a variety of reasons, including but not limited to:

- lack of available funding or financing;
- mergers or acquisitions involving the customer;
- a change in customer priorities;
- products being tested fail to satisfy safety requirements or efficacy criteria;
- products have undesirable preclinical or clinical results;
- the customer decides to forgo a particular study;

- inability to enroll enough patients in a particular study;
- inability to recruit enough investigators for a particular study;
- the customer decides to shift business to a competitor or to use internal resources;
- manufacturing problems that cause shortages of the study drug;
- actions by regulatory authorities; and
- performance failures.

As a result, contract terminations, delays and reductions in scope occur regularly in the normal course of our business. The delay, loss or reduction in scope of a large contract or multiple smaller contracts could result in under-utilization of our personnel, a decline in revenue and profitability and adjustments to our backlog, any or all of which could have a material adverse effect on our business, results of operations, financial condition and/or cash flows. Further, we believe the risk of termination or delay of multiple contracts may be higher where we have strategic partnership arrangements with biopharmaceutical companies and a large backlog of work for those companies.

We may be adversely affected by industry, customer or therapeutic concentration.

We provide services to biopharmaceutical, biotechnology, medical device and government organizations, as well as other industry participants that sponsor clinical trials, and our revenue is dependent upon expenditures by these customers. Accordingly, our business could be materially adversely affected by mergers, consolidations, business failures, distress in the financial markets or other factors resulting in a decrease in the number of potential customers or therapeutic products being developed through the drug development process. In the last few years, biopharmaceutical consolidation has been accelerating. If the number of our potential customers were to decline in the future, they might be able to negotiate price discounts or other terms for services that are less favorable to us than they have been historically. We have experienced customer concentration in the past and could again in the future. For example, our top 10 customers accounted for approximately 52.1% of our total revenue for the year ended December 31, 2020. The loss of business from a significant customer could have a material adverse effect on our business, results of operations, financial condition and/or cash flows.

At times, we conduct multiple clinical studies for different customers in a single therapeutic area involving drugs with similar effects or to treat the same specific condition. As a result, our business could be adversely affected if some or all of the clinical studies are canceled due to newly discovered scientific information or regulatory decisions that affect the drugs within a particular class or for the treatment of a specific condition.

Our financial results may be adversely impacted if we underprice our contracts, overrun our cost estimates or fail to receive approval for or experience delays in documenting change orders.

The majority of our service contracts are based on fixed prices or fixed unit prices for those services, and therefore have set limits on the amounts we can charge for our direct and indirect services. As a result, variations in the timing and progress of large contracts may materially adversely affect our results of operations. In addition, we bear the risk of cost overruns unless the scope of activity is revised from the contract specifications and we are able to negotiate a contract modification with the customer shifting the additional cost to the customer. If we fail to adequately price our contracts for direct and indirect services in total or at the unit level or if we experience significant cost overruns (including direct and indirect costs such as pass-through costs), or are delayed in, or fail to, execute contract modifications with customers increasing the scope of activity, our results of operations could be materially adversely affected. From time to time, we have underpriced contracts and have had to commit unanticipated resources to complete projects, resulting in lower margins and profitability on those projects. We might experience similar situations in the future, which could have a material adverse impact on our results of operations and cash flows.

Our business depends on the efficient and uninterrupted operation of our information and communication systems, including systems we use to deliver services to our customers, and failures in, breach of, or unauthorized access to or use of these systems or data contained therein may materially limit our operations and result in significant harm to our business.

Our success depends on the security and efficient and uninterrupted operation of our information and communication systems, including information and communication systems maintained by third parties on our behalf or with whom we contract, and we expect to increase our reliance on these and similar systems over time. As the breadth, complexity and reliance on information systems grows, we will be increasingly exposed to the risks inherent in the development, deployment, operation, use and reliance on these systems, including:

- disruption, impairment or failure of data centers, telecommunications facilities or other key infrastructure platforms;
- security breaches of, cyber-attacks on and other failures or malfunctions in our critical application systems or their associated hardware; and
- excessive costs, delays or other deficiencies in systems development and deployment.

The occurrence of these risks could impede the processing of data, the delivery of services to our customers and the day-to-day management and operation of our business and could result in the corruption, loss, disclosure or unauthorized access to proprietary, confidential or other data, which in turn could result in diminished internal and external reporting capabilities, impaired ability to process transactions, harm to our control environment, diminished employee productivity, legal proceedings and fines and other unanticipated increases in costs.

Furthermore, in light of the COVID-19 pandemic, we have directed most of our personnel to work remotely and we have restricted on-site staff to those personnel and contractors who perform essential activities that can only be completed on-site. This new working environment could increase our cyber-security risk, create data accessibility concerns, and make us more susceptible to communication disruptions, any of which could adversely impact our business operations.

While we maintain disaster recovery plans, they might not adequately protect us. Despite any precautions we take, damage from cybersecurity attacks, computer viruses, or fire, floods, hurricanes, power loss, telecommunications failures, break-ins and similar events at our facilities or those of our suppliers could result in interruptions in the flow of data to our servers and from our servers to our customers. Corruption or loss of data could result in the need to repeat a trial at no cost to our customer, but at significant cost to us, and may result in the termination of a contract and/or damage to our reputation. Additionally, significant delays in system enhancements and improvements, or inadequate performance of the systems once they are completed, could damage our reputation and harm our business. Although we carry insurance, our coverage might not respond or be adequate to compensate us for all losses that may occur.

Unauthorized disclosure of or access to sensitive or confidential data, including confidential information of our customers, whether through third-party attack, system failure, employee negligence, fraud or misappropriation, could significantly damage our business. We have been, and expect we will continue to be, subject to attempts to gain unauthorized access to or through our information systems, whether by our employees or third parties, including by cyber-attack from computer programmers or hackers who deploy viruses, worms or other malicious software programs. To date, these attacks have not had a material impact on our operations or financial results. However, attacks in the future could result in fines, negative publicity, significant remediation costs, liability and/or damage to our reputation, and could have a material adverse effect on our business, results of operations, financial condition and/or cash flows. In addition, any insurance coverage we have might not respond or be sufficient to cover us against claims or penalties imposed by the federal government or state governments related to security breaches, cyber-attacks and other related breaches.

Our ability to serve customers effectively depends on the reliability of our technology network and we depend on information systems to perform many critical business needs. During the fourth quarter of 2020, we substantially completed the transition of our existing human capital management, financial management and general ledger systems to an integrated enterprise resource planning ("ERP") system with the remaining conversion of certain reporting units expected to be completed in late 2021. The implementation and maintenance of a new ERP system has required and may continue to require significant financial and/or human capital resources. Furthermore, despite extensive planning, system testing and training of our employees, we could experience disruptions in our business operations in the future because of the project's complexity and we may not fully optimize the ERP as planned. The potential consequences could include project and other delays, loss of information, diminished internal and external reporting capabilities, impaired ability to process transactions, harm to our internal control environment, diminished employee productivity and unanticipated increases in costs, all of which could result in material adverse effects on our business, results of operations, financial condition and/or cash flows.

If we fail to perform our services in accordance with contractual requirements, regulatory standards and ethical considerations, we could be liable for significant costs or penalties and our reputation could be harmed.

The clinical development and laboratory services we provide to biopharmaceutical companies and other entities are complex and subject to contractual requirements, regulatory standards and ethical considerations. For example, we must adhere to regulatory requirements from the FDA governing our activities relating to preclinical studies and clinical trials, including GCP, GLP and GMP requirements. We are accredited by certain professional bodies, such as the CAP. We are also subject to regulation by the DEA which regulates the distribution, recordkeeping, handling, security and disposal of controlled substances. If we fail to perform our services in accordance with these requirements, regulatory agencies have in the past and may in the future take action against us or our customers for failure to comply with applicable regulations governing clinical trials and the development and testing of therapeutic products. Such actions may include sanctions, such as warning or untitled letters, injunctions or failure of such regulatory authorities to grant marketing approval of products, delay, suspension or withdrawal of approvals, license revocation, loss of accreditation, product seizures or recalls, operational restrictions, civil or criminal penalties or prosecutions, damages or fines. Customers may also bring claims against us for breach of our contractual obligations in clinical trials, may terminate their contracts with us and/or may choose not to award further work to us, and patients involved in the clinical trials or taking drugs approved on the basis of those trials may bring personal injury claims against us. From time to time, customers and patients have brought such claims against us, and we might experience similar situations in the future. While to date, such claims have not had a material impact on our operations or financial results, any such action in the future could have a material adverse effect on our reputation, business, results of operations, financial condition and/or cash flows.

Such consequences could arise if, among other things, the following occur:

Failure or inadequate performance of our services. The performance of clinical development and laboratory services is complex and time-consuming. For example, we have made in the past, and in the future might make, mistakes in conducting a clinical trial or providing laboratory services that could negatively impact or obviate the usefulness of the trial or the data generated from it or cause the results of the trial to be reported improperly or the trial results to be compromised. While to date, such mistakes have not had a material impact on our operations, if we make such mistakes in the future, we could be subject to significant costs or liability, which could have a material adverse impact on our business, reputation and ability to perform our services. Examples include:

- non-compliance generally could result in the termination of ongoing clinical trials or the disqualification of data for submission to regulatory authorities, or enforcement action from regulators;
- compromise of data from a particular trial, such as our failure to verify that informed consents were obtained from patients, could require us to repeat the trial under the terms of our contract at no further cost to our customer, but at a substantial cost to us;
- improperly conducting or reporting laboratory results could affect medical decisions for the patient in the trial as well as the clinical trial data and create liability for personal injury and breach of contract for us; and
- breach of a contractual term could result in liability for damages and/or termination of the contract.

Large clinical trials can cost hundreds of millions of dollars and, while we endeavor to contractually limit our exposure to such risks and maintain insurance coverage, improper performance of our services could have a material adverse effect on our financial condition, damage our reputation and result in the cancellation of current contracts by or failure to obtain future contracts from the affected customer and other customers.

Interactive Response Technology ("IRT") malfunction. Our IRT is critical because it enables the randomization of patients in a given clinical trial to different treatment arms and regulates the supply of an investigational drug, all by means of interactive voice response and interactive web response systems. If these systems malfunction or our personnel make mistakes in the provision of these services and, as a result, patients are incorrectly randomized or misdosed during the course of the clinical trial, then we could be subject to claims for significant damages for any resulting personal injury or death and/or breach of contract claims by our customers, as well as face potential regulatory enforcement. Furthermore, we could suffer from negative publicity associated with any such malfunctions or failures that could have a material adverse effect on our business and reputation. Additionally, errors in randomization may require us to repeat the trial at no further cost to our customer, but a substantial cost to us.

Inspections/Investigations of customers. From time to time, our customers are inspected or investigated by regulatory authorities or enforcement agencies with respect to regulatory compliance of their clinical trials. In these situations, we have often provided services to our customers with respect to the clinical trials being inspected or investigated, and we are called upon to respond to requests for information by the authorities and agencies. Our customers and regulatory authorities have claimed, and in the future may claim, that we performed our services improperly or that we were responsible for clinical trial non-compliance. While to date, such claims have not had a material impact on our operations, if our customers or regulatory authorities make such claims against us in the future, we could be subject to material damages, fines, penalties or other liabilities. In addition, negative publicity regarding compliance of our customers' clinical trials, programs or drugs could have an adverse effect on our business and reputation.

If we encounter difficulties or delays in attracting suitable investigators and enrolling a sufficient number of patients for our customers' clinical trials, our Clinical Development Services segment may be adversely affected.

The recruitment of investigators and patients is essential for the clinical research studies we run for our customers. Investigators are typically located at hospitals, clinics or other sites, including sites we own, and supervise administration of the study drug to patients during the course of a clinical trial. Patients generally are people from the communities in which clinical trials are conducted and may be difficult to locate and enroll in trials, particularly for rare or acute indications, or if the trial protocol requires patients who have not taken other treatments or have failed other treatments for the relevant condition. If we are unable to attract suitable and willing investigators or recruit, enroll and retain patients for clinical trials, our Clinical Development Services segment could be materially adversely affected. For example, if we are unable to recruit sufficient investigators to conduct clinical trials as planned or enroll the required number of patients, we may need to incur additional costs to meet the recruitment or enrollment targets or cause a delay or modification to the clinical trial plans. Delays in patient enrollment may result in increased costs or may affect the timing or outcome of the planned clinical trials, which could prevent completion of these trials and adversely affect our ability to fulfill our obligations to our customers. We have experienced delays in patient enrollment from time to time, including as a result of the COVID-19 pandemic, and while to date such delays have not had a material impact on our operations or financial results, any such difficulties or delays in the future could result in additional costs to us and materially adversely affect our business, results of operations, financial condition and/or cash flows and reputation in the industry.

We are subject to numerous privacy and data security laws and our failure to comply with those laws could cause us significant harm.

In the normal course of our business, we collect, process, use and disclose individual personal data, including patient-specific medical and other clinical trial data, as well as personal data relating to health professionals and our employees. The collection, processing, use, disclosure, disposal and protection of this information and personal data is highly regulated both in the United States and other jurisdictions we are subject to, including but not limited to, applicable regulations arising from HIPAA, as amended by HITECH, and the Privacy, Security and Breach Notification Rules, 45 C.F.R. Parts 160-164, that implement those laws; U.S. state privacy, security and breach notification and healthcare information laws; the E.U. GDPR; the U.K. Data Protection Act 2018 and other privacy laws that are increasingly being adopted in other regions globally. These laws and regulations include varied and sometimes inconsistent requirements, increasing legal risk and the costs and risks of compliance.

If we improperly process personal information, fail to protect the confidentiality and security of this information or otherwise breach applicable privacy laws, regulations or duties relating to the use, privacy or security of personal data, we could be subject to civil liability or criminal prosecution, be forced to alter our business practices and we could suffer significant financial, reputational and other harm and our business, results of operations, financial condition and/or cash flows could be materially adversely affected.

The GDPR became enforceable in 2018. The GDPR includes sanctions for violations up to the greater of €20 million or 4.0% of the annual global revenues of the noncompliant company, whichever is greater, and applies to service providers such as us. Additionally, following the United Kingdom's withdrawal from the European Economic Area ("EEA") and the European Union, and the expiry of the transition period, companies will have to comply with the GDPR and the GDPR as incorporated into the United Kingdom national law, the latter regime having the ability to separately fine up to the greater of £17.5 million or 4% of global turnover. Other privacy laws, including HIPAA and HITECH, provide for potentially large fines for violations. Were we to be subject to any such sanction, it could result in a material adverse effect on our reputation, business, results of operations, financial condition and/or cash flows.

In connection with some clinical trials that we conduct in the European Union on behalf of our customers, we serve as the customer's European Union data privacy representative under the GDPR. As the customer's representative, we could in certain very limited circumstances be liable for the customer's failure to comply with the GDPR. We believe we maintain adequate processes and systems to ensure our and our customers' compliance with the requirements of the GDPR, but it is possible that we could fail to comply or that we could incur liability due to the acts or omissions of our customers. Our contracts for these services include indemnification provisions intended to protect us from a customers' failure to comply with the GDPR, but it might not cover all our losses in the event of a failure to comply. In the event we are not able to secure indemnification or the indemnification and any insurance coverage is inadequate to cover our losses, we could suffer significant financial, operational, reputational and other harm and our business, results of operations, financial condition and/or cash flows could be materially adversely affected.

The U.S., the European Union, and other jurisdictions where we operate continue to issue new, and enhance existing, privacy and data security protection regulations related to the collection, use, disclosure, disposal and protection of personal data and medical information. Privacy and data security laws are rapidly evolving both in the U.S. and internationally, and the future interpretation of those laws is somewhat uncertain. For example, in July 2020, the Court of Justice of the European Union limited how organizations could lawfully transfer personal data from the EEA to the U.S. by invalidating the E.U.-U.S. Privacy Shield and imposing further restrictions on use of the standard contractual clauses, which could increase our costs and our ability to efficiently process personal data from the EEA. The relationship between the United Kingdom and the European Union in relation to certain aspects of data protection law also remains unclear, for example around how data can lawfully be transferred between each jurisdiction, which exposes us to further compliance risk.

We do not know how European Union regulators will interpret or enforce many other aspects of the GDPR and some regulators may do so in an inconsistent manner. In the U.S., privacy and data security is an area of emphasis for some but not all state regulators, and new legislation has been and likely will continue to be introduced at the state and/or federal level. Additional legislation or regulation might, among other things, require us to implement new security measures and processes or bring within the legislation or regulation de-identified health or other personal data, each of which may require substantial expenditures or limit our ability to offer some of our services.

Our business could be harmed if we are unable to effectively manage our growth.

We believe that sustained growth places a strain on human, operational and financial resources. To manage our organic and inorganic growth and increasing complexity of our business, we must continue to attract and retain qualified management, professional, scientific, technical and business development personnel and improve our operating and administrative systems. We believe that maintaining and enhancing both personnel and our systems at a reasonable cost are instrumental to our success. We may not be able to enhance our current technology or obtain new technology that will enable our systems to keep pace with industry developments and the sophisticated needs of our customers. The nature and pace of our organic and inorganic growth introduces risks associated with quality control and customer dissatisfaction due to delays in performance or other problems. In addition, non-U.S. operations involve the additional risks of assimilating differences in non-U.S. business practices, hiring and retaining qualified personnel and overcoming language barriers. If we are unable to manage our growth effectively, we could incur losses.

If we are unable to recruit, retain and motivate key personnel, or if a significant percentage of our workforce is unable to work, including as a result of the COVID-19 pandemic, our business could be adversely affected.

Our success depends on the collective performance, contribution and expertise of our senior management team and other key personnel throughout our businesses, including qualified management, professional, operational, scientific, technical and business development personnel. There is significant competition for qualified personnel in the biopharmaceutical and related services industries, particularly personnel with advanced degrees and those with significant experience and expertise. The loss of any key executive, including if he or she becomes seriously ill with COVID-19 or otherwise, or our inability to continue to recruit, retain and motivate key personnel and replace departed personnel in a timely fashion, may adversely impact our ability to compete effectively and grow our business and negatively affect our ability to meet our short and long-term financial and operational objectives. In addition, if a significant percentage of our workforce is unable to work, including because of illness, travel or government restrictions in connection with the COVID-19 pandemic, or as a result of having to isolate due to exposure or to care for a sick family member, our operations may be negatively impacted.

We depend on third parties for critical goods and support services.

We depend on third parties for a variety of goods and support services that are critical to us. These third-party service providers include, but are not limited to, software and other technology providers, third-party transportation and travel providers, suppliers of study drugs for clinical trials, couriers, customs brokers, drug depots and distributors, suppliers of licensing agreements, investigator meeting planners, suppliers of kits, reagents, contractors and other supplies used by our laboratory segments and equipment maintenance providers. The failure of any of these third parties to adequately provide goods or services to us or to comply with relevant laws and regulations could have a material adverse effect on our reputation, business, results of operations, financial condition and/or cash flows. While we have not seen an adverse impact from the COVID-19 pandemic on the third parties that we rely on to provide goods and services, a significant impact to our third-party providers could occur in the future.

We operate in many different countries and are subject to the FCPA, the Bribery Act and anti-corruption laws and regulations in other countries, as well as laws and regulations relating to trade compliance and economic sanctions. Violations of these laws and regulations could harm our reputation and business, or materially adversely affect our business, results of operations, financial condition and/or cash flows.

We are subject to various U.S. and non-U.S. anti-corruption laws, including the FCPA and the Bribery Act. The FCPA and the Bribery Act prohibit us and our officers, directors, employees and third parties acting on our behalf, including agents, from corruptly offering, promising, authorizing or providing anything of value to a “foreign official” for the purposes of influencing official decisions or obtaining or retaining business or otherwise obtaining favorable treatment. The FCPA further requires us to make and keep books, records and accounts that accurately reflect transactions and dispositions of assets and to maintain a system of adequate internal accounting controls. The Bribery Act also prohibits “commercial” bribery and accepting bribes.

Our global business operations also must be conducted in compliance with applicable export controls and economic sanctions laws and regulations, including those administered by the U.S. Treasury’s Office of Foreign Assets Control, the U.S. Department of State, the U.S. Department of Commerce, the United Nations Security Council, the European Union, Her Majesty’s Treasury and other relevant sanctions authorities.

Our internal policies and procedures require strict compliance with these anti-corruption, export control and economic sanctions laws. Despite our training and compliance efforts, our policies and procedures may not protect us from liability for violations of anti-corruption or economic sanctions laws committed by persons associated with us, including our employees or third parties acting on our behalf. Our continued expansion outside the U.S., including in countries that are known to have an increased prevalence of corruption, could increase such risks in the future. Violations of these anti-corruption laws or economic sanctions, or even allegations of such violations, could disrupt our business and result in a material adverse effect on our reputation, business, results of operations, financial condition and/or cash flows. For example, violations may result in criminal or civil penalties, disgorgement of profits, related stockholder lawsuits and other remedial measures, and companies that violate these laws can be debarred by the U.S. government and lose U.S. export privileges. Future changes in anti-corruption or economic sanctions laws and enforcement could also result in increased compliance requirements and related costs which could have a material adverse effect on our business, results of operations, financial condition and/or cash flows.

The competition between our existing and potential customers may adversely impact the extent to which those customers use our services, which may materially adversely affect our business, results of operations, financial condition and/or cash flows.

We regularly provide services to biopharmaceutical companies that compete against each other and we sometimes provide services to customers that are developing competing drugs. Therefore, the existing or future business we receive from a customer might discourage a competing customer or potential customer from requesting our services. Also, in connection with the negotiation of a contract, a customer might require that we agree to limit the scope of services we provide to other customers or other restrictive covenants that might limit our ability to provide services to others. From time to time we have lost customers for these reasons, and while to date these losses have not had a material impact on our financial results, any future loss of, or reduction in, business we receive from a customer or limits on our ability to service other customers may have a material adverse effect on our business, results of operations, financial condition and/or cash flows.

We face risks associated with business restructurings and the integration of new businesses, which, if not properly managed, could materially affect our business.

In the past few years, we have adopted and implemented restructuring plans and cost-saving initiatives designed to, among other things, improve our operating efficiencies, match our capacity with market demand and reduce costs. At the same time, we have made strategic investments by acquiring businesses that we believe complement our existing portfolio of services. Restructurings and the integration of new businesses present potential risks that could materially adversely affect our business. Restructurings could result in a decline in employee morale, an increase in employment claims, the failure to achieve the stated operational objectives and/or targeted costs savings and the failure to meet customer requirements. Conversely, the success of any acquisition will depend upon, among other things, our ability to effectively integrate the acquired business operations, personnel, services and technologies into our organization, retain and motivate personnel key to the future success of the acquired business and retain customers. If we fail to identify and effectively manage these potential risks, our reputation, business, results of operations, financial condition and/or cash flows could be materially adversely affected.

The operation of our early development Phase I clinics and our AES offering involves direct interaction with clinical trial volunteers, and exposes us to potential liability for personal injury or death that could materially adversely affect our reputation and business.

We operate early development clinics, which involve direct interaction by us with clinical trial volunteers, and we also have strategic alliances with other early development clinics that serve as subcontractors for us. We also own and operate a global site network, which involves direct interaction with clinical trial volunteers. As a part of our early development and our AES operations, we employ and contract with physicians, nurses and other trained health care professionals who conduct the protocol and testing directly on individuals, which may involve administration of the investigational drug, drawing of blood and other medical procedures required under the protocol. Any personal injury to, or death of, a person participating in a clinical trial caused by the medical malpractice or negligence of our physicians, nurses or other staff, or those of our subcontractors, may result in liability to us. We have been subject to claims involving liability of this nature from time to time, and while to date these claims have not had a material impact on our operations or financial condition, any such claims in the future may have a material adverse effect on our reputation, business, results of operations, financial condition and/or cash flows.

Our insurance might not cover all of our liabilities, including indemnification obligations, associated with the operation of our business and provision of services.

We procure and maintain insurance for ordinary risks associated with the operation of our business, including our indemnification obligations. This insurance coverage under the policies we procure might not be sufficient to cover all of our liabilities or may be contested by our carriers. If our insurance is not adequate or available to cover our liabilities, including our indemnification obligations, or if insurance is not available in the future upon terms acceptable to us, if at all, or if the cost of our insurance is far in excess of historical amounts, our business, results of operations, financial condition and/or cash flows may be materially adversely harmed. Claims involving liability not covered by our insurance have occurred from time to time, and we expect they may occur again in the future.

Our business uses biological and hazardous materials, which are regulated by various laws. As such, we are exposed to liabilities for violations of those laws and claims for personal injury or death that could materially adversely affect our business.

Our drug development activities involve the use of biological materials, hazardous materials, chemicals and various radioactive compounds. We are subject to various laws and regulations governing the use, storage, handling and disposal of these materials. In the event we violate these laws, we could be liable for costs and expenses for cleanup and remediation, statutory fines and penalties and other civil and criminal penalties. In addition, if there are changes in these laws or regulations or new laws or regulations are enacted, we might be required to incur significant costs to bring our operations into compliance with any new requirements. Furthermore, in the event of an incident involving these materials, we may be subject to claims for personal injury, death or property damage, all of which could materially adversely impact our business, results of operations, financial condition and/or cash flows. Claims involving liabilities of this nature have occurred from time to time, and we expect they may occur again in the future.

Our business is subject to international and U.S. economic, currency, political and other risks that could negatively affect our business, results of operations, financial condition and/or cash flows.

We provide services globally and have business operations in numerous countries throughout the world. Because we provide our services worldwide, our business is subject to risks associated with doing business internationally, including risks associated with a global pandemic such as the COVID-19 pandemic. Revenue from our non-U.S. operations represented approximately 43.8% of our total revenue for the year ended December 31, 2020. We anticipate that we will continue to perform a significant portion of our services through our international operations. Our U.S. and international operations are subject to risk and uncertainties inherent in operating in these regions, including:

- conducting a clinical trial in multiple countries is complex, and issues in one country can affect the progress of the trial in other countries and result in delays or cancellation of contracts, including delays and other issues caused by the COVID-19 pandemic;
- the U.S. or foreign countries could enact legislation or impose regulations, including unfavorable labor regulations, tax policies or economic sanctions, that could have an adverse effect on our ability to conduct business in or expatriate profits from the countries in which we operate;
- the complexities of operating within multiple tax jurisdictions, including potentially negative consequences from changes in tax laws or from current and future tax examinations;
- foreign countries are expanding or might expand their regulatory framework with respect to patient informed consent or other aspects of the conduct of clinical trials, which could delay or inhibit our ability to conduct trials in such countries, including changes that may be enacted or result from the COVID-19 pandemic;
- the regulatory or judicial authorities of foreign countries might not enforce legal rights and recognize business procedures in a manner to which we are accustomed or would reasonably expect;
- changes in political, economic and social conditions might lead to changes in the environment in which we operate, such as the current changes caused by the COVID-19 pandemic, including those to protect the general population and patient safety in clinical trials which could delay or inhibit our ability to conduct trials in such environments;
- actual or perceived risk of infection relating to COVID-19 or otherwise might impact the willingness of patients to enroll in clinical trials and to visit clinics, hospitals and other clinical research sites for procedures associated with the conduct of clinical trials, which in turn could have an adverse effect on our ability to conduct business in relevant countries and regions;
- changes in foreign currency exchange rates, including the impact of contractual provisions that shift the risk of unfavorable movement in certain exchange rates to us;
- potential violations of existing or newly enacted laws may cause difficulties in staffing and managing international operations;
- customers in foreign countries may have longer payment cycles, and it may be more difficult to collect receivables in those countries;

- political unrest could interrupt our services, endanger our personnel or cause project delays or loss of clinical trial material or results; and
- any failure by us to comply with foreign regulations or restrictions or become aware of and acknowledge changes in foreign regulations or restrictions, including changes in foreign regulations or restrictions due to the COVID-19 pandemic.

From time to time, these factors have impacted our operations, and we might experience similar situations in the future. While to date, such matters have not had a material impact on our operations or financial results, the impact of these risks and uncertainties in the future could negatively impact our ability to, among other things, perform large, global projects for our customers. Furthermore, our ability to manage these risks and uncertainties could be affected by international and U.S. laws and could have an adverse impact on our business, results of operations, financial condition and/or cash flows. For further information regarding foreign currency exchange rate risk, see Part II, Item 7A, "Quantitative and Qualitative Disclosures About Market Risk—Foreign Currency Exchange Rate Risk."

Our operations might be affected by the occurrence of natural disasters, pandemics, such as the COVID-19 pandemic, or other catastrophic events.

We depend on our customers, investigators, laboratories and other facilities for the continued operation of our business. While we maintain disaster recovery and business continuity plans, they might not adequately protect us. Despite any precautions we take for natural disasters or other catastrophic events, these events, including terrorist attacks, hurricanes, fires, floods, ice and snowstorms, and pandemics, such as the COVID-19 pandemic, may result in interruptions in our ability to provide services to our customers. Disruptions in infrastructure, laboratory, clinic or office closures, mandatory stay at home orders or other social distancing measures and disruptions caused by events such as natural disasters, or other "acts of God," the outbreak of war, the escalation of hostilities and acts of terrorism or pandemics, such as the COVID-19 pandemic, particularly involving countries and cities in which we have laboratories, clinics or offices, could adversely affect our businesses. Although we carry business interruption insurance policies and typically have provisions in our contracts that protect us from certain events, our coverage might not respond or be adequate to compensate us for all losses that may occur, including those relating to the COVID-19 pandemic. Any natural disaster or catastrophic event, such as the COVID-19 pandemic, affecting us or our customers, investigators or infrastructure could have a significant negative impact on our operations or financial performance.

To date, the COVID-19 pandemic has impacted our business across both our Clinical Development Services and Laboratory Services segments. The impacts include the ability of our employees to visit hospitals and other clinical research sites to conduct monitoring and other critical activities, and patient recruitment and enrollment activities as part of services offered within our Clinical Development Services segment, as well as a temporary shutdown of our Phase I clinics beginning in March 2020. Furthermore, as a result of the COVID-19 pandemic, we have had customers delay new studies and/or pause ongoing studies or certain activities thereof, such as patient recruitment, patient enrollment, site visits and site monitoring, for various reasons including (i) to protect patient safety, (ii) as a result of government restrictions, (iii) to limit impacts on healthcare systems and (iv) due to concerns regarding the ability of hospitals and other clinical research sites to conduct clinical trials safely, efficiently and effectively, which has impacted our Clinical Development Services segment. Additionally, at the onset of the pandemic, our Laboratory Services segment experienced reductions in central lab services due to delays in clinical trial activity that impacted sample volumes. While to date these delays have not had a material impact on our operations or financial results, continued delays or cancellations in the future could have a material adverse effect on our business, results of operations, financial condition and/or cash flows.

Beginning in the second quarter of 2020, as travel restrictions were lifted and phased reopenings began in jurisdictions in which we operate, we reopened a limited number of our offices and also allowed business-critical travel to occur, including employee visits to hospitals and other clinical research sites, as well as the activation of new sites. We also began a phased reopening of all of our Phase I clinics, with such phased reopening resulting in reduced domiciling of patients for clinical trials as compared to pre-pandemic levels. Due to safety measures we implemented shortly following the onset of the COVID-19 pandemic, our laboratory facilities have continued to operate at near full capacity during the pandemic. While we saw improvements over the course of 2020 in relation to fewer customers delaying new or ongoing studies, improvements in site-based activities, including patient recruitment and enrollment, and the return of pre-pandemic testing volumes at our central labs, these delays have impacted and will continue to impact the timing and extent to which backlog has and will convert to revenue. In addition, depending on the future duration, severity and impacts of the COVID-19 pandemic, we may have to again shut down one or all of our Phase I clinics and also shut down (or delay reopening) one or more of our laboratories, other clinics or offices due to patient safety, government restrictions, illness or other impacts in connection with the COVID-19 pandemic.

We do not yet know the full extent of the impact the COVID-19 pandemic will have on our business, financial condition, results of operations or the global economy as a whole, as the ultimate impact of the pandemic is highly uncertain and subject to change. While the COVID-19 pandemic has impacted our business and results of operations, we have been able to largely offset the financial impact due to the mitigation activities discussed elsewhere in this Annual Report on Form 10-K. However, the operational and financial impacts from COVID-19 could significantly increase in the future due to the magnitude, continued duration, geographic reach, ongoing impact on the global economy and capital and credit markets, and governmental stay-at-home and other restrictions relating to the COVID-19 pandemic. In addition, we might not be able to mitigate future impacts as we have done to date.

Furthermore, federal, state and local governments have implemented, and may continue to implement in the future, economic and other stimulus measures to support individuals and businesses impacted by the COVID-19 pandemic, and while we have utilized such measures where applicable, such measures may not benefit us or otherwise offset any or all of the financial impacts from the COVID-19 pandemic. To date, such measures have not been material to our results of operations.

Although there are vaccines for COVID-19 that have been approved for use, distribution of the vaccines did not begin until late 2020, and a majority of the public will likely not have access to a vaccination until sometime in 2021. In addition, new strains of the virus appear to have increased transmissibility, which could complicate treatment and vaccination programs. If the pandemic continues for an extended period or worsens from current levels, governments' actions to contain the spread of COVID-19 are ineffective and/or there is a significant delay in the production, distribution or administration of effective vaccines or other therapeutics, these factors could result in a material negative impact on our business, growth, reputation, prospects, financial condition, results of operations (including components of our financial results), cash flows and liquidity. Such impacts could include, but are not limited to, additional customer delays or cancellations of awarded services, reductions in research and development, drug development pipelines which could result in lower growth to the clinical research organization industry, additional costs related to restructuring activities, non-cash impairments of goodwill and other long-lived assets, decreases in the value of our investments, loss of hedge accounting and restrictions on our ability to obtain additional financing, if needed.

Tax reform in the United States could materially affect our business, results of operations, financial condition and/or cash flows.

On December 22, 2017, the U.S. government enacted comprehensive tax legislation commonly referred to as the Tax Cuts and Jobs Act of 2017 (the "Tax Act"). The Tax Act made broad and complex changes to the U.S. tax code including, but not limited to, (i) reducing the corporate statutory income tax rate from 35% to 21%, effective for 2018 and thereafter, (ii) amending the limitations on deductions for interest and (iii) transitioning U.S. international taxation from a worldwide system to a territorial system, inclusive of a one-time mandatory transition tax on accumulated unremitted foreign earnings as of December 31, 2017. Although we have adopted the applicable portions of the Tax Act as required, certain amounts recorded represent our best estimate based on regulatory guidance and information available at the time of recording. The ultimate impact from applying the Tax Act may differ materially from amounts recognized, due to, among other things, additional regulatory guidance that may be issued and actions we take because of the Tax Act. While additional guidance has been issued by the Internal Revenue Service ("IRS") and the U.S. Treasury Department, there are still some areas that need to be clarified. Also, a number of U.S. states have not updated their laws to take into account the new federal legislation. As a result, there may be further impact of the new laws on our future results of operations and financial condition. We continue to assess the impact of the Tax Act, and our accounting for the Tax Act could have a material effect on our business, results of operations, financial condition and/or cash flows. In addition, the new U.S. presidential administration has provided some informal guidance on what tax law changes it would support. Among other things, the proposals would raise the rate on both domestic and foreign income and impose a new alternative minimum tax on book income. If these proposals are ultimately enacted into legislation, they could materially impact our tax provision, cash tax liability and effective tax rate and adversely impact our results of operations, financial condition and/or cash flows.

Our cash taxes paid and effective tax rate have and will continue to fluctuate from time to time, and increases in either may adversely affect our business, results of operations, financial condition and/or cash flows.

Our cash taxes paid and effective income tax rate are influenced by our projected and actual profitability in the taxing jurisdictions in which we operate as well as changes in income tax rates. Additionally, changes in the distribution of profits and losses among taxing jurisdictions may have a significant impact on our cash taxes paid and effective income tax rate. Factors that may affect our cash taxes paid and/or effective income tax rate include, but are not limited to:

- the requirement to exclude from our quarterly worldwide effective income tax calculations losses in jurisdictions where no income tax benefit can be recognized;
- actual and projected full year pre-tax income;
- changes in existing tax laws and rates in various taxing jurisdictions;
- examinations or audits by taxing authorities;
- the use of foreign tax credits, and restrictions therein;
- changes in our capital structure;
- the establishment of valuation allowances against deferred income tax assets if we determine that it is more likely than not that future income tax benefits will not be realized;
- other provisions of the Tax Act, including (i) base erosion and anti-abuse tax, if applicable, (ii) taxation of foreign-derived intangible income and global intangible low-taxed income and (iii) limitations on deductions for interest, among others; and
- changes in tax laws from the new U.S. presidential administration.

These factors could have a material adverse effect on our business, results of operations, financial condition and/or cash flows.

Additionally, we rely upon generally accepted interpretations of tax laws and regulations in the countries in which we operate and cannot be certain that these interpretations are accurate or that the responsible taxing authority is in agreement with our views. We currently have open examinations with various tax authorities. If a satisfactory resolution cannot be achieved with the tax authorities, the ultimate tax outcome may have a material adverse effect on our results of operations, financial condition and/or cash flows.

Economic conditions and regulatory changes relating to the United Kingdom's exit from the European Union could negatively affect our business, results of operations, financial condition and/or cash flows.

We have operations in multiple countries, including the United Kingdom, and have transactions in multiple currencies, including the Pound Sterling. We also employ nationals of European Union countries in the United Kingdom and United Kingdom nationals in our European Union businesses. We import and export goods, including investigational product and laboratory samples, into and out of the United Kingdom from and to the European Union (respectively). During the second quarter of 2016, the United Kingdom voted by referendum to exit the European Union, commonly referred to as "Brexit." On January 31, 2020, the United Kingdom ceased to be part of the European Union. On December 24, 2020, the United Kingdom and the European Union announced that they had reached a new bilateral trade and cooperation agreement governing the future relationship between the United Kingdom and the European Union (the "EU-UK Trade and Cooperation Agreement") which was formally approved by the 27 member states of the European Union on December 29, 2020. The EU-UK Trade and Cooperation Agreement was formally approved by the U.K. parliament on December 30, 2020 and is expected to be formally ratified by the European Union parliament during the first half of 2021.

The EU-UK Trade and Cooperation Agreement provides some clarity in respect of the intended shape of the future relationship between the U.K. and the European Union. However, it remains unclear what general long-term economic, financial, trade and legal implications the U.K. withdrawal from the European Union will have and how the withdrawal and implications thereof will impact our business. In addition, Brexit may lead other European Union member countries to consider referendums regarding their European Union membership. Accordingly, the impact of the United Kingdom's departure from the European Union is uncertain. Brexit has and continues to create general economic uncertainty in the United Kingdom and European Union. The effects of Brexit could have an adverse impact on our business, results of operations, financial condition, and/or cash flows.

Our inability to adequately protect our intellectual property rights could adversely affect our business.

Our success is dependent, in part, on our ability to develop, use and protect our proprietary methodologies, software, compositions, processes, procedures, systems, technologies and other intellectual property. To protect our intellectual property rights, we primarily rely upon trade secret law, confidentiality agreements and policies, invention assignments and other contractual arrangements, along with patent, copyright and trademark laws. Existing laws of the countries outside of the U.S. in which we provide services offer only limited protection, and these are subject to change at any time. In addition, the agreements upon which we rely to protect our intellectual property might be breached, or might not be fully enforceable. Our intellectual property rights might not prevent our competitors from independently developing intellectual property that is similar to or duplicative of ours. Also, enforcing our intellectual property rights might also require substantial time, money and oversight, and we might not be successful in enforcing our rights.

Our investments in third parties are illiquid and subject to loss which could materially adversely affect our financial condition.

We have made investments and commitments to invest in other companies and investment vehicles. Most of our investments are as a limited partner in investment partnerships and are not directly in individual companies. In many cases, there is no public market for these investments and we might not be able to sell them on terms acceptable to us, if at all. In addition, if these funds or companies encounter financial difficulties, we might lose all or part of our investment. We account for the majority of these equity method investments at fair value, utilizing the fair value option, in accordance with U.S. generally accepted accounting principles ("U.S. GAAP"). These investments could have a significant impact on our operating results due to changes in fair market value of their respective investment portfolios or changes in the valuation assumptions by management.

We have recorded a liability for additional consideration estimated to be payable to former stockholders related to the recapitalization of our company in 2017. The contingent additional consideration is based primarily on changes in the fair value of Auven Therapeutics Holdings, L.P. and venBio Global Strategic Fund, L.P., net of taxes and other expenses related to such investments. For additional information see Note 6, "Investments," to our audited consolidated financial statements included elsewhere in this Annual Report on Form 10-K.

We may be required to provide the audited financial statements of one or more of our equity method investees in our Annual Report on Form 10-K, and rely on our equity method investees to provide us with these audited financial statements to fulfill our SEC reporting obligations.

We account for our economic ownership interest in our equity method investments using the equity method of accounting or at fair value using the fair value option (collectively, the "equity method investees"). Pursuant to Rule 3-09 of Regulation S-X ("Rule 3-09"), we may be required to provide in our Annual Report on Form 10-K audited financial statements for these equity method investees (the "Regulation S-X Audited Financial Statements"). If required to provide Regulation S-X Audited Financial Statements for these equity method investees, we have relied, and may in the future rely, on these equity method investees to provide us with their Regulation S-X Audited Financial Statements. In addition, we do not control the financial reporting process of our equity method investees and cannot change the way in which these equity method investees report their respective financial results.

In the future, these equity method investees may not provide us with the Regulation S-X Audited Financial Statements necessary to enable us to complete our SEC filings on a timely basis or at all. If we are required to provide Regulation S-X Audited Financial Statements for any of our equity method investees in future periods and are unable to do so, it may cause us to no longer be deemed timely and current with our SEC reporting obligations. In such event, we could become ineligible to use a "short form" registration statement on Form S-3. In addition, the SEC may not declare effective any registration statement that we file in connection with an offering that requires the financial statements under Rule 3-09 to be included. If, as a result, we are unable to complete a registered offering, our ability to access the public capital markets would be materially adversely affected. Any resulting inability to complete a registered offering may materially adversely impact our business, liquidity position, growth prospects, financial condition and results of operations.

We may need to recognize impairment charges related to goodwill, definite-lived intangible assets and/or fixed assets.

We have substantial balances of goodwill and definite-lived intangible assets. As of December 31, 2020, our goodwill and intangible assets totaled $1,820.2 million and $748.4 million, respectively. We are required to test goodwill for possible impairment on the same date each year and on an interim basis if there are indicators of a possible impairment. We are also required to evaluate amortizable intangible assets for impairment if there are indicators of a possible impairment.

There is significant judgment required in the analysis of a potential impairment of goodwill and intangible assets. As a result of a general economic slowdown, impacts from the COVID-19 pandemic, deterioration in one or more of the markets in which we operate or in our financial performance and/or future outlook of reporting units with assigned goodwill or intangible assets, we may determine that impairment of our goodwill or intangible assets exists. An impairment charge would be determined based on the estimated fair value of the reporting unit's assigned goodwill and estimated fair value of intangible assets and any such impairment charge could have a material adverse effect on our results of operations. For example, for the year ended December 31, 2018, we recognized goodwill impairment charges of $29.6 million. For the years ended December 31, 2020 and 2019 we did not recognize any goodwill impairment charges. See Part II, Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations—Critical Accounting Policies and Estimates," included elsewhere in this Annual Report on Form 10-K for additional information.

Difficult and volatile conditions in the capital and credit markets and in the overall economy, including those caused by the COVID-19 pandemic, could materially adversely affect our business, financial position, results of operations and/or cash flows.

Our business, financial position, results of operations and/or cash flows could be materially adversely affected by difficult conditions and volatility in the capital and credit markets and changes in national or global economic conditions including, but not limited to, inflation, interest rates, the negative impacts caused by pandemics, including the COVID-19 pandemic, and the effects of governmental initiatives to manage economic conditions. Difficult conditions in these markets and the overall economy affect our business and operations in a number of ways. For example:

- market conditions, including those caused by the COVID-19 pandemic, could result in our key customers experiencing financial difficulties and/or electing to limit spending or delay payment of invoices, or become unable to pay invoices, which in turn could result in decreased revenues, cash flows and earnings for us;
- current market conditions, including dislocation in the financial markets and volatility in interest rates due to the COVID-19 pandemic, may affect the performance of our hedging relationships for cash flow hedges, which could cause the hedges to no longer be effective;

- under difficult market conditions, borrowings under our senior secured credit facilities may not be available or sufficient, and in such a case, we might not be able to successfully obtain additional financing on reasonable terms and within a reasonable time period acceptable to us, or at all; and
- in order to respond to market conditions, we may need to seek waivers of various provisions in the credit agreement governing our senior secured credit facilities, and we might not be able to obtain such waivers on reasonable terms, if at all.

Risks Related to Our Industry

The CRO industry is fragmented and highly competitive and, if we fail to compete effectively, our business could suffer.

The CRO industry is fragmented and we face intense competition from numerous competitors. We primarily compete against other global, full service CROs similar to us, mid-size and small specialty CROs, in-house departments of biopharmaceutical companies and, to a lesser extent, universities, teaching hospitals and other organizations. Some of the larger CROs against which we compete and some in-house departments of biopharmaceutical companies may have greater capital, deeper expertise in selected areas and more resources than us, and in recent years, some of our larger competitors have engaged in mergers to add new or ancillary services, which might be attractive to consumers. In addition, our competitors that are smaller specialized CROs might compete effectively against us based on price and other commercial terms, as well as on their concentrated size and focus.

As a result of the level of competition we face in our industry, we might not be successful in retaining our existing customers and relationships or in winning new business. For example, in recent years a number of the large biopharmaceutical companies have established strategic or preferred partnerships or other alliances with one or more CROs relating to the provision of services over extended time periods. These partnerships and alliances differ in purpose, scope and term, but they have generally resulted in fewer CROs being selected to perform work for the biopharmaceutical companies. If we are unable to continue to effectively compete in the future, we might not be able to maintain current strategic or preferred partnerships or win new ones. In addition, the level of competition among CROs has led to firms competing aggressively on price, payment terms and other commercial terms, and has and may continue to result in us agreeing to terms that are less favorable to us than we have historically agreed to. Our future success depends on our ability to compete and, if we are unable to do so effectively, our business, results of operations, financial condition and/or cash flows could be materially adversely affected.

Trends in R&D spending and the rate of outsourcing by biopharmaceutical companies could materially adversely affect our growth potential, business, results of operations, financial condition and/or cash flows.

We provide clinical development and laboratory services to companies and other participants in the biopharmaceutical industry that sponsor clinical research, and our direct revenues, growth prospects and backlog are highly dependent on R&D spending levels and outsourcing rates. As such, industry trends, economic factors, regulatory developments, patent protection and political and other events and circumstances that affect the biopharmaceutical industry, such as volatility or declines in securities markets limiting capital and liquidity, also affect us. For example, in recent years there has been significant public and private capital inflows to biotechnology companies and, while the level of fundraising in recent years has been strong, the ability of small and mid-sized biotechnology companies to attract the funding needed to sustain operations and advance clinical candidates to subsequent stages in the development process remains dependent on the overall health of the financial markets.

Thus, if for these reasons or any other reason biopharmaceutical firms reduce their R&D spending or the extent to which they outsource their work to CROs, our ability to grow our business and our results of operations, financial condition and/or cash flows could be materially adversely affected. In addition, in the past, mergers, consolidations, product withdrawals, lawsuits and other events in the biopharmaceutical industry appear to have slowed decision-making by pharmaceutical companies and resulted in delays and cancellations of drug development projects. Continuation or increases in these trends, as well as their effect on R&D spending and outsourcing penetration, could also have a material adverse effect on our business.

The U.S. and international healthcare industry is subject to political, economic and/or regulatory influences and changes, such as healthcare reform, all of which could adversely affect both our customers' business and our business.

The U.S. and international healthcare industry is subject to changing political, economic and regulatory influences that could significantly affect the drug development process, R&D costs and the pricing and reimbursement for pharmaceutical products.

Governments worldwide have increased efforts to expand healthcare coverage while at the same time curtailing and better controlling the increasing costs of healthcare. In recent years, the U.S. Congress enacted healthcare reform legislation that expanded health insurance coverage and imposed healthcare industry cost containment measures. More recently, as a result of the 2020 U.S. presidential and congressional elections, there are renewed and reinvigorated calls for health insurance reform, which could cause significant uncertainty in the U.S. healthcare market. At this point, it is uncertain as to what changes, new legislation or regulations will be adopted or how any such changes, new legislation or regulations would impact our business. If cost-containment efforts limit our customers' profitability, they may decrease R&D spending, which could decrease the demand for our services and materially adversely affect our growth prospects. Likewise, if a simplified or more relaxed drug approval process is adopted, the demand for our services may decrease.

The U.S. Congress has also considered and might adopt other legislation that could put downward pressure on the prices that biopharmaceutical companies can charge for prescription drugs. In addition, government bodies may have adopted or are considering the adoption of healthcare reform to control the increasing cost of healthcare. For example, under the previous presidential administration, the Centers for Medicare and Medicaid Services issued an interim final rule in November 2020 announcing a most favored nation drug pricing model aimed at certain drug prices. The model was challenged in several U.S. courts and has not been implemented. It is uncertain whether the current presidential administration will defend this new model or take similar measures. Cost-containment measures, whether instituted by healthcare providers or imposed by governments or through new government regulations or executive orders, could result in greater selectivity in the number of pharmaceutical products available for purchase, resulting in third-party payers potentially challenging the price and cost-effectiveness of certain pharmaceutical products. In addition, in many major markets outside the U.S., pricing approval is required before sales may commence. As a result, significant uncertainty exists as to the reimbursement status of approved healthcare products. Any of these factors could harm our customers' businesses, which, in turn, could materially adversely hurt our business.

In addition to healthcare reform proposals, the expansion of managed care organizations, which focus on reducing healthcare costs by limiting expenditures on pharmaceutical products and medical devices, could result in biopharmaceutical and medical device companies spending less on R&D, which could decrease the demand for our services. If this were to occur, we would have fewer business opportunities and our revenues could decrease, potentially materially.

Government bodies may also adopt healthcare legislation or regulations that are more burdensome than existing regulations. For example, product safety concerns and recommendations from the FDA's Drug Safety Oversight Board could change the regulatory environment for drug products, including the process for conducting clinical trials of drug and biologic product candidates, FDA product approval and post-approval safety surveillance. These and other changes in regulation could increase our expenses or limit our ability to offer some of our services. Additionally, new or heightened regulatory requirements may have a negative impact on the ability of our customers to conduct and fund clinical trials for new medicines, which could reduce the demand for our services.

We cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative action, either in the U.S., especially given the recent change in the U.S. presidential administration, or abroad. If we are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we are not able to maintain regulatory compliance, our business may be harmed.

The biopharmaceutical industry has a history of patent and other intellectual property litigation, and we might be involved in costly intellectual property lawsuits.

The biopharmaceutical industry has a history of intellectual property litigation, and these lawsuits will likely continue in the future. Accordingly, we may face patent infringement suits by companies that hold patents for similar business processes or other claims alleging infringement of their intellectual property rights. As the industry employs new technologies, the risk of intellectual property litigation could rise. Legal proceedings relating to intellectual property are costly, take significant time and resources and divert management's attention from other business concerns, regardless of the merits or the outcome of such claims. If we do not prevail in an infringement lawsuit brought against us, we might have to pay substantial damages, and we could be required to stop the infringing activity or obtain a license to continue such activity, which might not be available on favorable terms or at all, all of which could materially adversely affect our ability to provide services to our customers and our business, results of operations, financial condition and/or cash flows.

Risks Associated with Our Indebtedness

Our substantial indebtedness could materially adversely affect our financial condition and our ability to operate our business, react to changes in the economy or industry or pay our debts and meet our obligations under our debt and could divert our cash flow from operations for debt payments.

We have a significant amount of indebtedness. As of December 31, 2020, our total term loan facility borrowing was $3,064.0 million (the "2015 Term Loan") under the credit agreement dated as of August 18, 2015, as amended from time to time (the "2015 Credit Agreement"), among Jaguar Holding Company I, the borrowers party thereto, the lenders party thereto and Credit Suisse AG, Cayman Islands Branch, as administrative agent, collateral agent and letter of credit ("L/C") issuer and L/C issuer party thereto, and we had $500.0 million outstanding of 4.625% Senior Notes due 2025 (the "2025 Notes") and $700.0 million of 5.000% Senior Notes due 2028 (the "2028 Notes" and, together with the 2025 Notes, the "New Notes"). In addition, as of December 31, 2020, we had a $300.0 million revolving credit facility (the "2015 Revolving Credit Facility") under which we had $298.4 million of availability after giving effect to outstanding letters of credit. On January 13, 2021, together with our indirect wholly-owned subsidiary, PPD Development, L.P. (the "Co-Borrower"), we entered into and closed a new (i) $3,050.0 million aggregate principal amount senior secured first-lien term loan facility maturing in January 2028 (the "New Term Loan") and (ii) $600.0 million committed principal amount senior secured first-lien revolving credit facility maturing in January 2026 (the "New Revolving Credit Facility" and, together with the New Term Loan, the "Bank Facilities") under the credit agreement dated as of January 13, 2021 (the "New Credit Agreement"), among us, the Co-Borrower, JPMorgan Chase Bank, N.A., as administrative agent, collateral agent and a L/C Issuer, each lender from time to time party thereto and each L/C Issuer party thereto. The proceeds from borrowings under the New Term Loan, together with cash on hand, were used to (i) refinance in full the principal amount outstanding and accrued and unpaid interest, fees and other amounts then due and owing under, the 2015 Credit Agreement, and (ii) pay fees and expenses relating to the New Credit Agreement. See Part II, Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations—Liquidity and Capital Resources," included elsewhere in this Annual Report on Form 10-K for additional information on our indebtedness. In addition, subject to restrictions in the agreements governing our Bank Facilities and the indenture for our New Notes, we may incur additional debt.

Our substantial debt could have important consequences to you, including the following:

- it may be difficult for us to satisfy our obligations, including debt service requirements under our outstanding debt, resulting in possible defaults on and acceleration of such indebtedness;
- our ability to obtain additional financing for working capital, capital expenditures, debt service requirements, acquisitions or other general corporate purposes may be impaired;
- a substantial portion of cash flow from operations may be dedicated to the payment of principal and interest on our debt, therefore reducing our ability to use our cash flow to fund our operations, capital expenditures, future business opportunities, acquisitions and other purposes;
- we are more vulnerable to economic downturns and adverse industry conditions and our flexibility to plan for, or react to, changes in our business or industry is more limited;
- our ability to capitalize on business opportunities and to react to competitive pressures, as compared to our competitors, may be compromised due to our high level of debt; and

- our ability to borrow additional funds or to refinance debt may be limited.

Furthermore, all of our debt under our Bank Facilities bears interest at variable rates, at our option, based on the London Inter-bank Offered Rate ("LIBOR") or an alternative base rate. If these rates were to increase significantly, whether because of an increase in market interest rates or a decrease in our creditworthiness, our ability to borrow additional funds may be reduced and the risks related to our substantial debt would intensify. A hypothetical 25 basis point increase in interest rates on total borrowings on our 2015 Term Loan and 2015 Revolving Credit Facility, net of the impact of our interest rate swaps, would have resulted in approximately a $3.1 million decrease in interest expense for the year ended December 31, 2020.

In addition, on July 27, 2017, the Chief Executive of the U.K. Financial Conduct Authority (the "FCA"), which regulates LIBOR, announced that it intends to stop persuading or compelling banks to submit rates for the calibration of LIBOR to the administrator of LIBOR after 2021. On November 30, 2020, the ICE Benchmark Administration, which is regulated by the FCA and is the authorized administrator of LIBOR, announced that it would extend most tenors of U.S. LIBOR until June 30, 2023 for legacy products. While this announcement extends the transition period to June 2023, the United States Federal Reserve concurrently issued a statement advising banks to stop new LIBOR issuances by the end of 2021.

If LIBOR ceases to exist, the method and rate used to calculate our interest rates and/or payments on our Bank Facilities in the future may result in interest rates and/or payments that are higher than, lower than or that do not otherwise correlate over time with the interest rates and/or payments that would have been applicable to our obligations if LIBOR was available in its current form. There is currently no definitive information regarding the future utilization of LIBOR or of any particular replacement rate. As such, the potential effect of any such event is uncertain, but were it to occur, our cost of capital, financial results, cash flows and results of operations may be adversely affected.

Servicing our debt requires a significant amount of cash. Our ability to generate sufficient cash depends on numerous factors beyond our control, and we may be unable to generate sufficient cash flow to service our debt obligations.

Our business may not generate sufficient cash flow from operating activities to service our debt obligations. Our ability to make payments on and to refinance our debt and to fund planned capital expenditures depends on our ability to generate cash in the future. To some extent, this is subject to general economic, financial, competitive, legislative, regulatory and other factors that are beyond our control.

If we are unable to generate sufficient cash flow from operations to service our debt and meet our other commitments, we may need to refinance all or a portion of our debt, sell material assets or operations, delay capital expenditures or raise additional debt or equity capital. We may not be able to effect any of these actions on a timely basis, on commercially reasonable terms or at all, and these actions may not be sufficient to meet our capital requirements. In addition, the terms of our existing or future debt agreements may restrict us from pursuing any of these alternatives.

Restrictive covenants in the New Credit Agreement governing our Bank Facilities and the indenture governing our New Notes may restrict our ability to pursue our business strategies, and failure to comply with any of these restrictions could result in acceleration of our debt.

The operating and financial restrictions and covenants in the New Credit Agreement governing our Bank Facilities and the indenture governing our New Notes may materially adversely affect our ability to distribute monies to our stockholders, finance future operations or capital needs or engage in other business activities. Such agreements limit our ability, among other things, to:

- incur additional indebtedness and guarantee indebtedness;
- pay dividends on or make distributions in respect of our common stock or make other restricted payments;
- make loans and investments;
- prepay, redeem or repurchase certain debt;
- sell or otherwise dispose of assets;
- incur liens;
- consolidate, merge, sell or otherwise dispose of all or substantially all of our assets;

- enter into agreements restricting our subsidiaries' ability to pay dividends;
- enter into certain transactions with our affiliates; and
- designate our subsidiaries as unrestricted subsidiaries.

In addition, the restrictive covenants in the New Credit Agreement governing our Bank Facilities require us to maintain a specified first lien net leverage ratio when a certain percentage of our New Revolving Credit Facility commitments are borrowed and outstanding as of the end of each fiscal quarter. In certain circumstances, our ability to meet this financial covenant may be affected by events beyond our control.

A breach of the covenants under the New Credit Agreement governing our Bank Facilities or the indenture governing our New Notes could result in an event of default under the applicable indebtedness. Such a default might allow the creditors to accelerate the related debt and might result in the acceleration of any other debt to which a cross-acceleration or cross-default provision applies. In addition, an event of default under the New Credit Agreement governing our Bank Facilities would permit the lenders under our Bank Facilities to terminate all commitments to extend further credit under our Bank Facilities. Furthermore, if we were unable to repay the amounts due and payable under our Bank Facilities, those lenders could proceed against the collateral granted to them to secure that indebtedness. In the event our lenders or noteholders accelerate the repayment of our borrowings, we and our subsidiaries may not have sufficient assets to repay that indebtedness.

As a result of all of these restrictions, we and/or our subsidiaries, as applicable, may be:

- limited in how we conduct our business;
- unable to raise additional debt or equity financing to operate during general economic or business downturns; or
- unable to compete effectively or to take advantage of new business opportunities.

These restrictions might hinder our ability to service our indebtedness or grow in accordance with our business strategy.

Furthermore, the terms of any future indebtedness we may incur could have further additional restrictive covenants. We may not be able to maintain compliance with these covenants in the future, and in the event that we are not able to maintain compliance, we may not be able to obtain waivers from the lenders or amend the covenants.

Despite current debt levels, we and our subsidiaries may still be able to incur substantially more debt. This could further exacerbate the risks associated with our substantial leverage.

We and our subsidiaries may be able to incur substantial additional debt in the future. Although the New Credit Agreement governing our Bank Facilities and the indenture governing our New Notes contain restrictions on the incurrence of additional debt, these restrictions are subject to a number of qualifications and exceptions, and the debt incurred in compliance with these restrictions could be substantial. Additionally, we may successfully obtain waivers of these restrictions. If we incur additional debt above the levels currently in effect, the risks associated with our leverage, including those described above, would increase.

Risks Related to Ownership of Our Common Stock

We currently do not intend to declare dividends on our common stock in the foreseeable future and, as a result, your only opportunity to achieve a return on your investment is if the price of our common stock appreciates.

We currently do not expect to declare any dividends on our common stock in the foreseeable future. Instead, we anticipate that all of our earnings in the foreseeable future will be used to provide working capital to support our operations and to finance the growth and development of our business. Any determination to declare or pay dividends in the future will be at the discretion of our board of directors, subject to applicable laws and dependent upon a number of factors, including our earnings, capital requirements and overall financial conditions. In addition, our ability to pay dividends on our common stock is currently limited by the covenants of our Bank Facilities and our indenture governing our New Notes and may be further restricted by the terms of any future debt or preferred securities. Accordingly, your only opportunity to achieve a return on your investment in our company may be if the market price of our common stock appreciates and you sell your shares at a profit. The market price for our common stock may never exceed, and may fall below, the price that you pay for such common stock.

Future sales, or the perception of future sales, by us or our existing stockholders in the public market following this offering could cause the market price for our common stock to decline.

The sale of additional shares of our common stock in the public market, or the perception that such sales could occur, could harm the prevailing market price of shares of our common stock. These sales, or the possibility that these sales may occur, also might make it more difficult for us to sell equity securities in the future at a time and at a price that we deem appropriate.

Shares held by certain investment funds of The Carlyle Group Inc. and its affiliates and Hellman & Friedman LLC and its affiliates (collectively, the "Majority Sponsors"), Platinum Falcon B 2018 RSC Limited, a restricted scope company incorporated in the Abu Dhabi Global Market and an investment vehicle of the Abu Dhabi Investment Authority ("ADIA"), Clocktower Investment Pte Ltd. ("GIC") (and together with the Majority Sponsors, the "Sponsors") and certain of our directors, officers and employees are "restricted securities" as defined by Rule 144 of the Securities Act ("Rule 144") and subject to certain restrictions on resale. Restricted securities may be sold in the public market only if they are registered under the Securities Act or are sold pursuant to an exemption from registration such as Rule 144.

Unregistered shares represented approximately 66% of our common stock as of February 19, 2021, and may become registered shares in the future. Registration of any of these outstanding shares of common stock would result in such shares becoming freely tradable without compliance with Rule 144 upon effectiveness of the registration statement.

As restrictions on resale end or if these stockholders exercise their registration rights, the market price of our shares of common stock could drop significantly if the holders of these shares sell them or are perceived by the market as intending to sell them. These factors could also make it more difficult for us to raise additional funds through future offerings of our shares of common stock or other securities.

In addition, as of December 31, 2020, 37.7 million shares of our common stock are reserved for future issuance under the 2020 Omnibus Incentive Plan and will become eligible for sale in the public market once those shares are issued, subject to provisions relating to various vesting agreements, lock-up agreements and Rule 144, as applicable.

In the future, we may also issue our securities in connection with investments or acquisitions. The amount of shares of our common stock issued in connection with an investment or acquisition could constitute a material portion of our then-outstanding shares of our common stock. Any issuance of additional securities in connection with investments or acquisitions may result in dilution to you.

Provisions in our organizational documents could delay or prevent a change of control.

Certain provisions of our amended and restated certificate of incorporation, amended and restated bylaws and second amended and restated stockholders agreement may have the effect of delaying or preventing a merger, acquisition, tender offer, takeover attempt or other change of control transaction that a stockholder might consider to be in its best interest, including attempts that might result in a premium over the market price of our common stock.

These provisions provide for, among other things:

- the division of our board of directors into three classes, as nearly equal in size as possible, with directors in each class serving three-year terms and with terms of the directors of only one class expiring in any given year;
- that at any time when the Majority Sponsors and certain of their respective affiliates beneficially own, in the aggregate, less than 40% in voting power of the stock of our company entitled to vote generally in the election of directors, directors may only be removed for cause, and only by the affirmative vote of the holders of at least two-thirds in voting power of all the then-outstanding shares of stock entitled to vote thereon, voting together as a single class;
- the ability of our board of directors to issue one or more series of preferred stock with voting or other rights or preferences that could have the effect of impeding the success of an attempt to acquire us or otherwise effect a change of control;
- advance notice for nominations of directors by stockholders and for stockholders to include matters to be considered at stockholder meetings;

- the right of the Majority Sponsors and certain of their respective affiliates to nominate the majority of the members of our board of directors and the obligation of certain of our other pre-initial public offering ("IPO") stockholders to support such nominees;
- certain limitations on convening special stockholder meetings; and
- that certain provisions of our amended and restated certificate of incorporation and amended and restated bylaws may be amended only by the affirmative vote of the holders of at least two-thirds in voting power of all the then-outstanding shares of our stock entitled to vote thereon, voting together as a single class, if the Majority Sponsors and certain of their respective affiliates beneficially own, in the aggregate, less than 40% in voting power of our stock entitled to vote generally in the election of directors.

These provisions could make it more difficult for a third-party to acquire us, even if the third-party's offer may be considered beneficial by many of our stockholders. As a result, our stockholders may be limited in their ability to obtain a premium for their shares.

We are controlled by the Majority Sponsors, whose interests may be different than the interests of other holders of our securities.

The Majority Sponsors are able to control actions to be taken by us, including future issuances of our common stock or other securities, the payment of dividends, if any, on our common stock, amendments to our organizational documents and the approval of significant corporate transactions, including mergers, sales of substantially all of our assets, distributions of our assets, the incurrence of indebtedness and any incurrence of liens on our assets.

The interests of the Majority Sponsors may be materially different than the interests of our other stakeholders. In addition, the Majority Sponsors may have an interest in pursuing acquisitions, divestitures and other transactions that, in their judgment, could enhance their investment, even though such transactions might involve risks to you. For example, the Majority Sponsors may cause us to take actions or pursue strategies that could impact our ability to make payments under our New Credit Agreement or New Notes or cause a change of control. In addition, to the extent permitted by the New Credit Agreement or the indenture governing the New Notes, the Majority Sponsors may cause us to pay dividends rather than make capital expenditures or repay debt. The Majority Sponsors are in the business of making investments in companies and may from time to time acquire and hold interests in businesses that compete directly or indirectly with us. Our amended and restated certificate of incorporation provides that none of the Majority Sponsors, any of their respective affiliates or any director who is not employed by us (including any non-employee director who serves as one of our officers in both his or her director and officer capacities) or his or her affiliates will have any duty to refrain from engaging, directly or indirectly, in the same business activities or similar business activities or lines of business in which we operate. The Majority Sponsors also may pursue acquisition opportunities that may be complementary to our business, and, as a result, those acquisition opportunities may not be available to us.

So long as the Majority Sponsors continue to own a significant amount of our outstanding common stock, even if such amount is less than 50%, they will continue to be able to strongly influence or effectively control our decisions and, so long as each of the Majority Sponsors continues to own shares of our outstanding common stock, they will have the ability to nominate individuals to our board of directors pursuant to the Stockholders Agreement (as defined below) entered into in connection with our IPO. See Part III, Item 13, "Certain Relationships and Related Transactions, and Director Independence - Second Amended and Restated Stockholders Agreement," included elsewhere in this Annual Report on Form 10-K. In addition, the Majority Sponsors, acting together, will be able to determine the outcome of all matters requiring stockholder approval and will be able to cause or prevent a change of control of our company or a change in the composition of our board of directors and could preclude any unsolicited acquisition of our company. The concentration of ownership could deprive you of an opportunity to receive a premium for your shares of common stock as part of a sale of our company and ultimately might affect the market price of our common stock.

Our board of directors is authorized to issue and designate shares of our preferred stock in additional series without stockholder approval.

Our amended and restated certificate of incorporation authorizes our board of directors, without the approval of our stockholders, to issue 100,000,000 shares of our preferred stock, subject to limitations prescribed by applicable law, rules and regulations and the provisions of our amended and restated certificate of incorporation, as shares of preferred stock in series, to establish from time to time the number of shares to be included in each such series and to fix the designation, powers, preferences and rights of the shares of each such series and the qualifications, limitations or restrictions thereof. The powers, preferences and rights of these additional series of preferred stock may be senior to or on parity with our common stock, which may reduce its value.

Our amended and restated bylaws provide, subject to limited exceptions, that the Court of Chancery of the State of Delaware and, to the extent enforceable, the federal district courts of the United States of America are the sole and exclusive forums for certain stockholder litigation matters, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers or employees.

Our amended and restated bylaws provide, subject to limited exceptions, that unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware shall, to the fullest extent permitted by law, be the sole and exclusive forum for any (i) derivative action or proceeding brought on behalf of our company, (ii) action asserting a claim of breach of a fiduciary duty owed by any director, officer or other employee of our company to the company or our stockholders, (iii) action asserting a claim against the company or any director, officer or other employee of the company arising pursuant to any provision of the Delaware General Corporation Law, (the "DGCL"), or our amended and restated certificate of incorporation or our amended and restated bylaws or as to which the DGCL confers jurisdiction on the Court of Chancery of the State of Delaware or (iv) action asserting a claim against the company or any director, officer or other employee of the company governed by the internal affairs doctrine. These provisions shall not apply to suits brought to enforce a duty or liability created by the Exchange Act or any other claim for which the federal courts have exclusive jurisdiction and our stockholders cannot waive compliance with federal securities laws and the rules and regulations thereunder. Unless we consent in writing to the selection of an alternative forum, the federal district courts of the United States of America shall be the exclusive forum for the resolution of any complaint asserting a cause of action arising under the Securities Act, subject to and contingent upon a final adjudication in the State of Delaware of the enforceability of such exclusive forum provision. Any person or entity purchasing or otherwise acquiring any interest in shares of our capital stock shall be deemed to have notice of and consented to the forum provisions in our amended and restated bylaws.

These choice of forum provisions may limit a stockholder's ability to bring a claim in a different judicial forum, including one that it may find favorable or convenient for disputes with us or any of our directors, officers or other employees which may discourage lawsuits with respect to such claims. Alternatively, if a court were to find the choice of forum provisions that will be contained in our amended and restated bylaws to be inapplicable or unenforceable with respect to one or more of the specified types of actions or proceedings, we may incur additional costs associated with resolving such action in other jurisdictions, which could harm our business, operating results and financial condition.

General Risk Factors

Our stock price may change significantly, and you may not be able to resell shares of our common stock at or above the price you paid or at all, and you could lose all or part of your investment as a result.

The trading price of our common stock may be volatile and could be subject to fluctuations in response to various factors, some of which are beyond our control. Factors that could cause fluctuations in the trading price of our common stock include the following:

- results of operations that vary from the expectations of securities analysts and investors;
- results of operations that vary from those of our competitors;
- changes in expectations as to our future financial performance, including financial estimates and investment recommendations by securities analysts and investors;
- declines in the market prices of stocks generally;
- strategic actions by us or our competitors;

- announcements by us or our competitors of significant contracts, new products, acquisitions, joint marketing relationships, joint ventures, other strategic relationships or capital commitments;
- changes in general economic or market conditions or trends in our industry or markets;
- changes in business or regulatory conditions;
- additions or departures of key management personnel;
- future sales of our common stock or other securities by us or our existing stockholders, or the perception of such future sales;
- investor perceptions of the investment opportunity associated with our common stock relative to other investment alternatives;
- the public's response to press releases or other public announcements by us or third parties, including our filings with the SEC;
- announcements relating to litigation;
- guidance, if any, that we provide to the public, any changes in this guidance or our failure to meet this guidance;
- the development and sustainability of an active trading market for our stock;
- changes in accounting principles; and
- other events or factors, including those resulting from pandemics, such as the COVID-19 pandemic, natural disasters, war, acts of terrorism or responses to these events.

These broad market and industry fluctuations may materially adversely affect the market price of our common stock, regardless of our actual operating performance. In addition, price volatility may be greater if the trading volume of our common stock is low.

In the past, following periods of market volatility, stockholders have instituted securities class action litigation. If we were involved in securities litigation, it could have a substantial cost and divert resources and the attention of executive management from our business regardless of the outcome of such litigation.

Our quarterly operating results fluctuate and may fall short of prior periods, our projections or the expectations of securities analysts or investors, which could materially adversely affect our stock price.

Our operating results have fluctuated from quarter to quarter at points in the past, and they may do so in the future. Therefore, results of any one fiscal quarter are not a reliable indication of results to be expected for any other fiscal quarter or for any year. If we fail to increase our results over prior periods, to achieve our projected results or to meet the expectations of securities analysts or investors, our stock price may decline, and the decrease in the stock price may be disproportionate to the shortfall in our financial performance. Results may be affected by various factors, including those described in these risk factors. We maintain a forecasting process that seeks to align expenses to backlog conversion. If we do not control costs or appropriately adjust costs to actual results, or if actual results differ significantly from our forecast, our financial performance could be materially adversely affected.

If securities analysts do not publish research or reports about our business or if they downgrade our stock or our sector, our stock price and trading volume could decline.

The trading market for our common stock will rely in part on the research and reports that industry or financial analysts publish about us or our business or industry. We do not control these analysts. Furthermore, if one or more of the analysts who do cover us downgrade our stock or our industry, or the stock of any of our competitors, or publish inaccurate or unfavorable research about our business or industry, the price of our stock could decline. If one or more of these analysts ceases coverage of us or fails to publish reports on us regularly, we could lose visibility in the market, which in turn could cause our stock price or trading volume to decline.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

As of December 31, 2020, we had numerous office, laboratory and other real estate facilities in 46 countries used by both our Clinical Development Services and Laboratory Services segments. We own five of these facilities and lease the remaining facilities. We also own our worldwide headquarters located in Wilmington, North Carolina. Our properties are geographically distributed to meet our worldwide operating requirements, and none of our properties are individually material to our business operations. Many of our leases have an option to renew, and we believe that we will be able to successfully renew expiring leases on terms satisfactory to us if needed. We believe that our facilities are adequate for our operations and that suitable additional space will be available when needed.

Item 3. Legal Proceedings

We are party to legal proceedings incidental to our business. While our management currently believes the ultimate outcome of these proceedings, individually and in the aggregate, will not have a material adverse effect on our consolidated financial statements, all litigation is subject to inherent uncertainties. Were an unfavorable ruling to occur, there exists the possibility of a material adverse impact on our financial condition and results of operations.

Item 4. Mine Safety Disclosures

Not applicable.

Part II

Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

Market Information for Common Stock

Our common stock trades on the Nasdaq under the symbol "PPD."

Holders of Record

On February 19, 2021, we had approximately 60 record holders of common stock as reported by our transfer agent. Holders of record are defined as those stockholders whose shares are registered in their names in our stock records and do not include beneficial owners of common stock whose shares are held in the names of brokers, dealers or clearing agencies.

Dividend Policy

We currently do not expect to declare any dividends on our common stock in the foreseeable future. Instead, we anticipate that all of our earnings in the foreseeable future will be used to provide working capital, to support our operations and to finance the growth and development of our business. Any determination to declare or pay dividends in the future will be at the discretion of our board of directors, subject to applicable laws, and will be dependent on a number of factors, including our earnings, capital requirements and overall financial condition. We are controlled by the Majority Sponsors, who have the ability to nominate a majority of the members of our board of directors and therefore control the payment of dividends. See Part I, Item 1A, "Risk Factors—Risks Related to Ownership of Our Common Stock—We are controlled by the Majority Sponsors, whose interests may be different than the interests of other holders of our securities." In addition, because we are a holding company, our ability to pay dividends on our common stock may be limited by restrictions on our ability to obtain sufficient funds through dividends from subsidiaries, including restrictions under the covenants of the New Credit Agreement governing our Bank Facilities and the indentures governing our New Notes, and may be further restricted by the terms of any future debt or preferred securities. See Part II, Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations—Liquidity and Capital Resources—Indebtedness" for additional information about our New Credit Agreement and our New Notes.

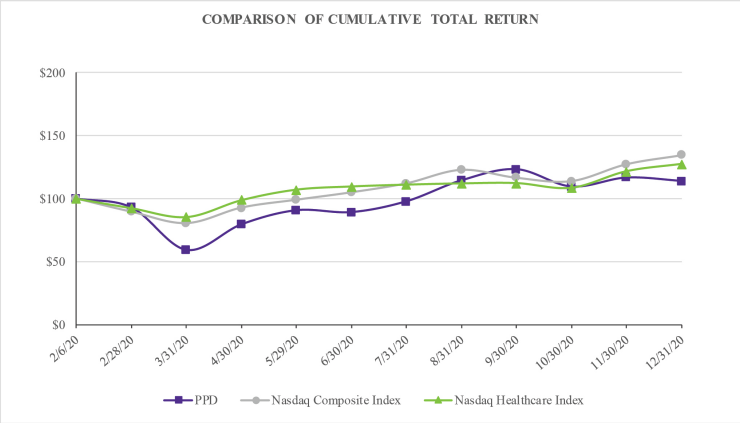
Recent Sales of Unregistered Securities

There were no unregistered sales of equity securities in 2020 that have not been previously reported in a quarterly report on Form 10-Q.

Stock Performance Graph

The following stock performance graph shall not be deemed to be soliciting material or to be filed with the SEC for purposes of Section 18 of the Exchange Act, nor shall such information be incorporated by reference into any of our other filings under the Securities Act or the Exchange Act.

The stock performance graph compares the cumulative total shareholder return on our common stock with the cumulative total return of the Nasdaq Composite Index and of the Nasdaq Healthcare Index. The graph assumes an initial investment of $100 in our common stock and each index on February 6, 2020, the date our common stock commenced trading, and is not intended to forecast or be indicative of future stock performance. Historical data for the Nasdaq Composite Index and the Nasdaq Healthcare Index assumes the reinvestment of dividends, if any.



Item 6. Removed and Reserved

The selected financial data previously required by Item 301 of Regulation S-K has been omitted in reliance on SEC Release No. 33-10890, *Management's Discussion and Analysis, Selected Financial Data and Supplementary Financial Information*.

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

The following discussion summarizes the significant factors affecting the operating results, financial condition, liquidity and cash flows of our company as of and for the periods presented below. The following discussion and analysis should be read in conjunction with the audited consolidated financial statements and the related notes thereto included elsewhere in this Annual Report on Form 10-K. Some of the discussion includes forward-looking statements related to future events and our future operating performance that are based on current expectations and are subject to risk and uncertainties. Actual results could differ materially from those discussed in or implied by forward-looking statements as a result of various factors, including those discussed below and in Part I, Item 1A,"Risk Factors," of this Annual Report on Form 10-K.

Company Overview

We are a leading provider of drug development services to the biopharmaceutical industry, focused on helping our customers bring their medicines and other treatments to patients around the world. We have been in the drug development services business for 35 years, providing a comprehensive suite of clinical development and laboratory services to pharmaceutical, biotechnology, medical device and government organizations, as well as other industry participants. We have deep experience across a broad range of rapidly growing areas of the drug development industry and engage with our customers through a variety of commercial models, including both full-service and functional service partnerships and other offerings tailored to address the specific needs of our customers. We have two reportable segments, Clinical Development Services and Laboratory Services. For a description of our service offerings within our segments, see Part I, Item 1, "Business," of this Annual Report on Form 10-K.

Initial Public Offering

On February 10, 2020, we completed our IPO of our common stock at a price to the public of $27.00 per share. We issued and sold 69.0 million shares of common stock in the IPO, including 9.0 million shares of common stock issued pursuant to the full exercise of the underwriters' option to purchase additional shares. We raised net proceeds of $1,773.0 million through the IPO, after deducting underwriting discounts and other offering expenses totaling $90.0 million.

We used a portion of the proceeds from the IPO to (i) redeem $550.0 million in aggregate principal amount of unsecured 7.625%/8.375% Senior PIK Toggle Notes (the "Initial HoldCo Notes"), plus accrued and unpaid interest thereon and $5.5 million of redemption premium and (ii) redeem $900.0 million in aggregate principal amount of unsecured 7.75%/8.50% Senior PIK Toggle Notes (the "Additional HoldCo Notes" and, together with the Initial HoldCo Notes, the "HoldCo Notes"), plus accrued and unpaid interest thereon and $9.0 million of redemption premium. The redemption of the HoldCo Notes resulted in a total loss on extinguishment of debt of $50.1 million.

Issuance of New Notes and Redemption of OpCo Notes

On June 5, 2020, we issued $1,200.0 million of unsecured New Notes and used the proceeds to redeem $1,125.0 million in aggregate principal amount of unsecured 6.375% senior notes (the "OpCo Notes"), plus accrued and unpaid interest thereon and a $35.9 million redemption premium. The redemption of the OpCo Notes resulted in a total loss on extinguishment of debt of $43.5 million.

COVID-19 Pandemic

In March 2020, the World Health Organization declared COVID-19 a global pandemic that has resulted in travel and business disruption and volatile conditions in the capital and credit markets and overall economy. Globally, governments have implemented travel bans, stay at home or total lock-down mandates and other social distancing measures to combat the spread of COVID-19, which remained, to a greater or lesser extent, throughout 2020. In response to the global pandemic, we created a pandemic response committee of company leaders, including our chief medical officer, to help manage our response to the pandemic. The committee was focused on (i) the health and safety of our employees and the patients we recruit/enroll and (ii) business continuity, preserving the integrity of the work we do for our customers, such as providing support for vaccines and anti-viral therapies for COVID-19. To implement social distancing measures and maximize work productivity, we have enacted several measures, including limiting the amount of personnel in our facilities, with remote-capable employees throughout our company working remotely, and introduced COVID-19 testing for employees in critical patient-facing and laboratory roles. We have also significantly limited domestic and international travel of our employees.

To date, the COVID-19 pandemic has impacted our business across both our Clinical Development Services and Laboratory Services segments. The impacts include the ability of our employees to visit hospitals and other clinical research sites to conduct monitoring and other activities and patient recruitment and enrollment activities as part of services offered within our Clinical Development Services segment, as well as a temporary shutdown of our Phase I clinics beginning in March 2020. Furthermore, we have had customers delay new studies and/or pause ongoing studies or certain activities thereof, such as patient recruitment, patient enrollment, site visits and site monitoring, for various reasons including (i) to protect patient safety, (ii) as a result of government restrictions, (iii) to limit impacts on healthcare systems and (iv) due to concerns regarding the ability of hospitals and other clinical research sites to conduct clinical trials safely, efficiently and effectively, which has impacted our Clinical Development Services segment. Additionally, at the onset of the pandemic, our Laboratory Services segment experienced reductions in central lab services due to delays in clinical trial activity that impacted sample volumes.

Beginning in the second quarter of 2020, as travel restrictions were lifted and phased reopenings began in jurisdictions in which we operate, we reopened a limited number of our offices and also allowed business-critical travel to occur, including employee visits to hospitals and other clinical research sites, as well as the activation of new sites. We also began a phased reopening of all of our Phase I clinics, with such phased reopenings resulting in reduced domiciling of patients for clinical trials as compared to pre-pandemic levels. Due to safety measures we implemented shortly following the onset of the COVID-19 pandemic, our laboratory facilities have continued to operate at near full capacity during the pandemic. While we saw improvements over the course of 2020 in relation to fewer customers delaying new or ongoing studies, improvements in site-based activities, including patient recruitment and enrollment, and the return of pre-pandemic testing volumes at our central labs, these delays have impacted and will continue to impact the timing and extent to which backlog has and will convert to revenue. In addition, depending on the future duration, severity and impacts of the COVID-19 pandemic, we may have to again shut down one or all of our Phase I clinics and also shut down (or delay reopening) one or more of our laboratories, other clinics or offices due to patient safety, government restrictions, illness or other impacts in connection with the COVID-19 pandemic.

In response to the COVID-19 pandemic, we have taken measures to mitigate the impact of the aforementioned factors across both of our segments. Such mitigation activities include, but are not limited to, (i) winning new awards for services to help our customers treat or combat the spread of COVID-19 with anti-viral therapies and vaccines, which includes more than 140 COVID-19 related awards as of December 31, 2020 across both of our segments and enrolling over 75,000 patients in COVID-19 clinical trials to date, (ii) the continued adoption of digital and virtual strategies and (iii) cost reduction strategies, including reducing travel and related expenses, limiting increases in employee headcount in certain non-billable areas, voluntary and limited temporary involuntary employee furloughs and reduced working hours. We may also implement other cost mitigation or reduction measures in the future depending on the progression of the COVID-19 pandemic and the resulting impacts to our business.

We do not yet know the full extent of the impact the COVID-19 pandemic will have on our business, financial condition, results of operations or the global economy as a whole, as the ultimate impact of the pandemic is highly uncertain and subject to change. While the COVID-19 pandemic has impacted our business and results of operations, we have been able to largely offset the financial impact due to the mitigation activities discussed above. However, the operational and financial impacts from COVID-19 could significantly increase in the future due to the magnitude, continued duration, geographic reach, ongoing impact on the global economy and capital and credit markets, and government stay at home and other restrictions relating to the COVID-19 pandemic. In addition, we might not be able to mitigate future impacts as we have done to date.

Furthermore, federal, state and local governments have implemented, and may implement in the future, economic and other stimulus measures to support individuals and businesses impacted by the COVID-19 pandemic, and while we have utilized such measures where applicable, such measures may not benefit us or otherwise offset any or all of the financial impacts from the COVID-19 pandemic. To date, such measures have not been material to our results of operations.

If the pandemic continues for an extended period or worsens from current levels, governments' actions to contain the spread of COVID-19 are ineffective and/or there is a significant delay in the production, distribution or administration of effective vaccines or other therapeutics, these factors could result in a material negative impact on our business, growth, reputation, prospects, financial condition, results of operations (including components of our financial results), cash flows and liquidity. Such impacts could include, but are not limited to, additional customer delays or cancellations of awarded services, reductions in R&D drug development pipelines which could result in lower growth to our industry, additional costs related to restructuring activities, non-cash impairments of goodwill and other long-lived assets, decreases in the value of our investments, loss of hedge accounting and restrictions on our ability to obtain additional financing, if needed.

We are closely monitoring the changing landscape with respect to the COVID-19 pandemic and taking actions to manage our business and support our employees, customers and the patients we recruit/enroll. We will continue to evaluate the nature and extent of the impact to our business, results of operations, financial condition and liquidity. For further discussion of the risks related to our business and the COVID-19 pandemic, see Part I, Item 1A, "Risk Factors," included elsewhere in this Annual Report on Form 10-K.

Industry Outlook

For information about the industry outlook and markets that we operate in, including a discussion of the trends that we believe will create increasing demand for our offering of services, refer to "Our Markets," within Part I, Item I, "Business," included elsewhere in this Annual Report on Form 10-K.

Sources of Revenue

Revenue is comprised of direct, third-party pass-through and out-of-pocket revenue from providing services to our customers. Direct revenue represents revenue associated with the direct services provided under our contracts. Third-party pass-through and out-of-pocket revenue (collectively, "indirect revenue") represents the reimbursement by customers of third-party pass-through and out-of-pocket costs incurred by us under our contracts.

We record the reimbursement of indirect revenue and the related costs incurred as revenue and reimbursed costs, respectively, on the consolidated statements of operations. These reimbursed costs are included as revenue as we (i) are the principal in the relationship, (ii) are primarily responsible for the services provided by third parties and (iii) significantly integrate the services of the third parties with our own services in delivering a combined output to the customer.

We assess our revenue based on our primary business segments, Clinical Development Services and Laboratory Services. Our Clinical Development Services segment represented 81.3%, 83.2% and 84.9% of total segment revenue for the years ended December 31, 2020, 2019 and 2018, respectively, with the remainder generated from Laboratory Services.

We have a diverse customer mix, with no one customer accounting for more than 10% of our revenue for the years ended December 31, 2020, 2019 and 2018. Our top 10 customers accounted for approximately 52.1%, 47.9% and 47.5% of our revenue for the years ended December 31, 2020, 2019 and 2018, respectively. Based on the diversity of our customer base, we do not believe we have significant customer concentration risk. We do not have any significant product revenues.

Operating Costs and Expenses

Our operating costs and expenses primarily consist of direct costs, reimbursed costs, selling, general and administrative ("SG&A") expenses and depreciation and amortization.

Direct Costs

Direct costs represent costs for providing services to customers. Direct costs primarily include labor-related costs, such as compensation and benefits for employees providing services, an allocation of facility and information technology costs, supply costs, costs for certain media-related services for patient recruitment, stock-based compensation expense, other overhead costs and offsetting R&D incentive credits. Direct costs typically increase or decrease with changes in revenue and may fluctuate significantly from period to period as a percentage of revenue due to staff labor utilization, project labor mix, the type of services, changes to the timing of work performed and project inefficiencies, among other factors.

Reimbursed Costs

Reimbursed costs include third-party pass-through and out-of-pocket costs which are generally reimbursable by our customers at cost. Third-party pass-through and out-of-pocket costs include, but are not limited to, payments to investigators, payments for the use of third-party technology, shipping costs and travel costs related to the performance of services. Third-party pass-through and out-of-pocket costs are incurred across both of our reportable segments.

Because services associated with reimbursed costs are generally provided by us without profit or mark-up and fluctuate from period to period without being important to our underlying performance over the full term of a contract, these costs do not have a significant impact on our income from operations. While fluctuations from period to period are not meaningful over the full term of a contract, actual and estimated reimbursed costs can impact revenue recognized, consolidated income from operations and segment operating income throughout the duration of a contract.

Selling, General and Administrative Expenses

SG&A expenses represent costs of business development, administrative and support functions. SG&A expenses primarily include compensation and benefits for employees, costs related to employees performing administrative tasks, stock-based compensation expense, sales, marketing and promotional expenses, employee recruiting and relocation expenses, employee training costs, travel costs, an allocation of facility and information technology costs and other overhead costs.

Depreciation and Amortization

Depreciation and amortization represents the costs charged for our property and equipment and intangible assets. We record depreciation and amortization on property and equipment using the straight-line method, based on the estimated useful lives of the respective assets. We depreciate leasehold improvements over the shorter of the lease term or the estimated useful lives of the improvements. We amortize software developed or obtained for internal use over the estimated useful life of the software or term of the licensing agreement. Amortization expense primarily comes from acquired definite-lived intangible assets. We amortize definite-lived intangible assets using either the straight-line method or sum-of-the-years digits method over the estimated useful lives of the assets.

How We Assess the Performance of Our Business

We manage and assess our business based on segment performance and allocate resources utilizing segment revenues and segment operating income. We also assess the performance of our reported consolidated business using a number of metrics including backlog and net authorizations. Historically, we have assessed backlog and net authorizations on a basis which excluded indirect revenues and the impact of Accounting Standards Codification ("ASC") Topic 606, *Revenue from Contracts with Customers* ("ASC 606") on direct revenue ("Historical Basis"). Starting in the first quarter of 2020, we also began to assess backlog and net authorizations on an ASC 606 total direct and indirect revenue basis ("ASC 606 Basis"). For comparative purposes, we have updated our backlog and net authorization metrics as of, and for the year ended, December 31, 2019 to include the ASC 606 Basis. Our discussion of backlog and net authorizations below is applicable to both of the aforementioned backlog and net authorization metrics.

Our backlog represents anticipated revenue for work not yet completed or performed (i) under signed contracts, letters of intent and, in some cases, awards that are supported by other forms of written communication and (ii) where there is sufficient or reasonable certainty about the customer's ability and intent to fund and commence the services within six months. Backlog and backlog conversion (defined as quarterly revenue for the period divided by opening backlog for that period) vary from period to period depending upon new authorizations, contract modifications, cancellations and the amount of revenue recognized under existing contracts. We adjust backlog for foreign currency fluctuations and exclude from backlog revenue that has been recognized as revenue in our statements of operations.

Although an increase in backlog will generally result in an increase in future revenue to be recognized over time (depending on future contract modifications, contract cancellations and other adjustments), an increase in backlog at a particular point in time does not necessarily correspond to an increase in revenue during a particular period. The timing and extent to which backlog will result in revenue depends on many factors, including the timing of commencement of work, the rate at which we perform services, scope changes, cancellations, delays, receipt of regulatory approvals and the nature, duration, size, complexity and phase of the studies. Our contracts generally have terms ranging from several months to several years. In addition, delayed projects remain in backlog unless they are canceled.

As noted elsewhere in this Annual Report on Form 10-K, due to the COVID-19 pandemic, we have had customers delay new studies and/or pause ongoing studies or certain activities thereof, such as patient recruitment, patient enrollment, site visits and site monitoring. Such delays have impacted and will continue to impact the timing and extent to which backlog has and will convert to revenue and we cannot estimate the length of delay. We have not adjusted backlog to remove the backlog associated with these studies as our customers for these studies have not canceled or notified us of their intent to cancel these studies and because we cannot estimate the length of delay. In many instances, our customers have subsequently started new studies and resumed delayed studies due to our ability to operate safely and effectively in the current COVID-19 environment. As a result of these and other factors, our backlog might not be a reliable indicator of future revenue and we might not realize all or any part of the revenue from the authorizations in backlog as of any point in time. Once work begins, we recognize revenue over the life of the contract as we perform services under such contract.

We add new authorizations to backlog based on the aforementioned criteria for backlog. Net authorizations represent new business awards, net of award or contract modifications, contract cancellations, foreign currency fluctuations and other adjustments. New authorizations vary from period to period depending on numerous factors, including customer authorization volume, sales performance and overall health of the biopharmaceutical industry, among others. New authorizations have varied and will continue to vary significantly from quarter to quarter and from year to year. In addition to net authorizations, we also assess net book-to-bill, which represents the amount of net authorizations for the period divided by revenue recognized in that period. We have included new business awards associated with COVID-19 in our net authorizations and backlog. The dynamics of such awards differ from those of more traditional studies and therefore we have adjusted the amount of such new business awards included in net authorizations and backlog.

Net Authorizations and Backlog

The following table provides selected information related to our backlog and net authorizations as of and for the years ended December 31, 2020, 2019 and 2018:

	Historical Basis			ASC 606 Basis	
(dollars in millions)	**2020**	**2019**	**2018**	**2020**	**2019**
Net authorizations	$ 4,613.7	$ 3,827.3	$ 3,421.0	$ 6,643.8	$ 5,050.8
Backlog	8,187.9	7,066.3	6,313.7	12,237.7	10,275.4
Backlog conversion	11.7 %	11.9 %	11.9 %	10.7 %	10.5 %
Net book-to-bill	1.32x	1.22x	1.21x	1.42x	1.25x

The increase in net authorizations and backlog in 2020 for the metrics above as compared to the same period in 2019 was primarily due to a higher number of, and win rate on, competitive decisions (which represents the total dollar amount of new business on which we bid), new business awards related to the COVID-19 pandemic and favorable net foreign currency fluctuations, partially offset by cancellations.

The increase in net authorizations and backlog in 2019 on a historical basis as compared to the same period in 2018 was primarily due to a higher win rate on competitive decisions and favorable net foreign currency fluctuations, partially offset by cancellations.

Foreign Currency

A large portion of our revenues and expenses are denominated in foreign currencies and our consolidated financial statements are reported in United States dollars. As such, changes in foreign currency exchange rates can significantly affect our results of operations. The revenue and expenses of our foreign operations are generally denominated in local currencies and translated into United States dollars for financial reporting purposes. Therefore, exchange rate fluctuations will affect the translation of foreign results into United States dollars for purposes of reporting consolidated results of operations. We believe that reporting results of operations that disclose the effects of foreign currency rate fluctuations on certain financial results, where meaningful, can facilitate analysis of period to period comparisons.

Acquisitions

On September 3, 2019, we acquired 100% of the issued and outstanding equity of Synarc, Inc. (“Synarc”), the global site network of Bioclinica, Inc., expanding our global footprint into China and Latin America and expanding our central nervous system offering in the United States. Additionally, on July 1, 2019, we acquired 100% of the issued and outstanding equity of Medimix International (“Medimix”), a global technology company that provides real-world evidence insights and information to the pharmaceutical, diagnostic and medical device industries. See Note 5, “Business Combinations,” to our consolidated financial statements included elsewhere in this Annual Report on Form 10-K for additional information. We had no acquisitions during the years ended December 31, 2020 or 2018.

Incremental Public Company Expenses

As a new public company, we have and will incur additional expenses on an ongoing basis that we did not incur as a private company. Those costs include additional director and officer liability insurance expenses, as well as third-party and internal resources related to accounting, auditing, Sarbanes-Oxley Act compliance, legal, investor and public relations expenses and additional stock-based compensation expense as we align our long-term incentive plan with other public company plans. These costs are generally SG&A expenses.

Consolidated Results of Operations

We have included the results of operations of acquired companies in our consolidated results of operations from the date of their respective acquisitions, which impacts the comparability of our results of operations when comparing results for the year ended December 31, 2020 to the year ended December 31, 2019 and the year ended December 31, 2019 to the year ended December 31, 2018. We have noted in the discussion below, to the extent meaningful and quantifiable, the impact on the comparability of our consolidated results of operations to prior year results due to the inclusion of acquired companies.

Year Ended December 31, 2020 versus Year Ended December 31, 2019 and Year Ended December 31, 2019 versus Year Ended December 31, 2018

Consolidated Results of Operations

Revenue

	Years Ended December 31,			Change			
				2020 vs. 2019		2019 vs. 2018	
(dollars in thousands)	**2020**	**2019**	**2018**	**$**	**%**	**$**	**%**
Revenue	$ 4,681,474	$ 4,031,017	$ 3,748,971	$ 650,457	16.1 %	$ 282,046	7.5 %

Revenue increased $650.5 million, or 16.1%, to $4,681.5 million for the year ended December 31, 2020 as compared to the same period in 2019. Revenue increased 15.4% from organic volume growth across our business due to higher opening backlog at the beginning of the year as compared to the prior year and overall growth in new business awards during 2020, including awards and associated revenue for COVID-19 work. Additionally, revenue increased 0.8% from inorganic growth primarily due to our acquisitions of Synarc and Medimix (the “2019 Acquisitions”). The increase in revenue was partially offset by a 0.1% decrease from the unfavorable impact from foreign currency exchange rates.

Revenue increased $282.0 million, or 7.5%, to $4,031.0 million for the year ended December 31, 2019 as compared to the same period in 2018. Revenue increased 7.6% from organic volume growth due to increased net authorizations and backlog growth in 2019 and 2018 and 0.7% from inorganic growth primarily due to our 2019 Acquisitions. The increase in revenue was partially offset by a 0.8% decrease from the unfavorable impact from foreign currency exchange rates.

Direct Costs

	Years Ended December 31,			Change			
				2020 vs. 2019		2019 vs. 2018	
(dollars in thousands)	**2020**	**2019**	**2018**	**$**	**%**	**$**	**%**
Direct costs	$ 1,682,046	$ 1,484,258	$ 1,333,812	$ 197,788	13.3 %	$ 150,446	11.3 %
% of revenue	35.9 %	36.8 %	35.6 %				

Direct costs increased $197.8 million to $1,682.0 million for the year ended December 31, 2020 as compared to the same period in 2019. The increase in direct costs was due to (i) a $148.3 million increase from growth in employee headcount to support current and anticipated growth in revenue, as well as compensation increases including $16.7 million in compensation costs related to the acceleration of remaining expenses under the terminated cash-based long-term incentive plan ("LTIP"), (ii) a $34.1 million increase in laboratory supply costs from the growth in revenue and (iii) a $21.5 million increase from the impact of the 2019 Acquisitions. The increase in direct costs was partially offset by a decrease in certain project delivery costs, including media-related costs for patient recruitment services and a 0.3% decrease from the favorable impact from foreign currency exchange rates. As a percentage of revenue, direct costs decreased to 35.9% for the year ended December 31, 2020 as compared to 36.8% in the same period in 2019 primarily due to the factors identified above.

Direct costs increased $150.4 million to $1,484.3 million for the year ended December 31, 2019 as compared to the same period in 2018. The increase in direct costs was due to (i) a $97.9 million increase from growth in employee headcount and contract labor to support current and anticipated growth in revenue, as well as compensation increases, (ii) a $16.5 million increase from the impact of the 2019 Acquisitions and (iii) an increase in project delivery costs from the growth in revenue, including media-related costs for patient recruitment services and laboratory supply costs. The increase in direct costs was partially offset by a 1.6% decrease from the favorable impact from foreign currency exchange rates. As a percentage of revenue, direct costs increased to 36.8% for the year ended December 31, 2019 as compared to 35.6% in the same period in 2018 primarily due to the factors identified above.

Reimbursed Costs

	Years Ended December 31,			Change			
				2020 vs. 2019		2019 vs. 2018	
(dollars in thousands)	**2020**	**2019**	**2018**	**$**	**%**	**$**	**%**
Reimbursed costs	$ 1,200,754	$ 924,634	$ 940,913	$ 276,120	29.9 %	$ (16,279)	(1.7)%
% of revenue	25.6 %	22.9 %	25.1 %				

Reimbursed costs increased $276.1 million to $1,200.8 million for the year ended December 31, 2020 as compared to the same period in 2019. Reimbursed costs increased primarily due to the increase in revenue, including growth related to certain awards of work for COVID-19 which have significant reimbursed costs, and higher shipping costs, partially offset by lower travel costs. The increase in reimbursed costs was also impacted by the general timing of costs incurred across our portfolio of work, which vary over the course of clinical trials due to (i) the timing of the work performed, (ii) scope changes and (iii) the complexity and phase of the study, among other factors. As a percentage of revenue, reimbursed costs increased to 25.6% for the year ended December 31, 2020 as compared to 22.9% in the same period in 2019 primarily due to the factors identified above.

Reimbursed costs decreased $16.3 million to $924.6 million for the year ended December 31, 2019 as compared to the same period in 2018. Reimbursed costs decreased due to lower pass-through costs for certain larger clinical trials within our Clinical Development Services segment as a result of fluctuations in enrollment and patient activity, as well as the general timing of costs incurred across the remainder of the portfolio, which vary over the course of clinical trials due to (i) the timing of the work performed, (ii) scope changes and (iii) the complexity and phase of the study, among other factors. As a percentage of revenue, reimbursed costs decreased to 22.9% for the for the year ended December 31, 2019 as compared to 25.1% in the same period in 2018 primarily due to the factors identified above.

Selling, General and Administrative Expenses

	Years Ended December 31,			Change			
				2020 vs. 2019		2019 vs. 2018	
(dollars in thousands)	**2020**	**2019**	**2018**	**$**	**%**	**$**	**%**
Selling, general and administrative expenses	$ 1,010,127	$ 938,806	$ 813,035	$ 71,321	7.6 %	$ 125,771	15.5 %
% of revenue	21.6 %	23.3 %	21.7 %				

SG&A expenses increased $71.3 million to $1,010.1 million for the year ended December 31, 2020 as compared to the same period in 2019. The increase in SG&A expenses was primarily due to (i) a $82.4 million increase from growth in employee headcount to support current and anticipated growth in revenue, as well as compensation increases including $5.5 million in compensation costs related to the acceleration of remaining expense under the terminated cash-based LTIP, (ii) a $13.7 million increase in technology costs primarily related to software licensing, cloud services and the implementation of a new ERP system and (iii) a $10.5 million increase from the impact of the 2019 Acquisitions. The increase in SG&A expenses was partially offset by lower travel and associated expenses as a result of COVID-19 related cost reduction measures and a 0.2% decrease from the favorable impact from foreign currency exchange rates. As a percentage of revenue, SG&A expenses decreased to 21.6% for the year ended December 31, 2020 as compared to 23.3% in the same period in 2019 primarily due to the factors identified above as well as our efforts to effectively leverage our SG&A function.

SG&A expenses increased $125.8 million to $938.8 million for the year ended December 31, 2019 as compared to the same period in 2018. The increase in SG&A expenses was primarily due to (i) a $43.7 million increase from growth in employee headcount to support current and anticipated growth in revenue, as well as compensation increases, (ii) $18.4 million in compensation costs related to a stock option modification and special cash bonus to option holders, (iii) an increase in professional fees, including acquisition and IPO transaction costs of $15.3 million, (iv) a $12.2 million increase in technology costs primarily related to software licensing, cloud services and the implementation of a new ERP system and (v) a $7.1 million increase from the impact of the 2019 Acquisitions. The increase in SG&A expenses was partially offset by a 1.4% decrease from the favorable impact from foreign currency exchange rates. As a percentage of revenue, SG&A expenses increased to 23.3% for the year ended December 31, 2019 as compared to 21.7% in the same period in 2018 primarily due to the factors identified above.

Depreciation and Amortization	**Years Ended December 31,**		
(in thousands)	**2020**	**2019**	**2018**
Depreciation and amortization	$ 279,116	$ 264,830	$ 258,974

Depreciation and amortization was $279.1 million for the year ended December 31, 2020 as compared to $264.8 million in the same period in 2019. The increase in depreciation and amortization expense primarily relates to the impact from (i) our laboratory facilities expansions, (ii) new purchased and internally developed software and (iii) the definite-lived intangibles amortization impact from the 2019 Acquisitions, partially offset by a decrease due to the timing of amortization of certain definite-lived intangible assets.

Depreciation and amortization was $264.8 million for the year ended December 31, 2019 as compared to $259.0 million in the same period in 2018. The increase in depreciation and amortization expense primarily relates to the impact from (i) our laboratory facilities expansion, (ii) new purchased and internally developed software and (iii) the definite-lived intangibles amortization impact from the 2019 Acquisitions, partially offset by a decrease due to the timing of amortization of certain definite-lived intangible assets and a favorable impact from foreign currency exchange rates.

Long-Lived and Goodwill Asset Impairments	**Years Ended December 31,**		
(in thousands)	**2020**	**2019**	**2018**
Long-lived and goodwill asset impairments	$ 1,414	$ 1,284	$ 29,626

Goodwill impairment was $29.6 million for the year ended December 31, 2018. Our 2018 annual goodwill impairment test indicated that one reporting unit in our Clinical Development Services segment had an estimated fair value below carrying value as a result of decreases in future cash flows. The expected future cash flows of the reporting unit decreased due to lower forecasted long-term revenue growth and higher forecasted operating expenses, resulting in reduced margins. There were no goodwill impairments for the years ended December 31, 2020 or 2019.

Interest Expense, Net

(in thousands)	Years Ended December 31, 2020	2019	2018
Interest expense, net	$ 216,932	$ 311,744	$ 263,618

Interest expense, net, was $216.9 million for the year ended December 31, 2020 as compared to $311.7 million in the same period in 2019. The decrease in interest expense was primarily due to (i) a reduction of $80.0 million from the redemption of our HoldCo Notes, (ii) a reduction of $35.3 million related to a lower variable interest rate on our 2015 Term Loan for a portion of the year and (iii) the impact from the lower interest rate on our New Notes as compared to the redeemed OpCo Notes, partially offset by an increase of $22.0 million from the unfavorable impact of interest rate swaps entered into during 2020.

Interest expense, net, was $311.7 million for the year ended December 31, 2019 as compared to $263.6 million in the same period in 2018. The increase in interest expense was due to $49.1 million of interest expense related to the issuance of the Additional HoldCo Notes and an increase in the variable interest rate on our 2015 Term Loan, partially offset by the favorable impact from the amortization of our terminated interest rate swaps.

Loss on Extinguishment of Debt

(in thousands)	Years Ended December 31, 2020	2019	2018
Loss on extinguishment of debt	$ (93,534)	$ —	$ —

Loss on extinguishment of debt was $93.5 million for the year ended December 31, 2020. The loss resulted from the early extinguishment of our HoldCo Notes and our OpCo Notes. The loss on extinguishment of debt for both the HoldCo and OpCo Notes consisted of redemption premiums of $50.4 million and the write off of our unamortized debt discount and deferred debt issuance costs of $43.1 million. There were no losses on extinguishment of debt for the years ended December 31, 2019 and 2018.

Gain (Loss) on Investments

(in thousands)	Years Ended December 31, 2020	2019	2018
Gain (loss) on investments	$ 52,737	$ (19,043)	$ 15,936

Gain on investments was $52.7 million for the year ended December 31, 2020 as compared to a loss of $19.0 million in the same period in 2019. The gain for 2020 and loss for 2019, respectively, was primarily a result of changes in the fair values of the net asset values of our investments, partially offset by changes to the discounts on certain investments. The increase in net asset values for the year ended December 31, 2020 also reflects an increase in fair value resulting from one of the underlying investments within a limited partnership becoming publicly traded during the year, as well as the subsequent increases in the trading stock price during the remainder of the year.

Loss on investments was $19.0 million for the year ended December 31, 2019 as compared to a gain of $15.9 million in the same period in 2018. The loss for 2019 and gain for 2018, respectively, was primarily a result of changes in the fair values of the net asset values of our investments, partially offset by changes to the discounts on certain investments.

The gains or losses from our investments will likely continue to fluctuate from period to period primarily based on the changes in fair value of the underlying holdings of the limited partnerships, including the volatility of stock prices underlying publicly traded investments within the partnerships, and changes in the discounts applied to such investments for our lack of control and lack of marketability, where applicable.

Other (Expense) Income, Net

(in thousands)	Years Ended December 31, 2020	2019	2018
Other (expense) income, net	$ (62,740)	$ (27,143)	$ 21,701

Other expense, net, was $62.7 million for the year ended December 31, 2020 and included transaction and re-measurement losses of $47.1 million resulting from foreign exchange rate movement as well as losses of $15.8 million resulting from interest rate swaps we entered into during 2020. There were no losses or gains from interest rate swaps for the years ended December 31, 2019 or 2018.

Other expense, net, was $27.1 million for the year ended December 31, 2019 and included transaction and re-measurement losses of $24.7 million resulting from foreign exchange rate movement.

Other income, net, was $21.7 million for the year ended December 31, 2018 and included transaction and re-measurement gains of $16.7 million resulting from foreign exchange rate movement.

Provision for Income Taxes

(dollars in thousands)	Years Ended December 31, 2020	2019	2018
Provision for income taxes	$ 18,805	$ 2,957	$ 39,579
Effective income tax rate	10.0 %	5.0 %	27.0 %

Our provision for income taxes was $18.8 million, resulting in an effective income tax rate of 10.0%, for the year ended December 31, 2020 and is primarily due to the estimated tax effect on our pre-tax income and an increase in state income taxes, partially offset by releases of uncertain tax positions and an increase in foreign tax credits.

Our provision for income taxes was $3.0 million, resulting in an effective income tax rate of 5.0%, for the year ended December 31, 2019 and was primarily due to the estimated tax effect on our pre-tax income, partially offset by the impact from the benefit related to state taxes, net of federal benefit, related to the Tax Act, as well as the realization of carryforward foreign tax attributes and an increase in foreign R&D credits.

Our provision for income taxes was $39.6 million, resulting in an effective income tax rate of 27.0%, for the year ended December 31, 2018 and was primarily due to the estimated tax effect on our pre-tax income and other tax impacts as a result of the Tax Act.

Segment Results of Operations

Clinical Development Services and Laboratory Services segment results for the years ended December 31, 2020, 2019 and 2018 are detailed below.

Clinical Development Services

(dollars in thousands)	Years Ended December 31, 2020	2019	2018	Change 2020 vs. 2019 $	2020 vs. 2019 %	2019 vs. 2018 $	2019 vs. 2018 %
Segment revenue	$ 3,804,873	$ 3,354,163	$ 3,182,870	$ 450,710	13.4 %	$ 171,293	5.4 %
Segment direct costs	1,265,314	1,162,678	1,064,557	102,636	8.8	98,121	9.2
Segment reimbursed costs	1,085,977	845,580	876,617	240,397	28.4	(31,037)	(3.5)
Segment SG&A expenses	578,898	529,425	475,242	49,473	9.3	54,183	11.4
Segment operating income	$ 874,684	$ 816,480	$ 766,454	$ 58,204	7.1	$ 50,026	6.5

Segment Revenue

Clinical Development Services' revenue was $3,804.9 million for the year ended December 31, 2020, an increase of $450.7 million as compared to the same period in 2019. Revenue increased 12.7% from organic volume growth primarily from our Phase II-IV clinical trial management services as a result of higher opening backlog at the beginning of the year as compared to the prior year and overall growth in new business awards during 2020, including awards and associated revenue for COVID-19 work and 0.9% from inorganic growth due to the 2019 Acquisitions. The increase in revenue was partially offset by a 0.2% decrease from the unfavorable impact from foreign currency exchange rates. The higher opening backlog was primarily due to increased net authorizations for our Phase II-IV clinical trial management services in 2019.

Clinical Development Services' revenue was $3,354.2 million for the year December 31, 2019, an increase of $171.3 million as compared to the same period in 2018. Revenue increased (i) 5.5% from organic volume growth in our Phase II-IV clinical trial management services, site and patient access services and medical communications services, as well as higher opening backlog at the beginning of the year and (ii) 0.8% from inorganic growth due to the 2019 Acquisitions. The increase in revenue was partially offset by a 0.9% decrease from the unfavorable impact from foreign currency exchange rates. The higher opening backlog was primarily due to increased net authorizations for our Phase II-IV clinical trial management services in 2018.

Segment Direct Costs

Clinical Development Services' direct costs were $1,265.3 million for the year ended December 31, 2020, an increase of $102.6 million as compared to the same period in 2019. The increase in direct costs was primarily due to a $95.5 million increase from growth in employee headcount to support current and anticipated growth in revenue, as well as compensation increases, and a $21.5 million increase from the impact of the 2019 Acquisitions. The increase in direct costs was partially offset by a decrease in certain project delivery costs, including media-related costs for patient recruitment services, and a 0.4% decrease from the favorable impact from foreign currency exchange rates.

Clinical Development Services' direct costs were $1,162.7 million for the year December 31, 2019, an increase of $98.1 million as compared to the same period in 2018. The increase in direct costs was primarily due to (i) a $66.9 million increase from growth in employee headcount and contract labor to support current and anticipated growth in revenue as well as compensation increases, (ii) a $16.5 million increase from the impact of the 2019 Acquisitions and (iii) an increase in project delivery costs including media-related costs for patient recruitment services. The increase in direct costs was partially offset by a 1.8% decrease from the favorable impact from foreign currency exchange rates.

Segment Reimbursed Costs

Clinical Development Services' reimbursed costs were $1,086.0 million for the year ended December 31, 2020, an increase of $240.4 million as compared to the same period in 2019. Reimbursed costs increased primarily due to the increase in revenue, including growth related to certain awards of work for COVID-19 which have significant reimbursed costs, partially offset by lower travel costs. The increase in reimbursed costs was also impacted by the general timing of costs incurred across our portfolio of work, which vary over the course of clinical trials due to (i) the timing of the work performed, (ii) scope changes and (iii) the complexity and phase of the study, among other factors.

Clinical Development Services' reimbursed costs were $845.6 million for the year ended December 31, 2019, a decrease of $31.0 million as compared to the same period in 2018. The decrease in reimbursed costs was primarily due to lower pass-through costs for certain larger clinical trials as a result of fluctuations in enrollment and patient activity, as well as the general timing of costs incurred across the remainder of the portfolio, which vary over the course of clinical trials due to the (i) timing of the work performed, (ii) scope changes and (iii) the complexity and phase of the study, among other factors.

Segment SG&A Expenses

Clinical Development Services' SG&A expenses were $578.9 million for the year ended December 31, 2020, an increase of $49.5 million as compared to the same period in 2019. The increase in SG&A expenses was primarily due to a $53.4 million increase from growth in employee headcount to support current and anticipated growth in revenue, as well as compensation increases and a $10.5 million increase from the impact of the 2019 Acquisitions. The increase in SG&A expenses was partially offset by lower travel and associated expenses as a result of COVID-19 related cost reduction measures and a 0.2% decrease from the favorable impact from foreign currency exchange rates.

Clinical Development Services' SG&A expenses were $529.4 million in 2019, an increase of $54.2 million as compared to the same period in 2018. The increase in SG&A expenses was primarily due to (i) a $32.2 million increase from growth in employee headcount to support current and anticipated growth in revenue, as well as compensation increases and (ii) a $7.1 million increase from the impact of the 2019 Acquisitions. The increase in SG&A expenses was partially offset by a 1.7% decrease from the favorable impact from foreign currency exchange rates.

Laboratory Services

	Years Ended December 31,			Change			
				2020 vs. 2019		2019 vs. 2018	
(dollars in thousands)	**2020**	**2019**	**2018**	**$**	**%**	**$**	**%**
Segment revenue	$ 876,601	$ 676,854	$ 566,101	$ 199,747	29.5 %	$ 110,753	19.6 %
Segment direct costs	393,329	307,346	258,472	85,983	28.0	48,874	18.9
Segment reimbursed costs	114,777	79,054	64,296	35,723	45.2	14,758	23.0
Segment SG&A expenses	92,097	81,373	68,305	10,724	13.2	13,068	19.1
Segment operating income	$ 276,398	$ 209,081	$ 175,028	$ 67,317	32.2	$ 34,053	19.5

Segment Revenue

Laboratory Services' revenue was $876.6 million for the year ended December 31, 2020, an increase of $199.7 million as compared to the same period in 2019. Revenue increased from organic volume growth across all our laboratory services in part due to higher opening backlog at the beginning of the year as compared to the prior year and overall growth in new business awards during 2020, including awards and associated revenue for COVID-19 work. The higher opening backlog was primarily due to increased net authorizations across all of our laboratory services in 2019.

Laboratory Services' revenue was $676.9 million in 2019, an increase of $110.8 million as compared to the same period in 2018. Revenue increased from organic volume growth across all our laboratory services, including increased net authorizations in 2019, as well as higher opening backlog at the beginning of the year. The higher opening backlog was primarily due to increased net authorizations in 2018.

Segment Direct Costs

Laboratory Services' direct costs were $393.3 million for the year ended December 31, 2020, an increase of $86.0 million as compared to the same period in 2019. The increase in direct costs was primarily due to (i) a $45.5 million increase from growth in employee headcount to support current and anticipated growth in revenue, as well as compensation increases and (ii) a $34.1 million increase in laboratory supply costs from the growth in revenue.

Laboratory Services' direct costs were $307.3 million in 2019, an increase of $48.9 million as compared to the same period in 2018. The increase in direct costs was primarily due to (i) a $27.9 million increase from growth in employee headcount to support current and anticipated growth in revenue, as well as compensation increases and (ii) an increase in laboratory supply costs associated with the growth in revenue.

Segment Reimbursed Costs

Laboratory Services' reimbursed costs were $114.8 million for the year ended December 31, 2020, an increase of $35.7 million as compared to the same period in 2019. Reimbursed costs increased primarily due to the increase in revenue, as well as higher shipping costs and the general timing of costs incurred across our portfolio of work.

Laboratory Services' reimbursed costs were $79.1 million for the year ended December 31, 2019, an increase of $14.8 million as compared to the same period in 2018. The increase in reimbursed costs was primarily due to an increase in revenue and overall growth, as well as the general timing of costs incurred across our portfolio of work.

Segment SG&A Expenses

Laboratory Services' SG&A expenses were $92.1 million for the year ended December 31, 2020, an increase of $10.7 million as compared to the same period in 2019. The increase in SG&A expenses was primarily due to an $11.5 million increase from growth in employee headcount to support current and anticipated growth in revenue, as well as compensation increases.

Laboratory Services' SG&A expenses were $81.4 million in 2019, an increase of $13.1 million as compared to the same period in 2018. The increase in SG&A expenses was primarily due to a $9.1 million increase from growth in employee headcount to support current and anticipated growth in revenue as well as compensation increases.

Liquidity and Capital Resources

Overview

We assess our liquidity in terms of our ability to generate adequate amounts of cash to meet current and future needs. We have historically funded our operations with cash flows from operations. We have historically used long-term debt and cash on hand to fund acquisitions and make special cash dividends or distributions to our stockholders. Our expected primary cash uses on a short-term and long-term basis are for repayment of debt, interest payments, working capital, capital expenditures, geographic or service offering expansion, acquisitions, investments and other general corporate purposes. We do not expect to declare dividends on our common stock in the foreseeable future. We hold our cash balances in the United States and numerous locations in the rest of the world.

While we have not seen a significant impact to our liquidity and capital resources as a result of the COVID-19 pandemic to date, we continue to monitor and assess the impact and have already taken certain measures to preserve those resources. For example, in June 2020, we issued $1,200.0 million of New Notes, and used the proceeds to redeem our OpCo Notes. This transaction, and the redemption of our HoldCo Notes, has and will lower our interest expense and cash paid for interest in the future. Additionally, in March 2020, we borrowed $150.0 million under our 2015 Revolving Credit Facility as a precautionary measure in order to further strengthen our cash position and to preserve financial flexibility due to the uncertainty in the global markets as a result of the COVID-19 pandemic. In June 2020, we repaid the $150.0 million borrowed under the 2015 Revolving Credit Facility, using cash on hand. In addition, we may implement future measures to preserve or increase cash on-hand and create financial flexibility. For example, in January 2021, we successfully completed a refinancing of our variable rate long-term debt that was outstanding under our 2015 Credit Agreement, as well as increasing the size of our revolving credit facility from $300.0 million to $600.0 million. Additionally, we may look to obtain additional financing. However, due to the ongoing impact of the COVID-19 pandemic on the capital and credit markets, or for other reasons, we might not be able to successfully obtain additional financing if needed.

As of December 31, 2020, we had total long-term debt and finance lease obligations outstanding of approximately $4.3 billion. See "Indebtedness" and Note 9, "Long-term Debt and Finance Lease Obligations," to our audited consolidated financial statements included elsewhere in this Annual Report on Form 10-K for further discussion and additional information regarding our debt instruments and other obligations.

The following table presents key measures of our liquidity on the dates set forth below:

	December 31,	
(in thousands)	**2020**	**2019**
Cash and cash equivalents:		
Cash held in the United States	$ 413,167	$ 135,917
Cash held in foreign locations	354,832	209,270
Total	$ 767,999	$ 345,187
2015 Revolving Credit Facility (net of letters of credit)	$ 298,370	$ 298,370

Contractual and Other Obligations

We have incurred contractual and other obligations in the ordinary course of running our business and as a result of the recapitalization of our company in 2017. Excluding the obligations we have or will incur in the ordinary course of running our business, our primary short-term and long-term obligations include (i) payments on our long-term debt and related interest, (ii) payments on our operating and finance leases, (iii) future capital calls on our investments, (iv) purchase obligations and commitments related to planned capital expenditures and (v) obligations as a result of the recapitalization. The material cash requirements for our long-term debt and finance leases, operating leases and future capital calls on our investments are further discussed in Note 9, "Long-term Debt and Finance Lease Obligations," Note 10, "Leases," and Note 6, "Investments," to our consolidated financial statements included elsewhere in this Annual Report on Form 10-K. Additionally, as of December 31, 2020, we have outstanding amounts totaling $20.7 million owed related to capital expenditures to support the ongoing growth of our business.

As a result of the recapitalization of the company in 2017, we incurred certain future obligations associated with potential additional recapitalization consideration. We do not expect the payment of the recapitalization investment portfolio liability (as defined in our audited consolidated financial statements and Part III, Item 13, "Certain Relationships and Related Transactions, and Director Independence," included elsewhere in this Annual Report on Form 10-K) to impact our future liquidity or capital resources as the right for the pre-closing holders to receive any such payment depends upon receipt of future cash proceeds from the applicable portion of the investment portfolio. We have classified in long-term liabilities the portion of the investment portfolio we estimate to be payable, net of taxes and other expenses, to the pre-closing holders. Future payments will be required to be made, if and when, cash proceeds are received and are payable under the recapitalization transaction merger agreement. For example, as required under the recapitalization transaction merger agreement, during 2020 and 2018, we made cash distributions of $20.5 million and $16.0 million, respectively, for the payment of a portion of the recapitalization investment portfolio liability from the cash proceeds received from the investment portfolio. Additionally, we made a cash distribution related to the recapitalization investment portfolio liability of approximately $12.8 million during January of 2021. No distributions for the recapitalization investment portfolio liability were made in 2019. As of December 31, 2020, the recapitalization investment portfolio liability was $204.7 million.

We expect to continue funding our operations and contractual and other obligations from existing cash, cash flows from operations and, if necessary or appropriate, borrowings under our New Revolving Credit Facility, which remains undrawn. Based on current conditions, we believe that these sources of liquidity will be sufficient to fund our operations and meet our contractual obligations and other requirements in the short and long-term, as well as address the impacts from the COVID-19 pandemic. From time to time, we evaluate potential acquisitions, investments and other growth and strategic opportunities that might require use of existing cash, borrowings under our New Revolving Credit Facility or additional long-term financing.

While we believe we have sufficient liquidity to fund our operations for the foreseeable future, our sources of liquidity could be affected by factors described above and under "Indemnification and Insurance," within Part I, Item 1, "Business," Part I, Item 1A, "Risk Factors," "Critical Accounting Polices and Estimates," within Part II, Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations," and Part II, Item 7A, "Quantitative and Qualitative Disclosures about Market Risk," included elsewhere in this Annual Report on Form 10-K.

Cash Flows

Year Ended December 31, 2020 versus Year Ended December 31, 2019 and Year Ended December 31, 2019 versus Year Ended December 31, 2018

Cash flows from operating activities	**Years Ended December 31,**		
(in thousands)	**2020**	**2019**	**2018**
Net cash provided by operating activities	$ 251,334	$ 432,946	$ 423,406

2020 compared to 2019

The decrease in operating cash flows of $181.6 million was due to a $378.8 million decrease in cash from the changes in operating assets and liabilities, partially offset by a $197.2 million increase in net income and non-cash reconciling items. The change in operating assets and liabilities was primarily due to period over period fluctuations in the timing of collections and payments, with the use of cash from (i) net accounts receivable (defined as the sum of period-end balances of accounts receivable and unbilled services net of unearned revenue), (ii) income taxes, (iii) other assets and (iv) operating lease liabilities being unfavorable and the source of cash for (i) prepaid expenses and other current assets and (ii) accounts payable, accrued expenses and other liabilities being favorable.

The increase in net income and non-cash reconciling items was primarily due to (i) the overall growth of our business during 2020, (ii) a loss on the extinguishment of debt related to the redemption of the HoldCo and OpCo Notes, (iii) an unrealized gain on investments in 2020, compared to an unrealized loss on investments in 2019 and (iv) a decrease in our deferred income tax benefit.

The change in the use of cash for net accounts receivable of $490.2 million for the year ended December 31, 2020 was largely due to the growth in revenue during the year, as well as the timing in the receipt of collections and contractual billings under our contracts. Other changes to cash flows from operating activities include a $39.9 million decrease in cash paid for interest and a $1.0 million net decrease in cash paid for income taxes during the year ended December 31, 2020 as compared to the same period in 2019. Cash paid for interest decreased primarily due to a lower variable interest rate on our 2015 Term Loan for a portion of the year ended December 31, 2020, as well as the redemption of the HoldCo Notes and OpCo Notes. The decrease in cash paid for interest was partially offset by an increase in interest paid on our interest rate swaps, as well as the issuance of the New Notes in June 2020. We expect our cash paid for interest to continue to decrease going forward due to the redemption of the HoldCo Notes and a lower interest rate on our New Notes as compared to the redeemed OpCo Notes, as well as the refinancing of our 2015 Credit Agreement.

2019 compared to 2018

The increase in operating cash flows of $9.5 million was due to a $41.1 million increase in cash from the changes in operating assets and liabilities, partially offset by a $31.6 million decrease in net income and non-cash reconciling items. The change in operating assets and liabilities was primarily due to period over period fluctuations in the timing of collections and payments, with the source of cash from (i) net accounts receivable, (ii) accounts payable, accrued expenses and other liabilities and (iii) income taxes being favorable and the use of cash for (i) operating lease liabilities, (ii) prepaid expenses and other current assets and (iii) other assets being unfavorable.

The decrease in net income and non-cash reconciling items was primarily due to (i) a decrease in net income, (ii) an increase in the deferred income tax benefit and (iii) goodwill impairment recorded in 2018 but not in 2019, partially offset by (i) non-cash operating lease expense and (ii) an unrealized loss on investments recorded in 2019, compared to an unrealized gain on investments in 2018. The change in operating lease liabilities and the non-cash operating lease expense was the result of the adoption of the new lease accounting standard at the beginning of 2019.

The change in the source of cash for net accounts receivable of $76.8 million for the year ended December 31, 2019 was largely due to a decrease in days sales outstanding, which represents the number of days revenue is outstanding in net accounts receivable, as well as the timing of the receipt of collections and contractual billings under our contracts. Other changes to cash flows from operating activities include a $37.6 million increase in cash paid for interest and a $7.8 million net increase in cash paid for income taxes during the year ended December 31, 2019 as compared to the same period in 2018. Cash paid for interest increased primarily due to the issuance of the Additional HoldCo Notes in May 2019. Additionally, cash paid for interest increased due to higher variable interest rates on our 2015 Term Loan for a portion of the year ended December 31, 2019. Cash paid for income taxes increased as a result of increased tax payments in certain foreign jurisdictions due to increases in pre-tax income from foreign subsidiaries, partially offset by foreign income tax refunds recognized during the year ended December 31, 2019. Additionally, for the year ended December 31, 2019, we paid special cash bonuses of $21.1 million to option holders in connection with the special cash dividends to our stockholders that we declared in May 2019 and November 2019, and subsequently paid.

Cash flows from investing activities

(in thousands)	Years Ended December 31, 2020	2019	2018
Net cash used in investing activities	$ (145,888)	$ (233,228)	$ (90,525)

2020 compared to 2019

The decrease in cash used during 2020 as compared to 2019 was primarily due to (i) the net cash paid for the 2019 Acquisitions of $74.2 million and no acquisitions during 2020, (ii) a decrease in investments in unconsolidated affiliates and (iii) an increase in distributions received from investments, partially offset by an increase in purchases of property and equipment.

Cash paid for investments in unconsolidated affiliates in 2020 and 2019 was $20.0 million and $30.0 million, respectively. Cash paid for property and equipment was $163.3 million and $125.4 million for 2020 and 2019, respectively. The increase in cash paid for property and equipment was primarily due to the timing of payments and year over year growth in the business, including an expansion of our laboratory facilities. Distributions received from investments in 2020 were $43.5 million higher than the prior year and will vary from period to period based on the timing and amount of distributions received, if any.

2019 compared to 2018

The increase in cash used during 2019 as compared to 2018 was primarily due to (i) the net cash paid for the 2019 Acquisitions of $74.2 million, (ii) new and incremental investments in unconsolidated affiliates, (iii) a decrease in distributions received from investments and (iv) an increase in purchases of property and equipment. Additionally, the increase in cash used resulted from $8.0 million of net cash proceeds received from the sale of a business in 2018 and no proceeds from the sale of a business in 2019.

Cash paid for investments in unconsolidated affiliates in 2019 and 2018 was $30.0 million and $9.0 million, respectively. Cash paid for property and equipment was $125.9 million and $116.1 million for 2019 and 2018, respectively. The increase in cash paid for property and equipment was primarily due to the timing of payments and year over year growth in the business. Distributions received from investments in 2019 were $27.3 million lower than the prior year and will vary from period to period based on the timing and amount of distributions received, if any.

Cash flows from financing activities

(in thousands)	Years Ended December 31, 2020	2019	2018
Net cash provided by (used in) financing activities	$ 280,717	$ (422,039)	$ (166,942)

2020

During 2020, the source of cash was primarily due to cash proceeds of $1,773.0 million from our IPO, net of IPO costs paid. A portion of the IPO net proceeds were used to redeem our HoldCo Notes, which included $1,450.0 million of principal and a $14.5 million redemption premium. Additionally, in June 2020, we issued $1,200.0 million of New Notes, which was used to redeem our OpCo Notes, including $1,125.0 million of principal and a $35.9 million redemption premium. We used cash of $20.7 million for payments of debt issuance costs primarily associated with the issuance of the New Notes. Additionally, we received cash proceeds of $24.3 million related to the exercise of stock options, made payments of $41.1 million on our other long-term debt and finance leases and a $20.5 million recapitalization investment portfolio liability distribution.

2019

During 2019, the use of cash was primarily due to special cash dividends paid to our stockholders, partially offset by the cash proceeds received from additional long-term borrowings. We borrowed $891.0 million net cash under the Additional HoldCo Notes to fund, along with cash on hand, special cash dividends totaling $1,246.0 million to our stockholders. The use of cash also included $30.1 million in payments for debt issuance and debt modification costs associated with the issuance of the Additional HoldCo Notes and modification of the Initial HoldCo Notes. During 2019, payments on long-term debt and finance leases was $37.4 million, which included quarterly principal payments on the 2015 Term Loan. The cash used for financing activities was partially offset by cash proceeds of $4.5 million from the exercise of stock options.

2018

During 2018, the use of cash was primarily due to the distribution of $108.3 million for the recapitalization tax benefit liability associated with the recapitalization of the company in 2017, quarterly principal payments on the 2015 Term Loan of $32.4 million, a recapitalization investment portfolio liability distribution of $16.0 million and the use of $8.6 million for the purchase of treasury stock.

Indebtedness

The following table details our borrowings outstanding as of December 31, 2020 and the associated interest expense, including amortization of debt issuance and debt discounts and the average effective interest rates for such borrowings for the year ended December 31, 2020:

	Principal Balance		Interest Expense
(dollars in thousands)	**December 31, 2020**	**Average Effective Interest Rate**	**For Year Ended December 31, 2020**
2015 Term Loan	$ 3,064,006	3.71%	$ 120,968
2025 Notes	500,000	4.97%	13,950
2028 Notes	700,000	5.24%	20,558
Finance lease obligations	25,734	Various	3,110
Total	$ 4,289,740		$ 158,586

Bank Facilities

On January 13, 2021, together with the Co-Borrower, we entered into and closed the (i) $3,050.0 million aggregate principal amount New Term Loan issued at 99.5% of face value, or a discount of 0.5%, maturing in January 2028 and (ii) $600.0 million New Revolving Credit Facility maturing in January 2026 under the New Credit Agreement dated as of January 13, 2021.

The proceeds from borrowings under the New Term Loan, together with cash on hand, were used to (i) refinance in full the principal amount outstanding and accrued and unpaid interest, fees and other amounts then due and owing under, the 2015 Credit Agreement and (ii) pay fees and expenses relating to the New Credit Agreement. As of December 31, 2020, we had approximately $3,064.0 million of 2015 Term Loan outstanding and we had available $298.4 million of unused credit capacity on our 2015 Revolving Credit Facility as part of the 2015 Credit Agreement.

Borrowings under the New Term Loan bear interest, initially, at a rate equal to, at our option, either (a) Adjusted LIBOR plus a margin of 2.25% with an “Adjusted LIBOR floor” of 0.50% or (b) Base Rate plus a margin of 1.25%, with a “Base Rate floor” of 1.50%. Loans under the New Revolving Credit Facility bear interest, initially, at a rate equal to, at our option of either (a) Adjusted LIBOR plus a margin of 2.00% with an “Adjusted LIBOR floor” of 0.00% or (b) Base Rate plus a margin of 1.00% with a “Base Rate floor” of 1.00%. Pricing on each of the Bank Facilities includes a 25 basis point step-down to the respective interest rate margins upon the achievement and maintenance of a total net leverage ratio of 3.75:1.00 or lower or upon the public announcement that our corporate credit rating from each of Moody’s and S&P is equal to or better than Ba2 or BB, respectively.

In addition to paying interest on outstanding principal under the New Term Loan and the New Revolving Credit Facility, we are required to pay a commitment fee, payable quarterly in arrears, of 0.50% per annum on the average daily unused portion of the New Revolving Credit Facility, with step-downs (x) to (i) 0.375% and (ii) 0.25% per annum on such portion upon achievement of a total net leverage ratio equal to or less than (i) 4.75x and (ii) 3.75x, respectively, and (y) an additional 0.125% per annum upon the public announcement our corporate credit rating from each of Moody’s and S&P is equal to or better than Ba2 or BB, respectively. The commitment fee shall, however, in no event be less than 0.25% per annum. The commitment fee will initially be set at 0.375% per annum until the date we must deliver the applicable financial statements for the quarter ending June 30, 2021. The applicable borrowers must also pay customary letter of credit fees.

We are required, subject to certain exceptions, to pay outstanding loans under the New Term Loan, (i) commencing with the fiscal year ending December 31, 2022, with 50% of excess cash flow, with step-downs upon achievement of certain first lien net leverage ratios, (ii) with 100% of the net cash proceeds of all non-ordinary course asset sales by us and our restricted subsidiaries, with step-downs upon achievement of certain first lien net leverage ratios and subject our reinvestment right and (iii) with 100% of the net cash proceeds of issuances of debt obligations of us and our restricted subsidiaries, other than permitted debt. Additionally, we may voluntarily repay outstanding loans under the New Term Loan and the New Revolving Credit Facility at any time without premium or penalty, except in connection with, or resulting in, any repricing event. In addition, we may elect to permanently terminate or reduce all or a portion of the revolving credit commitments and the letter of credit sub-limit under the New Revolving Credit Facility at any time without premium or penalty.

We are required to repay installments on the New Term Loan in quarterly principal amounts equal to 0.25% of the original principal amount of the New Term Loan borrowed on the closing date on the last business day of each June, September, December and March of each year, with the balance payable on January 13, 2028. Additionally, the entire principal amount of revolving loans outstanding (if any) under the New Revolving Credit Facility are due and payable in full at maturity on January 13, 2026, on which day the revolving credit commitments thereunder will terminate.

All obligations under the New Credit Agreement are unconditionally guaranteed on a senior basis by, subject to certain exceptions, each of our existing and subsequently acquired or organized direct or indirect wholly owned restricted subsidiaries organized in the United States and Wildcat Acquisition Holdings (UK) Limited and Jaguar (Barbados) Finance SRL. Additionally, the obligations under the New Credit Agreement and the guarantees are secured, subject to certain exceptions and excluded assets, by (i) the equity securities of the Co-Borrower and each guarantor, and of the direct, restricted subsidiaries of the Co-Borrower and each subsidiary guarantor and (ii) security interests in, and mortgages on, substantially all personal property and material owned real property by us and each subsidiary guarantor.

The New Credit Agreement includes negative covenants limiting our ability and the ability of our restricted subsidiaries to incur indebtedness and liens, sell assets and make restricted payments, including dividends and investments, subject to certain exceptions. In addition, the New Credit Agreement also contains other customary affirmative and negative covenants and customary events of default (with customary grace periods, as applicable). Certain negative covenants are subject to customary investment grade fall-away provisions once we have a public corporate credit/family ratings that are investment grade from Moody's and S&P (so long as there is no ongoing event of default) and will be reinstated if the ratings condition is no longer met. If an event of default occurs the administrative agent shall, at the request of, or may, with the consent of the required lenders, (i) terminate lenders' commitments under the New Credit Agreement, (ii) declare any outstanding loans under the New Credit Agreement to be immediately due and payable, (iii) require that we cash collateralize the letter of credit obligations and (iv) exercise on behalf of itself, the L/C issuers and the lenders all rights and remedies available to it, the L/C issuers and the lenders under the loan documents or applicable law.

New Notes

On June 5, 2020, Jaguar Holding Company II and PPD Development, L.P. (collectively, the "Issuers"), issued in a private placement the 2025 Notes and 2028 Notes. We used the proceeds from the issuance of the New Notes to redeem the OpCo Notes, and pay accrued and unpaid interest thereon and a $35.9 million redemption premium. The redemption of the OpCo Notes resulted in a total loss on extinguishment of debt of $43.5 million. The 2025 Notes mature on June 15, 2025, and the 2028 Notes mature on June 15, 2028. Interest on the New Notes is payable semi-annually on June 15 and December 15 of each year. The New Notes do not have registration rights.

The Issuers can redeem the New Notes, at their option, in whole at any time or in part from time to time, upon notice, at the various redemption prices (expressed as a percentage of principal amount) and, in certain cases, a "make-whole" premium, plus accrued and unpaid interest, if any, to the redemption date. Additionally, upon the occurrence of specific change of control events, the Issuers are required to offer to repurchase all of the New Notes then outstanding at 101% of their principal amount, plus accrued and unpaid interest. As of December 31, 2020, no redemptions have been made. The Issuers were in compliance with all covenants under the New Notes indenture at December 31, 2020. See Note 9, "Long-term Debt and Finance Lease Obligations," to our audited consolidated financial statements included elsewhere in this Annual Report on Form 10-K for further discussion and additional information on the New Notes.

Critical Accounting Policies and Estimates

Our accounting policies are more fully described in Note 1, “Basis of Presentation and Summary of Significant Accounting Policies,” to our audited consolidated financial statements included elsewhere in this Annual Report on Form 10-K. The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. We monitor estimates and update them as facts and circumstances change and new information is obtained, including facts and circumstances related to the COVID-19 pandemic. Actual results could differ materially from those estimates and assumptions due to, among other things, the impacts caused by the COVID-19 pandemic. We believe the following accounting policies are most critical to the portrayal of our results of operations and financial condition and require management’s most difficult, subjective and complex judgments.

Revenue Recognition

Our clinical development services full-service clinical trial management contracts include multiple promised services such as trial feasibility, investigator recruitment, clinical trial monitoring, project management, database management and biostatistical services, among others. Our full-service clinical trial management services constitute a single performance obligation, which is the delivery of clinical trial data and related reports, as we provide a significant service of integrating all promises in the contract and the promises are highly interdependent and interrelated with one another. We use a cost-to-cost input method to recognize revenue for the satisfaction of the performance obligation for full-service contracts. Actual total costs incurred, which is inclusive of direct, third-party pass-through and out-of-pocket costs, is compared to the estimated total costs to satisfy the performance obligation under the contract. This ratio is then multiplied by the estimated total contract consideration to determine and recognize revenue. This methodology is consistent with the manner in which the customer receives the benefit of the work performed over time as services are rendered and is consistent with our contract termination provisions. Direct costs consist primarily of the amount of direct labor and certain overhead for the delivery of services. The inclusion of actual incurred and total estimated third-party pass-through and out-of-pocket costs in the measure of progress may create a timing difference between the amount of revenue recognized and the actual third-party pass-through and out-of-pocket costs incurred.

We review and revise estimated total costs to satisfy the performance obligation throughout the life of the contract, with adjustments to revenue resulting from such revisions being recorded in the period in which the change in estimate is determined. Estimated total costs are determined as part of the customer proposal and negotiation process, based on the scope of work, the complexity of the clinical trial services, the geographic locations involved, industry information and historical experience, among other factors. Monthly, accumulated actual total costs on each project are compared to the current estimated total costs to complete the performance obligation under the contract. This process includes, among other things:

- a comparison of actual total costs incurred in the current month to the budgeted total costs for the month;
- detailed input from project teams relating to the status of the project, including the rate of enrollment, the ability to complete individual tasks in the time allotted, the anticipated total units to be achieved, an assessment of expected third-party pass-through and out-of-pocket costs and potential changes to the project scope;
- a comparison of third-party pass-through and out-of-pocket costs to direct costs and direct units to be achieved;
- a comparison of the fees invoiced and collected to revenue recognized;
- a review of experience on projects recently completed or currently running; and
- a review of specific customer and industry changes.

As a result, we might determine that previous estimates of total costs need to be revised based upon the new information and such changes in estimates may have a material impact on revenue recognized. In addition, a change in the scope of work generally results in the negotiation of a contract modification to increase or decrease the estimated total contract consideration along with an associated increase or decrease in the estimated total costs to complete.

See Note 2, “Revenue,” to our audited consolidated financial statements included elsewhere in this Annual Report on Form 10-K for additional information.

Investments

We make investments in unconsolidated affiliates that are accounted for under the equity method of accounting if we are able to exercise significant influence over the investment. Our other investments which are not accounted for under the equity method of accounting are accounted for at fair value. We have significant investments in two limited partnerships that we account for utilizing the fair value option, but for which fair values are not readily determinable. These limited partnerships invest in novel, innovative and potentially commercially viable biomedical products in clinical development and in early stage life sciences companies, some of which are publicly traded companies. It is inherently difficult to make accurate fair value estimates based on long-range projections of any pharmaceutical or biomedical product or early life sciences companies, especially with respect to products that have not completed clinical development and therefore have not received regulatory approval. Due to the lack of observable inputs, assumptions used can significantly impact the resulting fair value and therefore the partnerships' results of operations. In addition, due to the inherent uncertainty of valuation for these investments, estimates of fair value might differ materially from the value that would have been used had a readily available market for these investments existed or from the value which would be realized upon disposition of these investments, and the differences could be material. The analysis of fair value for these investments requires significant judgment and can fluctuate from period to period. Changes in the fair value of these investments could have a material impact on our results of operations or financial condition.

The estimate of fair value involves an evaluation of the investment and its underlying assets, including the market for the investment, available information on historical and projected financial performance, the potential sale or initial public offering of the underlying assets, the stage of development of the underlying assets, recent private transactions, the market value of any publicly traded assets, control over the investment partnership and the lack of marketability of the investments, as well as our expected holding period, among other considerations. We record the fair value of these investments at the net asset value determined by the investment partnership adjusted for the aforementioned factors, including a discount for our lack of control and the lack of marketability of the investments. We engaged an independent third-party valuation specialist to assist us in determining the discount for our lack of control and the lack of marketability of the investments. The discount for lack of marketability of the investments is based on (i) market data, including public studies that quantify market discounts; (ii) the discount implied by option pricing models; (iii) specific factors relative to the investment partnerships and (iv) the expected investment horizon. The lack of control discount is based on (i) observed control premiums paid for transactions in similar investments; (ii) observed control premiums for the industry and (iii) specific factors relative to the investment partnerships.

We adjust our discount based on updates to our expected holding period for the investments, changes in the volatilities of comparable investments impacting the lack of marketability of the investments and/or updated observed control premiums impacting the lack of control in the investments, as well as other qualitative factors discussed above.

See Note 6, "Investments," and Note 14, "Fair Value Measurements," to our audited consolidated financial statements included elsewhere in this Annual Report on Form 10-K for additional information.

Income Taxes

Changes in judgment as to recognition and/or measurement of tax positions may materially affect the estimate of our effective tax rate and, consequently, our results of operations. We consider many factors when evaluating and estimating our tax positions and tax benefits, which may require periodic adjustments and may not accurately anticipate actual outcomes.

We use estimates and judgments in calculating certain tax liabilities and determining the recoverability of certain deferred tax assets, which arise from net operating losses, tax credit carryforwards and temporary differences between the tax and financial statement recognition of revenue and expense. We are also required to reduce our deferred tax assets by a valuation allowance if, based on the weight of available evidence, it is more likely than not that all or some portion of the recorded deferred tax assets will not be realized in future periods.

In evaluating our ability to recover our deferred tax assets, in full or in part, we consider all available positive and negative evidence, including our past results of operations, the existence of cumulative losses in the most recent fiscal years, our forecast of future taxable income on a jurisdiction-by-jurisdiction basis and the potential impacts from tax legislation changes. In determining future taxable income, assumptions include the amount of federal, state and foreign pretax operating income, international transfer pricing policies, the reversal of temporary differences and the implementation of feasible and prudent tax planning strategies. These assumptions require significant judgment about the forecasts of future taxable income and are consistent with the plans and estimates we use to manage the underlying businesses. Changes in our assumptions could result in future increases or decreases to the valuation allowance, and ultimately income tax expense or benefit.

We have analyzed our filing positions in all significant federal, state and foreign jurisdictions where we are required to file income tax returns, as well as open tax years in these jurisdictions. The significant jurisdictions with periods subject to examination are the 2017 through 2019 tax years for the United States and the United Kingdom. Various U.S., foreign and state income tax returns are under examination by taxing authorities. We do not believe that the outcome of any examination will have a material impact on our results of operations, financial condition and/or cash flows.

See Note 11, “Income Taxes,” to our audited consolidated financial statements included elsewhere in this Annual Report on Form 10-K for additional information.

Goodwill

We review goodwill for impairment annually during the fourth quarter, and more frequently if impairment indicators arise, which requires significant judgment. Impairment indicators include events or changes in circumstances that would more likely than not reduce the fair value of a reporting unit with assigned goodwill below its carrying amount. We monitor events and changes in circumstances on a continuous basis between annual impairment testing dates to determine if any events or changes in circumstances indicate impairment.

The goodwill impairment test involves comparing the estimated fair value of each reporting unit, including goodwill, to its carrying value using a qualitative or quantitative analysis. If the qualitative analysis indicates that it is more likely than not that the estimated fair value is less than the carrying value for the reporting unit, we perform a quantitative analysis of the reporting unit. If based on the qualitative analysis it is more likely than not that the reporting unit’s estimated fair value exceeds its carrying value, no further analysis is required. If after performing the quantitative analysis it is more likely than not that the reporting unit’s carrying value exceeds estimated fair value, a goodwill impairment loss must be recognized in an amount equal to that excess for that reporting unit, not to exceed the total goodwill amount for that reporting unit.

The fair value of a reporting unit could be negatively impacted by future events and circumstances. Such events or circumstances include a future decline in our results of operations, a decline in the valuation of biopharmaceutical company stocks, a significant slowdown in the worldwide economy, the impact of the COVID-19 pandemic on the biopharmaceutical industry, failure to meet the performance projections included in our forecasts of future operating results, loss of key customers and a reduction in R&D spending or outsourcing by biopharmaceutical companies, among other events and circumstances. Additionally, such events and circumstances may be magnified due to the COVID-19 pandemic.

When performing the quantitative analysis we estimate the fair value of each reporting unit using generally accepted valuation techniques, which include a weighted combination of income and market approaches. The income approach incorporates a discounted cash flow model in which the estimated future cash flows of the reporting unit are discounted using an appropriately risk-adjusted weighted-average cost of capital. The forecasts used in the discounted cash flow model for each reporting unit are based in part on strategic plans and represent our estimates based on current and forecasted business and market conditions. The market approach considers our results of operations and information about our publicly traded competitors, such as earnings multiples, making adjustments to the selected competitors based on size, strengths and weaknesses, as well as publicly announced acquisition transactions. The determination of fair value for each reporting unit requires significant judgments and estimates and actual results could be materially different than those judgments and estimates, resulting in goodwill impairment. We did not recognize any goodwill impairment for the years ended December 31, 2020 and 2019. We recognized goodwill impairment of $29.6 million for the year ended December 31, 2018, associated with one reporting unit in our Clinical Development Services segment, whose estimated fair value was below carrying value as a result of decreased expected future cash flows. The reporting unit’s expected future cash flows decreased due to lower forecasted long-term revenue growth and higher forecasted operating expenses, resulting in reduced margins.

In addition, as of the date of our 2020 annual goodwill impairment test, of our eight reporting units with goodwill allocated, two reporting units' estimate of their fair value did not exceed their respective carrying value by a substantial margin. These reporting units had recorded goodwill of $261.5 million and $30.0 million, respectively, as of the goodwill impairment testing date. The percentage by which the reporting units' estimated fair values exceeded carrying value was 19.3% and 23.1%, respectively. Key assumptions that drive the estimated fair values for the reporting units are our risk-adjusted discounted cash flows and market comparable information for our industry. Decreases in theses reporting units' results of operations, changes in discount rates or other assumptions or a decline in our industry, could result in future goodwill impairment for these reporting units. Additionally, certain revenue streams of these reporting units were negatively impacted by the COVID-19 pandemic due to certain clinic closures and delays of new studies and/or pauses to ongoing studies or certain activities thereof, and to the extent that the impacts are significant in the future or that they result in a change to long-term outlook, such impacts could trigger an impairment to these reporting units in the future. Future goodwill impairment, if any, could have a material impact on our results of operations.

See Note 1, "Basis of Presentation and Summary of Significant Accounting Policies," and Note 8, "Goodwill and Intangible Assets, Net," to our audited consolidated financial statements included elsewhere in this Annual Report on Form 10-K for additional information.

Intangible Assets

Our definite-lived intangible assets consist of trade names, investigator/payer networks, technology/intellectual property, know-how/processes, backlog and customer relationships. We determine the fair value of our intangible assets identified as part of a business combination using generally accepted valuation techniques that are specific to the intangible asset for which fair value is being estimated. For example, fair value may be determined by estimating the costs to develop the acquired intangible assets into commercially viable services or revenues and income from continuing to provide contracted services, estimating the resulting net cash flows from future services to be provided and discounting the net cash flows to present value. We also consider the present value of the royalties saved because we own the intangible asset instead of paying a fee to use it. Additionally, our estimates take into account the relevant market size and growth factors, expected trends in technology and the nature and expected timing of new service introductions by us and our competitors. The resulting net cash flows are based on management's estimates of revenues, direct costs, operating expenses, royalty rates for similar intangible assets and income taxes from the provision of services. The rates utilized to discount the net cash flows to their present value are commensurate with the uncertainties of the estimates of future revenues and costs used in the projections described above.

We review intangible assets for impairment when circumstances indicate that the carrying amount of intangible assets might not be recoverable. This evaluation involves various analyses that require the use of judgments and estimates, including undiscounted cash flow projections. In the event undiscounted cash flow projections or other analyses indicate that the carrying amount of the intangible asset is not likely to be recovered, we record an impairment to reduce the carrying value of the intangible asset to its estimated fair value. We estimate fair value based on generally accepted valuation techniques, including cost and income approaches. The approaches may include a discounted cash flow income model or other generally accepted approaches.

The value of our intangible assets could be impacted by future adverse changes such as changes in regulatory conditions, decisions by customers to discontinue research programs, the success of our customer relationships, introduction of competing services or new technologies, significant losses of customers, investigators or payers, significant slowdowns in the worldwide economy or the biopharmaceutical industry, the delay or abandonment of any of our in-process technology development and from the COVID-19 pandemic, among other developments. Future intangible asset impairment, if any, could have a material impact on our results of operations.

Stock-based Compensation

We recognize stock-based compensation expense for stock-based awards provided to our employees and non-employee directors. We measure stock-based compensation cost at the grant date, based on the fair value of the award. We calculate the fair value of restricted stock units and performance stock units based on the closing market price of our common stock on the date of grant.

We calculate the fair value of each stock option award on the grant date using the Black-Scholes option-pricing model. The model requires the use of subjective and objective assumptions, including the expected term of the award, expected stock price volatility, expected dividends and the risk-free interest rate. In developing our assumptions, we take into account the following:

Expected Term

The expected term of the stock options represents the average period the stock options are expected to remain outstanding. As we do not have sufficient historical information to develop reasonable expectations about future exercise patterns and post-vesting employment termination behavior, the expected term of options granted is derived from the average midpoint between the weighted-average vesting and the contractual term, also known as the simplified method.

Expected Volatility

As we do not have sufficient historical data to calculate the historical volatility of our stock, we utilize the historical volatilities of a selected peer group for a period that is equal to the expected term.

Risk-Free Interest Rate

We use the risk-free interest rate at the date of grant for a zero-coupon U.S. Treasury bond with a term that approximates the expected term of the option using the simplified method.

Expected Dividend Yield

We do not have a history of paying regular dividends and we do not expect to pay regular dividends on our common stock in the future. Therefore our expected dividend yield is assumed to be zero. The special cash dividends previously paid to our stockholders were considered a return of capital to our stockholders and not regular dividends.

See Note 1, “Basis of Presentation and Summary of Significant Accounting Policies,” and Note 3, “Stock-based Compensation,” to our audited consolidated financial statements included elsewhere in this Annual Report on Form 10-K for additional information.

Recently Adopted Accounting Standards

Recently adopted accounting standards relevant in our audited consolidated financial statements are described more fully in Note 1, “Basis of Presentation and Summary of Significant Accounting Policies,” in our audited consolidated financial statements included elsewhere in this Annual Report on Form 10-K.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

Market risk is broadly defined as potential economic losses due to adverse changes in the fair value of a financial instrument. In the normal course of business, we are exposed to market risks, including foreign currency exchange rate risk and interest rate risk.

Foreign Currency Exchange Rate Risk

We are exposed to foreign currency exchange rate risk by virtue of our international operations. This risk arises because we enter into contracts with customers and pay operating expenses in currencies other than our reporting currency. We derived 43.8%, 47.1% and 47.7% of our revenue for the years ended December 31, 2020, 2019 and 2018, respectively, from operations outside of the United States. Our strategy for managing foreign currency risk relies on efforts to negotiate customer contracts to receive payment in the same currency used to pay expenses or, in some cases, we have historically entered into foreign currency exchange rate fluctuation provisions in our contracts with our customers. The exchange rate fluctuation provisions may result in increases or decreases in revenue or operating income in periods of significant exchange rate volatility when such exchange rates increase over a stated exchange rate or dollar threshold in the contract with a customer. During 2020, 2019 and 2018, exchange rate fluctuation provisions in our contracts decreased revenue and operating income by $6.5 million, $7.4 million and $10.9 million, respectively. Foreign currency exchange rate risk is evidenced in our consolidated financial statements through translation risk and transaction and re-measurement risk.

Translation Risk

We are exposed to movements in foreign currencies, predominately in the Pound sterling, Euro, Chinese yuan and Japanese yen. The vast majority of our contracts are entered into by our U.S. and U.K. subsidiaries. The contracts entered into by the U.S. subsidiaries are almost always denominated in U.S. dollars. Contracts entered into by our U.K. subsidiaries are generally denominated in U.S. dollars, Pound sterling or Euros, with the majority in U.S. dollars. If the U.S. dollar had weakened 10% relative to the Pound sterling, Euro, Chinese yuan and Japanese yen in 2020, income from operations would have been lower by approximately $23.3 million for the year then ended, based on revenues and costs related to our foreign operations.

Changes in exchange rates between the applicable foreign currency and the U.S. dollar will affect the translation of foreign subsidiaries' financial results into U.S. dollars for purposes of reporting our consolidated financial results. The process by which we translate each foreign subsidiary's financial results to U.S. dollars is as follows:

- we translate statement of operations accounts at the average exchange rates for the relevant monthly period;
- we translate balance sheet asset and liability accounts at the end of period exchange rates; and
- we translate equity accounts at historical exchange rates.

Translation of the balance sheet in this manner affects stockholders' deficit through the foreign currency translation adjustment account. This account exists only in the foreign subsidiary's U.S. dollar balance sheet and is necessary to keep the foreign balance sheet, stated in U.S. dollars, in balance.

We report translation adjustments within accumulated other comprehensive loss as a separate component of stockholders' deficit on our consolidated balance sheets. Gains or losses from translating amounts in foreign currencies are recorded in other comprehensive income or other comprehensive loss on our consolidated statements of comprehensive income.

Transaction and Re-measurement Risk

We have currency risk resulting from the passage of time between the recognition of revenue, invoicing of customers under contracts and the collection of payment. If a contract is denominated in a currency other than the subsidiary's functional currency, we recognize an unbilled services asset at the time of revenue recognition and a receivable at the time of invoicing for the local currency equivalent of the foreign currency invoice amount. Changes in exchange rates from the time we recognize revenue until the time the customer pays will result in our receiving either more or less in local currency than the amount that was originally invoiced. We recognize this difference as a foreign currency transaction gain or loss, as applicable.

We also have currency risk as a result of intercompany loans or other intercompany borrowings (collectively, "Intercompany Debt") throughout our organization when such Intercompany Debt is denominated in a currency other than the subsidiary's functional currency. Changes in exchange rates from the time a subsidiary records the Intercompany Debt until the time the subsidiary repays the Intercompany Debt will result in a foreign currency transaction gain or loss. We record all foreign currency transaction and re-measurement gains and losses as other (expense) income, net on the consolidated statement of operations. We do not have significant operations in countries considered highly inflationary.

Interest Rate Risk

We have borrowings under our New Term Loan that bear interest at a variable rate, at our option, of either (a) Adjusted LIBOR plus a margin of 2.25% with an "Adjusted LIBOR floor" of 0.50% or (b) Base Rate plus a margin of 1.25%, with a "Base Rate floor" of 1.50%. As of December 31, 2020, we had $3,064.0 million of indebtedness under our 2015 Term Loan based on LIBOR with an interest rate of 3.50%. In February 2020, we entered into three variable to fixed interest rate swaps to hedge future interest rate exposure. The three swaps have a notional value of $3,500.0 million, with an effective date of March 31, 2020 and a termination date of March 31, 2025. In March 2020, we entered into a fixed to variable interest rate swap with a notional value of $500.0 million, with identical effective and termination dates, that offset one of the three February 2020 variable to fixed interest rate swaps. A hypothetical 25 basis point increase in interest rates on total borrowings on our 2015 Term Loan and 2015 Revolving Credit Facility, net of the impact of our interest rate swaps, would have resulted in approximately a $3.1 million decrease in interest expense for the year ended December 31, 2020. See Note 9, "Long-term Debt and Finance Lease Obligations," and Note 12, "Derivative Instruments and Hedging Activities," to our audited consolidated financial statements included elsewhere in this Annual Report on Form 10-K for additional information on impacts to our market risks.

Other Risk

Although we perform services for customers located in a number of jurisdictions, we have not experienced any material difficulties in receiving funds remitted from foreign countries. However, new or modified exchange control restrictions could have an adverse effect on our ability to repatriate cash to fund our operations and make principal and interest payments, when necessary.

Item 8. Financial Statements and Supplementary Data

Index to Consolidated Financial Statements

MANAGEMENT'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

Management of PPD, Inc. (the "Company") is responsible for establishing and maintaining adequate internal control over financial reporting for the Company as defined in Rules 13a-15(f) and 15d-15(f) under the Securities Exchange Act of 1934. The Company's internal control system was designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of consolidated financial statements for external reporting purposes in accordance with accounting principles generally accepted in the United States of America.

Internal control over financial reporting has inherent limitations and may not prevent or detect misstatements. The design of an internal control system is also based in part upon assumptions and judgments made by management about the likelihood of future events, and there can be no assurance that an internal control will be effective under all potential future conditions. Therefore, even those systems determined to be effective can provide only reasonable, not absolute, assurance with respect to the financial statement preparation and presentation. Further, because of changes in conditions, the effectiveness of internal control over financial reporting may vary over time.

Management assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2020. In making these assessments, management used the framework established by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in Internal Control — Integrated Framework (2013 framework). Management's assessment included an evaluation of the design of the Company's internal control over financial reporting and testing of the operating effectiveness of its internal control over financial reporting. Management reviewed the results of its assessment with the Audit Committee of the Company's Board of Directors. Based on this assessment, management has concluded that, as of December 31, 2020, the Company's internal control over financial reporting was effective.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the stockholders and the Board of Directors of PPD, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of PPD, Inc. and subsidiaries (the "Company") as of December 31, 2020 and 2019, the related consolidated statements of operations, comprehensive income, stockholders' deficit and redeemable noncontrolling interest, and cash flows, for each of the three years in the period ended December 31, 2020, and the related notes and the schedule listed in the Index at Item 15 (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2020 and 2019, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2020, in conformity with accounting principles generally accepted in the United States of America.

Change in Accounting Principle

As discussed in Note 1 to the financial statements, the Company changed its method of accounting for leases in 2019 due to the adoption of Accounting Standard Codification Topic 842, *Leases*.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current-period audit of the financial statements that was communicated or required to be communicated to the audit committee and that (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates**.**

Revenue – Clinical Development Services — Refer to Notes 1 and 2 to the financial statements

Critical Audit Matter Description

The Company's full-service clinical trial management services constitute a single performance obligation, which is the delivery of clinical trial data and related reports, as the Company provides a significant service of integrating all promises in the contract and the promises are highly interdependent and interrelated with one another. The Company uses a cost-to-cost input method to recognize revenue for the satisfaction of the performance obligation for full-service contracts. The Company reviews and revises estimated total costs to satisfy the performance obligation throughout the life of the contract, with adjustments to revenue resulting from such revisions being recorded in the period in which the change in estimate is determined. Estimated total costs are determined as part of the customer proposal and negotiation process, based on the scope of work, the complexity of the clinical trial services, the geographic locations involved, industry information and historical experience, among other factors. Monthly, accumulated actual total costs on each project are compared to the current estimated total costs to complete the performance obligation under the contract.

Given the judgments necessary to estimate total contract costs in order to estimate the amount of revenue to recognize for certain full-service clinical research contracts which use the cost-to-cost method, auditing such estimates required extensive audit effort due to the complexity of these contracts and a high degree of auditor judgment when performing audit procedures and evaluating the results of those procedures.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to management's estimates of total contract costs and revenue to estimate the amount of revenue to recognize for clinical development services contracts included the following, among others:

- We selected a sample of long-term contracts and performed the following:
  - Evaluated whether the contracts were properly included in management's calculation of long-term contract revenue based on the terms and conditions of each contract, including whether continuous transfer of control to the customer occurred as progress was made toward fulfilling the performance obligation.
  - Compared the transaction prices to the consideration expected to be received based on current rights and obligations under the contracts and any contract modifications that were agreed upon with the customers.
  - Evaluated management's identification of distinct performance obligations by evaluating whether the underlying services were highly interdependent and interrelated.
  - Tested the accuracy and completeness of the total contract costs incurred to date for selected contracts.
  - Evaluated the estimates of total contract cost and revenue for selected contracts by:
    - Evaluating management's estimates of total contract cost and revenue by performing corroborating inquiries with the Company's project managers and project financial analysts, and comparing the estimates to management's work plans and cost estimates.
    - Comparing management's estimates of cost and revenue for the selected contracts to historical experience, and evaluating the reasonableness of management's forecast of remaining costs to be incurred for each contract based on progress to date.
  - Tested the mathematical accuracy of management's calculation of revenue for the performance obligation.
- We evaluated management's ability to accurately estimate total contract costs and revenue by comparing actual costs and revenue to management's historical estimates for contracts that have been completed.

/s/ Deloitte & Touche LLP

Raleigh, North Carolina
February 26, 2021

We have served as the Company's auditor since 2002.

PPD, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF OPERATIONS
(in thousands, except per share data)

	Years Ended December 31,		
	2020	**2019**	**2018**
Revenue	$ 4,681,474	$ 4,031,017	$ 3,748,971
Operating costs and expenses:			
Direct costs, exclusive of depreciation and amortization	1,682,046	1,484,258	1,333,812
Reimbursed costs	1,200,754	924,634	940,913
Selling, general and administrative expenses	1,010,127	938,806	813,035
Depreciation and amortization	279,116	264,830	258,974
Long-lived and goodwill asset impairments	1,414	1,284	29,626
Total operating costs and expenses	4,173,457	3,613,812	3,376,360
Income from operations	508,017	417,205	372,611
Interest expense, net of interest income of $2,359, $5,233 and $5,454 in 2020, 2019 and 2018, respectively	(216,932)	(311,744)	(263,618)
Loss on extinguishment of debt	(93,534)	—	—
Gain (loss) on investments	52,737	(19,043)	15,936
Other (expense) income, net	(62,740)	(27,143)	21,701
Income before provision for income taxes	187,548	59,275	146,630
Provision for income taxes	18,805	2,957	39,579
Income before equity in losses of unconsolidated affiliates	168,743	56,318	107,051
Equity in losses of unconsolidated affiliates, net of income taxes	(8,187)	(3,563)	(186)
Net income	160,556	52,755	106,865
Net income attributable to noncontrolling interest	(6,865)	(4,934)	(2,679)
Net income attributable to PPD, Inc.	153,691	47,821	104,186
Recapitalization investment portfolio consideration	(33,538)	6,846	(7,849)
Net income attributable to common stockholders of PPD, Inc.	$ 120,153	$ 54,667	$ 96,337
Earnings per share attributable to common stockholders of PPD, Inc.:			
Basic	$ 0.35	$ 0.20	$ 0.34
Diluted	$ 0.35	$ 0.19	$ 0.34
Weighted-average common shares outstanding:			
Basic	341,178	279,285	279,238
Diluted	346,684	280,693	279,317

The accompanying notes are an integral part of these consolidated financial statements.

PPD, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(in thousands)

	Years Ended December 31,		
	2020	**2019**	**2018**
Net income	$ 160,556	$ 52,755	$ 106,865
Other comprehensive income (loss), net of tax expense (benefit):			
Foreign currency translation	105,026	24,824	(91,177)
Defined benefit plan, net of income taxes of $(572), $(259) and $339 in 2020, 2019 and 2018, respectively	(2,479)	(1,314)	1,504
Derivative instruments, net of income taxes of $(28,922), $(2,804) and $2,183 in 2020, 2019 and 2018, respectively	(88,488)	(9,523)	11,159
Other comprehensive income (loss)	14,059	13,987	(78,514)
Comprehensive income	174,615	66,742	28,351
Comprehensive income attributable to noncontrolling interest	(8,722)	(5,144)	(3,159)
Comprehensive income attributable to PPD, Inc.	165,893	61,598	25,192
Recapitalization investment portfolio consideration	(33,538)	6,846	(7,849)
Comprehensive income attributable to common stockholders of PPD, Inc.	$ 132,355	$ 68,444	$ 17,343

The accompanying notes are an integral part of these consolidated financial statements.

PPD, INC. AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
(in thousands, except par value)

	December 31,	
	2020	**2019**
Assets		
Current assets:		
Cash and cash equivalents	$ 767,999	$ 345,187
Accounts receivable and unbilled services, net	1,609,718	1,326,614
Income taxes receivable	22,386	27,437
Prepaid expenses and other current assets	146,100	119,776
Total current assets	2,546,203	1,819,014
Property and equipment, net	496,474	458,845
Investments in unconsolidated affiliates	43,178	34,028
Investments	265,894	250,348
Goodwill, net	1,820,208	1,764,104
Intangible assets, net	748,404	892,091
Other assets	201,643	156,220
Operating lease right-of-use assets	171,839	181,596
Total assets	$ 6,293,843	$ 5,556,246
Liabilities, Redeemable Noncontrolling Interest and Stockholders' Deficit		
Current liabilities:		
Accounts payable	$ 176,341	$ 130,060
Accrued expenses:		
Payables to investigators	404,654	322,231
Accrued employee compensation	331,156	263,834
Accrued interest	2,825	44,527
Other accrued expenses	192,954	138,632
Income taxes payable	21,206	15,161
Unearned revenue	1,060,544	1,110,872
Current portion of operating lease liabilities	51,643	45,962
Current portion of long-term debt and finance lease obligations	36,238	35,794
Total current liabilities	2,277,561	2,107,073
Accrued income taxes	18,658	38,465
Deferred tax liabilities	54,535	92,225
Recapitalization investment portfolio liability	191,923	191,678
Long-term operating lease liabilities, less current portion	137,657	153,766
Long-term debt and finance lease obligations, less current portion	4,226,192	5,608,134
Other liabilities	98,908	33,017
Total liabilities	7,005,434	8,224,358
Commitments and contingencies (Note 1)		
Redeemable noncontrolling interest	34,929	30,036
Stockholders' deficit:		
Common stock $0.01 par value, 2,000,000 shares authorized; 350,858 shares issued and 350,132 shares outstanding as of December 31, 2020 and 2,080,000 shares authorized; 280,127 shares issued and 279,426 shares outstanding as of December 31, 2019	3,509	2,801
Treasury stock, at cost, 726 and 701 shares as of December 31, 2020 and 2019, respectively	(13,268)	(12,707)
Additional paid-in-capital	1,819,892	1,983
Accumulated deficit	(2,271,808)	(2,391,321)
Accumulated other comprehensive loss	(284,845)	(298,904)
Total stockholders' deficit	(746,520)	(2,698,148)
Total liabilities, redeemable noncontrolling interest and stockholders' deficit	$ 6,293,843	$ 5,556,246

The accompanying notes are an integral part of these consolidated financial statements.

PPD, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)

	Years Ended December 31,		
	2020	**2019**	**2018**
Cash flows from operating activities:			
Net income	$ 160,556	$ 52,755	$ 106,865
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	279,116	264,830	258,974
Long-lived and goodwill asset impairments	1,414	1,284	29,626
Stock-based compensation expense	21,274	15,632	18,265
Non-cash operating lease expense	43,797	40,633	—
Amortization of debt issuance costs, modification costs and debt discounts	10,535	17,768	10,082
Non-cash losses (gains) on interest rate swaps	2,572	(9,523)	(5,269)
(Gain) loss on investments	(52,737)	19,043	(15,936)
Loss on unconsolidated affiliates	8,187	3,563	186
Deferred income tax benefit	(38,564)	(84,795)	(26,062)
Loss on extinguishment of debt	93,534	—	—
Amortization of costs to obtain a contract	11,224	11,432	8,693
Other	(1,722)	9,366	(11,877)
Change in operating assets and liabilities, net of effect of businesses acquired or sold:			
Accounts receivable and unbilled services, net	(278,471)	(28,075)	(144,822)
Prepaid expenses and other current assets	15,577	(11,465)	18,510
Other assets	(40,899)	(31,288)	(26,819)
Income taxes, net	(7,001)	7,712	606
Accounts payable, accrued expenses and other liabilities	141,238	26,283	(4,443)
Operating lease liabilities	(45,330)	(39,065)	—
Unearned revenue	(72,966)	166,856	206,827
Net cash provided by operating activities	251,334	432,946	423,406
Cash flows from investing activities:			
Purchases of property and equipment	(163,331)	(125,424)	(115,981)
Acquisitions of businesses, net of cash and cash equivalents acquired	321	(74,187)	224
Capital contributions paid for investments	(6,852)	(4,069)	(1,546)
Distributions received from investments	43,974	452	27,778
Investments in unconsolidated affiliates	(20,000)	(30,000)	(9,000)
Proceeds from sale of business	—	—	8,000
Net cash used in investing activities	(145,888)	(233,228)	(90,525)
Cash flows from financing activities:			
Purchase of treasury stock	(626)	(4,012)	(8,630)
Proceeds from exercise of stock options	24,264	4,524	923
Borrowing on revolving credit facility	150,000	—	—
Repayment of revolving credit facility	(150,000)	—	—
Proceeds from issuance of senior notes	1,200,000	891,000	—
Redemption of HoldCo Notes	(1,464,500)	—	—
Redemption of OpCo Notes	(1,160,865)	—	—
Payments on long-term debt and finance leases	(41,137)	(37,409)	(35,387)
Payment of debt issuance and debt modification costs	(20,738)	(30,142)	—
Distribution to noncontrolling interest holder	(3,829)	—	—
Payment of contingent consideration for acquisition of business	(4,338)	—	—
Net proceeds from initial public offering	1,772,960	—	—
Recapitalization tax benefit distribution	—	—	(108,320)
Recapitalization investment portfolio distribution	(20,474)	—	(16,008)
Proceeds from employee stock purchases	—	—	480
Return of capital and special dividend to stockholders	—	(1,246,000)	—
Net cash provided by (used in) financing activities	280,717	(422,039)	(166,942)
Effect of exchange rate changes on cash and cash equivalents	36,649	14,442	(31,833)
Net increase (decrease) in cash and cash equivalents	422,812	(207,879)	134,106
Cash and cash equivalents, beginning of the period	345,187	553,066	418,960
Cash and cash equivalents, end of the period	$ 767,999	$ 345,187	$ 553,066

The accompanying notes are an integral part of these consolidated financial statements.

PPD, INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' DEFICIT AND REDEEMABLE NONCONTROLLING INTEREST

(in thousands)

		PPD, Inc. Stockholders' Deficit							
		Common Stock			Treasury Stock				
	Redeemable Noncontrolling Interest	Shares	Amount	Paid-in-Capital	Shares	Amount	Accumulated Other Comprehensive Loss	Accumulated Deficit	Total Stockholders' Deficit
Balance, December 31, 2017	$ 21,733	279,443	$ 2,794	$ 22,018	—	$ —	$ (234,377)	$ (1,282,115)	$ (1,491,680)
Impact from adoption of ASC 606, net of tax	—	—	—	—	—	—	—	(55,467)	(55,467)
Balance, January 1, 2018	21,733	279,443	2,794	22,018	—	—	(234,377)	(1,337,582)	(1,547,147)
Net income	2,679	—	—	—	—	—	—	104,186	104,186
Other comprehensive income (loss)	480	—	—	—	—	—	(78,514)	—	(78,514)
Vesting of restricted stock	—	9	—	—	—	—	—	—	—
Issuance of common stock for stock option exercises	—	61	1	922	—	—	—	—	923
Repurchases of common stock	—	—	—	—	515	(8,933)	—	—	(8,933)
Stock-based compensation expense	—	—	—	18,265	—	—	—	—	18,265
Recapitalization investment portfolio consideration	—	—	—	—	—	—	—	(7,849)	(7,849)
Recapitalization tax benefit consideration	—	—	—	—	—	—	—	(3,161)	(3,161)
Employee stock purchases	—	32	—	480	—	—	—	—	480
Other	—	—	—	—	—	—	—	(671)	(671)
Balance, December 31, 2018	24,892	279,545	2,795	41,685	515	(8,933)	(312,891)	(1,245,077)	(1,522,421)
Net income	4,934	—	—	—	—	—	—	47,821	47,821
Other comprehensive income	210	—	—	—	—	—	13,987	—	13,987
Vesting of restricted stock	—	13	—	—	—	—	—	—	—
Issuance of common stock for stock option exercises	—	301	3	4,521	—	—	—	—	4,524
Issuance of common stock for acquisition	—	268	3	4,998	—	—	—	—	5,001
Repurchases of common stock	—	—	—	—	186	(3,774)	—	—	(3,774)
Stock-based compensation expense	—	—	—	15,632	—	—	—	—	15,632
Modification of stock option awards	—	—	—	(19,669)	—	—	—	—	(19,669)
Return of capital and special dividend to stockholders	—	—	—	(45,184)	—	—	—	(1,200,816)	(1,246,000)
Recapitalization investment portfolio consideration	—	—	—	—	—	—	—	6,846	6,846
Other	—	—	—	—	—	—	—	(95)	(95)
Balance, December 31, 2019	30,036	280,127	2,801	1,983	701	(12,707)	(298,904)	(2,391,321)	(2,698,148)
Net income	6,865	—	—	—	—	—	—	153,691	153,691
Other comprehensive income	1,857	—	—	—	—	—	14,059	—	14,059
Vesting of restricted stock	—	8	—	—	—	—	—	—	—
Issuance of common stock for stock option exercises	—	1,723	18	24,365	—	—	—	—	24,383
Repurchases of common stock	—	—	—	—	25	(561)	—	—	(561)
Stock-based compensation expense	—	—	—	21,274	—	—	—	—	21,274
Recapitalization investment portfolio consideration	—	—	—	—	—	—	—	(33,538)	(33,538)
Issuance of common stock for initial public offering	—	69,000	690	1,772,270	—	—	—	—	1,772,960
Distribution to noncontrolling interest holder	(3,829)	—	—	—	—	—	—	—	—
Other	—	—	—	—	—	—	—	(640)	(640)
Balance, December 31, 2020	$ 34,929	350,858	$ 3,509	$ 1,819,892	726	$ (13,268)	$ (284,845)	$ (2,271,808)	$ (746,520)

The accompanying notes are an integral part of these consolidated financial statements.

1. Basis of Presentation and Summary of Significant Accounting Policies

Basis of Presentation

Description of Business

PPD, Inc. (together with its subsidiaries "PPD" or the "Company") is a holding company incorporated in Delaware. References to the "Company" throughout these consolidated financial statements refer to PPD, Inc. and its consolidated subsidiaries, unless the context indicates otherwise. The Company is a leading provider of drug development services to the biopharmaceutical industry, focused on helping the Company's customers bring their medicines and other treatments to patients around the world. The Company has been in the drug development services business for 35 years, providing a comprehensive suite of clinical development and laboratory services to pharmaceutical, biotechnology, medical device, government organizations and other industry participants. The Company has deep experience across a broad range of rapidly growing areas of drug development and engages with customers through a variety of commercial models, including both full-service and functional service partnerships and other offerings tailored to address the specific needs of the Company's customers. The Company has two reportable segments, Clinical Development Services ("Clinical Development Services") and Laboratory Services ("Laboratory Services").

Initial Public Offering

On February 6, 2020, the Company's common stock began trading on The Nasdaq Global Select Market under the symbol "PPD." On February 10, 2020, the Company completed its initial public offering ("IPO") of its common stock at a price to the public of $27.00 per share. The Company issued and sold 69.0 million shares of common stock in the IPO, including 9.0 million shares of common stock issued pursuant to the full exercise of the underwriters' option to purchase additional shares. The Company raised net proceeds of $1,773.0 million through the IPO, after deducting underwriting discounts and other offering expenses totaling $90.0 million. During the year ended December 31, 2020, the Company expensed $4.0 million of costs related to the IPO.

The Company used a portion of the proceeds from the IPO to (i) redeem $550.0 million in aggregate principal amount of unsecured 7.625%/8.375% Senior PIK Toggle Notes due 2022 (the "Initial HoldCo Notes"), plus accrued and unpaid interest thereon and $5.5 million of redemption premium and (ii) redeem $900.0 million in aggregate principal amount of unsecured 7.75%/8.50% Senior PIK Toggle Notes due 2022 (the "Additional HoldCo Notes" and, together with the Initial HoldCo Notes, the "HoldCo Notes"), plus accrued and unpaid interest thereon and $9.0 million of redemption premium. The redemption of the HoldCo Notes resulted in a loss on extinguishment of debt of $50.1 million. See Note 9, "Long-term Debt and Finance Lease Obligations," for additional information regarding the redemption.

In connection with the IPO, the Company's board of directors adopted and stockholders approved the PPD, Inc. 2020 Omnibus Incentive Plan ("2020 Incentive Plan") to implement a new market-based long-term incentive program to align the Company's executive and management compensation packages with similarly situated public companies. See Note 3, "Stock-based Compensation," for additional information.

During 2020, the Company terminated its cash-based long-term incentive plan (the "LTIP") and accelerated the remaining expense for future service under the plan. The LTIP was terminated to align the long-term compensation package of a certain set of employees to the interests of the Company's stockholders and that offered by similarly situated public companies. These employees started receiving stock-based awards under the 2020 Incentive Plan beginning in May 2020. During the year ended December 31, 2020, the Company recorded compensation expense of $22.2 million for the acceleration of expense under the LTIP. The compensation expense was recorded as a component of direct costs and selling, general and administrative ("SG&A") expenses on the consolidated statement of operations and all LTIP amounts were paid during the year ended December 31, 2020.

Summary of Significant Accounting Policies

Principles of Consolidation

The consolidated financial statements include the accounts and operations of the Company. All intercompany balances and transactions have been eliminated in consolidation. Amounts pertaining to the redeemable noncontrolling ownership interest held by a third-party in the operating results and financial position of the Company's indirect majority-owned subsidiary are included as a noncontrolling interest.

Use of Estimates

The consolidated financial statements have been prepared in accordance with U.S. generally accepted accounting principles ("U.S. GAAP"). The preparation of financial statements in conformity with U.S. GAAP require management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. The Company monitors estimates and assumptions and updates these estimates and assumptions as facts and circumstances change and new information is obtained, including facts and circumstances related to the novel coronavirus disease ("COVID-19") pandemic. Actual results could differ from those estimates and assumptions due to, among other things, the impacts caused by the COVID-19 pandemic.

Revenue Recognition

The Company enters into contracts with customers to provide services in which contract consideration is generally based on fixed-fee or variable pricing arrangements. The Company recognizes revenue arising from contracts with customers in an amount that reflects the consideration that the Company expects to receive in exchange for the services it provides. The Company determines its revenue recognition through the following five steps: (i) identification of the contract with a customer, (ii) identification of the performance obligations in the contract, (iii) determination of the transaction price, (iv) allocation of the transaction price to the performance obligations in the contract and (v) recognition of revenue when, or as, the Company satisfies its performance obligations in the contract. The Company's contracts are service contracts that generally have a duration of a few months to several years with revenue being recognized primarily over time as services are provided to the customer in satisfaction of its performance obligations.

The majority of the Company's contracts can be terminated by the customer either immediately or after a specified notice period. Upon early termination, the contracts generally require the customer to pay the Company for: (i) consideration earned through the termination date, which is consistent with the level of cost and effort expended through the termination date, (ii) consideration for services to complete the work still required to be performed and reimbursement for other related expenses, as applicable, (iii) reimbursement for certain non-cancelable expenditures and (iv) in certain cases, payment to cover a portion of the total consideration under the contract or a termination penalty.

Changes to the scope of the Company's services are common, especially under long-term contracts, and a change in the scope of services generally results in a change in the transaction price. Changes in scope are reflected through contract modifications which are assessed on a contract-by-contract basis to determine if they should be accounted for as a new contract or part of the original contract. Generally, contract modifications are accounted for as part of the existing contract as the services to be provided for the modification are not distinct from the existing services provided under the contract. When contract modifications are accounted for as part of the existing contract, the effect of the contract modification on the transaction price and measure of progress under the contract is recognized as a cumulative adjustment to revenue as of the date of the modification.

In many cases, the Company's contracts include variable consideration that is contingent upon the occurrence of future events, such as volume rebates, performance incentives and performance penalties or other variable consideration such as third-party pass-through and out-of-pocket costs incurred, which may impact the transaction price. Variable consideration is estimated using the expected value or the most likely amount of consideration and is included in the transaction price to the extent that it is probable that a significant reversal in the amount of cumulative revenue recognized will not occur when the uncertainty associated with the variable consideration is subsequently resolved. The estimation of variable consideration is based on the Company's expected performance under the contract and where applicable, available historical, current and forecasted information to support such estimate. Actual results could differ significantly from estimates.

The Company incurs third-party pass-through and out-of-pocket costs in the performance of services under its contracts which are reimbursed by the customer. Third-party pass-through and out-of-pocket costs include, but are not limited to, payments to investigators, payments for the use of third-party technology, shipping costs and travel costs related to the performance of services. The Company records third-party pass-through and out-of-pocket costs as revenue and the related costs incurred as reimbursed costs on the consolidated statements of operations. These reimbursed costs are included as revenue as the Company is the principal in the relationship, is primarily responsible for the services provided by third parties and significantly integrates the services of third parties with its own services in delivering a combined output to the customer. The Company excludes from revenue amounts collected and paid to governmental authorities, such as value-added taxes, that are associated with revenue transactions. All of the Company's revenue is from contracts with customers. See below for additional information by reportable segment.

The methods used to recognize revenue as discussed below align with the satisfaction of the performance obligations and benefits received by the customer over time, as the customer would not need to have the services re-performed if the remaining unfulfilled performance obligations were transferred to another party. When contracts for clinical development services and laboratory services contain multiple performance obligations, the transaction price is allocated to each performance obligation based on a directly observable relative standalone selling price. When not directly observable, the Company utilizes an expected cost plus a margin in order to estimate standalone selling price.

Clinical Development Services

The Company's Clinical Development Services segment provides a wide range of clinical development services to its customers including early development/Phase I, patient recruitment and enrollment, investigator site management, Phase II-IV clinical trial management, medical communications and various peri- and post-approval services. Clinical Development Service contracts are generally fixed-fee, fee-for-service or time and materials contracts and include full-service partnerships, functional service partnerships and other custom-built offerings and tailored services.

The Company's full-service clinical trial management contracts include multiple promised services such as trial feasibility, investigator recruitment, clinical trial monitoring, project management, database management and biostatistical services, among others. The Company's full-service clinical trial management services constitute a single performance obligation, which is the delivery of clinical trial data and related reports, as the Company provides a significant service of integrating all promises in the contract and the promises are highly interdependent and interrelated with one another. The Company uses a cost-to-cost input method to recognize revenue for the satisfaction of the performance obligation for full-service contracts. Actual total costs incurred, which is inclusive of direct, third-party pass-through and out-of-pocket costs, is compared to the estimated total costs to satisfy the performance obligation under the contract. This ratio is then multiplied by the estimated total contract consideration to calculate and recognize revenue. This methodology is consistent with the manner in which the customer receives the benefit of the work performed over time as services are rendered and is generally consistent with the Company's contract termination provisions. Direct costs consist primarily of the amount of direct labor and certain overhead for the delivery of services. The inclusion of actual incurred and estimated total third-party pass-through and out-of-pocket costs in the measure of progress may create a timing difference between the amount of revenue recognized and the actual third-party pass-through and out-of-pocket costs incurred.

The Company reviews and revises estimated total costs to satisfy the performance obligation throughout the life of the contract, with adjustments to revenue resulting from such revisions being recorded in the period in which the change in estimate is determined. Estimated total costs are determined as part of the customer proposal and negotiation process, based on the scope of work, the complexity of the clinical trial services, the geographic locations involved, industry information and historical experience, among other factors. Monthly, accumulated actual total costs on each project are compared to the current estimated total costs to complete the performance obligation under the contract. This process includes, among other things:

- a comparison of actual total costs incurred in the current month to the budgeted total costs for the month;
- detailed input from project teams relating to the status of the project, including the rate of enrollment, the ability to complete individual tasks in the time allotted, the anticipated total units to be achieved, an assessment of expected third-party pass-through and out-of-pocket costs and potential changes to the project scope;
- a comparison of third-party pass-through and out-of-pocket costs to direct costs and direct units to be achieved;
- a comparison of the fees invoiced and collected to revenue recognized;
- a review of experience on projects recently completed or currently running; and
- a review of specific customer and industry changes.

As a result, the Company might determine that previous estimates of total costs need to be revised based upon the new information and such changes in estimates may have a material impact on revenue recognized. In addition, a change in the scope of work generally results in the negotiation of a contract modification to increase or decrease the estimated total contract consideration along with an associated increase or decrease in the estimated total costs to complete.

The Company recognizes revenue for other clinical development services using a variety of input and output methods depending on the type of contract and/or the performance obligations in the contract. Methods utilized primarily include cost-to-cost, units delivered, such as patients recruited or tasks performed, hours expended and the right to invoice practical expedient.

Laboratory Services

The Company's Laboratory Services segment provides comprehensive laboratory services to its customers including bioanalytical, vaccine sciences, good manufacturing practices ("GMP"), central lab and biomarker testing. Laboratory Services contracts are generally fixed-fee, fee-for-service or time and materials contracts.

The Company's laboratory services contracts include multiple service promises such as research and development, sample testing, sample management, certain clinical trial management services and providing full-time equivalent resources, among others. The Company's laboratory services contracts generally contain multiple performance obligations based on the types of services provided as the Company does not provide a significant integration service, nor are the services highly interrelated or interdependent. The Company uses a variety of output methods to recognize revenue depending on the type of contract and the performance obligations in the contract. Methods primarily utilized to recognize revenue include units delivered, milestones achieved and full-time equivalent resources provided.

Operating Costs and Expenses

The Company's operating costs and expenses primarily consist of direct costs, reimbursed costs, SG&A expenses and depreciation and amortization.

Direct Costs

Direct costs represent costs for providing services to customers. Direct costs primarily include labor-related costs, such as compensation and benefits for employees providing services, an allocation of facility and information technology costs, supply costs, costs for certain media-related services for patient recruitment, stock-based compensation expense, other overhead costs and offsetting research and development ("R&D") incentive credits. Direct costs typically increase or decrease with changes in revenue and may fluctuate significantly from period to period as a percentage of revenue due to staff labor utilization, project labor mix, the type of services, changes to the timing of work performed and project inefficiencies, among other factors.

Reimbursed Costs

Reimbursed costs include third-party pass-through and out-of-pocket costs which are generally reimbursable by the Company's customers at cost. Third-party pass-through and out-of-pocket costs include, but are not limited to, payments to investigators, payments for the use of third-party technology, shipping costs and travel costs related to the performance of services, among others. Third-party pass-through and out-of-pocket costs are incurred across both of the Company's reportable segments.

Because services associated with reimbursed costs are generally provided by us without profit or mark-up and fluctuate from period to period without being important to the Company's underlying performance over the full term of a contract, these costs do not have a significant impact on the Company's income from operations. While fluctuations from period to period are not meaningful over the full term of a contract, actual and estimated reimbursed costs can impact revenue recognized, consolidated income from operations and segment operating income throughout the duration of a contract.

Selling, General and Administrative Expenses

SG&A expenses represent costs of business development, administrative and support functions. SG&A expenses primarily include compensation and benefits for employees, costs related to employees performing administrative tasks, stock-based compensation expense, sales, marketing and promotional expenses, employee recruiting and relocation expenses, employee training costs, travel costs, an allocation of facility and information technology costs and other overhead costs.

Depreciation and Amortization

Depreciation and amortization represents the costs charged for the Company's property and equipment and intangible assets. The Company records depreciation and amortization on property and equipment using the straight-line method, based on the estimated useful lives of the respective assets. Leasehold improvements are depreciated over the shorter of the lease term or the estimated useful lives of the improvements. The Company amortizes software developed or obtained for internal use over the estimated useful life of the software or term of the licensing agreement. Amortization expense primarily comes from acquired definite-lived intangible assets. The Company amortizes definite-lived intangible assets using either the straight-line method or sum-of-the-years digits method over the estimated useful lives of the assets.

Leases

The Company adopted Accounting Standards Codification ("ASC") Topic 842, *Leases* ("ASC 842") on January 1, 2019. Prior the adoption of ASC 842, the Company accounted for its leases in accordance with ASC Topic 840, *Leases*. Under ASC 842, at the inception of a contract, the Company determines whether the arrangement is or contains a lease. Upon commencement of a lease, the Company recognizes a lease liability and a corresponding right-of-use ("ROU") asset. The lease liability is measured based upon the present value of future lease payments over the term of the lease using the appropriate discount rate at the date of lease commencement. The ROU asset is calculated as the lease liability plus any initial direct costs incurred and lease payments made at or before the commencement date of the lease, reduced by lease incentives, when applicable. Given that the rate implicit in a lease is not readily determinable, the Company generally uses its incremental borrowing rate as the discount rate. The incremental borrowing rate is the rate of interest that the Company would have to pay to borrow on a collateralized basis over a similar term for an amount equal to the lease payments in a similar economic environment. The Company determines its incremental borrowing rate by developing a baseline unsecured rate curve based upon its credit quality, among other factors, and separately makes an adjustment to reflect collateralization and any other specific lease adjustments, such as adjustments for the term of the lease and currency risks.

The Company determines if its lease arrangements are operating or finance leases at the lease commencement date. This determination includes evaluating whether (i) the underlying asset transfers ownership at the end of the lease term, (ii) the lease term represents the major part of the remaining economic life of the underlying asset, (iii) the present value of lease payments represents substantially all of the fair value of the underlying asset, (iv) an option to purchase the underlying asset is reasonably certain to be exercised and (v) the underlying asset is of a specialized nature. Finance leases are included within the current portion of and long-term debt and finance lease obligations on the consolidated balance sheets.

The Company records lease expense for operating leases, some of which have escalating rent over the remaining lease term, ratably over the lease term as lease expense within direct costs or SG&A expenses on the consolidated statements of operations, depending on the use of the underlying asset. The Company records lease expense for finance leases as a combination of the amortization of the ROU asset and the amount recognized as interest on the outstanding lease liability. The amortization of the ROU asset and the interest on the outstanding lease liability are recorded within depreciation and amortization expense and interest expense, net, respectively, on the consolidated statements of operations. Variable lease costs are lease payments that are not included in the measurement of the lease liability. Variable lease costs are either (1) payments that are entirely variable period to period such as common area maintenance, electricity and real estate taxes or (2) incremental changes in an index or rate on which lease payments are based. The Company initially measures leases that are based on an index or rate by using the applicable rate at the commencement of the lease. Any subsequent changes in an index or rate are recognized as variable lease costs. Variable lease costs are recorded in the period they are incurred.

For leases with a term of one year or less ("short-term leases"), the Company has elected not to recognize lease liabilities and associated ROU assets. Lease payments on short-term leases are recognized as lease expense within direct costs or SG&A expenses on the consolidated statements of operations, depending on the nature of the lease, on a straight-line basis over the lease term. The Company has also elected to account for lease components and non-lease components in a contract as a single lease component.

Stock-Based Compensation

The Company measures stock-based compensation cost at the grant date, based on the fair value of the award, and recognizes it as expense (net of actual forfeitures as they occur) over the recipient's requisite service period considering performance features, if any, that may impact vesting of such award.

All awards granted subsequent to the Company's IPO are granted under the 2020 Incentive Plan. The Company estimates the fair value of each stock option award on the grant date using the Black-Scholes option-pricing model. The model requires the use of subjective and objective assumptions, including the fair market value of the Company's common stock (equal to the closing market price of the Company's common stock on the date of grant), expected term of the award, expected stock price volatility, expected dividends and risk-free interest rate. Prior to the Company's IPO, all stock options were granted under the Eagle Holding Company I 2017 Incentive Plan (the "2017 Eagle I Incentive Plan"), which were valued in the same manner as options granted under the 2020 Incentive Plan as described above, with the exception of the fair market value of the Company's common stock which was determined based on a valuation obtained from an independent third-party valuation firm, using a weighted combination of income and market approaches.

The Company accounts for its restricted stock units and performance stock units based on the closing market price of the Company's common stock on the date of grant. The Company recognizes all excess tax benefits or tax deficiencies associated with stock-based awards discretely in its provision for income taxes. See Note 3, "Stock-based Compensation," for additional information.

Other (Expense) Income, Net

The components of other (expense) income, net, were as follows:

	Years Ended December 31,		
(in thousands)	**2020**	**2019**	**2018**
Other (expense) income, net:			
Foreign currency (losses) gains, net	$ (47,055)	$ (24,659)	$ 16,682
Interest rate swap losses	(15,817)	—	—
Other income	2,957	3,778	8,728
Other expense	(2,825)	(6,262)	(3,709)
Total other (expense) income, net	$ (62,740)	$ (27,143)	$ 21,701

Cash and Cash Equivalents

The balances in cash and cash equivalents consist of unrestricted cash accounts that are not subject to withdrawal restrictions or penalties and all highly liquid investments that have a maturity of three months or less at the date of purchase.

Supplemental cash flow information consists of the following at the periods below:

(in thousands)	**2020**	**2019**	**2018**
Cash paid for interest (for the years ended December 31)	$ 260,578	$ 300,528	$ 262,921
Cash paid for income taxes, net (for the years ended December 31)	71,503	72,510	64,714
Purchases of property and equipment in current liabilities (as of December 31)	20,722	29,924	17,461

Accounts Receivable, Unbilled Services and Unearned Revenue

In the normal course of business, the Company generally establishes prerequisites for billings based on contractual provisions, including payment schedules, the completion of milestones or the submission of appropriate billing detail based on the performance of services during a specified period. Payment for the Company’s services may or may not coincide with the recognition of revenue. The Company’s intent with its invoicing and payment terms is not to provide financing to the customer or receive financing from the customer. Payment terms with customers are short-term, as payment for services is typically due less than one year from the date of billing.

Accounts receivable represents amounts for which invoices have been provided to customers pursuant to contractual terms. Unbilled services represent revenue earned and recognized for services performed to date for which amounts have not yet been billed to the customer pursuant to contractual terms. Contract assets represent unbilled services where the Company's right to bill includes something other than the passage of time, such as the satisfaction of milestones related to a performance obligation for services. Contract assets are recorded as part of accounts receivable and unbilled services, net, on the consolidated balance sheets.

The Company records unearned revenue, also referred to as contract liabilities, for amounts collected from or billed to customers in excess of revenue recognized. The Company reduces unearned revenue and recognizes revenue as the related performance obligations for services are performed. Unearned revenue and contract assets are recorded net on a contract-by-contract basis at the end of each reporting period.

Allowance for Doubtful Accounts

The Company’s allowance for doubtful accounts is based on a variety of factors including an assessment of risk, historical experience, length of time the accounts receivable are past due and specific customer collection information. The Company performs periodic credit evaluations of customers’ financial condition and continually monitors collections and payments from its customers. The Company writes off uncollectible invoices when appropriate collection efforts have been exhausted. The allowance for doubtful accounts is included in accounts receivable and unbilled services, net on the consolidated balance sheets.

Property and Equipment

The Company records property and equipment at cost, less accumulated depreciation and amortization. The Company records depreciation and amortization using the straight-line method, based on the following estimated useful lives:

Buildings	20 - 40 years
Furniture and equipment	4 - 18 years
Computer equipment and software	1 - 5 years

The Company depreciates leasehold improvements over the shorter of the remaining lease term or the estimated useful lives of the improvements. The Company capitalizes internal use software development costs incurred during the application development stage, while it expenses all other preliminary stage and post implementation-operation stage costs, including planning, training and maintenance costs as incurred. The Company amortizes software developed or obtained for internal use, including software licenses obtained through a cloud computing arrangement, over the shorter of the estimated useful life of the software or the term of the licensing or service agreement.

The Company reviews property and equipment for impairment when events and circumstances indicate that the carrying amount of property and equipment might not be recoverable. This evaluation involves various analyses, including undiscounted cash flow projections. In the event that undiscounted cash flow projections or other analysis indicates that the carrying amount of property and equipment is not recoverable, the Company records an impairment reducing the carrying value of the property or equipment to its estimated fair value. The Company estimates fair value based on generally accepted valuation techniques, including income and market approaches. These approaches may include a discounted cash flow income model, use of market information of fair value, such as recent sales or market comparables, and other generally accepted approaches. The Company depreciates or amortizes the revised fair value of the property and equipment over the remaining estimated useful life. The valuation of long-lived assets at estimated fair values, when required, is performed using Level 2 or Level 3 fair value inputs.

Goodwill

Goodwill is allocated to each identified reporting unit, which is defined as an operating segment or one level below the operating segment (referred to as a component of the entity). The Company assigns to goodwill the excess of the fair value of consideration conveyed for a business acquired over the fair value of identifiable net assets acquired. The Company reviews goodwill for impairment annually during the fourth quarter, and more frequently if impairment indicators arise. Impairment indicators include events or changes in circumstances that would more likely than not reduce the fair value of a reporting unit with assigned goodwill below its carrying amount. The Company monitors events and changes in circumstances on a continuous basis between annual impairment testing dates to determine if any events or changes in circumstances indicate potential impairment.

The Company performs a qualitative assessment to determine whether it is more likely than not that the estimated fair value of a reporting unit is greater than its carrying value. The qualitative analysis includes an assessment of macroeconomic conditions, industry and market specific considerations, internal cost factors, financial performance, fair value history and other Company specific events. If the qualitative analysis indicates that it is more likely than not that the estimated fair value is less than the carrying value for the reporting unit, the Company performs a quantitative analysis of the reporting unit. If based on the qualitative analysis it is more likely than not that the reporting unit’s estimated fair value exceeds its carrying value, no further analysis is required.

When the Company performs a quantitative analysis, the Company estimates the fair value of each reporting unit using generally accepted valuation techniques, which include a weighted combination of income and market approaches. The income approach incorporates a discounted cash flow model in which the estimated future cash flows of the reporting unit are discounted using an appropriately risk-adjusted weighted-average cost of capital. The forecasts used in the discounted cash flow model for each reporting unit are based in part on strategic plans and represent the Company’s estimates based on current and forecasted business and market conditions. The market approach considers the Company’s results of operations and information about the Company’s publicly traded competitors, such as earnings multiples, making adjustments to the selected competitors based on size, strengths and weaknesses, as well as publicly announced acquisition transactions. The determination of fair value for each reporting unit requires significant judgments and estimates and actual results could be materially different than those judgments and estimates resulting in goodwill impairment. If the reporting unit’s carrying value exceeds the estimated fair value, a goodwill impairment loss must be recognized in an amount equal to that excess for that reporting unit, not to exceed the total goodwill amount for that reporting unit. If based on the quantitative analysis the reporting unit’s estimated fair value exceeds its carrying value, no goodwill impairment is recorded. The valuation of goodwill at estimated fair value, when required, is performed using Level 2 or Level 3 fair value inputs.

During the year ended December 31, 2018, the Company recognized goodwill impairment. See Note 8, “Goodwill and Intangible Assets, Net,” for additional information on the goodwill impairment.

Intangible Assets

Definite-lived intangible assets consist of trade names, investigator/payer network, technology/intellectual property, know-how/processes, backlog and customer relationships. The Company amortizes customer relationships using either a sum-of-the-years’ digits method or straight-line method over their estimated useful lives. The Company amortizes all of its other definite-lived intangible assets using the straight-line method over their estimated useful lives. The methods used reflect the expected pattern of benefit over the expected useful lives of each type of intangible asset. As of December 31, 2020, the weighted-average remaining amortization period was 12 years for all intangible assets. The estimated useful lives are as follows:

Trade names	10 - 23 years
Investigator/payer network	5 - 10 years
Technology/intellectual property	2 - 8 years
Know-how/processes	7 - 10 years
Backlog	1 - 6 years
Customer relationships	13 - 23 years

The Company reviews definite-lived intangible assets for impairment when circumstances indicate that the carrying amount of assets might not be recoverable. This evaluation involves various analyses, including undiscounted cash flow projections. In the event undiscounted cash flow projections or other analyses indicate that the carrying amount of the intangible asset is not recoverable, the Company records an intangible asset impairment reducing the carrying value of the intangible asset to its estimated fair value. The Company estimates fair value based on generally accepted valuation techniques, including cost and income approaches. These approaches may include a discounted cash flow model and other generally accepted approaches. The new fair value of the intangible asset is amortized over the remaining estimated useful life. The valuation of intangible assets at estimated fair value, when required, is performed using Level 2 or Level 3 fair value inputs. The Company does not have any indefinite-lived intangible assets other than goodwill.

Investments

Equity Method Investments

The Company has investments that are accounted for under the equity method of accounting and are classified as investments in unconsolidated affiliates on the consolidated balance sheets based on the Company’s ownership percentage and/or as the Company has the ability to exercise significant influence over these investments. The Company records its pro rata share of the earnings or losses of these investments as part of equity in losses of unconsolidated affiliates, net of taxes, on the consolidated statements of operations.

The Company periodically reviews its equity method investments for declines in value that may be other than temporary. If an impairment indicator suggests that the estimated fair value of an investment may be less than the carrying value of the investment, the Company performs an analysis to estimate the fair value for the equity method investment, as well as assessing if the decline in the fair value estimate is other than temporary. When required, the Company estimates fair value based on generally accepted valuation techniques, including income and market approaches. The approaches may include a discounted cash flow model, use of market information such as information on the Company’s publicly traded competitors or other generally accepted approaches. Because of the inherent uncertainty of valuations, estimated valuations may differ significantly from the values that would have been used had a readily available market for the securities existed, and the differences could be material. The valuation of the equity method investments at estimated fair values, when required, is performed using Level 2 or Level 3 fair value inputs. See Note 6, “Investments,” for additional information on the Company’s investments recognized under the equity method.

Other Investments

The Company's other investments consist primarily of equity method investments in limited partnerships measured at fair value utilizing the fair value option, but for which fair values are not readily determinable. The Company records changes in the fair value of these investments in limited partnerships, representing realized and unrealized gains or losses, as a component of gain (loss) on investments on the consolidated statements of operations. The nature of the underlying investments in these funds is such that distributions are received through the liquidation of the underlying assets of the funds. Distributions reduce the fair value of the investment and are considered a return of investment. The Company does not receive significant amounts of interest or dividends from these investments. The estimate of fair value involves an evaluation of the investment and its underlying assets, including the market for the investment, available information on historical and projected financial performance, the potential sale or initial public offering of the investment's underlying assets, the stage of development of the underlying assets, recent private transactions, the market value of any publicly traded assets, control over the investment partnership and the lack of marketability of the investment, as well as the Company's expected holding period, among other considerations. See Note 6, "Investments," and Note 14, "Fair Value Measurements," for additional information on the Company's investments accounted for under the fair value option.

Capitalized Contract Costs

The Company often incurs direct and incremental contract costs to obtain a contract with a customer. Contract costs include certain bonuses, commissions and related fringe benefits paid to employees directly related to sales of services that result in a contract. The Company capitalizes the costs to obtain a contract when the expected period of benefit from the contract is greater than one year, and when capitalized, the costs are amortized on a straight-line basis over the expected period of benefit, which is generally the contract term. The Company expenses contract costs as incurred for contracts that have a contract term or estimated service period of one year or less. Capitalized contract costs are included as a component of other assets on the consolidated balance sheets and amortization of capitalized contract costs are included as a component of SG&A expenses on the consolidated statements of operations.

Pension Plan

The Company has a frozen defined benefit pension plan (the "Pension Plan") that provides retirement benefits to certain qualifying current and former U.K. employees. The determination of the benefit obligation and expense is based on actuarial models. In order to measure the benefit cost and obligation using these models, critical assumptions are made with regard to the discount rate, expected return on plan assets and the assumed rate of compensation increases. The Company reviews these critical assumptions at least annually. Other assumptions involve demographic factors such as retirement and mortality rates. The Company reviews these assumptions periodically and updates them when its experience deems it appropriate to do so.

Debt Issuance and Modification Costs

Debt issuance costs and certain debt modification costs associated with the Company's long-term debt arrangements are deferred and presented as a direct deduction from long-term debt and finance lease obligations on the consolidated balance sheets. Deferred debt issuance costs associated with the Company's revolving credit facility are capitalized and presented as an other long-term asset on the consolidated balance sheets. All deferred debt issuance and modification costs are amortized over the term of the related debt or agreement using the effective interest method.

Income Taxes

The Company accounts for income taxes under the asset and liability method, which requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been included in the consolidated financial statements. Under this method, the Company determines deferred tax assets and liabilities based on the differences between amounts recorded in the consolidated financial statements and tax basis of assets and liabilities using enacted tax rates in effect for the year in which differences are expected to reverse. The effect of a change in tax rates on deferred tax assets and liabilities is recognized in income in the period that includes the enactment date.

The Company records deferred tax assets to the extent it believes these assets will more likely than not be realized. All available positive and negative evidence is reviewed in making a determination. The evidence includes future reversals of existing deferred tax liabilities, historical and projected future taxable income and tax planning strategies. The realization of the deferred income tax assets ultimately depends on the existence of sufficient taxable income in either the carryback or carryforward periods under tax law. If future events differ from the Company's current forecasts, a valuation allowance may need to be established or released. The Company records deferred taxes as long-term assets or liabilities on the consolidated balance sheets.

The Company assesses its income tax positions and records tax benefits based upon management's evaluation of the facts, circumstances and information available at the reporting date. For those tax positions where it is more likely than not that a tax benefit will be sustained, the Company records the largest amount of tax benefit with a greater than 50 percent likelihood of being realized upon ultimate settlement with a taxing authority having full knowledge of all relevant information. For those income tax positions where it is not more likely than not that a tax benefit will be sustained, no tax benefit is recognized in the consolidated financial statements. The Company classifies liabilities for unrecognized tax benefits as accrued income taxes on the consolidated balance sheets unless the uncertainty is expected to be resolved within one year. The Company's policy for recording interest and penalties associated with unrecognized tax benefits is to record them as a component of provision for income taxes. See Note 11, "Income Taxes," for additional information.

Commitments and Contingencies

The Company records liabilities for pending and threatened litigation matters when an adverse outcome is probable and the amount of the potential liability can be reasonably estimated. The Company reviews claims and legal proceedings on a continuous basis and records or adjusts any liabilities recorded for such matters based on updated facts and circumstances including settlements or offers to settle, judicial rulings, advice of counsel or other information pertinent to a particular matter. Legal costs associated with contingencies are charged to expense as incurred.

In the ordinary course of business, the Company periodically becomes involved in a variety of pending and threatened proceedings and claims, including investigations, disputes, litigations and regulatory matters. These actions may be threatened or commenced by various parties, including customers, current or former employees, vendors, government agencies, including tax authorities, or others. Based on the latest information available, the Company does not expect that any pending or threatened proceeding, claim or investigation, dispute, litigation, or regulatory matter, either individually or in the aggregate, will have a material adverse effect on the business, financial position, results of operations and/or cash flows of the Company.

Recapitalization Investment Portfolio Liability

As a result of the recapitalization of the Company in 2017 (the "Recapitalization"), the Company incurred certain future obligations associated with potential additional consideration to holders of the company's common stock and stock options, including the Company's majority sponsors, affiliates of The Carlyle Group Inc. and affiliates of Hellman & Friedman LLC, as well as independent directors and members of management (the "Pre-Closing Holders"). Pursuant to the terms and conditions of the Recapitalization, the Pre-Closing Holders are entitled to receive consideration based on future payments received by the Company in respect of the existing investment portfolio at the time of the merger (the "Recapitalization Investment Portfolio"). The consideration represents the right to receive future payments from the Company determined by reference to the cash proceeds received from the Recapitalization Investment Portfolio, net of taxes and other expenses deemed attributable to the Recapitalization Investment Portfolio and capital contributions made in respect of the Recapitalization Investment Portfolio (the "Recapitalization Investment Portfolio Liability"). The Recapitalization Investment Portfolio Liability represents an obligation that is estimated and probable to become distributable by transferring assets (i.e., cash) to the Pre-Closing Holders. The Company records the Recapitalization Investment Portfolio Liability as a long-term liability until the Company is obligated to make a distribution to the Pre-Closing Holders. Once the Company has realized an obligation to make a distribution to the Pre-Closing Holders, the Company reclassifies the amount of the obligation to current liabilities.

Changes in the Recapitalization Investment Portfolio Liability (based on changes in the fair value of the investments underlying the Recapitalization Investment Portfolio, net of taxes and other expenses as required by merger agreement) are recognized as an increase or decrease to the liability with a corresponding increase or decrease in the Company's accumulated deficit, as well as a deemed dividend on the Company's consolidated statements of operations. These changes are recorded as a non-cash financing activity on the Company's consolidated statements of cash flows. Any payments made to the Pre-Closing Holders in respect of the Recapitalization Investment Portfolio Liability reduce such liability. See Note 6, "Investments," and Note 14, "Fair Value Measurements," for additional information on the Company's Recapitalization Investment Portfolio.

Derivative Instruments and Hedging Activities

The Company uses derivatives to manage its exposure to interest rate risk. When the Company uses derivatives, the Company records the fair value of derivative instruments on the consolidated balance sheet as either an asset or liability. Changes in a derivative's fair value are recorded each period in income from operations or other comprehensive income or loss ("OCI" or "OCL"), depending on the type of hedge transaction, whether the derivative is designated and whether the derivative is effective as a hedged transaction. Changes in the fair value of derivative instruments recorded to OCI or OCL are reclassified to income from operations in the period affected by the underlying hedged item. Any portion of the fair value of a derivative instrument determined to be ineffective is recognized in current earnings. The Company does not use derivative financial instruments for speculative or trading purposes and does not offset the fair value amounts of its derivatives.

Concentration of Credit Risk

Financial assets that subject the Company to concentrations of credit risk consist principally of cash and cash equivalents and accounts receivable and unbilled services, net. Based on the nature of the financial assets and the historical realization of these financial assets as well as the reputable credit ratings of the financial institutions holding the deposits, the Company believes it bears minimal credit risk.

Foreign Currency

The Company translates assets and liabilities of foreign operations, where the functional currency is the local currency, into U.S. dollars at the rate of exchange at each reporting date and stockholders' equity accounts at historical exchange rates. The Company translates income and expenses at the exchange rate on the date in which the transaction occurs or at the average exchange rate prevailing during the month in which a transaction occurs. Gains or losses from translating foreign currency amounts are recorded in OCI or OCL. As a result of foreign operations, the Company is exposed to foreign currency exchange risk due to the timing between the initiation of a transaction and the ultimate settlement of the transaction. Therefore, the Company incurs foreign currency transaction and re-measurement gains or losses. The Company includes foreign currency transaction and re-measurement gains and losses in other (expense) income, net on the consolidated statements of operations.

Business Combinations

The Company accounts for business combinations using the acquisition method of accounting, where the identifiable assets acquired, the liabilities assumed and any noncontrolling interest in the acquired entity are measured at their fair values and recognized on the date of acquisition. Initial estimates of fair value may be recorded as provisional, with measurement period adjustments to fair value recorded in subsequent periods. The measurement period is defined as the time period in which all information has been obtained to determine the fair value of the identifiable assets acquired, liabilities assumed and any noncontrolling interests. However, the measurement period is to not exceed one year from the date of acquisition. All adjustments made to provisional amounts are recognized in the period in which the adjustments are determined and disclosures are made when such adjustments are significant. Goodwill is the excess of the fair value of the consideration conveyed in the acquisition over the fair value of the identifiable net assets acquired. The fair values assigned to identifiable assets acquired, liabilities assumed and noncontrolling interests are based on management's estimates and assumptions, as well as other information compiled by management, including available historical information, using generally accepted valuation techniques. Significant judgment may be required to determine these fair values. Actual results could materially differ from the estimates and assumptions used in the determination of fair value, which could result in an impairment of the intangible assets or goodwill, or require acceleration of amortization expense of definite-lived intangible assets.

The Company records assets and liabilities representing working capital at their historical costs, which approximate fair value given the short-term nature of the assets and liabilities. The Company may use the market, income or cost approaches to value significant property and equipment acquired. The Company generally uses the income approach method to estimate the fair value of definite-lived intangible assets consisting of customer relationships, backlog, and trade names. The Company generally uses the cost approach method to estimate the fair value of investigator/payer network, certain technology/intellectual property and know-how/processes. Significant estimates and assumptions in the estimates of fair value reflect the consideration of other marketplace participants, and include the amount and timing of future cash flows (including expected growth rates and profitability), economic barriers to entry, the brand's relative market position, estimated royalty rates, estimated costs to replicate, opportunity costs and the discount rate applied to future cash flows. The valuation of property and equipment and definite-lived intangible assets at fair value is primarily performed using Level 2 or Level 3 fair value inputs.

Fair Value

The Company records certain assets and liabilities at fair value on a recurring and nonrecurring basis. Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability, or the exit price, in an orderly transaction between market participants at the measurement date. U.S. GAAP establishes a fair value hierarchy that gives highest priority to quoted prices (unadjusted) in active markets for identical assets or liabilities and the lowest level to unobservable inputs. The inputs used to measure fair value are classified into the following fair value hierarchy:

- Level 1 - Quoted prices (unadjusted) for identical assets or liabilities in active markets that the Company can access at the measurement date.
- Level 2 - Observable inputs other than quoted prices in Level 1, including (i) quoted prices for similar assets and liabilities in active markets, (ii) quoted prices for identical or similar assets or liabilities in markets that are not active and (iii) observable inputs for the assets or liabilities other than quoted market prices.
- Level 3 - Unobservable inputs that are supported by little or no market activity and are significant to the fair value of the assets or liabilities. This includes assets and liabilities determined using pricing models, discounted cash flow methodologies or similar techniques reflecting the Company's own assumptions.

The fair value measurement of a financial instrument and its classification within the hierarchy is determined based on the lowest level input that is significant to the fair value measurement in its entirety. The Company reports transfers between valuation levels at their fair value as of the beginning of the month in which such changes in the fair value inputs occur.

Earnings per Share

The calculation of earnings per share ("EPS") is based on the Company's net income that is attributable to its common stockholders divided by the weighted-average number of common shares or common share equivalents outstanding during the applicable period. The Company's net income that is attributable to common stockholders will generally not be the same as the Company's consolidated net income due to the effects of redeemable noncontrolling interests recognized and deemed dividends related to contingent consideration from the Recapitalization Investment Portfolio Liability. See Note 4, "Stockholders' Deficit and Redeemable Noncontrolling Interest," and "Recapitalization Investment Portfolio Liability," within this note, for additional information.

The dilutive effect of common share equivalents is excluded from basic EPS and is included in the calculation of diluted EPS. Restricted stock and stock options granted by the Company are treated as potential common shares outstanding in computing diluted EPS. Potential common shares related to unvested performance-based options, unvested performance stock units and unvested liquidity/realization event-based options are excluded from the calculation of diluted EPS as these shares are contingently issuable and their vesting is based on the Company's actual or expected achievement of performance factors or meeting certain market conditions. Diluted shares outstanding are calculated based on the average share price for each fiscal period using the treasury stock method.

Under the treasury stock method, the amount the employee must pay for exercising stock options and the amount of compensation cost for future service that the Company has not yet recognized are assumed to be used to repurchase shares. The Company does not include potentially dilutive shares in the calculation of diluted weighted-average number of common shares outstanding in cases where the inclusion of such additional shares would be anti-dilutive. Potential common shares related to stock options, unvested restricted stock units and performance stock units may be determined to be anti-dilutive based on the application of the treasury stock method and are also anti-dilutive in periods when the Company incurs a net loss. See Note 17, "Earnings Per Share," for additional information on the Company's calculation of basic and diluted EPS.

Reportable Segments

The Company has two reportable segments, Clinical Development Services and Laboratory Services. The Clinical Development Services segment provides a wide range of services to its customers including early development/Phase I, patient recruitment and enrollment, investigator site management, Phase II-IV clinical trial management, medical communications and various peri- and post-approval services. The Laboratory Services segment provides comprehensive services to its customers including bioanalytical, vaccine sciences, GMP, central lab and biomarker testing. Both segments provide services to pharmaceutical, biotechnology, medical device, government organizations and other industry participants. During the first quarter of 2020, the chief operating decision maker (the "CODM") began assessing performance and making resource allocation decisions based on total segment revenue, including direct, third-party pass-through and out-of-pocket revenue and segment operating income, including reimbursed costs. See Note 18, "Segments," for additional information on the Company's identified reportable segments.

Recently Adopted Accounting Standard

In August 2018, the Financial Accounting Standards Board issued an accounting standards update to address a customer's accounting for implementation costs incurred in a cloud computing arrangement that is a service contract. This new guidance was issued to align the accounting for costs incurred to implement a cloud computing arrangement that is a service contract with the guidance on capitalizing costs associated with developing or obtaining internal-use software. With the adoption of this standard, implementation costs incurred in a cloud computing arrangement that is a service contract are capitalized and presented in the financial statements similar to prepaid expenses related to service contracts. Additionally, expenses associated with capitalized implementation costs are recorded in the same financial statement line item as the fees associated with the hosting element of a cloud computing arrangement. The Company adopted this accounting standards update on January 1, 2020 using the prospective method. The adoption of this accounting standards update did not have a material impact to the Company's consolidated financial statements.

2. Revenue

Performance Obligations

Revenue recognized from performance obligations partially satisfied in prior periods was $147.6 million, $131.4 million and $145.7 million for the years ended December 31, 2020, 2019 and 2018, respectively. These cumulative catch-up adjustments primarily related to contract modifications executed in the current period, which resulted in changes to the transaction price, and to a lesser extent, changes in transaction price related to variable consideration and changes in estimates such as estimated total costs.

As of December 31, 2020, the aggregate amounts of transaction price allocated to unsatisfied performance obligations with an original contract term of greater than one year was $7.5 billion. The Company expects to recognize 36% to 42% of the transaction price allocated to unsatisfied performance obligations over the next 12 months as services are rendered, with the remainder recognized thereafter during the remaining contract term. The Company does not include the value of the transaction price allocated to unsatisfied performance obligations for contracts that have an original contract term of less than one year, for contracts which are determined to be short-term based on certain termination for convenience provisions or where it applies the right to invoice practical expedient.

Accounts Receivable and Unbilled Services, net and Unearned Revenue

The Company's accounts receivable and unbilled services, net, consisted of the following amounts on the dates set forth below:

	December 31,	
(in thousands)	**2020**	**2019**
Accounts receivable	$ 735,568	$ 726,111
Unbilled services	882,078	609,674
Total accounts receivable and unbilled services	1,617,646	1,335,785
Allowance for doubtful accounts	(7,928)	(9,171)
Total accounts receivable and unbilled services, net	$ 1,609,718	$ 1,326,614

The Company's unearned revenue consisted of the following amounts on the dates set forth below:

	December 31,	
(in thousands)	**2020**	**2019**
Unearned revenue	$ 1,060,544	$ 1,110,872

As of December 31, 2020 and 2019, contract assets of $171.2 million and $178.8 million, respectively, were included in unbilled services. The changes in the Company's contract assets and unearned revenue resulted from the timing difference between the Company's satisfaction of performance obligations under its contracts, achievement of billing milestones and customer payments. Additionally, during the years ended December 31, 2020, 2019 and 2018, the Company recognized revenue of $864.0 million, $705.3 million and $513.6 million, respectively, from the balance of unearned revenue outstanding as of the beginning of each respective year. Impairments of accounts receivable, unbilled services and contract assets were insignificant during the years ended December 31, 2020, 2019 and 2018.

Allowance for Doubtful Accounts

The Company's changes in the allowance for doubtful accounts consisted of the following amounts on the dates set forth below:

	Years Ended December 31,		
(in thousands)	**2020**	**2019**	**2018**
Balance at the beginning of the period	$ (9,171)	$ (5,029)	$ (4,904)
Current year recovery (provision)	1,176	(4,243)	(618)
Write-offs	67	101	493
Balance at the end of the period	$ (7,928)	$ (9,171)	$ (5,029)

Customer Concentration

Concentrations of credit risk with respect to accounts receivable and unbilled services, net, are limited due to the Company's large number of customers. As of December 31, 2020, one customer accounted for approximately 12% of accounts receivable and unbilled services, net. As of December 31, 2019, two customers each individually accounted for approximately 11% of accounts receivable and unbilled services, net. No one customer accounted for greater than 10% of revenues for the years ended December 31, 2020, 2019 or 2018.

Contract Costs

Capitalized contract costs and the related amortization for the periods below were as follows:

	December 31,	
(in thousands)	**2020**	**2019**
Capitalized costs to obtain a contract, net	$ 37,286	$ 25,766

	Years Ended December 31,		
(in thousands)	**2020**	**2019**	**2018**
Amortization of costs to obtain a contract	$ 11,224	$ 11,432	$ 8,693

No significant capitalized contract cost impairment was recognized during the years ended December 31, 2020, 2019 or 2018.

3. Stock-based Compensation

Stock-based Awards

Overview

2020 Incentive Plan

In February 2020, the Company adopted the 2020 Incentive Plan in connection with the Company's IPO. Under the 2020 Incentive Plan, the Company can issue stock options, restricted stock units ("RSUs"), performance stock units ("PSUs") and other stock-based awards to employees, directors and consultants of the Company. The Company reserved 39.1 million shares of common stock for issuance of stock-based awards under the 2020 Incentive Plan. The 2020 Incentive Plan is administered by the board of directors of the Company. Awards forfeited or expired remain available for future issuance under the 2020 Incentive Plan. As of December 31, 2020, there were 37.7 million shares of common stock available for issuance under the 2020 Incentive Plan.

Stock options granted under the 2020 Incentive Plan may not have a term that exceeds ten years from the date of grant. The exercise price of stock issued under the 2020 Incentive Plan may not be less than the fair market value of the Company's common stock on the date of grant. The fair value of all stock-based awards issued under the 2020 Incentive Plan are expensed on a straight-line basis over the requisite service period, which is equal to the vesting period. Stock options and RSUs generally vest over a four-year period at a rate of 25% per year. PSUs generally vest over a three year period with cliff vesting at the end of the period subject to the actual or expected achievement of performance factors for the vesting period. Compensation expense recorded for PSUs is based on the amount of awards expected to vest based on expected achievement of performance factors, which are re-assessed at each reporting period.

2017 Eagle I Incentive Plan

Prior the adoption of the 2020 Incentive Plan, all awards were granted under the 2017 Eagle I Incentive Plan and any awards previously granted under the 2017 Eagle I Incentive Plan remain subject to the terms of the 2017 Eagle I Incentive Plan and the applicable award agreements. No additional award grants are expected to be made under the 2017 Eagle I Incentive Plan.

Outstanding awards under the 2017 Eagle I Incentive Plan primarily consist of stock options to employees. For stock options that have time-based vesting, expense is recognized consistent with the 2020 Incentive Plan. For stock options that also have performance-based vesting, the performance options are eligible to vest at a rate of up to 20% per year (a "Tranche") subject to the actual or expected achievement of performance targets for such years. The Company recognizes stock-based compensation expense for the performance stock options on a straight-line basis over the period from the grant date through the end of the respective Tranche year, treating all Tranche as if they are each separate awards. Additionally, the performance stock options have a catch-up provision, which allows options that did not meet the performance targets in the prior year to vest in a subsequent year. The expense related to this catch-up is recorded in the period the catch-up occurs.

Liquidity/realization event-based stock options are also outstanding under the 2017 Eagle I Incentive Plan. Upon the Company's IPO, one of the performance conditions for these awards was satisfied and the awards became eligible for vesting. As a result, compensation expense began to be recognized over the requisite vesting period, which included a period of time prior to the IPO. For the year ended December 31, 2020, expense for liquidity/realization awards totaled $3.6 million.

For the years ended December 31, 2020, 2019 and 2018, stock-based compensation totaled $21.3 million, $15.6 million and $18.3 million, respectively, which the Company has recorded within direct expenses or SG&A expenses on the consolidated statements of operations based on the services provided by the recipients of such stock-based compensation.

Stock Options

The following table indicates the weighted-average assumptions used in estimating the fair value of stock options granted as follows:

	Years Ended December 31,		
	2020	**2019**	**2018**
Expected term (years)	6.25	6.5	6.5
Risk-free interest rate (%)	0.4	2.3	2.6
Expected volatility (%)	45.0	26.4	25.0
Expected dividend (%)	—	—	—

The expected term of the stock options represents the average period the stock options are expected to remain outstanding. As the Company does not have sufficient historical information to develop reasonable expectations about future exercise patterns and post-vesting employment termination behavior, the expected term of options granted is derived from the average midpoint between the weighted-average vesting and the contractual term, also known as the simplified method.

The risk-free interest rate was the rate at the date of grant for a zero-coupon U.S. Treasury bond with a term that approximated the expected term of the stock option.

As the Company does not have sufficient historical data to calculate the historical volatility of its stock, the expected volatility is derived from the historical volatilities of a selected peer group for a period that is equal to the expected term.

The Company does not have a history of paying regular dividends, exclusive of the special cash dividends paid to stockholders that were accounted for as a return of capital. The Company does not expect to pay regular cash dividends for the foreseeable future.

A summary of all 2020 stock option activity is presented below:

	Stock Options (in thousands)	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Life	Aggregate Intrinsic Value as of December 31, 2020
Outstanding at January 1, 2020	20,303	$ 14.10	7.8 years	
Granted	360	27.67		
Exercised	(1,723)	14.48		
Forfeited	(1,255)	13.68		
Cancelled	(62)	15.03		
Outstanding at December 31, 2020	17,623	$ 14.37	6.8 years	$ 349,771
Exercisable at December 31, 2020	8,921	$ 14.07	6.6 years	$ 179,680
Expected to vest at December 31, 2020	8,702	$ 14.67	7.1 years	$ 170,091

The following table summarizes information about all outstanding stock options as of December 31, 2020:

		Stock Options Outstanding			Stock Options Exercisable	
(in thousands, except per share data and years)	Exercise Price	Number Outstanding at December 31, 2020	Weighted-Average Remaining Contractual Life	Weighted-Average Exercise Price	Number Exercisable at December 31, 2020	Weighted-Average Exercise Price
Time-based	$14.35 - $34.27	7,787	5.9 years	$ 16.46	3,581	$ 15.47
Performance-based	9.89 - 21.70	7,681	6.8 years	13.23	5,340	13.14
Liquidity/realization event-based	10.59 - 21.70	2,155	6.5 years	10.90	—	—

Other information about the Company's stock options was as follows:

	Years Ended December 31,		
(in thousands, except per share data)	2020	2019	2018
Weighted-average grant date fair value per stock option granted	$ 12.01	$ 5.46	$ 4.69
Aggregate fair value of stock options granted	4,324	12,934	16,624
Total intrinsic value of stock options exercised	32,733	1,395	172
Total grant date fair value of stock options vested	16,971	15,999	14,944

As of December 31, 2020, the total unrecognized stock-based compensation cost related to unvested stock options was $24.5 million and was expected to be recognized over a weighted-average period of 2.4 years.

Restricted Stock

The Company has awarded RSUs and PSUs to employees under the 2020 Incentive Plan. As of December 31, 2020, no restricted stock units or performance stock units granted under the 2020 Incentive Plan have vested.

The aggregate fair value of RSUs and PSUs granted during the year ended December 31, 2020 was $24.1 million. As of December 31, 2020, the total unrecognized compensation cost related to unvested RSUs and PSUs was $18.2 million and was expected to be recognized over a weighted-average period of 3.0 years.

A summary of all RSU and PSU activity during 2020 is presented below:

(in thousands, except per share data)	RSUs and PSUs	Weighted-Average Grant Date Fair Value
Unvested at January 1, 2020	9	$ 18.05
Granted	889	27.10
Vested	(8)	17.93
Forfeited	(42)	26.84
Unvested at December 31, 2020	848	$ 27.09

Special Cash Bonuses and Option Modifications

In May 2019, in connection with the declaration and payment of a special cash dividend to the Company's stockholders, the board of directors approved and committed the Company to pay a special cash bonus of up to $43.7 million to its option holders with respect to vested and unvested time-based and vested performance-based options, each as of May 2019, subject to the optionee's continued employment on each payment date. The special cash bonus is payable in three separate installments. The first two installments of $14.6 million and $12.7 million were paid in May 2019 and October 2020, respectively. The last installment is expected to be paid in September 2021. The special cash bonus was considered a modification to the vested and unvested time-based options and vested performance-based options.

Additionally, in November 2019, in connection with the declaration and payment of a special cash dividend to the Company's stockholders, the board of directors approved and committed the Company to pay a special cash bonus of $6.5 million to its option holders with respect to vested and unvested time-based options and vested performance-based options as of November 2019. The cash bonus was paid in December 2019. The special cash bonus was considered a modification to the vested and unvested time-based options and vested performance-based options.

As a result of the May 2019 and November 2019 modifications and special cash bonuses, the Company recorded compensation expense, inclusive of incremental stock-based compensation expense, of $20.6 million during the year ended December 31, 2019. The compensation expense related to the modifications and special cash bonuses were primarily recorded as a component of SG&A expenses on the consolidated statements of operations. Additionally, the modifications resulted in a reclassification of $14.7 million from additional paid-in-capital due to the initial cash settlement and liability for the May 2019 special cash bonus and a reclassification of $5.0 million from additional paid-in capital due to the cash settlement for the November 2019 special cash bonus. Also, as a result of the May 2019 and November 2019 special cash dividends, the exercise price of unvested performance-based options was reduced by the dividend amounts of $3.89 and $0.57 per share, respectively. These adjustments were determined by the board of directors to be equitable and necessary to prevent the dilution or enlargement of benefits under the 2017 Eagle I Incentive Plan. The fair value adjustments for unvested performance-based options were equal to the amounts of the special cash dividends and therefore were not accounted for as modifications.

4. Stockholders' Deficit and Redeemable Noncontrolling Interest

Shares

The following is a summary of the Company's authorized, issued and outstanding shares for the periods set forth below:

(in thousands)	December 31, 2020	December 31, 2019
Shares authorized	2,000,000	2,080,000
Shares issued	350,858	280,127
Shares outstanding:		
Voting	350,132	276,052
Non-voting	—	3,374
Total shares outstanding	350,132	279,426

Voting, Dividend, and Liquidation Rights of Common Stock

Each share of common stock is entitled to one vote on all matters to be voted on by the stockholders of the Company holding common stock, including the election of directors. Additionally, the holders of common stock are entitled to dividends on a pro rata basis at such time and in such amounts, if and when declared by the Company's board of directors and are entitled to participate on a pro rata basis in all distributions that may be legally made to the Company's stockholders in connection with a voluntary or involuntary liquidation, dissolution or winding up of the Company. With the completion of the Company's IPO, all non-voting shares of common stock were converted to voting shares of common stock.

Stock Split

In January 2020, the Company filed its Amended and Restated Certificate of Incorporation prior to the IPO which, among other things, effected a 1.8-for-1 stock split of its common stock and increased the authorized number of shares of its common stock to 2.08 billion, which was subsequently reduced to 2.0 billion in connection with the Company's Amended and Restated Certificate of Incorporation filed in February 2020 as part of the IPO. All references to share and per share amounts in the Company's consolidated financial statements for periods prior to the stock split were retrospectively revised to reflect the stock split and increase in authorized shares for all periods presented.

Preferred Stock

In connection with the Company's Amended and Restated Certificate of Incorporation filed in February 2020, the Company authorized 100.0 million shares of preferred stock. No shares of preferred stock were issued or outstanding as of December 31, 2020.

Redeemable Noncontrolling Interest

The Company owns 60% of its consolidated subsidiary PPD-SNBL K.K. ("PPD-SNBL"). The 40% ownership interest held by Shin Nippon Biomedical Laboratories Ltd. ("SNBL") is classified as a redeemable noncontrolling interest on the consolidated balance sheets due to certain put options under which SNBL may require the Company to purchase SNBL's remaining ownership interest at fair value upon the occurrence of certain events described in the PPD-SNBL shareholders agreement. As of December 31, 2020 and 2019, no such events had occurred. See Note 16, "Related Party Transactions," for additional information.

Secondary Public Offering

In September 2020, the Company completed an underwritten secondary public offering of 43.7 million shares of common stock sold primarily by the Company's private equity sponsors (the "Selling Stockholders"), including 5.7 million shares of common stock pursuant to the full exercise of the underwriters' option to purchase additional shares. The Company did not offer any common stock in this transaction and did not receive any proceeds from the sale of the shares of common stock by the Selling Stockholders. The Company incurred costs of $1.9 million in relation to the secondary public offering for the year ended December 31, 2020 and such costs are recorded as a component of SG&A expenses on the consolidated statement of operations.

2019 Special Cash Dividends

In May 2019 and November 2019, the Company declared, and subsequently paid, special cash dividends to its stockholders of $1,086.0 million, or $3.89 per share and $160.0 million, or $0.57 per share, respectively. The May 2019 special cash dividend was funded with the issuance of long-term debt and cash on hand, and the November 2019 special cash dividend was funded with cash on hand. The special cash dividends were considered a return of capital to the Company's stockholders. See Note 9, "Long-term Debt and Finance Lease Obligations," for additional information on the the Company's long-term debt.

5. Business Combinations

The Company accounted for its business combinations below under the acquisition method of accounting and measured at fair value the identifiable assets acquired and liabilities assumed at the date of acquisition. For each business combination, the Company recorded assets and liabilities representing working capital at their historical costs, which approximate fair value given the short-term nature of the assets and liabilities. The methods used to estimate the fair value of definite-lived intangible assets are consistent with those described in Note 1, "Basis of Presentation and Summary of Significant Accounting Policies."

Acquisition of Synarc

On September 3, 2019, the Company acquired 100% of the issued and outstanding equity of Synarc, Inc. (“Synarc”), the global site network business of Bioclinica, Inc., expanding its global footprint into China and Latin America and expanding its central nervous system offering in the United States. The purchase price was $48.6 million and was paid with cash on hand.

The accounting for the acquisition is complete. The Company recorded measurement period adjustments including (i) an increase in the purchase price of $3.4 million, (ii) a net decrease in assets of $11.1 million and (iii) a net decrease in liabilities of $2.2 million, resulting in an increase of goodwill of $12.3 million. The goodwill recognized of $13.4 million was primarily the result of anticipated growth through the development of new customers, additional services to existing customers and the assembled workforce. The goodwill was assigned to a reporting unit within the Company’s Clinical Development Services segment. The Company is not able to deduct goodwill for U.S. income tax purposes.

The Company acquired the following definite-lived intangible assets with the acquisition of Synarc:

(dollars in thousands)	Acquired Intangible Assets	Weighted-Average Amortization Period (in years)
Customer relationships	$ 2,000	15
Know-how/processes	1,800	8
Investigator network	1,900	8
Trade names	1,400	10
Total	$ 7,100	10

The following table summarizes the consideration and the fair values of identifiable assets acquired and liabilities assumed at the acquisition date (in thousands):

Purchase price	$	48,635
Identifiable assets acquired:		
Cash and cash equivalents	$	6,003
Accounts receivable and unbilled services, net		18,819
Prepaid expenses and other current assets		1,590
Property and equipment		19,273
Intangible assets		7,100
Other assets		928
Operating lease right-of-use assets		1,609
Total identifiable assets acquired		55,322
Liabilities assumed:		
Accounts payable		(2,117)
Other accrued expenses		(4,026)
Unearned revenue		(7,210)
Long-term debt and finance lease obligations		(38)
Deferred tax liabilities		(4,736)
Other liabilities		(330)
Operating lease liabilities		(1,609)
Total liabilities assumed		(20,066)
Separately identifiable net assets acquired		35,256
Goodwill		13,379
Total net assets	$	48,635

Acquisition of Medimix

On July 1, 2019, the Company acquired 100% of the issued and outstanding equity of Medimix International ("Medimix"), a global technology company providing real-world evidence insights and information to the pharmaceutical, diagnostic and medical device industries. The acquisition enhanced the Company's ability to leverage data to provide real-world evidence and insights for customers. The purchase price was $36.8 million, which consisted of $27.5 million of cash, $5.0 million of common stock of the Company and $4.3 million of estimated contingent consideration.

Based on the fair values of identifiable assets acquired and liabilities assumed at the acquisition date, the consideration paid was allocated as follows: (i) $13.5 million to definite-lived intangible assets, (ii) $20.5 million to goodwill and (iii) $2.8 million to other net assets primarily related to net working capital.

As of December 31, 2019, the Company recorded a contingent consideration liability of $9.5 million to be paid based on Medimix meeting certain performance targets through December 31, 2019. The contingent consideration was paid to the seller in July 2020.

The accounting for the acquisition is complete and measurement period adjustments recorded were not material. The goodwill recognized was primarily the result of anticipated growth through the development of new customers, additional services to existing customers and the assembled workforce. The goodwill was assigned to a reporting unit within the Company's Clinical Development Services segment. The majority of goodwill is tax deductible for U.S. income tax purposes.

The Company acquired the following definite-lived intangible assets with the acquisition of Medimix:

	Acquired Intangible Assets (in thousands)	Weighted-Average Amortization Period (in years)
Customer relationships	$ 7,500	13
Trade names	900	10
Technology/intellectual property	5,100	8
Total	$ 13,500	11

Results from Acquisitions

The Company had the following results from its acquisitions for the periods subsequent to closing:

Business Combination	Time Period	Net Revenue (in thousands)	Net (Loss) Income
Synarc	September 3, 2019 to December 31, 2019	$ 17,170	Insignificant
Medimix	July 1, 2019 to December 31, 2019	5,996	Insignificant

Acquisition Costs

Acquisition costs are expensed as incurred and for the years ended December 31, 2019 and 2018, acquisition costs were $7.9 million and $0.8 million, respectively, and are included on the consolidated statements of operations as a component of SG&A expenses. Acquisition costs for the year ended December 31, 2020 were insignificant.

6. Investments

Equity Method Investments

The Company's investments in unconsolidated affiliates consisted of the following amounts on the dates set forth below:

	December 31,	
(in thousands)	2020	2019
Medable, Inc.	$ 19,554	$ 15,684
Science 37, Inc.	23,624	18,344
Total	$ 43,178	$ 34,028

Medable, Inc. (“Medable”) is a technology company that provides a platform to support data-driven and digitally enabled clinical trials. During the years ended December 31, 2020 and 2019, the Company made investments in Medable of $10.0 million each year. Additionally, the Company and Medable are parties to certain collaborative arrangements under which the parties may collaborate on various drug development technology or services. As of December 31, 2020, the Company had a 20.3% ownership interest in Medable.

Science 37, Inc. (“Science 37”) is a clinical trial company whose virtual trial model focuses on improving patient access and enrollment and accelerating clinical development. During the years ended December 31, 2020 and 2019 the Company made investments in Science 37 of $10.0 million and $20.0 million, respectively. As of December 31, 2020, the Company had a 21.0% ownership interest in Science 37.

The additional investments in Medable and Science 37 during 2020 did not change the Company’s accounting for such investments.

Other Investments

The Company’s other investments consisted of the following amounts on the dates set forth below:

	December 31,	
(in thousands)	**2020**	**2019**
Auven Therapeutics Holdings, L.P.	$ 204,736	$ 228,959
venBio Global Strategic Fund, L.P.	49,065	14,108
Venture capital funds and investment partnerships	10,786	5,386
Other investments	1,307	1,895
Total	$ 265,894	$ 250,348

The Company is a limited partner in Auven Therapeutics Holdings, L.P. (“Auven”), an investment limited partnership organized for the purpose of identifying, acquiring and investing in a diversified portfolio of novel therapeutic product candidates. As of December 31, 2020, the Company owned 32.7% of the outstanding partnership interests of Auven and had no remaining capital commitments. Additionally, the Company is a limited partner in venBio Global Strategic Fund, L.P. (“venBio”), an investment limited partnership which invests in early stage life science companies. As of December 31, 2020, the Company owned 22.3% of venBio. The Company’s investments in Auven and venBio are recorded at fair value utilizing the fair value option.

The Company’s investments in Auven and venBio each represent a variable interest entity that could expose the Company to losses. The amount of losses the Company could be exposed to from either investment is limited to its capital amount invested and any appreciation from the initial amount invested. The general partners in both investments have all decision-making authority relating to investment, financial and operating decisions, and the Company is not able to remove either general partner. As such, the Company is deemed to lack the control of Auven and venBio required for consolidation.

As described in Note 1, “Basis of Presentation and Summary of Significant Accounting Policies,” as part of the Recapitalization, the Pre-closing Holders are entitled to receive additional consideration based on distributions paid from the Recapitalization Investment Portfolio. Auven and venBio comprise the majority of the Company’s Recapitalization Investment Portfolio.

In addition to the investments above, the Company is a limited partner in Abingworth Bioventures VII LP, Abingworth Bioventures 8 LP and Abingworth Clinical Co-Development Fund 2 LP (the “Abingworth Investments”). The limited partnerships are dedicated to making investments in the life sciences and healthcare sectors, including late-clinical stage pharmaceutical and biotech drug development programs. As of December 31, 2020, the Company's ownership percentage in the Abingworth Investments ranged from 1.2% to 4.0%.

As of December 31, 2020, the Company had remaining capital commitments for its investments of $25.7 million that it expects to fund over the next one to five years.

See Note 14, “Fair Value Measurements,” for additional information on the investment activity for the years ended December 31, 2020 and 2019.

The summarized financial information presented below reflects the aggregated financial information of Auven and venBio as of and for periods ended December 31 of each year. The net investment income (loss) information presented below reflects the net realized and unrealized gains (losses), net of expenses and investment income, related to each investment. Auven and venBio have unclassified balance sheets. Therefore, the asset and liability information presented below are not split between current and non-current.

	December 31,		
(in thousands)	**2020**	**2019**	**2018**
Net investment income (loss) (for the years ended December 31)	$ 395,263	$ (280,962)	$ (140,943)
Total assets (as of December 31)	1,745,356	1,396,040	1,645,063
Total liabilities (as of December 31)	145,329	30,812	2,105

7. Property and Equipment, Net

Property and equipment, net, consisted of the following amounts on the dates set forth below:

	December 31,	
(in thousands)	**2020**	**2019**
Land	$ 6,907	$ 6,795
Buildings and leasehold improvements	443,567	384,975
Furniture and equipment	307,236	264,233
Computer equipment and software	384,935	311,381
Construction-in-progress, including information technology systems under development	57,111	76,972
Total property and equipment	1,199,756	1,044,356
Less: accumulated depreciation and amortization	(703,282)	(585,511)
Property and equipment, net	$ 496,474	$ 458,845

Depreciation and amortization expense for property and equipment for the years ended December 31, 2020, 2019 and 2018 was $121.5 million, $102.9 million and $90.4 million, respectively.

8. Goodwill and Intangible Assets, Net

Goodwill

The changes in the carrying amount of goodwill by segment consisted of the following on the dates set forth below:

(in thousands)	**Total**	**Clinical Development Services**	**Laboratory Services**
Balance at December 31, 2018:			
Goodwill	$ 1,850,089	$ 1,623,475	$ 226,614
Accumulated impairment losses	(126,711)	(99,432)	(27,279)
Goodwill, net	1,723,378	1,524,043	199,335
2019 Activity:			
Translation adjustments	12,814	12,814	—
Goodwill recorded from current year acquisitions	27,912	27,912	—
Balance at December 31, 2019:			
Goodwill	1,890,815	1,664,201	226,614
Accumulated impairment losses	(126,711)	(99,432)	(27,279)
Goodwill, net	1,764,104	1,564,769	199,335
2020 Activity:			
Translation adjustments	43,790	43,790	—
Measurement period adjustments for prior acquisition	12,314	12,314	—
Balance at December 31, 2020:			
Goodwill	1,946,919	1,720,305	226,614
Accumulated impairment losses	(126,711)	(99,432)	(27,279)
Goodwill, net	$ 1,820,208	$ 1,620,873	$ 199,335

The Company did not recognize any goodwill impairment for the years ended December 31, 2020 or 2019. The Company recognized goodwill impairment of $29.6 million for the year ended December 31, 2018, on the consolidated statements of operations. In 2018, a reporting unit's expected future cash flows decreased due to lower forecasted long-term revenue growth and higher forecasted operating expenses, resulting in reduced margins. The impaired reporting unit is included as part of the Company's Clinical Development Services segment.

Intangible Assets, Net

The Company's definite-lived intangible assets were composed of the following on the dates set forth below:

	December 31,					
	2020			2019		
(in thousands)	Carrying Amount	Accumulated Amortization	Net	Carrying Amount	Accumulated Amortization	Net
Customer relationships	$ 902,302	$ (479,341)	$ 422,961	$ 884,788	$ (415,427)	$ 469,361
Trade names	378,764	(159,131)	219,633	372,210	(139,141)	233,069
Backlog	181,762	(181,196)	566	177,599	(175,571)	2,028
Investigator/payer network	245,683	(217,963)	27,720	236,082	(185,478)	50,604
Technology/intellectual property	8,600	(4,256)	4,344	8,600	(3,319)	5,281
Know-how/processes	598,922	(525,742)	73,180	586,971	(455,223)	131,748
Total	$ 2,316,033	$ (1,567,629)	$ 748,404	$ 2,266,250	$ (1,374,159)	$ 892,091

Amortization expense was $157.6 million, $161.9 million and $168.6 million for the years ended December 31, 2020, 2019 and 2018, respectively. Translation adjustments of approximately $14.7 million and $5.2 million were recorded during the years ended December 31, 2020 and 2019, respectively, resulting in an increase to the carrying amount of the Company's definite-lived intangible assets. The Company does not have any indefinite-lived intangible assets other than goodwill.

As of December 31, 2020, estimated amortization expense for definite-lived intangible assets for each of the next five years and thereafter was as follows:

Year	Amortization Expense (in thousands)
2021	$ 149,193
2022	75,905
2023	68,921
2024	62,475
2025	57,460
Thereafter	334,450
Total future amortization expense	$ 748,404

9. Long-term Debt and Finance Lease Obligations

Long-term debt and finance lease obligations consisted of the following as set forth on the dates below:

(dollars in thousands)	Maturity Date	Effective Rate	Stated Rate	December 31, 2020	December 31, 2019
2015 Term Loan	August 2022	3.71%	3.50%	$ 3,064,006	$ 3,096,429
2025 Notes	June 2025	4.97%	4.63%	500,000	—
2028 Notes	June 2028	5.24%	5.00%	700,000	—
OpCo Notes [(1)]	August 2023	6.61%	6.38%	—	1,125,000
Initial HoldCo Notes [(1)]	May 2022	8.92%	7.63%	—	550,000
Additional HoldCo Notes [(1)]	May 2022	8.90%	7.75%	—	900,000
Other debt [(1)]	April 2025	1.13%	1.13%	—	5,707
Finance lease obligations	Various	Various	Various	25,734	28,726
				4,289,740	5,705,862
Unamortized debt discount				(4,198)	(13,956)
Unamortized debt issuance costs				(23,112)	(47,978)
Current portion of long-term debt and finance lease obligations				(36,238)	(35,794)
Long-term debt and finance lease obligations, less current portion				$ 4,226,192	$ 5,608,134

(1) Effective rate and stated rate are as of December 31, 2019 for the extinguished OpCo Notes, Initial HoldCo Notes, Additional HoldCo Notes and Other debt.

Senior Secured Credit Facilities

2015 Credit Agreement

On August 18, 2015, Jaguar Holding Company II and Pharmaceutical Product Development, LLC entered into a credit agreement (the "2015 Credit Agreement"), as amended, consisting of a $2.575 billion senior secured term loan (the "2015 Term Loan") issued at 99.5% of face value, or a discount of 0.5%, and a $300.0 million senior secured revolving credit facility (the "2015 Revolving Credit Facility"). In May and November of 2016, the Company amended the 2015 Credit Agreement to increase the borrowings of the 2015 Term Loan by $660.0 million in total. Borrowings under the 2015 Term Loan bore interest at a variable rate based on the London Inter-bank Offered Rate ("LIBOR") for a specific interest period plus an applicable margin, subject to a Eurocurrency rate floor of 1.00%.

In March 2020, the Company borrowed $150.0 million from the 2015 Revolving Credit Facility as a precautionary measure in order to further strengthen the Company's cash position and to preserve financial flexibility due to the uncertainty in the global markets as a result of the COVID-19 pandemic. In June 2020, the Company repaid the outstanding balance of the 2015 Revolving Credit Facility using cash on hand. From time to time, the Company is required to have letters of credit issued on its behalf to provide credit support for guarantees, contractual commitments and insurance policies. As of December 31, 2020 and 2019, the Company had letters of credit outstanding with an aggregate value of $1.6 million, which reduced available borrowings under the 2015 Revolving Credit Facility by such amount. As of December 31, 2020, the Company had available credit under the 2015 Revolving Credit Facility of $298.4 million. The Company did not have any borrowings outstanding under the 2015 Revolving Credit Facility as of December 31, 2020 or 2019.

The 2015 Term Loan was scheduled to mature on August 18, 2022 and the 2015 Revolving Credit Facility was scheduled to mature on May 15, 2022. Debt issuance costs of $16.3 million, consisting primarily of arrangement fees and professional fees, were capitalized in connection with the 2015 Term Loan. Additionally, deferred debt issuance costs of $2.7 million were capitalized in connection with the 2015 Revolving Credit Facility, consisting primarily of arrangement fees and discount.

New Credit Agreement

On January 13, 2021, the Company and its indirect wholly-owned subsidiary, PPD Development, L.P. (the "Co-Borrower") entered into and closed a new (i) $3,050.0 million aggregate principal amount senior secured first-lien term loan facility (the "New Term Loan") issued at 99.5% of face value, or a discount of 0.5%, maturing in January 2028 and (ii) $600.0 million committed principal amount senior secured first-lien revolving credit facility (the "New Revolving Credit Facility" and, together with the New Term Loan, the "Bank Facilities") maturing in January 2026 under the credit agreement dated as of January 13, 2021 (the "New Credit Agreement").

The proceeds from borrowings under the New Term Loan, together with cash on hand, were used to (i) refinance in full the principal amount outstanding and accrued and unpaid interest, fees and other amounts then due and owing under the 2015 Term Loan and (ii) pay fees and expenses relating to the New Credit Agreement.

Borrowings under the New Term Loan bear interest, initially, at a rate equal to, at the option of the Company, either (a) Adjusted LIBOR plus a margin of 2.25% with an "Adjusted LIBOR floor" of 0.50% or (b) Base Rate plus a margin of 1.25%, with a "Base Rate floor" of 1.50%. Loans under the New Revolving Credit Facility bear interest, initially, at a rate equal to, at the option of the Company either (a) Adjusted LIBOR plus a margin of 2.00% with an "Adjusted LIBOR floor" of 0.00% or (b) Base Rate plus a margin of 1.00% with a "Base Rate floor" of 1.00%. Pricing on each of the Bank Facilities includes a 25 basis point step-down to the respective interest rate margins upon the achievement and maintenance of a total net leverage ratio of 3.75:1.00 or lower or upon the public announcement that the Company's corporate credit rating from each of Moody's and S&P is equal to or better than Ba2 or BB, respectively.

In addition to paying interest on outstanding principal under the New Term Loan and the New Revolving Credit Facility, the Company is required to pay a commitment fee, payable quarterly in arrears, of 0.50% per annum on the average daily unused portion of the New Revolving Credit Facility, with step-downs to (i) 0.375% and (ii) 0.25% per annum on such portion upon achievement of a total net leverage ratio equal to or less than (i) 4.75x and (ii) 3.75x, respectively, and an additional 0.125% per annum upon the public announcement that the Company's corporate credit rating from each of Moody's and S&P is equal to or better than Ba2 or BB, respectively. The commitment fee shall, however, in no event be less than 0.25% per annum. The commitment fee will initially be set at 0.375% per annum until the date the Company delivers the applicable financial statements for the quarter ending June 30, 2021. The borrowers must also pay customary letter of credit fees.

The borrowers are required, subject to certain exceptions, to pay outstanding loans under the New Term Loan, (i) commencing with the fiscal year ending December 31, 2022, with 50% of excess cash flow, with step-downs upon achievement of certain first lien net leverage ratios, (ii) with 100% of the net cash proceeds of all non-ordinary course asset sales by the Company and its restricted subsidiaries, with step-downs upon achievement of certain first lien net leverage ratios and subject to the Company's reinvestment right and (iii) with 100% of the net cash proceeds of issuances of debt obligations of the Company and its restricted subsidiaries, other than permitted debt. The borrowers may also voluntarily repay outstanding loans under the New Term Loan and the New Revolving Credit Facility at any time without premium or penalty, except in connection with, or resulting in, any repricing event. In addition, the borrowers may elect to permanently terminate or reduce all or a portion of the revolving credit commitments and the letter of credit sub-limit under the New Revolving Credit Facility at any time without premium or penalty.

The borrowers are required to repay installments on the New Term Loan in quarterly principal amounts equal to 0.25% of the original principal amount of the New Term Loan borrowed on the closing date on the last business day of each June, September, December and March of each year, with the balance payable on January 13, 2028. The entire principal amount of revolving loans outstanding (if any) under the New Revolving Credit Facility are due and payable in full at maturity on January 13, 2026, on which day the revolving credit commitments thereunder will terminate.

All obligations under the New Credit Agreement are unconditionally guaranteed on a senior basis by, subject to certain exceptions, each existing and subsequently acquired or organized direct or indirect wholly owned restricted subsidiary of the Company organized in the United States and Wildcat Acquisition Holdings (UK) Limited and Jaguar (Barbados) Finance SRL. The obligations of the borrowers under the New Credit Agreement and the guarantees are secured, subject to certain exceptions and excluded assets, by (i) the equity securities of the Co-Borrower and each guarantor, and of each direct, restricted subsidiary of the Company, the Co-Borrower and of each subsidiary guarantor and (ii) security interests in, and mortgages on, substantially all personal property and material owned real property of the Company and each subsidiary guarantor.

The New Credit Agreement includes negative covenants limiting the ability of the Company and its restricted subsidiaries to incur indebtedness and liens, sell assets and make restricted payments, including dividends and investments, subject to certain exceptions. In addition, the New Credit Agreement also contains other customary affirmative and negative covenants and customary events of default (with customary grace periods, as applicable). Additionally, certain negative covenants are subject to customary investment grade fall-away provisions if the Company has a public corporate credit/family ratings that is investment grade from Moody's and S&P (so long as there is no ongoing event of default) and will be reinstated if the ratings condition is no longer met. If an event of default occurs the administrative agent shall, at the request of, or may, with the consent of the required lenders, (i) terminate lenders' commitments under the New Credit Agreement, (ii) declare any outstanding loans under the New Credit Agreement to be immediately due and payable, (iii) require that the Company cash collateralize the letter of credit ("L/C") obligations and (iv) exercise on behalf of itself, the L/C issuers and the lenders all rights and remedies available to it, the L/C issuers and the lenders under the loan documents or applicable law.

2025 Notes and the 2028 Notes

On June 5, 2020, the Company's indirect wholly-owned subsidiaries, Jaguar Holding Company II and PPD Development, L.P. (collectively, the "Issuers"), issued and sold in a private placement $1,200.0 million of unsecured senior notes consisting of (i) $500.0 million aggregate principal amount of 4.625% senior notes due 2025 (the "2025 Notes") and (ii) $700.0 million aggregate principal amount of 5.0% senior notes due 2028 (the "2028 Notes" and, together with the 2025 Notes, the "New Notes"), in each case, under an indenture dated as of June 5, 2020 (the "Indenture"). The 2025 Notes mature on June 15, 2025 and the 2028 Notes mature on June 15, 2028. Interest on the New Notes is payable semi-annually on June 15 and December 15 of each year. The New Notes do not have registration rights. Debt issuance costs of $18.6 million, consisting primarily of underwriters fees and professional fees, were capitalized in connection with the issuance of the New Notes. The net proceeds from the New Notes were used to redeem all outstanding $1,125.0 million aggregate principal amount of unsecured 6.375% senior notes (the "OpCo Notes"), as well as to pay for the redemption premium and accrued interest on the OpCo Notes and debt issuance costs associated with the New Notes.

The Issuers may redeem, at their option, some or all of the 2025 Notes prior to June 15, 2022, or the 2028 Notes prior to June 15, 2023, at a price equal to 100% of the principal amount of the 2025 Notes and 2028 Notes, plus accrued and unpaid interest, if any, to the redemption date plus a "make-whole" premium. Alternatively, within the same time frames, the Issuers may redeem up to 40% of the original principal amount of the 2025 Notes or the 2028 Notes, as applicable, with the proceeds of certain equity offerings at a redemption price of 104.625%, in the case of the 2025 Notes, and 105.000%, in the case of the 2028 Notes, of the principal amount of the 2025 Notes or the 2028 Notes, plus accrued and unpaid interest, if any, to the redemption date.

On or after June 15, 2022, in the case of the 2025 Notes, and June 15, 2023, in the case of the 2028 Notes, the Issuers may redeem some or all of such notes at the redemption prices listed below (expressed as a percentage of the principal amount), plus accrued and unpaid interest, if any, to the redemption date, if redeemed during the 12-month period commencing on June 15 of the years set forth below.

2025 Notes

Period	Redemption Price
2022	102.313 %
2023	101.156 %
2024 and thereafter	100.000 %

2028 Notes

Period	Redemption Price
2023	102.500 %
2024	101.250 %
2025 and thereafter	100.000 %

Upon the occurrence of specific kinds of changes of control events, the holders of the New Notes will have the right to cause the Issuers to repurchase some or all of the New Notes at 101% of face amount, plus accrued and unpaid interest, if any, to the repurchase date. Additionally, if the Issuers or their restricted subsidiaries sell assets, under certain circumstances, the Issuers will be required to make an offer to purchase a specified amount of New Notes equal to the net proceeds of such sale at an offer price in cash at the amount equal to 100% of the principal amount of the New Notes to be redeemed, plus accrued and unpaid interest, if any, to the repurchase date.

The New Notes are unsecured obligations and (i) rank senior in right of payment to all of the Issuers' and the guarantors existing and future subordinated indebtedness, (ii) rank equally in right of payment with all of the Issuers' existing and future senior indebtedness, (iii) are effectively subordinated to any of the Issuers' existing and future secured debt, to the extent of the value of the assets securing such debt and (iv) are structurally subordinated to all of the existing and future liabilities of each of the Issuers' subsidiaries that do not guarantee the New Notes. The New Notes contain customary covenants including, but not limited to, restrictions on the Issuers and their restricted subsidiaries' ability to incur additional indebtedness and guarantee indebtedness; pay dividends or make other distributions in respect of, or repurchase or redeem, capital stock; make loans and investments; sell or otherwise dispose of assets; incur liens; enter into transactions with affiliates; enter into agreements restricting the Issuers's subsidiaries' ability to pay dividends; and consolidate, merge or sell all or substantially all of their assets. Additionally, the indenture for the New Notes includes certain customary events of default which may require acceleration of payment. Such events of default include nonpayment of principal or interest, failure to pay final judgments in excess of a specified threshold, failure of a guarantee to remain in effect, bankruptcy and insolvency events and cross acceleration, the occurrence of which could result in the principal of and accrued interest on the New Notes to become or be declared due and payable immediately.

Redemption of OpCo Notes

On June 5, 2020, the Company redeemed all its outstanding OpCo Notes in accordance with the provisions governing the OpCo Notes indenture for $1,160.9 million, including a redemption premium of $35.9 million. As such, the obligations of the Company under the OpCo Notes indenture were discharged on that date. Also as part of the redemption, the Company wrote off unamortized debt issuance costs related to the OpCo Notes of $7.6 million, and combined with the applicable redemption premium, resulted in a total loss on extinguishment of debt of $43.5 million. The Company redeemed the OpCo Notes with the proceeds received from the Company's New Notes.

Redemption of HoldCo Notes

On February 18, 2020, the Company redeemed all of its outstanding HoldCo Notes in accordance with the provisions governing the HoldCo Notes indentures for $1,464.5 million, including a redemption premium of $14.5 million. As such, the obligations of the Company under the HoldCo Notes and such indentures were discharged on that date. Also as part of the redemption, the Company wrote off the unamortized debt discount and deferred debt issuance costs related to the HoldCo Notes of $35.6 million, and combined with the applicable redemption premium, resulted in a total loss on extinguishment of debt of $50.1 million. The Company redeemed the HoldCo Notes with a portion of the net proceeds received from the Company's IPO.

Other Debt

During the year ended December 31, 2020, the Company repaid its working capital loan with SNBL which was classified as "other debt." See Note 16, "Related Party Transactions," for additional details on the Company's transactions with SNBL.

Scheduled Maturities of Long-term Debt and Finance Lease Obligations

As of December 31, 2020, the scheduled maturities of long-term debt and settlement of finance lease obligations for each of the next five years and thereafter were as follows (in thousands):

Year	Amount
2021	$ 36,238
2022	3,035,512
2023	3,658
2024	3,508
2025	503,530
Thereafter	707,294
Total	$ 4,289,740

10. Leases

The Company's operating and finance leases are primarily related to office, laboratory and other real estate facilities used in the delivery of clinical development services and laboratory services. Lease terms are determined at the commencement of the lease. The Company's lease term may include options to extend the lease, when it is reasonably certain that the Company will exercise that option. As of December 31, 2020, the Company's leases have remaining lease terms of less than one year to 16 years.

The amount of finance lease ROU assets and liabilities and the associated financial statement line item they are included within on the consolidated balance sheets are as follows (in thousands):

	December 31,	
Classification	**2020**	**2019**
Property and equipment, net	$ 20,299	$ 23,084
Current portion of long-term debt and finance lease obligations	$ 3,213	$ 2,861
Long-term debt and finance lease obligations, less current portion	21,297	24,510
Total finance lease liabilities	$ 24,510	$ 27,371

The components of total lease expense were as follows (in thousands):

	Years Ended December 31,	
Lease expenses	**2020**	**2019**
Finance lease cost:		
Amortization of ROU assets	$ 2,785	$ 2,497
Interest on lease liabilities	1,869	1,968
Operating lease expense	60,150	54,179
Short-term lease expense	419	1,301
Variable lease expense	15,741	15,804
Total lease expense	$ 80,964	$ 75,749

Supplemental cash flow information related to operating and finance leases was as follows (in thousands):

	Years Ended December 31,	
	2020	**2019**
Cash paid for amounts included in the measurement of lease liabilities:		
Operating cash flows for operating leases	$ 62,414	$ 52,502
Operating cash flows for finance leases	1,869	1,968
Financing cash flows for finance leases	2,861	1,948
ROU assets obtained in exchange for lease obligations:		
Operating leases	16,011	42,520
Finance leases	—	3,736

Other information on operating and finance leases were as follows:

	Years Ended December 31,	
	2020	**2019**
Weighted-average remaining lease term:		
Operating leases	5.8 years	6.3 years
Finance leases	7.5 years	8.5 years
Weighted-average discount rate:		
Operating leases	5.5 %	5.8 %
Finance leases	7.2 %	7.2 %

As of December 31, 2020, the undiscounted future lease payments for operating and finance lease liabilities were as follows (in thousands):

Year	Operating Leases	Finance Leases	Total
2021	$ 61,918	$ 4,865	$ 66,783
2022	46,682	5,000	51,682
2023	33,921	4,610	38,531
2024	22,744	4,335	27,079
2025	13,938	4,186	18,124
2026 and thereafter	50,818	7,884	58,702
Total lease payments	230,021	30,880	260,901
Less: imputed interest	40,721	6,370	47,091
Total	$ 189,300	$ 24,510	$ 213,810

11. Income Taxes

The components of income before provision for income taxes were as follows:

	Years Ended December 31,		
(in thousands)	2020	2019	2018
Domestic	$ (257,303)	$ 668,036	$ 118,393
Foreign	444,851	(608,761)	28,237
Income before provision for income taxes	$ 187,548	$ 59,275	$ 146,630

The components of the provision for income taxes were as follows:

	Years Ended December 31,		
(in thousands)	2020	2019	2018
U.S. federal income taxes:			
Current	$ (2,186)	$ 32,051	$ 16,775
Deferred	(30,304)	(55,206)	(24,426)
U.S. state income taxes:			
Current	5,359	1,614	2,843
Deferred	(2,383)	(18,658)	(3,038)
Foreign income taxes:			
Current	58,796	44,657	49,411
Deferred	(10,477)	(1,501)	(1,986)
Provision for income taxes	$ 18,805	$ 2,957	$ 39,579

On March 27, 2020, the U.S. government passed the Coronavirus Aid, Relief, and Economic Security Act (the “CARES Act”) in response to the COVID-19 pandemic. The CARES Act provides wide-ranging economic relief, including significant changes to U.S. business tax provisions. These changes include, in summary, (i) modifications to limitations on the deductibility of net operating losses, (ii) modifications to limitations on the deductibility of business interest, (iii) alternative minimum tax credit acceleration and (iv) the expensing of qualified improvement property. The Company determined there were no significant impacts to its provision for income taxes for the year ended December 31, 2020 or prior tax years as a result of the CARES Act legislation. The Company is continuing to assess other legislative changes being considered by governments around the world in response to the COVID-19 pandemic.

The corporate statutory U.S. federal income tax rate was 21% for the years ended December 31, 2020, 2019 and 2018. Taxes computed at the corporate statutory U.S. federal income tax rate are reconciled to the provision for income taxes as follows:

	Years Ended December 31,		
(dollars in thousands)	**2020**	**2019**	**2018**
Effective tax rate	10.0 %	5.0 %	27.0 %
Income tax expense at federal statutory rate	$ 39,385	$ 12,461	$ 30,792
State taxes, net of federal tax benefit	2,432	(13,437)	(706)
Nondeductible interest	682	7,781	9,749
Research and development credits	(11,470)	(11,206)	(9,609)
Transaction costs	(4,139)	1,226	—
Goodwill impairment	—	—	6,221
Change in valuation allowance	(3,189)	(6,550)	8,532
Foreign tax rate differential	19,709	39,776	(40,724)
Foreign tax credit	(47,974)	(39,456)	(24,999)
Global intangible low-taxed income	63,858	65,918	46,269
Foreign-derived intangible income	—	—	(6,225)
Nondeductible compensation	7,763	—	—
Stock-based compensation	(4,656)	3	56
Provision to return adjustment	(94)	(2,948)	(9,098)
Other taxes	1,670	1,542	2,358
Other permanent items	1,334	3,623	2,417
Intercompany financing	(32,573)	(67,607)	13,981
Effect of double taxation, net of dividend received	1,724	2,164	4,022
Unrecognized tax benefits	(15,152)	9,807	6,541
Other, net	(505)	(140)	2
Provision for income taxes	$ 18,805	$ 2,957	$ 39,579

The year over year change in 2020 and 2019 for the provision for income taxes is primarily due to the impact of the Company's increase in pre-tax income and an increase in state income taxes, net of federal tax benefit, partially offset by releases of uncertain tax positions and an increase in foreign tax credits. During 2020, the change in foreign tax rate differential and intercompany financing was due to non-taxable gains related to intercompany debt financing structures.

The year over year change in 2019 and 2018 for the provision for income taxes is primarily due to the impact of the Company's decrease in pre-tax income, a benefit related to state income taxes, net of federal tax benefit related to tax reform, as well as the realization of carryforward foreign tax attributes and an increase in foreign R&D credits. During 2019, the change in foreign tax rate differential and intercompany financing was due to non-taxable gains resulting from the dissolution of intercompany debt financing structures and the 2018 benefit related to the foreign tax rate differential is attributable to an increase in pre-tax income recorded in foreign jurisdictions which have tax rates lower than the U.S. statutory tax rate and also considers the year over year changes in local tax rates.

Deferred income taxes were as follows on the dates set forth below:

	December 31,			
	2020		2019	
(in thousands)	Assets	Liabilities	Assets	Liabilities
Property and equipment and intangible assets	$ —	$ 220,941	$ —	$ 232,945
Operating lease obligations/ROU assets	44,960	41,117	49,932	46,404
Accrued expenses	28,955	—	26,412	—
Investment basis difference	—	33,264	—	32,066
Stock-based compensation awards	4,069	—	11,173	—
Future benefit of tax credits	29,507	—	25,920	—
Future benefit of carryforward losses	44,885	—	53,077	—
Unearned revenue	51,304	—	32,230	—
Interest rate swaps	29,516	—	—	2,696
Other	19,124	24,069	22,436	23,104
Disallowed interest carryforward	92,671	—	78,697	—
Valuation allowance	(35,466)	—	(38,178)	—
Total deferred income taxes	$ 309,525	$ 319,391	$ 261,699	$ 337,215

As of December 31, 2020, the Company has various state and foreign net operating losses in the amounts of $326.5 million and $148.5 million, respectively, that are subject to various carryforward periods of 5 years to 20 years or an indefinite carryforward period. The Company has also recorded deferred tax assets related to foreign tax credits in the amount of $25.8 million and other miscellaneous credits of $3.8 million, the majority of which expire in 2028. Additionally, the Company has recorded a deferred tax asset of $82.9 million as a result of the business interest expense limitations as well as $9.8 million related to certain foreign jurisdictions subject to an indefinite carryforward period. The Company also recorded a deferred tax asset of $29.5 million related to interest rate swaps entered into during 2020.

As of December 31, 2020 and 2019, the Company recorded a valuation allowance against the carryforward attributes of $34.9 million and $36.8 million, respectively, which represents the portion of these amounts that the Company believes are not likely to be utilized. The Company also recorded a valuation allowance of $0.5 million and $1.4 million, respectively, for the years ended December 31, 2020 and 2019 against deferred tax assets for certain jurisdictions where no benefit is expected to be realized.

The changes in valuation allowance for deferred tax assets for the periods indicated below were as follows:

	December 31,		
(in thousands)	2020	2019	2018
Balance at the beginning of the period	$ (38,178)	$ (88,980)	$ (78,025)
Additions charged to costs and expenses	(9,280)	(2,463)	(11,527)
Additions or reductions charged to other accounts [1]	114	43,418	—
Reductions charged to costs and expenses	11,878	9,847	572
Balance at end of the period	$ (35,466)	$ (38,178)	$ (88,980)

(1) The balance includes the impact of deferred tax assets, purchase accounting and currency translation adjustments.

The following is a tabular reconciliation of the total unrecognized tax benefits for the periods indicated below:

	December 31,		
(in thousands)	**2020**	**2019**	**2018**
Unrecognized tax benefit at beginning of period	$ 39,733	$ 28,442	$ 21,890
Gross increases - tax positions in prior period	399	5,997	6,408
Gross decreases - tax positions in prior period	(15,034)	(7,967)	(277)
Gross increases - tax positions in current period	5,286	13,908	7,970
Foreign exchange rate movements	81	49	(275)
Settlement	(4,368)	—	—
Lapse of statute	(4,767)	(696)	(7,274)
Unrecognized tax benefit at end of period	$ 21,330	$ 39,733	$ 28,442

Included in the balance of unrecognized tax benefits as of December 31, 2020, 2019 and 2018 are $14.9 million, $28.8 million and $20.4 million, respectively, net of the federal benefit of state taxes that, if recognized, would reduce the Company's effective tax rate. The Company believes that it is reasonably possible that the total amount of unrecognized tax benefits could decrease by up to $3.5 million within the next 12 months due to the filing of amended returns, settlement of audits and the expiration of the statutes of limitations.

Interest and penalties recognized during the years ended December 31, 2020, 2019 and 2018 were insignificant. As of December 31, 2020 and 2019, the Company had accrued $2.9 million and $4.3 million, respectively, of interest and penalties with respect to unrecognized tax benefits. To the extent interest and penalties are not assessed with respect to unrecognized tax benefits, the Company will reduce amounts reflected as a reduction of the overall income tax provision (benefit).

The Company has analyzed its filing positions in all significant federal, state and foreign jurisdictions where it is required to file income tax returns, as well as open tax years in these jurisdictions. The significant jurisdictions with periods subject to examination where the Company does business are the 2017 through 2019 tax years for the United States and the United Kingdom. Various U.S., foreign and state income tax returns are under examination by taxing authorities. The Company does not believe that the outcome of any examination will have a material impact on its results of operations, financial condition and/or cash flows.

12. Derivative Instruments and Hedging Activities

The Company had variable rate borrowings under its 2015 Term Loan and now has variable rate borrowings under its New Term Loan, and as a result, was and is exposed to interest rate fluctuations on these borrowings. From time to time, the Company enters into interest rate swaps to mitigate the risk in fluctuations in interest rates. For hedges that qualify, the Company accounts for these interest rate swaps as qualifying cash flow hedges because their purpose is to hedge the Company's exposure to increases in interest rates on its variable rate borrowings and as the interest rate swaps effectively convert variable rate borrowings to fixed rate borrowings based on the fixed interest rate for the interest rate swaps plus the applicable margin on the 2015 Term Loan and New Term Loan. For those interest rate swaps accounted for as cash flow hedges, the Company recognizes in accumulated other comprehensive loss ("AOCL") or accumulated other comprehensive income ("AOCI"), net of tax, any changes in the fair value, representing unrealized gains or losses, of its interest rate swaps. The Company assesses effectiveness at inception and on an ongoing quarterly basis. The Company may also enter into interest rate swap agreements that are not designated as cash flow hedges for accounting purposes. Changes in the fair value of interest rate swaps not designated as cash flow hedges are reported in the statements of operations as part of other (expense) income, net. The Company does not use derivative financial instruments for speculative or trading purposes and does not offset the fair value amounts of its derivatives.

In February 2020, the Company, in anticipation of refinancing certain portions of its outstanding variable rate debt, entered into three new variable to fixed interest rate swaps with multiple counterparties to hedge future interest rate exposure. At the inception date, the interest rate swaps were designated as cash flow hedges and accounted for in accordance with the aforementioned accounting policy. In February and March 2020, due to, among other factors, difficult and volatile conditions in the credit markets caused by the COVID-19 pandemic, the Company did not enter into the new variable rate debt as previously planned. Therefore, in March 2020, the Company entered into a fixed to variable interest rate swap which reduced the amount of variable rate debt being hedged. See Note 9, "Long-term Debt and Finance Lease Obligations," and Note 20, "Subsequent Event," for additional information on the Company's refinancing of its variable rate debt.

The following table summarizes the material terms of the interest rate swaps outstanding as of December 31, 2020 (dollars in thousands):

Swap #	Terms	Notional Amount	Fixed Interest Rate	Maturity Date
1	Variable to fixed	$ 1,500,000	1.19%	March 31, 2025
2	Variable to fixed	1,500,000	1.22%	March 31, 2025
3	Variable to fixed	500,000	1.17%	March 31, 2025
4	Fixed to variable	500,000	0.52%	March 31, 2025

The Company did not designate the fixed to variable swap as a cash flow hedge for accounting purposes. Simultaneously upon entering into the fixed to variable swap, the Company discontinued cash flow hedge accounting on a variable to fixed swap with the same notional amount and began recording the change in fair value directly in earnings. The unrealized losses recorded in AOCL at the date of discontinuance will be reclassified into (i) interest expense, net, or (ii) other (expense) income, net, for any portion of the originally forecasted transactions deemed not probable to occur, through the original maturity date of the interest rate swap. Going forward, the Company expects the change in fair value of the two undesignated swaps to mostly offset in earnings as the swaps economically offset each other. During the year ended December 31, 2020, the Company recorded a loss of $1.7 million in other (expense) income, net, from the settlement and change in the fair value of the undesignated interest rate swaps. Current market conditions, including dislocation in the financial markets and volatility in interest rates due to the COVID-19 pandemic, may affect the performance of the Company's hedging relationships for cash flow hedges, which could cause the hedges to no longer be effective.

The Company expects to reclassify current unrealized losses of $32.6 million within the next 12 months from AOCL to interest expense, net, on the consolidated statements of operations as interest payments are made on the New Term Loan.

The Company recognized the following amounts of pre-tax (loss) gain as a component of OCI or OCL for the periods indicated below:

(in thousands)	Pre-Tax (Loss) Gain Recognized in OCI or OCL		
	Years Ended December 31,		
Derivatives in Cash Flow Hedging Relationships	2020	2019	2018
Interest rate swaps	$ (142,187)	$ —	$ 18,960

The following table provides the location of the pre-tax (loss) gain reclassified from AOCL into the consolidated statements of operations for the periods indicated below:

		Pre-Tax (Loss) Gain Reclassified from AOCL into Statements of Operations		
		Years Ended December 31,		
(in thousands)	Location of (Loss) Gain Reclassified from AOCL into Statements of Operations	2020	2019	2018
Interest rate swaps	Interest expense, net	$ (10,675)	$ 12,327	$ 5,618
Interest rate swaps	Other (expense) income, net	(14,102)	—	—

The fair value of derivative instruments consisted of the following balances as set forth on the dates below:

		December 31,			
		2020		2019	
(in thousands)	Balance sheet location	Assets	Liabilities	Assets	Liabilities
Derivatives designated as hedging instruments:					
Interest rate swaps	Other accrued expenses	$ —	$ 32,188	$ —	$ —
Interest rate swaps	Other liabilities	—	74,286	—	—
Derivatives not designated as hedging instruments:					
Interest rate swaps	Prepaid expenses and other current assets	1,901	—	—	—
Interest rate swaps	Other assets	1,667	—	—	—
Interest rate swaps	Other accrued expenses	—	5,184	—	—
Interest rate swaps	Other liabilities	—	11,893	—	—
		$ 3,568	$ 123,551	$ —	$ —

The Company considers the fair value of the interest rate swap assets and liabilities to be a Level 2 classification within the fair value hierarchy. See Note 14, “Fair Value Measurements,” for additional information.

13. Employee Savings and Pension Plan

Savings Plans

The Company provides 401(k) retirement savings plans or other defined contribution savings plans (“Savings Plans”) to its qualified U.S. and non-U.S. employees. Under the Company’s primary U.S. savings plan, the Company matches 50% of the employee’s pre-tax retirement savings contribution up to a maximum of 3% of eligible earnings. Vesting in the Company match is 25% per vesting year of service in the plan, subject to a minimum number of hours worked threshold and other events which may trigger immediate vesting of the Company match. Under the Company’s primary non-U.S. savings plan in the United Kingdom, employees can contribute a maximum of their annual compensation and the Company matches those contributions with 5% to 8% of the employee’s annual compensation. Company matching contributions, net of forfeitures, for the Savings Plans for the years ended December 31, 2020, 2019 and 2018 were $29.9 million, $27.6 million and $25.5 million, respectively.

Pension Plan

The Pension Plan was closed to new participants as of December 31, 2002 and in December 2009, the Company closed the Pension Plan to additional contributions effective January 1, 2010. As amended, participants are entitled to receive benefits previously accrued, which are based on the expected amount of compensation at retirement and the number of years of service through January 1, 2010, but participants will receive no additional credit for subsequent years of service. The Company will, however, continue to make contributions in respect of the funding plan. The expected funding contributions to the Pension Plan are discretionary and can change at any time based on updated statutory funding position calculations, resulting changes to the funding recovery plan and other factors determined by the Company.

The investment objectives for the Pension Plan are to provide for growth of capital with a moderate level of volatility by investing in accordance with target asset allocations to meet the benefit obligations of the Pension Plan, while continuing to be fully funded and managing the risk of the investment portfolio. The target allocations are selected by the trustees with the advice of an independent third-party investment manager who manages the assets and tracks the return on a benchmark portfolio (matching the strategic asset allocation), and reports the estimated funding level to the trustees, which in turn drives changes in the allocation of the Pension Plan assets. The target allocation is adjusted as necessary to align with the future expected liabilities of the Pension Plan. As of December 31, 2020, the target allocations of the Pension Plan were 38.5% equity securities and 61.5% debt securities, while the actual allocations were 35.0% equity securities and 65.0% debt securities. The trustees review the performance of the investment manager and Pension Plan assets on a continuous basis to ensure the trustees’ investment strategy is meeting the investment objectives.

As of December 31, 2020, the Pension Plan's accumulated benefit obligation ("ABO") was $108.9 million, the projected benefit obligation ("PBO") was $113.8 million and the fair value of plan assets was $112.5 million, resulting in an unfunded status of $1.3 million which was recorded in other liabilities on the consolidated balance sheets. As of December 31, 2019, the Pension Plan's ABO was $89.6 million, the PBO was $92.5 million and the fair value of plan assets was $94.6 million, resulting in a funded status of $2.1 million which was recorded in other assets on the consolidated balance sheets.

As of December 31, 2020, the Company expects to make funding contributions and benefit payments of $3.8 million and $1.1 million, respectively, related to the Pension Plan during 2021. The Company considers the Pension Plan assets to be a Level 2 classification within the fair value hierarchy. See Note 15, "Accumulated Other Comprehensive Loss," for information on pension costs and other amounts recognized in OCL or (OCI) for the Pension Plan.

14. Fair Value Measurements

Recurring Fair Value Measurements

The following table presents information about the Company's assets and liability measured at fair value on a recurring basis (in thousands):

As of December 31, 2020	Level 1	Level 2	Level 3	Total
Assets				
Investments	$ 1,307	$ —	$ 264,587	$ 265,894
Derivative instruments	—	3,568	—	3,568
Total assets	$ 1,307	$ 3,568	$ 264,587	$ 269,462
Liabilities				
Derivative instruments	$ —	$ 123,551	$ —	$ 123,551
Recapitalization investment portfolio liability	—	—	204,742	204,742
Total liabilities	$ —	$ 123,551	$ 204,742	$ 328,293

As of December 31, 2019	Level 1	Level 2	Level 3	Total
Assets				
Investments	$ 1,895	$ —	$ 248,453	$ 250,348
Total assets	$ 1,895	$ —	$ 248,453	$ 250,348
Liabilities				
Contingent consideration	$ —	$ —	$ 9,489	$ 9,489
Recapitalization investment portfolio liability	—	—	191,678	191,678
Total liabilities	$ —	$ —	$ 201,167	$ 201,167

Investments - The Company records all of its investments (other than its equity method investments for which the fair value option has not been elected) at fair value. The Company's Level 3 investments are in limited partnerships which invest in novel, innovative and potentially commercially viable biomedical products in clinical development as well as in early stage life sciences companies, some of which are public entities. It is inherently difficult to make accurate fair value estimates based on long-range projections of any pharmaceutical or biomedical product, especially with respect to products that have not completed clinical development and therefore have not received regulatory approval. Due to the lack of observable inputs, assumptions used can significantly impact the resulting fair value and therefore the partnerships' result of operations. In addition, due to inherent uncertainty of valuation for these investments, estimates of fair value might differ from the value that would have been used had a ready market for these investments existed or from the value which would be realized upon disposition of these investments, and the differences could be material.

The Company has elected the fair value option of accounting for its investments in Auven and venBio. The estimate of fair value for these investments involves an evaluation of the investment and its underlying assets, including the market for the investment, available information on historical and projected financial performance, the potential sale or initial public offering of the underlying assets, the stage of development of the underlying assets, recent private transactions, the market value of any publicly traded assets, control over the investment partnership and the lack of marketability of the investments, as well as the Company's expected holding period, among other things. The Company records the fair value of these investments at the net asset value determined by the partnership adjusted for the aforementioned factors including the Company's lack of control and the lack of marketability of the investments, where applicable. Due to the significant unobservable inputs and use of the Company's own assumptions, the Company classifies such fair value investments within Level 3 of the fair value hierarchy.

The following table summarizes the Company's quantitative information about the fair value measurements of Auven and venBio at the dates indicated (dollars in thousands):

	Quantitative Information About Level 3 Fair Value Measurements for December 31, 2020			
Description	**Fair Value**	**Valuation Technique**	**Unobservable Input**	**Range of Rates**
Fair value option investments	$253,801	Market evaluation/pricing models	Discount for lack of marketability	12.5% - 32.5%
		Recent acquisition transactions	Discount for lack of control	20.0% - 35.0%

	Quantitative information about Level 3 Fair Value Measurements for December 31, 2019			
Description	**Fair Value**	**Valuation Technique**	**Unobservable Input**	**Range of Rates**
Fair value option investments	$243,067	Market evaluation/pricing models	Discount for lack of marketability	10.0% - 30.0%
		Recent acquisition transactions	Discount for lack of control	20.0% - 35.0%

The Company also holds an equity investment in a publicly traded late-stage clinical biopharmaceutical company which it classifies within Level 1 of the fair value hierarchy due to the active market with quoted prices for this investment. See Note 6, "Investments," for additional information on the Company's investments.

Changes in fair value of the Company's investments measured on a recurring basis using significant unobservable inputs (Level 3) were as follows:

(in thousands)	**2020**	**2019**
Balance as of January 1,	$ 248,453	$ 256,124
Recognized fair value gains (losses)	53,256	(11,288)
Cash distributions received	(43,974)	(452)
Capital contributions paid	6,852	4,069
Balance as of December 31,	$ 264,587	$ 248,453

Recapitalization Investment Portfolio Liability

Changes in fair value of the Recapitalization Investment Portfolio Liability measured on a recurring basis using significant unobservable inputs (Level 3) were as follows:

(in thousands)	**2020**	**2019**
Balance as of January 1,	$ 191,678	$ 198,524
Recapitalization investment portfolio consideration change in value	33,538	(6,846)
Cash distributions paid	(20,474)	—
Balance as of December 31,	$ 204,742	$ 191,678

The balances in the table above represent the full amount of the Recapitalization Investment Portfolio Liability. As of December 31, 2020, $12.8 million of the $204.7 million above was classified as short-term and was included as part of other accrued expenses on the consolidated balance sheets.

Contingent Consideration

During 2020, the Company paid the contingent consideration liability of $9.5 million due to the seller in connection with its 2019 acquisition of Medimix. See Note 5, "Business Combinations," for additional information on the Medimix acquisition.

Nonrecurring Fair Value Measurements

See Note 1, “Basis of Presentation and Summary of Significant Accounting Policies,” for additional information on the Company’s assets and liabilities that are not remeasured to fair value on a recurring basis.

Fair Value of Financial Instruments

The Company estimated the fair value of its financial instruments using available market information as of December 31, 2020 and 2019. The estimate of fair value has been determined based on the fair value hierarchy for U.S. GAAP. The following table presents information about the carrying value and estimated fair value of the Company’s financial instruments on the dates set forth below:

	December 31, 2020		December 31, 2019	
(in thousands)	**Carrying Amount**	**Estimated Fair Value**	**Carrying Amount**	**Estimated Fair Value**
Assets:				
Cash and cash equivalents	$ 767,999	$ 767,999	$ 345,187	$ 345,187
Liabilities:				
2015 Term Loan	3,064,006	3,067,652	3,096,429	3,111,911
2025 Notes	500,000	527,645	—	—
2028 Notes	700,000	754,257	—	—
OpCo Notes	—	—	1,125,000	1,164,566
Initial HoldCo Notes	—	—	550,000	559,873
Additional HoldCo Notes	—	—	900,000	915,120
Other debt	—	—	5,707	5,707

Cash and Cash Equivalents - The carrying amount approximates fair value due to the short-term maturity of these financial instruments (less than three months). The Company considers the fair value of cash and cash equivalents to be a Level 1 classification within the fair value hierarchy.

2015 Term Loan - The estimated fair value of the 2015 Term Loan is based on recently reported market transactions and prices for identical or similar financial instruments obtained from a third-party pricing source. The Company considers the fair value of the 2015 Term Loan to be a Level 2 classification within the fair value hierarchy.

2025 Notes, 2028 Notes, OpCo Notes and HoldCo Notes - The estimated fair values of the 2025 Notes and the 2028 Notes are based on recently reported market transactions and prices for identical or similar financial instruments obtained from a third-party pricing source. The Company considers the fair values of the 2025 Notes and 2028 Notes to be a Level 2 classification within the fair value hierarchy. The estimated fair values of the Company’s previously outstanding OpCo Notes and HoldCo Notes were determined in the same manner as the 2025 Notes and 2028 Notes.

Other Debt - The carrying amount of the previously outstanding other debt approximated fair value due to the nature of the obligation.

15. Accumulated Other Comprehensive Loss

The balances of AOCL or AOCI, each net of tax, were as follows on the dates set forth below:

(in thousands)	Foreign Currency Translation	Derivative Instruments	Defined Benefit Plan	Accumulated Other Comprehensive Loss
Balance as of December 31, 2017	$ (240,099)	$ 6,930	$ (1,208)	$ (234,377)
(OCL) or OCI before reclassifications	(91,177)	14,498	861	(75,818)
Amounts reclassified from AOCI or (AOCL)	—	(4,261)	643	(3,618)
Other	—	922	—	922
Net (OCL) or OCI	(91,177)	11,159	1,504	(78,514)
Balance as of December 31, 2018	(331,276)	18,089	296	(312,891)
OCI or (OCL) before reclassifications	24,824	—	(1,803)	23,021
Amounts reclassified from AOCI	—	(9,523)	489	(9,034)
Net OCI or (OCL)	24,824	(9,523)	(1,314)	13,987
Balance as of December 31, 2019	(306,452)	8,566	(1,018)	(298,904)
OCI or (OCL) before reclassifications	105,026	(107,138)	(3,006)	(5,118)
Amounts reclassified from AOCI or AOCL	—	18,650	527	19,177
Net OCI or (OCL)	105,026	(88,488)	(2,479)	14,059
Balance as of December 31, 2020	$ (201,426)	$ (79,922)	$ (3,497)	$ (284,845)

The following table presents the significant reclassifications to the statements of operations out of AOCI or AOCL and the line item affected on the consolidated statements of operations for the respective periods:

(in thousands)	Years Ended December 31,			
Details about AOCI or AOCL Components	2020	2019	2018	Affected line item in statements of operations
(Losses) gains on derivative instruments:				
Interest rate swaps	$ (10,675)	$ 12,327	$ 5,618	Interest expense, net
Interest rate swaps	(14,102)	—	—	Other (expense) income, net
Total before income tax benefit (expense)	(24,777)	12,327	5,618	
Income tax benefit (expense)	6,127	(2,804)	(1,357)	Provision for income taxes
Total net of income tax	$ (18,650)	$ 9,523	$ 4,261	
Defined benefit plan:				
Amortization of actuarial loss	$ (655)	$ (605)	$ (784)	Other (expense) income, net
Income tax benefit	128	116	141	Provision for income taxes
Total net of income tax	$ (527)	$ (489)	$ (643)	

16. Related Party Transactions

Majority Sponsor Transactions

The Company was party to consulting services agreements with affiliates of The Carlyle Group Inc. (“Carlyle”) and affiliates of Hellman & Friedman LLC (“H&F” and, together with Carlyle, the “Majority Sponsors”) under which the Company paid the Majority Sponsors a fee for consulting services provided to the Company as well as reimbursements for out-of-pocket expenses incurred in conjunction with such services. The consulting services agreements terminated pursuant to their terms upon completion of the Company’s IPO on February 10, 2020. The Company incurred consulting and out-of-pocket expenses for services rendered under the consulting agreement of $0.4 million, $3.8 million and $3.6 million for the years ended December 31, 2020, 2019 and 2018, respectively. These expenses are recorded as a component of SG&A expenses on the consolidated statements of operations.

Affiliates of one of the Majority Sponsors had funded commitments in the 2015 Term Loan totaling $12.6 million and $78.0 million, respectively, as of December 31, 2020 and 2019. The amounts paid to the relevant affiliates for the 2015 Term Loan for the respective periods were as follows:

	Years Ended December 31,	
(in thousands)	**2020**	**2019**
Interest paid	$ 1,624	$ 3,900
Principal paid	441	800

Recapitalization Investment Portfolio distributions made to the Majority Sponsors for the year ended December 31, 2020 were $18.9 million. There were no such payments made during the year ended December 31, 2019. As of December 31, 2020, the Company owed $11.8 million in Recapitalization Investment Portfolio distributions to the Majority Sponsors. This payable is included as part of other accrued expenses on the consolidated balance sheets and was paid to the Majority Sponsors in January 2021. See Note 1, “Basis of Presentation and Summary of Significant Accounting Policies,” for additional information related to the Recapitalization.

SNBL Transactions

Both the Company and SNBL have service agreements to provide administrative and support services to PPD-SNBL, both of which will remain in effect as long as the PPD-SNBL shareholders agreement remains in effect. The Company and SNBL also have a collaboration agreement under which the parties may collaborate on various drug development services. This collaboration agreement will remain in effect as long as SNBL owns at least 20% of PPD-SNBL. For the years ended December 31, 2020, 2019 and 2018, the Company incurred expenses for services rendered under the services agreement of $1.3 million, $1.5 million and $1.3 million, respectively. The expenses are recorded as a component of SG&A expenses on the consolidated statements of operations. As of December 31, 2019, the Company owed SNBL $0.3 million for services rendered under the services agreement. No amount was owed to SNBL as of December 31, 2020.

As of December 31, 2019, PPD-SNBL owed SNBL $5.7 million related to a working capital loan. During the year ended December 31, 2020, the Company repaid the balance of this working capital loan. This loan was previously classified as long-term debt on the consolidated balance sheets and as “other debt” in Note 9, “Long-term Debt and Finance Lease Obligations.” Additionally, during the year ended December 31, 2020, PPD-SNBL made a distribution of $3.8 million to SNBL.

17. Earnings Per Share

The following table provides a reconciliation of the numerator and denominator of the basic and diluted EPS computations for the periods set forth below:

(dollars in thousands, except per share data)	**Years Ended December 31,**		
Numerator:	**2020**	**2019**	**2018**
Net income	$ 160,556	$ 52,755	$ 106,865
Net income attributable to noncontrolling interest	(6,865)	(4,934)	(2,679)
Recapitalization investment portfolio consideration	(33,538)	6,846	(7,849)
Net income attributable to common stockholders of PPD, Inc.	$ 120,153	$ 54,667	$ 96,337
Denominator:			
Basic weighted-average common shares outstanding	341,178	279,285	279,238
Effect of dilutive stock options and share awards	5,506	1,408	79
Diluted weighted-average common shares outstanding	346,684	280,693	279,317
Earnings per share:			
Basic	$ 0.35	$ 0.20	$ 0.34
Diluted	$ 0.35	$ 0.19	$ 0.34

See Note 1, “Basis of Presentation and Summary of Significant Accounting Policies,” for additional information related to the Recapitalization and Note 4, “Stockholders’ Deficit and Redeemable Noncontrolling Interest,” for additional information related to shares.

The number of potential common shares outstanding that were considered anti-dilutive using the treasury stock method and therefore excluded from the computation of diluted EPS, weighted for the portion of the period they were outstanding, are as follows:

	Years Ended December 31,		
(in thousands)	**2020**	**2019**	**2018**
Anti-dilutive stock options and restricted stock	436	434	106

At December 31, 2020, unvested performance-based options, unvested PSUs and unvested liquidity/realization options totaling 4.5 million potential shares were outstanding but excluded from the calculation of diluted EPS, as these shares are contingently issuable based on the Company's actual or expected achievement of performance factors or certain market conditions.

18. Segments

The Company is managed through two reportable segments, Clinical Development Services and Laboratory Services. The Company determines reportable segments using the management approach. The management approach is based on how the CODM organizes the segments for purposes of assessing performance and making operating decisions. The Clinical Development Services segment provides a wide range of services to its customers including early development/Phase I, patient recruitment and enrollment, investigator site management, Phase II-IV clinical trial management, medical communications and various peri- and post-approval services. The Laboratory Services segment provides comprehensive services to its customers including bioanalytical, vaccine sciences, GMP, central lab and biomarker testing. Both segments provide services to pharmaceutical, biotechnology, medical device, government organizations and other industry participants.

The Company's CODM assesses segment performance and makes resource allocation decisions based on segment revenues and segment operating income. The CODM reviews the Company's assets on a consolidated basis and does not assess performance or make operating decisions based on segment assets.

Information on reportable segment revenue and segment operating income, including a reconciliation of segment operating income to consolidated income from operations, for the respective periods were as follows:

	Years Ended December 31,		
(in thousands)	**2020**	**2019**	**2018**
Segment revenue:			
Clinical Development Services	$ 3,804,873	$ 3,354,163	$ 3,182,870
Laboratory Services	876,601	676,854	566,101
Total segment revenue	4,681,474	4,031,017	3,748,971
Segment direct costs:			
Clinical Development Services	1,265,314	1,162,678	1,064,557
Laboratory Services	393,329	307,346	258,472
Total segment direct costs	1,658,643	1,470,024	1,323,029
Segment reimbursed costs:			
Clinical Development Services	1,085,977	845,580	876,617
Laboratory Services	114,777	79,054	64,296
Total segment reimbursed costs	1,200,754	924,634	940,913
Segment SG&A expenses:			
Clinical Development Services	578,898	529,425	475,242
Laboratory Services	92,097	81,373	68,305
Total segment SG&A expenses	670,995	610,798	543,547
Segment operating income:			
Clinical Development Services	874,684	816,480	766,454
Laboratory Services	276,398	209,081	175,028
Total segment operating income	1,151,082	1,025,561	941,482
Operating costs and expenses not allocated to segments:			
Direct costs	23,403	14,234	10,783
SG&A expenses	339,132	328,008	269,488
Depreciation and amortization	279,116	264,830	258,974
Long-lived and goodwill asset impairments	1,414	1,284	29,626
Income from operations	$ 508,017	$ 417,205	$ 372,611

19. Entity-wide Information by Geographic Location

The tables below present certain entity-wide information about the Company's operations by geographic location. The Company allocates revenues to geographic locations based on where the services are performed. Total revenues by geographic location are as follows:

	Years Ended December 31,		
(in thousands)	**2020**	**2019**	**2018**
Revenue:			
North America[1]	$ 2,645,683	$ 2,155,609	$ 1,981,814
Latin America	178,877	147,375	129,644
Europe, Middle East and Africa[2]	1,348,056	1,310,573	1,280,861
Asia-Pacific	508,858	417,460	356,652
Revenue	$ 4,681,474	$ 4,031,017	$ 3,748,971

[1] Revenue for the North America region includes revenue attributable to the United States of $2,633,139, $2,132,275 and $1,960,637, respectively, for the years ended December 31, 2020, 2019 and 2018.

[2] Revenue for the Europe, Middle East and Africa region includes revenue attributable to the United Kingdom of $583,036, $659,350 and $655,314, respectively, for the years ended December 31, 2020, 2019 and 2018.

Total property and equipment, net, by geographic location is as follows:

(in thousands)	December 31, 2020	2019
Property and equipment, net:		
North America[1]	$ 396,180	$ 372,163
Latin America	2,933	4,294
Europe, Middle East and Africa	53,784	51,780
Asia-Pacific	43,577	30,608
Total property and equipment, net	$ 496,474	$ 458,845

[1] Property and equipment, net, for the North America region includes property and equipment, net, attributable to the United States of $396,173 and $372,033, respectively, as of December 31, 2020 and 2019.

20. Subsequent Event

Debt Refinancing

On January 13, 2021, the Company refinanced its 2015 Credit Agreement with the New Credit Agreement consisting of a $3,050.0 million New Term Loan issued at 99.5% of face value, or a discount of 0.5%, and a $600.0 million New Revolving Credit Facility. The New Term Loan matures in January 2028 and the New Revolving Credit Facility matures in January 2026. See Note 9, “Long-term Debt and Finance Lease Obligations,” for additional information on the New Credit Agreement.

SCHEDULE I

Condensed Financial Information of the Registrant

PPD, Inc. (Parent Company Only)
STATEMENTS OF INCOME AND COMPREHENSIVE INCOME
(in thousands)

	Years Ended December 31,		
	2020	**2019**	**2018**
Equity in income of subsidiaries	$ 160,002	$ 53,159	$ 105,308
General and administrative expenses	8,512	6,452	1,345
Income before benefit from income taxes	151,490	46,707	103,963
Benefit from income taxes	(2,201)	(1,114)	(223)
Net income	153,691	47,821	104,186
Equity in other comprehensive income (loss) of subsidiaries	12,202	13,777	(78,994)
Total comprehensive income	$ 165,893	$ 61,598	$ 25,192

The accompanying notes are an integral part of these condensed financial statements.

PPD, Inc. (Parent Company Only)
BALANCE SHEETS
(in thousands, except par value)

	December 31,	
	2020	**2019**
Assets		
Cash and cash equivalents	$ 77,665	$ 2,458
Other assets	3,056	3,699
Total assets	$ 80,721	$ 6,157
Liabilities and Stockholders' Deficit		
Other liabilities	$ 206,483	$ 205,819
Recapitalization investment portfolio liability	191,923	191,678
Investments in subsidiaries	428,835	2,306,808
Total liabilities	827,241	2,704,305
Common stock $0.01 par value,		
2,000,000 shares authorized; 350,858 shares issued and		
350,132 shares outstanding as of December 31, 2020 and		
2,080,000 shares authorized; 280,127 shares issued and		
279,426 shares outstanding as of December 31, 2019	3,509	2,801
Other stockholders' deficit	(750,029)	(2,700,949)
Total stockholders' deficit	(746,520)	(2,698,148)
Total liabilities and stockholders' deficit	$ 80,721	$ 6,157

The accompanying notes are an integral part of these condensed financial statements.

PPD, Inc. (Parent Company Only)
STATEMENTS OF CASH FLOWS
(in thousands)

	Years Ended December 31,		
	2020	**2019**	**2018**
Net cash used in operating activities	$ (19,154)	$ (15,492)	$ (2,105)
Cash flows from investing activities:			
Return of capital from subsidiaries	—	1,260,681	123,000
Investments in and advances to subsidiaries	(1,683,278)	—	—
Net cash (used in) provided by investing activities	(1,683,278)	1,260,681	123,000
Cash flows from financing activities:			
Net proceeds from initial public offering	1,772,960	—	—
Purchase of treasury stock	(626)	(4,012)	(8,630)
Proceeds from exercise of stock options	24,264	4,524	923
Recapitalization tax benefit distribution	—	—	(99,745)
Recapitalization investment portfolio distribution	(18,959)	—	(14,741)
Proceeds from employee stock purchases	—	—	480
Return of capital and special dividend to stockholders	—	(1,246,000)	—
Net cash provided by (used in) financing activities	1,777,639	(1,245,488)	(121,713)
Net change in cash and cash equivalents	75,207	(299)	(818)
Cash and cash equivalents at beginning of period	2,458	2,757	3,575
Cash and cash equivalents at end of period	$ 77,665	$ 2,458	$ 2,757

The accompanying notes are an integral part of these condensed financial statements.

Notes to Registrant's Condensed Financial Statements (Parent Company Only)

Basis of Presentation

These condensed PPD, Inc. ("PPD" or "Parent Company") only financial statements have been prepared in accordance with Rule 12-04 of Regulation S-X, as the restricted net assets of the subsidiaries of the Parent Company exceed 25% of the consolidated net assets of the Parent Company as stipulated by Rule 5-04, Section I from Regulation S-X. The ability of the Parent Company's operating subsidiaries to pay dividends is restricted due to the terms of the subsidiaries' credit agreement and indenture as defined in Note 9, "Long-term Debt and Finance Lease Obligations," to the audited consolidated financial statements included elsewhere in this Annual Report on Form 10-K.

These condensed Parent Company only financial statements have been prepared using the same accounting principles and policies described in the notes to the audited consolidated financial statements included elsewhere in this Annual Report on Form 10-K, with the only exception being that the Parent Company accounts for investments in its subsidiaries using the equity method. Other liabilities in the condensed balance sheets include related party transactions with subsidiaries. Cash payments made by subsidiaries on behalf of the Parent Company during the year ended December 31, 2020 include $1.5 million related to the recapitalization investment portfolio liability. Cash payments made by subsidiaries on behalf of the Parent Company during the year ended December 31, 2019 include $2.6 million in professional fees related to the Parent Company's initial public offering and $19.7 million in cash settlements to stockholders related to the stock option modification. These condensed financial statements should be read in conjunction with the audited consolidated financial statements and related notes thereto included elsewhere in this Annual Report on Form 10-K.

Dividends Paid

There were no dividends paid to the Parent Company by subsidiaries in 2020. The following summarizes the dividends paid to the Parent Company by subsidiaries in 2019 (in thousands):

Paid in May 2019	$	1,086,281
Paid in November 2019		174,400
Total paid in 2019	$	1,260,681

Subsequent Event

On January 13, 2021, PPD and its indirect wholly-owned subsidiary, PPD Development, L.P. entered into and closed a new (i) $3,050.0 million aggregate principal amount senior secured first-lien term loan facility issued at 99.5% of face value, or a discount of 0.5%, maturing in January 2028 (the "New Term Loan") and (ii) $600.0 million committed principal amount senior secured first-lien revolving credit facility maturing in January 2026 under the credit agreement dated as of January 13, 2021 (the "New Credit Agreement"). The proceeds from borrowings under the New Term Loan, together with cash on hand, were used to (i) refinance in full the principal amount outstanding and accrued and unpaid interest, fees and other amounts then due and owing under the term loan outstanding under its then-existing credit agreement, and (ii) pay fees and expenses relating to the New Credit Agreement.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

None.

Item 9A. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

As required by Rule 13a-15 under the Exchange Act, as amended, we carried out an evaluation under the supervision and with the participation of our management, including the Chief Executive Officer ("CEO") and Chief Financial Officer ("CFO"), of the effectiveness of our disclosure controls and procedures. Regulations under the Exchange Act require public companies, including us, to maintain "disclosure controls and procedures," as defined in Rule 13a-15(e) and 15d-15(e) under the Exchange Act to mean a company's controls and other procedures that are designed to ensure that information required to be disclosed in reports that it files or submits under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in the SEC's rules and forms and that such information is accumulated and communicated to management, including our CEO and CFO, or persons performing similar functions, as appropriate to allow timely decisions regarding required or necessary disclosures.

There are inherent limitations to the effectiveness of any system of disclosure controls and procedures, including the possibility of human error and the circumvention or overriding of the controls and procedures. Accordingly, even effective disclosure controls and procedures can only provide reasonable assurance of achieving their control objectives. Based upon our evaluation, our CEO and CFO concluded that our disclosure controls and procedures were effective at the reasonable assurance level as of December 31, 2020.

Changes in Internal Control Over Financial Reporting

During the fourth quarter of fiscal 2020, we substantially completed the upgrade of our existing human capital management, financial management and general ledger systems to an integrated enterprise resource planning ("ERP") system. As a result of this upgrade, we modified certain existing internal controls over financial reporting as well as implemented new controls and procedures related to the new ERP system. Other than the implementation of the ERP system, there were no changes in our internal controls over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) that occurred during the quarter ended December 31, 2020 that have materially affected, or are reasonably likely to materially affect, our internal controls over financial reporting.

Management's Report on Internal Control Over Financial Reporting

Our management's report on internal control over financial reporting is set forth in Part II, Item 8, "Financial Statements and Supplementary Data," included elsewhere in this Annual Report on Form 10-K and is incorporated herein by reference. As defined in Rule 12b-2 of the Exchange Act, we meet the criteria to be a non-accelerated filer in connection with the preparation of the consolidated financial statements as of December 31, 2020 and, therefore, we are not required to include, and have not included, an attestation report of our independent registered public accounting firm on internal control over financial reporting.

Item 9B. Other Information

None.

Part III

Item 10. Directors and Executive Officers of the Registrant and Corporate Governance

Directors and Executive Officers of the Registrant

The following table sets forth information about our directors and executive officers as of February 19, 2021:

Name	Age	Position
David Simmons	56	Chairman and Chief Executive Officer
Glen Donovan	47	Chief Accounting Officer
Christopher Fikry	44	Executive Vice President, Global Laboratory Services
Ronald Garrow	57	Executive Vice President and Chief Human Resource Officer
B. Judd Hartman	57	Executive Vice President, Chief Administrative Officer
Julia James	46	Executive Vice President, General Counsel and Secretary
David Johnston	52	Executive Vice President of Global Clinical Development
Karen Kaucic	61	Executive Vice President, Chief Medical Officer
Christopher Scully	50	Executive Vice President and Chief Financial Officer, Treasurer and Assistant Secretary
William Sharbaugh	58	Chief Operating Officer
Anshul Thakral	43	Executive President, Chief Commercial Officer and President of Evidera
Joe Bress	38	Director
Stephen Ensley	36	Director
Maria Teresa Hilado	56	Director
Colin Hill	48	Director
Jeffrey B. Kindler	65	Director
P. Hunter Philbrick	41	Director
Allen R. Thorpe	50	Director
Stephen H. Wise	48	Director

Set forth below is a brief description of the business experience of our directors and executive officers. All of our executive officers serve at the discretion of our Board of Directors of the Company (the "Board").

David Simmons. David Simmons has served as Chairman and Chief Executive Officer of the Company or its predecessor since May 2012. Prior to joining the Company, Mr. Simmons served in various roles at Pfizer Inc. (PFE), a multinational pharmaceutical corporation, from 1996 to 2012, most recently as their President of the Emerging Markets and Established Products business units. Mr. Simmons currently serves on the board of directors for Albany Molecular Research, Inc., a contract research and manufacturing organization, and Edelman Financial Engines LLC, a financial planning and investment management firm. Mr. Simmons also previously served as a director of Owens & Minor, Inc. (OMI). We believe Mr. Simmons brings to our Board extensive knowledge of the pharmaceutical industry, which together with his experience leading the Company as our Chief Executive Officer, makes him well qualified to serve as one of our directors.

Glen Donovan. Glen Donovan has served as Chief Accounting Officer of the Company or its predecessor since June 2015. Prior to joining the Company, Mr. Donovan served in various roles at Deloitte & Touche LLP, a multinational professional services network, from November 1995 to May 2015, including as Audit and Assurance Partner from September 2011 to May 2015. As Audit and Assurance Partner, Mr. Donovan led all aspects of audit and audit-related services across a wide range of industries, and played a significant role in new business development, recruiting, counseling and mentoring.

Christopher Fikry. Christopher Fikry, M.D., has served as our Executive Vice President of Global Laboratory Services since June 2017. Prior to joining the Company, Dr. Fikry served in various roles at Quest Diagnostics (DGX), from September 2012 to May 2017, including as Vice President and General Manager of Oncology and Companion Diagnostics, and at Novartis AG (NUS) Vaccines and Diagnostics, from January 2007 to September 2012, including as Director of Strategic Planning, Head of the U.S. Meningococcal and the U.S. Influenza and Travel Vaccine franchises and Vice President of U.S. Marketing. He began his career in the healthcare practice of The Boston Consulting Group Inc.

Ronald Garrow. Ronald Garrow has served as our Executive Vice President and Chief Human Resource Officer since July 2018. Prior to joining the Company, Mr. Garrow served in various roles at Belk, from July 2016 to July 2018, including as Chief Human Resource Officer. Prior to joining Belk, Mr. Garrow worked at Mastercard Inc. (MA) from March 2010 to July 2016, including as its Chief Human Resource Officer, where he was responsible for developing and executing human resource strategy in support of the overall business plan and strategic direction of the organization.

B. Judd Hartman. Judd Hartman served as General Counsel of the Company or its predecessor from July 2001 to February 2021. In June 2017, he was also appointed as our Chief Administrative Officer and continues to serve in that role. Prior to joining the Company, Mr. Hartman served as Vice President of Legal Affairs for Anker Coal Group, Inc., a coal mining company, from 1997 to 2001. Prior to Anker Coal Group, Mr. Hartman was a partner with Spilman Thomas & Battle, a law firm headquartered in Charleston, West Virginia.

Julia James. Julia James has served as our Executive Vice President, General Counsel and Secretary since February 2021. Ms. James joined the Company in 2005 and has served in various roles, most recently as Senior Vice President, Deputy General Counsel from June 2017 to February 2021, and prior to that as Vice President, Assistant General Counsel from April 2015 to June 2017. Prior to joining the Company, Ms. James worked at Clifford Chance LLP, a leading global law firm, from February 1997 to March 2005.

David Johnston. David Johnston, Ph.D., has served as our Executive Vice President of Global Clinical Development since October 2016. From July 2013 to September 2016, Dr. Johnston served as Executive Vice President and Global Head of PPD Laboratories. Prior to joining the Company, Dr. Johnston worked at Laboratory Corp of America (LH) from April 1998 to June 2013, where he most recently served as Senior Vice President and Global Head of the Clinical Trials business.

Karen Kaucic. Karen Kaucic, M.D., has served in various leadership positions at the Company or its predecessor since December 2009 and currently serves as our Executive Vice President, Chief Medical Officer. Prior to joining the Company, Dr. Kaucic held positions in oncology clinical development at AstraZeneca PLC (AZN) from June 2006 to December 2009.

Christopher Scully. Christopher Scully has served as our Executive Vice President and Chief Financial Officer, Treasurer and Assistant Secretary since May 2018. Prior to joining the Company, Mr. Scully served in various roles at Pfizer, Inc. (PFE), a multinational pharmaceutical corporation, from 1997 to 2017, including as their Chief Commercial Officer for the Essential Health business unit from January 2014 to August 2017 and Regional President of Europe Established Products from October 2010 to January 2014.

William Sharbaugh. William Sharbaugh has served as Chief Operating Officer of the Company or its predecessor since May 2007. Prior to joining the Company, Mr. Sharbaugh served in various roles at Bristol-Myers Squibb (BMY), a multinational pharmaceutical corporation, from 2001 to 2007, most recently as their Vice President of Global Development Operations. Prior to Bristol-Myers Squibb, Mr. Sharbaugh served in various roles in research and development, manufacturing, quality assurance and sales at Merck & Co. (MRK), a multinational pharmaceutical corporation, from 1991 to 2001.

Anshul Thakral. Anshul Thakral has served as our Executive Vice President and Chief Commercial Officer since November 2019. In February 2021, he was also appointed as President of Evidera, a subsidiary of the Company. Mr. Thakral previously served as Executive Vice President and Global Head of PPD Biotech of the Company from July 2016 to November 2019. Prior to joining the Company, Mr. Thakral served as General Manager of the Global Life Sciences business unit at Gerson Lehrman Group from March 2014 to June 2016.

Joe Bress. Joe Bress has served as a director since April 2019. Mr. Bress currently serves as a Managing Director at The Carlyle Group, a multinational private equity firm, which he joined in July 2007. He currently serves on the board of directors of WellDyneRx, an independent pharmacy benefit manager, Albany Molecular Research, a contract research and drug manufacturing organization, CorroHealth, a business service provider for healthcare companies, Millicent Pharma, a pharmaceutical company, and TriNetX, a real world data technology business serving the life sciences industry. Prior to Carlyle, Mr. Bress worked in the Mergers and Acquisitions group at UBS from 2005 to 2007. We believe Mr. Bress contributes to our Board his financial expertise and experience in the healthcare industry, as well as the experience gained from advising and serving as a director of multiple Carlyle portfolio companies.

Stephen Ensley. Stephen Ensley has served as a director since August 2017. Mr. Ensley currently serves as a Partner of Hellman & Friedman, a multinational private equity firm. Prior to joining Hellman & Friedman in 2009, Mr. Ensley worked as an investment banker in the Mergers and Acquisitions group at J.P. Morgan from 2007 to 2009. He currently serves on the operating committee of Genesys Telecommunications Laboratories, Inc., a customer engagement software provider, and the board of directors of Checkmarx, a market leader in the application security testing market. Mr. Ensley was formerly a director of Sheridan Healthcare, Inc., a provider of physician services, and CarProof, an automotive data provider. We believe Mr. Ensley contributes to our Board his financial expertise and capital markets experience, as well as the experience gained from advising and serving as a director of multiple Hellman & Friedman portfolio companies.

Maria Teresa Hilado. Maria Teresa Hilado has served as a director since February 2018. Ms. Hilado served as the Chief Financial Officer of Allergan plc (AGN), a global pharmaceutical company, from December 2014 to February 2018. Prior to joining Allergan plc, Ms. Hilado served as Senior Vice President, Finance and Treasurer of PepsiCo Inc. (PEP) from 2009 to 2014. Before joining PepsiCo, Ms. Hilado served as Vice President and Treasurer for Schering-Plough Corp., a pharmaceutical company, from 2008 to 2009. Before joining Schering-Plough, Ms. Hilado served in various roles at General Motors Co. (GM), most recently as Assistant Treasurer from 2006 to 2008 and as Chief Financial Officer of GMAC Commercial Finance LLC from 2001 to 2005. Ms. Hilado currently serves on the board of directors of H.B. Fuller Co (FUL), an adhesives manufacturing company, Campbell Soup Company (CPB), a food company, and Zimmer Biomet (ZBH), a medical device company. We believe Ms. Hilado contributes to our Board her significant financial experience and extensive knowledge of the pharmaceutical industry, derived from her senior finance positions within Allergan, PepsiCo and Schering-Plough.

Colin Hill. Colin Hill has served as a director since October 2017. He co-founded GNS Healthcare Inc., a data analytics company, in 2000 and has since served as its Chief Executive Officer. Mr. Hill is also the Chairman of Gene Network Sciences, Inc., the parent company of GNS Healthcare Inc. Mr. Hill currently serves on the board of directors of Biotelemetry Inc. (BEAT), a remote medical technology company. He is also a founding board member of TMed (Transforming Medicine: The Elizabeth Kauffman Institute), a non-profit foundation dedicated to the advancement of personalized medicine. We believe Mr. Hill contributes to our Board his substantial experience in healthcare technologies, in particular technologies related to the use of data and machine learning in the biopharmaceutical industry.

Jeffrey Kindler. Jeffrey Kindler has served as a director since May 2017. Mr. Kindler has served as the Chief Executive Officer of Centrexion Therapeutics (CNTX), a biopharmaceutical company focused on developing safe and effective, non-addictive treatments for chronic pain, since 2013. Mr. Kindler is also a Senior Advisor to Blackstone, one of the world's leading investment firms, and an Operating Partner at Artis Ventures, a leading venture capital firm. Mr. Kindler serves on the board of directors of Perrigo Company PLC (PRGO), an international manufacturer of private label over-the-counter pharmaceuticals, Precigen, Inc. (PGEN) (formerly Intrexon Corporation (XON)), a biotechnology company, and Terns Pharmaceutical (TERN), a clinical-stage biopharmaceutical company. Mr. Kindler served in a variety of roles at Pfizer Inc. (PFE) from 2002 to 2010, most recently as Chairman and Chief Executive Officer. Prior to his appointment as Chairman and Chief Executive Officer in 2006, Mr. Kindler served as Executive Vice President and General Counsel and Vice Chairman from 2002 to 2006. Mr. Kindler also previously served on the board of directors of SIGA Technologies Inc. (SIGA), a pharmaceutical company, and vTv Therapeutics Inc. (VTVT), a clinical-stage biopharmaceutical company. Mr. Kindler also serves as Chair of the GLG Institute, a membership-based learning community for leading executives, and as a director or advisor to several private health care firms. We believe Mr. Kindler contributes to our Board his knowledge of the pharmaceutical industry and corporate governance based on his experience as a senior executive in the pharmaceutical industry and serving as a director of several public companies.

P. Hunter Philbrick. P. Hunter Philbrick has served as a director of the Company or its predecessor since December 2011. Mr. Philbrick has served as a Partner at Hellman & Friedman, a multinational private equity firm, since January 2013. Prior to joining Hellman & Friedman in 2003, Mr. Philbrick worked as an investment banker in the mergers, acquisitions and restructuring and general industrial departments of Morgan Stanley & Co (MS). He currently serves as a member of the board of directors of HUB International Limited, a global insurance brokerage firm, MultiPlan Corporation (MPLN), a healthcare cost management service provider, and Vantage Group Holdings Ltd., a commercial property and casualty insurance carrier. Mr. Philbrick was formerly a director of Change Healthcare Inc. (CHNG) (formerly Emdeon), an independent healthcare technology platform, GeoVera Insurance Holdings Ltd., a residential property insurance company, and Sedgwick Inc., a provider of technology-enabled risk, benefits and integrated business solutions. We believe Mr. Philbrick contributes to our Board his finance and capital markets experience as well as insight into the healthcare industry, gained from advising and serving as a director of multiple Hellman & Friedman portfolio companies.

Allen Thorpe. Allen Thorpe has served as a director of the Company or its predecessor since October 2011. Mr. Thorpe has served as a Partner of Hellman & Friedman, a multinational private equity firm, since January 1, 2004 and leads the firm's New York office. Prior to joining Hellman & Friedman in 1999, Mr. Thorpe was a vice president with Pacific Equity Partners in Australia, a private equity firm, and was a manager at Bain & Company, Inc., a management consulting firm. He currently serves on the board of directors of MultiPlan Corporation (MPLN), a healthcare cost management service provider, and Edelman Financial Engines LLC, a financial planning and investment management firm. Mr. Thorpe also previously served as Chairman of Sheridan Healthcare, Inc., a provider of physician services, a director of Change Healthcare Inc. (CHNG) (formerly Emdeon), an independent healthcare technology platform, Mitchell International Inc., an enterprise software provider, Artisan Partners Asset Management Inc. (APAM), a global investment management firm, the lead independent director of LPL Financial Holdings Inc. (LPLA), an investment firm and a member of the Advisory Board of Grosvenor Capital Management, a provider of financial planning and advisory services. We believe Mr. Thorpe contributes to our Board his extensive knowledge of the healthcare industry as well as financial and corporate governance experience gained through years of serving as a director of multiple Hellman & Friedman portfolio companies.

Stephen Wise. Stephen Wise has served as a director of the Company or its predecessor since December 2011. Mr. Wise has served as a Managing Director of The Carlyle Group, a multinational private equity firm, since January 2010 and as the Global Head of Healthcare at The Carlyle Group since January 2016. Prior to joining Carlyle in 2006, Mr. Wise worked with JLL Partners, a New York-based private equity firm. Prior to JLL Partners, he worked with J.W. Childs Associates, a Boston-based private equity firm, and prior to that, in the leveraged finance group of Credit Suisse (USOI). Mr. Wise currently serves as a member of the board of directors of Albany Molecular Research, Inc., a contract research and drug manufacturing organization, CorroHealth, a business service provider for healthcare companies, MedRisk Holdco, LLC, a physical therapy-focused workers' compensation solutions company, Millicent Pharma Limited, a pharmaceutical company and Ortho-Clinical Diagnostics, a global provider of in vitro diagnostic solutions for screening, diagnosing, monitoring and confirming diseases, Rede D'Or São Luiz S.A., a hospital provider in Brazil, Sedgwick Inc., a global multiline claims management firm, TriNetX, Inc., a global health research network optimizing clinical research, and WellDyneRx, an independent pharmacy benefit manager. We believe Mr. Wise contributes to our Board his extensive knowledge of and experience in the healthcare industry as well as his financial and corporate governance experience, both gained through years of serving as head of Carlyle's Global Health Care team and as a director of multiple Carlyle portfolio companies.

Board of Directors

Our business and affairs are managed under the direction of our Board. Our Board currently consists of nine directors, divided into three classes, each serving staggered, three-year terms:

- our Class I directors are Ms. Hilado and Messrs. Simmons and Ensley, and their current terms expire at the 2021 annual meeting of stockholders;
- our Class II directors are Messrs. Bress, Hill and Philbrick, and their current terms expire at the 2022 annual meeting of stockholders; and
- our Class III directors are Messrs. Kindler, Thorpe and Wise, and their current terms expire at the 2023 Annual meeting of stockholders.

The size of our Board is currently fixed at nine directors. Pursuant to our Second Amended and Restated Stockholders Agreement (the "Stockholders Agreement"), the size of our Board may not exceed nine directors unless approved by Hellman & Friedman and Carlyle (in each case, only if such party then has the right to nominate any individuals for election to our Board). Subject to the terms of our Stockholders Agreement, in general, only our Board has the power to fix the size of our Board, fill newly created director positions resulting from an increase in the size of the Board, and fill vacancies. However, subject to the terms of our Stockholders Agreement, if at any time the Majority Sponsors own at least 40% in voting power of the stock of our Company entitled to vote generally in the election of directors, the stockholders will also have the power to fix the size of our Board, fill newly created director positions resulting from an increase in the size of the Board, and fill vacancies.

The Stockholders Agreement provides that the Majority Sponsors have the right to nominate a certain number of individuals to our Board (such persons, the "Majority Sponsor Nominees").

Hellman & Friedman has the right to nominate the following number of individuals to the Company's Board (such persons, the "Hellman & Friedman Nominees"): (i) three individuals so long as it collectively owns more than 30% of the Company's outstanding shares of common stock, (ii) two individuals so long as it collectively owns less than 30% but at least 15% of the Company's outstanding shares of common stock and (iii) one individual so long as it collectively owns less than 15% but at least 7.5% of the Company's outstanding shares of common stock; provided, in each case, that if Hellman & Friedman's continuing ownership percentage (with respect to its ownership percentage as of May 2017) is not less than Carlyle's then continuing ownership percentage, the number of individuals that Hellman & Friedman has the right to nominate to our Board will not be reduced if it would result in a number of Carlyle Nominees (as defined below) that is equal or greater to the number of Hellman & Friedman Nominees. Hellman & Friedman has nominated Messrs. Ensley, Philbrick, and Thorpe to serve on our Board.

Carlyle has the right to nominate the following number of individuals to the Company's Board (such persons, the "Carlyle Nominees"): (i) two individuals so long as (x) it collectively owns at least 15% of the Company's outstanding shares of common stock or (y) (A) Hellman & Friedman collectively owns at least 15% of the Company's outstanding shares of common stock and (B) Carlyle's continuing ownership percentage (with respect to its ownership percentage as of May 2017) is not less than Hellman & Friedman's continuing ownership percentage and (ii) one individual so long as (x) it collectively owns less than 15% but at least 7.5% of the Company's outstanding shares of common stock or (y) (A) Hellman & Friedman collectively owns less than 15% but at least 7.5% of the Company's outstanding shares of common stock and (B) Carlyle's continuing ownership percentage of common stock (with respect to its ownership percentage as of May 2017) is not less than Hellman & Friedman's then continuing ownership percentage of common stock. Carlyle has nominated Messrs. Bress and Wise to serve on our Board.

In addition, each of ADIA and GIC has the right to designate a board observer to the Board so long as it owns at least 5% of our outstanding shares of common stock.

For so long as Hellman & Friedman and Carlyle have the right to nominate any individuals to our Board, (i) the Majority Sponsor Nominees will be included on the slate in our proxy statement relating to the election of directors of the class to which such persons belong and we will provide the highest level of support for the election of each such persons as we provide to any other individual standing for election as a director, and (ii) the only nominees that will be included on the slate in our proxy statement relating to the election of directors will be (x) the Majority Sponsor Nominees, and (y) the other nominees (if any) nominated by our Board, provided that each such other nominee must be (A) an independent director unanimously approved by Hellman & Friedman and Carlyle (in each case, only if such party then has the right to nominate any individuals) or (B) our Chief Executive Officer. In addition, each of the Sponsors has agreed to vote in favor of the Company slate that is included in our proxy statement.

In the event that a Majority Sponsor Nominee ceases to serve as a director for any reason (other than the failure of our stockholders to elect such individual as a director), the persons entitled to nominate such individual under our Stockholders Agreement will be entitled to nominate another individual to fill the resulting vacancy.

Background and Experience of Directors

Our Corporate Governance Guidelines provide that the Board must consider the mix of specific experience, qualifications and skills of its directors in order to assure that the Board, as a whole, has the necessary tools to perform its oversight function effectively in light of the Company's business and structure. Specifically, our Corporate Governance Guidelines require our Nominating and Corporate Governance Committee to consider, in reviewing the qualifications of potential director candidates, (a) minimum individual qualifications, including strength of character, mature judgment, industry knowledge or experience and an ability to work collegially with the other members of the Board and (b) all other factors it considers appropriate, which may include age, diversity of background, existing commitments to other businesses, service on other boards of directors or similar governing bodies of public or private companies or committees thereof, potential conflicts of interest with other pursuits, legal considerations such as antitrust issues, corporate governance background, financial and accounting background, executive compensation background and the size, composition and combined expertise of the existing Board. The Nominating and Corporate Governance Committee and the Board evaluate each director in the context of the membership of the Board as a group, with the objective of having a group that can best perpetuate the success of the business and represent stockholder interests through the exercise of sound judgement using its diversity of background and experience in various areas. The Board has considered each director's background and experience as reflected in the information discussed in each of the directors' individual biographies set forth above and believes that our directors provide an appropriate mix of experience and skills relevant to the size and nature of our business.

The Nominating and Corporate Governance Committee may identify potential director candidates by asking current directors and executive officers for their recommendations of persons they believe possess the right mix of criteria and qualifications, and are prepared to represent the best interests of PPD and our stockholders. Our Nominating and Corporate Governance Committee may also engage firms that specialize in identifying director candidates to our Board. Director nominations also may be made at the recommendation of stockholders pursuant to our Amended and Restated Bylaws.

The Nominating and Corporate Governance Committee has adopted Director Qualification Standards that require the Nominating and Corporate Governance Committee, in determining whether to recommend a director nominee, to take into account diversity, among other factors, with a view toward the needs of the Board as a whole. The Nominating and Corporate Governance Committee members generally conceptualize diversity expansively to include, without limitation, diversity of background, experience, and other demographics, including concepts such as gender, race, and ethnicity, which contribute to the total mix of viewpoints and experience represented on the Board. The Nominating and Corporate Governance Committee believes that the inclusion of diversity as one of many factors considered in selecting director nominees is consistent with the committee's goal of creating a Board that best serves the needs of the Company and the interests of its stockholders.

Role of Board of Directors in Risk Oversight

The Board has extensive involvement in the oversight of risk management related to us and our business and accomplishes this oversight through the regular reporting by management to the Audit Committee. Through its regular meetings with management, including the finance, legal and internal audit functions, the Audit Committee reviews and discusses all significant areas of our business and summarizes for the Board areas of risk and appropriate mitigating factors. In addition, our Board also reviews information regarding other risks through regular reports of its other committees. We believe that the leadership structure of our Board provides appropriate risk oversight of our activities. Each committee is chaired by an independent Director, and Mr. Simmons, our Chairman and Chief Executive Officer, does not serve on any committee.

Board Leadership Structure

In accordance with our Corporate Governance Guidelines, we believe that it is important that our Board retains the flexibility to optimally address the needs of our business at any given point in time. Therefore, the Board does not have a policy on whether the role of Chairman and CEO should be separate or combined and, if it is to be separate, whether the Chairman should be selected from the independent directors.

At this time, we believe it is in the best interest of the business and our stockholders that the roles of Chairman and Chief Executive Officer be combined. Mr. Simmons has served in the combined roles of Chairman and Chief Executive Officer of the Company or its predecessor since May 2012. Mr. Simmons's combined service as Chairman and Chief Executive Officer creates unified leadership for the Company. This leadership structure demonstrates to our business partners and stockholders that the Company is under strong leadership and minimizes the potential duplication of efforts among management and the directors. The Board does not have a lead independent director and does not believe that one is necessary at this time given that the majority of the members of the Board are independent and all members of Board committees, including Chairpersons, are independent. The Board believes its leadership structure allows the Company to operate efficiently and is in the best interests of the Company and its stockholders.

Controlled Company Exception

The Majority Sponsors beneficially own more than 50% of our common stock and voting power. As a result, (a) under certain provisions of our Stockholders Agreement, the Majority Sponsors will be entitled to nominate at least a majority of the total number of directors comprising our Board and (b) we qualify as a "controlled company" as that term is set forth in Section 5615(c)(1) of the Nasdaq Marketplace Rules. Under the Nasdaq corporate governance standards, as a "controlled company" we may elect not to comply with certain corporate governance standards, including:

- the requirement that a majority of our Board consist of independent directors;
- the requirement that the Compensation Committee of the Board (the "Compensation Committee") be composed entirely of independent directors and have a written charter addressing the Compensation Committee's purpose and responsibilities; and
- the requirement that our director nominations be made, or recommended to our full Board, by our independent directors or by a nominations committee that consists entirely of independent directors and that we adopt a written charter or Board resolution addressing the nominations process.

We do not utilize these exemptions. However, if we utilize any of these exemptions in the future, we will not have the same protections afforded to stockholders of companies that are subject to all of the Nasdaq corporate governance requirements. In the event that we cease to be a "controlled company," we will be required to comply with these provisions within the transition periods specified in the Nasdaq corporate governance rules.

Committees of the Board of Directors

The standing committees of our Board consist of the Audit Committee, the Compensation Committee, and a Nominating and Corporate Governance Committee (the "Nominating and Corporate Governance Committee"). Each of our standing committees a has written charter which is available under "Corporate Governance – Governance Documents" at https://investors.ppd.com/. The principal functions and the names of the directors currently serving as members of each of these committees are set forth below.

Audit Committee

Our Audit Committee is responsible for, among other things:

- overseeing and monitoring the quality and integrity of our financial statements, including oversight of our accounting and financial reporting processes, internal controls and financial statement audits;
- overseeing and monitoring our compliance with legal and regulatory requirements;
- engaging our independent registered public accounting firm and assessing our independent registered public accounting firm's qualifications, performance and independence (including the rotation of partners of the independent registered public accounting firm on our engagement team) as required by law;
- providing oversight assistance in connection with our corporate compliance program, including our code of conduct and anti-corruption compliance policy, and investigating possible violations thereunder;
- overseeing and monitoring our risk management policies and procedures; and
- overseeing and monitoring the performance of our internal audit function.

The current members of our Audit Committee are Ms. Hilado (Chair) and Messrs. Hill and Kindler. Our Board has determined that each of Ms. Hilado and Mr. Kindler qualify as an "audit committee financial expert" as such term is defined in Item 407(d)(5) of Regulation S-K.

Compensation Committee

The purpose of the Compensation Committee is to assist our Board in discharging its responsibilities relating to, among other things:

- setting our compensation program and compensation of our executive officers and directors;
- administering our incentive and equity-based compensation plans; and
- preparing the compensation committee report required to be included in our proxy statement under the rules and regulations of the SEC.

The Compensation Committee charter authorizes the Compensation Committee to form and delegate its authority to a subcommittee composed solely of two or more members of the Compensation Committee who meet the criteria for a "non-employee director" as defined in Rule 16b-3 under the Exchange Act. Accordingly, the Compensation Committee has established a Section 16 Subcommittee, which has the non-exclusive responsibility and authority to grant equity-based awards and performance-based awards under the PPD, Inc. 2020 Omnibus Incentive Plan (the "2020 Plan") and to administer and interpret the Eagle Holding Company I 2017 Equity Incentive Plan (the "2017 Plan") and the 2020 Plan, to exercise all other powers and authority permitted under the 2017 Plan and the 2020 Plan, and to establish, approve and certify terms and conditions applicable to awards made under the 2017 Plan and the 2020 Plan.

The current members of our Compensation Committee are Ms. Hilado and Messrs. Philbrick (Chair), Kindler and Wise. The current members of our Section 16 Subcommittee are Ms. Hilado and Mr. Kindler.

Nominating and Corporate Governance Committee

The purpose of our Nominating and Corporate Governance Committee is to assist our Board in discharging its responsibilities relating to, among other things:

- identifying individuals qualified to become new Board members, consistent with criteria approved by the Board;
- reviewing the qualifications of incumbent directors to determine whether to recommend them for reelection and recommending to the Board candidates for director nominees for the next annual meeting of stockholders;

- identifying Board members qualified to fill vacancies on any committee of the Board and recommending that the Board appoint the identified member or members to the applicable committee;
- developing, evaluating and recommending to the Board corporate governance guidelines applicable to us,
- overseeing the evaluation of the Board; and
- overseeing management succession planning.

The Nominating and Corporate Governance Committee met one time during 2020. The current members of our Nominating and Corporate Governance Committee are Messrs. Thorpe (Chair), Hill and Wise.

Code of Conduct

We have adopted a Code of Conduct (the "Code of Conduct") that constitutes a "code of ethics" as defined by applicable SEC rules and a "code of conduct" as defined by applicable Nasdaq rules. The Code of Conduct is applicable to all employees, executive officers and directors and addresses legal and ethical issues that may be encountered in carrying out their duties and responsibilities, including the requirement to report any conduct they believe to be a violation of the Code of Conduct. If we were ever to amend or waive any provision of our Code of Conduct that applies to our principal executive officer, principal financial officer, principal accounting officer or any person performing similar functions, we intend to satisfy our disclosure obligations, if any, with respect to any such waiver or amendment by posting such information on our website rather than by filing a Form 8-K. Our current Code of Conduct is available under "Corporate Governance – Governance Documents" at https://investors.ppd.com/.

Item 11. Executive Compensation

Compensation Discussion and Analysis

This Compensation Discussion and Analysis provides an overview of our executive compensation philosophy, the overall objectives of our executive compensation program, and each material element of compensation for the fiscal year ended December 31, 2020 that we provided to each person who served as our principal executive officer or principal financial officer during fiscal year 2020 and our three other most highly compensated executive officers employed at the end of fiscal year 2020, all of whom we refer to collectively as our "Named Executive Officers."

Our Named Executive Officers for the fiscal year ended December 31, 2020 were as follows:

- David Simmons, *Chairman and Chief Executive Officer*
- Christopher Scully, *Executive Vice President and Chief Financial Officer*
- William Sharbaugh, *Chief Operating Officer*
- Anshul Thakral, *Executive Vice President, Chief Commercial Officer and President of Evidera*
- David Johnston, *Executive Vice President of Global Clinical Development*

The Compensation Committee is responsible for establishing, implementing and evaluating our employee compensation and benefit programs. The Compensation Committee annually evaluates the performance of our executive officers, establishes the annual salaries and annual cash incentive awards for our executive officers and approves equity awards for all of our eligible employees and directors. The Compensation Committee's objective is to ensure that the total compensation paid to the Named Executive Officers as well as our other executive officers is performance-based, competitive, fair and reasonable. Generally, the types of compensation and benefits provided to our Named Executive Officers are similar to those provided to other senior members of our management team. The Compensation Committee also periodically reviews and amends our cash-based incentive compensation plans for all employees, including our executive officers, and our equity incentive compensation plans for all eligible employees, including our executive officers, and evaluates, among other things, whether (i) the performance measures upon which awards under these plans are based are aligned with our stockholders' interests and (ii) the relationship between the incentives associated with these plans and the level of risk-taking by executive officers or others in response to such incentives is reasonably likely to have a material adverse effect on the Company.

Executive Compensation Objectives and Philosophy

The goal of our executive compensation program is to provide market-competitive total compensation programs that drive performance and long-term value for our stockholders and that aid the Company in attracting, retaining, engaging and motivating the executive talent required to be an employer of choice in our industry. We believe the most effective way to achieve these objectives is to design an executive compensation program that targets total compensation opportunities at or near the market median while maintaining the flexibility to target total compensation opportunities above the market median for key talent and roles and high performing individuals, and to offer performance-based incentives tied to clearly articulated Company performance metrics and to individual objectives that reward our executives for over-performance and hold them accountable for under-performance. This philosophy is the foundation for evaluating and continuously improving the effectiveness of our executive pay program. The following are the core elements of our executive compensation philosophy:

- Performance-Based: A significant portion of executive compensation should be "at-risk," performance-based pay linked to specific, measurable short-term and long-term goals that reward both organizational and individual performance;
- Stockholder Aligned: Incentives should be structured to create a strong alignment between executives and stockholders on both a short-term and long-term basis; and
- Market Competitive: Compensation levels and programs for executives, including the Named Executive Officers, should be competitive relative to the markets in which we operate and compete for talent.

By incorporating these core design elements, we believe our executive compensation program is in line with and supportive of our objectives of driving and rewarding performance and creating long-term value for our stockholders. In addition, we believe our executive compensation program is effective in attracting, retaining, engaging and motivating the level of talent we need to successfully manage and grow our business.

Process for Determining Compensation

Each year, the Compensation Committee reviews the performance and compensation of our Named Executive Officers. The Compensation Committee assesses the Company's performance against its annual enterprise priorities and evaluates the performance of the Named Executive Officers relative to those priorities and their individual objectives for the applicable year. The Compensation Committee seeks to ensure that a substantial portion of our Named Executive Officers' annual compensation is directly linked to the annual performance of our business. As discussed under "—Narrative Disclosure to Summary Compensation Table and Grants of Plan-Based Awards Table—Employment Agreements with Named Executive Officers," we entered into employment agreements with each of our Named Executive Officers, which address certain elements of their compensation and benefit packages.

In evaluating the performance of the Chief Executive Officer, the Compensation Committee considers the Chief Executive Officer's assessment of his own performance and conducts its own performance evaluation of his performance and compensation in closed session with Compensation Committee members only. With regard to the performance and compensation of each of our other Named Executive Officers, the Compensation Committee seeks the input of our Chief Executive Officer. The Chief Executive Officer provides his assessments and recommendations to the Compensation Committee regarding the performance and compensation of the other Named Executive Officers.

In determining the level of compensation for our Named Executive Officers, the Compensation Committee considered each Named Executive Officer's position and responsibility, the Chief Executive Officer's recommendations for the Named Executive Officers other than himself, compensation levels of other members of the Company's senior leadership team, and the performance of the Company and each Named Executive Officer. The Compensation Committee also retained Korn Ferry, an independent compensation consultant (the "Consultant"), to assist us in designing our compensation program and setting compensation levels for our Named Executive Officers. The Compensation Committee also considered survey and other market data provided by the Consultant, and based on the considerations described above, management's recommendations, and the judgment and experience of its members, the Compensation Committee established the compensation levels for our Named Executive Officers and the allocation of total compensation among each of our three main components of compensation described below.

Management also plays a significant role in the executive compensation-setting process. From time to time, the Compensation Committee invites senior members of management to attend all or a portion of its meetings. The most significant aspects of management's role are:

- evaluating employee performance;
- preparing information for Compensation Committee meetings;

- proposing for the Compensation Committee's consideration organizational performance targets and objectives;
- providing background information regarding PPD's strategic objectives; and
- reviewing and analyzing competitive market data from our Peer Group (as defined below) as well as from other survey data provided by the Consultant, and recommending executive compensation levels for the Compensation Committee's consideration, as further described below.

In October 2019, the Compensation Committee retained the Consultant to assist it in designing our executive compensation program and setting compensation levels for our Named Executive Officers. The Consultant provided the Compensation Committee with objective analysis, advice and information, including competitive market data and compensation recommendations related to the compensation of our Named Executive Officers. While the Consultant, the Chief Executive Officer, and/or management may make recommendations on the form and amount of compensation delivered, the Compensation Committee makes all decisions regarding the compensation of our Named Executive Officers.

The Compensation Committee is solely responsible for approving payments to the Consultant and for setting the terms and scope of the Consultant's engagement and the termination of this engagement.

The Compensation Committee targets total compensation opportunities for our Named Executive Officers at or near the median of our market, as determined by a competitive market benchmark analysis conducted by the Consultant, which consists of data from our Peer Group as well as from other survey data provided by the Consultant. In assessing total compensation opportunities, the Compensation Committee considers comparisons to long-term equity incentive compensation and target total annual cash, which is further subcategorized into base salary and annual incentive bonus target. The Compensation Committee considers comparisons to compensation levels of each of these elements at other peer companies to be helpful in assessing the overall competitiveness of our compensation practices but places a greater emphasis on total compensation opportunities rather than on setting each element of compensation at or near the median for that element. To the extent that management, with the advice of the Consultant, determines that an executive's total compensation opportunity is not at or near the market median, management may recommend that the Compensation Committee make an adjustment to base salary, short-term incentive or long-term equity incentive compensation pay elements.

The Compensation Committee, with the assistance of the Consultant, developed the following peer group composed of the 14 companies set forth below (the "Peer Group").

Peer Group

Agilent Technologies, Inc.	Charles River Labs International, Inc.	Mettler-Toledo International Inc.	Quest Diagnostics Incorporated
Avantor, Inc.	Illumina, Inc.	PerkinElmer, Inc.	Syneos Health, Inc.
Bio-Rad Laboratories, Inc.	IQVIA Holdings Inc.	PRA Health Sciences, Inc.	
Bruker Corporation	Laboratory Corporation of America Holdings	Perrigo Company plc	

The Peer Group was selected based on a review of companies within relevant industries in which we compete for executive talent, and are broadly similar to us based on certain characteristics, such as business model and financial size and performance as measured by revenue and growth opportunity. The Compensation Committee reviews compensation information from this Peer Group to gain insight on market practices and trends in both pay levels and pay structure and to ensure that our pay program and the total compensation opportunity paid to the Company's executives remains competitive and within a reasonable range of the peer and market survey median.

During fiscal years 2019 and 2020, the Consultant performed a variety of work, including but not limited to: as discussed above, conducting a review of the competitiveness of our executive compensation program, including executive pay levels; assisting in the development of a market-based director compensation program; assisting in the evaluation of a post-IPO long-term equity incentive award program and strategy; assisting in the development of executive and director stock ownership guidelines; and establishing a post-IPO public company Compensation Committee annual calendar.

The Compensation Committee considered the Consultant's independence and determined that the Consultant was independent and that the work it performed during 2020 did not raise any conflicts of interest.

Relationship of Compensation Practices to Risk Management

Our compensation program is designed to mitigate the possibility of encouraging excessive risk-taking behavior and the potential impacts thereof. For example, the following features of our executive compensation program mitigate risk:

- Challenging, but attainable goals that are well-communicated;
- Balance of compensation elements, including short- and long-term variable compensation tied to a mix of commercial, financial and individual performance metrics, such that no single compensation element is able to drive a specific outcome at the expense of other outcomes; and
- Use of incentive bonus and long-term equity incentive compensation to ensure alignment of our executives' interests with those of our stockholders.

In addition to our executive pay-for-performance program, the Compensation Committee has adopted a number of other compensation policies or best practices designed to mitigate the possibility of encouraging excessive risk-taking behavior, such as:

- Maintaining a clawback policy which allows for recovery of all or a portion of any incentive compensation awarded to certain of our employees, including our executive officers, related to restatements of our financial statements caused or contributed by such employee's fraud, willful misconduct or gross negligence;
- Requiring our executives to achieve and maintain designated stock ownership levels, including 6x annual base salary for our Chief Executive Officer, which ensure their investment in the Company's long-term success;
- Maintaining an Insider Trading Policy that generally prohibits our directors, officers, employees, and independent contractors from hedging or pledging our stock, although the Company may permit a pledging transaction in limited circumstances if prior approval is obtained for such a transaction. No such approval has ever been sought or given; and
- Except in connection with certain corporate transactions or events that affect the shares of the Company's common stock (including a Change in Control) or unusual or nonrecurring events affecting the Company, the Company's equity plans prohibit repricing of stock options without stockholder approval.

Our Compensation Committee, with assistance from the Consultant, reviewed our compensation program to assess whether the program creates risks that are reasonably likely to have a material adverse effect on the Company. The review included an assessment of our compensation philosophy, governance provisions, our executive pay program design, our broad-based pay program, our director pay program, and our equity plan provisions. Several factors that mitigate compensation risk were identified, including the factors enumerated above. Based on these findings, the Compensation Committee determined that our compensation program does not create risks that are reasonably likely to have a material adverse effect on the Company.

Considerations in Setting 2020 Compensation

The 2020 compensation of our Named Executive Officers was based on the Company's performance against enterprise priorities and specific performance metrics, and each Named Executive Officer's individual performance against their annual objectives. The Compensation Committee believes the total 2020 compensation of our Named Executive Officers was competitive while at the same time being responsible to our stockholders because a significant percentage of total compensation in 2020 was allocated to variable compensation which is paid only upon achievement of Company performance objectives and individual Named Executive Officer goals that contribute to the creation of stockholder value.

The following is a summary of key considerations that affected the development of 2020 compensation targets and 2020 compensation decisions for our Named Executive Officers (and which the Compensation Committee believes will continue to affect its compensation decisions in future years):

Emphasis on Performance. Our compensation program provides increased pay opportunity correlated with superior performance on an annual basis and over the long term. When evaluating base salary, the Compensation Committee reviews, among other factors, our overall financial and operating performance in the prior year, the outlook for the current year, our targets for base salary increases for all employees, inflation, changes in the scope of an individual's job, individual performance and the performance of the segments, business units or functions for which a Named Executive Officer is responsible. Under our Senior Executive Incentive Compensation Plan (the "SEICP"), which provides for an annual cash bonus for our Senior Vice Presidents and above, Company performance against specific performance measures and individual performance against annual goals are the drivers in determining the Named Executive Officer's non-equity incentive award. For our equity incentives, of the options granted under our 2017 Plan to our Named Executive Officers, the vesting of a significant portion of these options is based on performance against specified financial and stockholder return metrics.

The Importance of Company Results. The SEICP (and, in the case of Mr. Thakral, the SEICP combined with the Annual Authorization Bonus, as further discussed below) uses the achievement of specific company performance metrics in determining 85% of the target annual cash incentive award for Messrs. Simmons, Scully, and Sharbaugh, and 75% of the target annual cash incentive award for Dr. Johnston. This weighting is intended to incentivize the Named Executive Officers to achieve these specified targets and to hold them accountable when we fail to do so. In addition, a significant portion of our long-term equity incentive awards to the Named Executive Officers vest based upon the attainment of certain pre-established performance conditions, including, for example, EBITDA targets in the case of the EBITDA Options (as defined below).

Use of Market Data. The Compensation Committee establishes target compensation levels that are consistent with external competitive market practices and internal equity considerations (including position, responsibility and contribution) relative to base salaries, annual cash bonuses and long-term equity compensation, as well as the appropriate pay mix for a particular position. During fiscal years 2019 and 2020, in order to gauge the competitiveness of its compensation programs, the Compensation Committee, with assistance from the Consultant, analyzed competitive market data relating to executive compensation programs, including salary, annual bonus, and equity compensation data, from the Peer Group as well as from other survey data and third-party data provided by the Consultant. We strive to position ourselves to attract and retain qualified senior executives in the face of competitive pressures in our relevant labor markets.

Components of 2020 Compensation Program

There are three key components of our executive compensation program for our executives, including our Named Executive Officers:

- base salary;
- annual incentive bonus; and
- long-term equity incentive compensation in the form of stock options.

In addition to these key compensation elements, the Named Executive Officers are provided certain other compensation. See "—Other Compensation."

We believe that offering each of the components of our executive compensation program is necessary to remain competitive in attracting, retaining and motivating talented executives. Furthermore, we structure the annual incentive bonus and long-term equity incentive compensation to ensure alignment of our executives' interests with those of our stockholders. Collectively, these components are designed to motivate and reward our executives and drive our short- and long-term performance and increase stockholder value.

Our base salaries are designed to attract and retain individuals with superior talent, be market competitive and reward executives for their individual performance and our short-term performance. Our annual incentive bonus program is designed to motivate our executives to achieve the targets we set annually for selected performance metrics, to reward them for that achievement and to hold them accountable if they fail to deliver. Our long-term incentive compensation ensures that our executives have a continuing stake in our long-term success, have incentives to increase our equity value, and that our executives' interests are aligned with those of our stockholders.

2020 Base Salaries

The Compensation Committee reviews base salaries of our Named Executive Officers in the first quarter of each year. In setting annual base salaries for our Named Executive Officers, the Compensation Committee takes into consideration our overall financial and operating performance in the prior year, the outlook for the current year, our targets for base salary increases for all employees, inflation, changes in the scope of a Named Executive Officer's job, individual performance, performance of the segments, business units or functions for which a Named Executive Officer is responsible, other components of compensation and other relevant factors, and the benchmarking analysis conducted by the Consultant. No formulaic base salary increases are provided to the Named Executive Officers.

In 2020, the Compensation Committee reviewed the base salaries for our Named Executive Officers based on the criteria discussed above and determined that it was appropriate to maintain base salaries for our Named Executive Officers at their current levels. Although base salaries were not increased for fiscal year 2020, the Committee believes base salaries for the Named Executive Officers remain competitive for our market.

The base salaries for our Named Executive Officers for 2020 were as follows: Mr. Simmons—$1,566,720; Mr. Sharbaugh—$526,365; Mr. Scully—$495,000; Mr. Thakral—$450,000; and Dr. Johnston—$412,000.

2020 Annual Cash Incentive Compensation

We have entered into employment agreements with our Named Executive Officers. Pursuant to their employment agreements with the Company, our Named Executive Officers are entitled to receive an annual cash incentive award targeted at a specified percentage of their annual base salary paid to them during each year. The annual cash bonus targets for our Named Executive Officers for 2020 were as follows: Mr. Simmons—100%; Mr. Sharbaugh—90%; Mr. Scully—75%; Mr. Thakral—75%; and Dr. Johnston—50%.

Each Named Executive Officer's annual bonus is based upon a formula calculated by measuring achievement against annual performance measures and individual objectives. The annual cash bonuses for Messrs. Simmons, Scully, Sharbaugh and Johnston were determined under the SEICP, which provides for a Company Performance Award (as described below) component (based on EBITDA and Gross Authorizations, each as defined below) and an Individual Qualitative Performance Award (as described below) component. Mr. Thakral's annual bonus is based on (i) the bonus plan set forth in his employment agreement, which is based on performance against a specified gross authorization target established each year by the Compensation Committee (the "Annual Authorization Bonus") and (ii) the SEICP. Of Mr. Thakral's bonus target, 70% is based on achievement under the Annual Authorization Bonus and 30% is based on the SEICP. The following table sets forth the overall weighting of each component of cash incentive compensation for the Named Executive Officers in 2020:

	SEICP			
Name	**EBITDA Performance Award Weight (%)**	**Gross Authorization Performance Award Weight (%)**	**Individual Qualitative Performance Award Weight (%)**	**Annual Authorization Bonus (%)**
David Simmons	60	25	15	—
Christopher Scully	60	25	15	—
William Sharbaugh	60	25	15	—
Anshul Thakral	15	—	15	70
David Johnston	50	25	25	—

More detailed descriptions of the terms and conditions of the SEICP and Mr. Thakral's Annual Authorization Bonus are set forth below.

The Compensation Committee also has the power, in its discretion, to (i) amend, modify, or terminate the SEICP and/or Mr. Thakral's Annual Authorization Bonus, provided that any amendment, modification or termination with respect to any calendar year must be affected on or before December 31 of such calendar year, and (ii) allocate amounts reserved for payment under the SEICP to the Company's business units, functions and departments in such manner as it determines. This discretionary authority allows the Compensation Committee to either award compensation absent attainment of the relevant performance goal(s) under the SEICP and/or Mr. Thakral's Annual Authorization Bonus, or to reduce or increase the size of any such award or payout. In fiscal year 2020, the Compensation Committee did not exercise this discretionary authority.

SEICP—Company Performance Awards

The "Company Performance Award" is based on EBITDA and Gross Authorizations and is defined as the sum of the EBITDA Performance Award (as described below) and the Gross Authorization Performance Award (as described below). The EBITDA Performance Award is defined as the product of: (a) the Named Executive Officer's eligible earnings (the base salary paid to the Named Executive Officer in the applicable calendar year), (b) the Named Executive Officer's target award percentage, (c) the EBITDA Performance Award Weight and (d) the EBITDA Achievement Payout Percentage. The "Gross Authorization Performance Award" is defined as the product of: (a) the Named Executive Officer's eligible earnings, (b) the Named Executive Officer's target award percentage, (c) the Gross Authorization Performance Award Weight and (d) the Gross Authorization Achievement Payout Percentage. For 2020, the EBITDA Performance Award Weight and the Gross Authorization Performance Award Weight for each of the Named Executive Officers were as set forth in the table above.

The EBITDA Achievement Payout Percentage and Gross Authorization Achievement Payout Percentage are determined under separate leverage curves set forth in the SEICP based on our actual achievement against an annual target. For each performance year, the Compensation Committee sets an EBITDA Target and Gross Authorization Target. The "Annual EBITDA Target" is defined as the Company's projected Adjusted EBITDA for a calendar year adjusted by (among other things) (i) adding an amount equal to the aggregate amount of all employee cash bonuses under any short-term cash bonus plan (other than cash bonus plans for our business development personnel), as forecast in our budget for such calendar year, (ii) if we sell or otherwise divest any business unit during such calendar year, by subtracting an amount equal to the amount of EBITDA associated with such business, if and to the extent such EBITDA was included in the Annual EBITDA Target for such calendar year. "Adjusted EBITDA" for fiscal year 2020 consists of net income or loss attributable to common stockholders of the Company, adjusted for changes in recapitalization investment portfolio consideration and net income or loss attributable to noncontrolling interest and before interest expense, net, provision for or benefit from income taxes and depreciation and amortization and eliminates (i) non-operating income or expense and (ii) impacts of certain non-cash, unusual or other items that are included in net income or loss that we do not consider indicative of our ongoing operating performance.

The "Gross Authorization Target" for the Named Executive Officers is defined as the projected Gross Authorizations for the specified Company business unit(s) for a calendar year, as determined by the Compensation Committee. For Messrs. Simmons, Scully and Sharbaugh, the Gross Authorization Targets includes all of the Company's business units, and for Dr. Johnston, the Gross Authorization Target includes the Global Clinical Development business unit. "Gross Authorization" is defined, for the relevant Company business unit(s), as (A) the U.S. dollar amount of authorizations (i) evidenced by an agreement or letter of intent or other written confirmation from the customer of intent to proceed with the services in question and (ii) added to the Company's backlog in the applicable calendar year as determined by the Company's Chief Financial Officer, acting in good faith after consultation with the Chief Executive Officer, and in accordance with the Company's authorization policy in effect from time to time, plus (B) the U.S. dollar amount of positive contract modification and adjustments made to the Company's backlog in the applicable calendar year, minus (C) the U.S. dollar amount of negative contract modifications and adjustments made to the Company's backlog in the applicable calendar year. The Compensation Committee establishes each of the Annual EBITDA Target and the Gross Authorization Target so that the threshold performance level is reasonably likely to be achieved, while the target goal is more challenging, but achievable.

Under the SEICP leverage curves, achievement of 100% of our Annual EBITDA Target yields a 100% EBITDA Achievement Payout Percentage and achievement of 100% of the applicable annual Gross Authorization Target yields a 100% Gross Authorization Achievement Payout Percentage. Achievement within a certain number of percentage points above or below the Annual EBITDA Target and Gross Authorization Target also yields 100% payout percentages (the "Target EBITDA Range" and "Target Gross Authorization Range," as applicable, and together, the "Target Range"). The SEICP leverage curves set threshold and maximum percentages of achievement against our Annual EBITDA Target and annual Gross Authorization Targets. The SEICP further determines the "Leverage Ratio," that is, the number of percentage points that the applicable Achievement Payout Percentage increases for every one percentage point that achievement exceeds the Target EBITDA Range or Target Gross Authorization Range, as applicable, up to the applicable maximum Achievement Payout Percentage, and the number of percentage points that the Achievement Payout Percentage decreases for every one percentage point that the achievement falls below the applicable Target Range. The Leverage Ratio is zero within the applicable Target Range.

The following chart sets forth the SEICP leverage curve for the Annual EBITDA Target for 2020:

Achievement Relative to Annual EBITDA Target (%)	Leverage Ratio (#)	Payout Percentage Range (%)
<86	—	—
86	Threshold	8
87 to 97	8.0	16-96
97.5 to 102.5	Target	100
103 to 120+	5.75	102.9-200

The following chart sets forth the SEICP leverage curve for the Gross Authorization Target for 2020:

Achievement Relative to Annual Gross Authorization Target (%)	Leverage Ratio (#)	Payout Percentage Range (%)
<75	—	—
75	Threshold	50
76 to 94	2.5	52.5-97.5
95 to 105	Target	100
106 to 125+	1.25	101.25-125

For 2020, the Compensation Committee established an Annual EBITDA Target of $995.8 million. The Adjusted EBITDA achieved was $1,017.2 million, or 102.2% of the Annual EBITDA Target. Under the SEICP leverage curve, this level of Adjusted EBITDA achievement relative to the Annual EBITDA Target, as adjusted by the Leverage Ratio, yielded an Achievement Payout Percentage of 100%. For 2020, the Gross Authorization achieved was 113.2% of the annual Gross Authorization Target for Messrs. Simmons, Scully, and Sharbaugh and 112.7% for Dr. Johnston. Under the SEICP leverage curve, this level of Gross Authorization achievement relative to the annual Gross Authorization Target, as adjusted by the Leverage Ratio, yielded an Achievement Payout Percentage of 110% for Messrs. Simmons, Scully and Sharbaugh and 108.75% for Dr. Johnston.

SEICP—Individual Qualitative Performance Awards

Under the SEICP, the “Individual Qualitative Performance Award” is defined as the product of: (a) the Named Executive Officer’s eligible earnings, (b) the Named Executive Officer’s target award percentage, (c) the Individual Qualitative Performance Award Weight and (d) the Individual Performance Factor. The Individual Qualitative Performance Award Weight was 15% for each of Messrs. Simmons, Scully, and Sharbaugh and 25% for Dr. Johnston. The Individual Qualitative Performance Award Weight was 15% for Mr. Thakral, whose Individual Performance Factor under the SEICP was 50% (with respect to the 30% of his bonus target tied to the SEICP, which equals 15% of his total annual bonus target). The Individual Performance Factor reflects the Compensation Committee’s subjective assessment of each Named Executive Officer’s performance against his individual goals and objectives for the year and overall contributions to the Company (and for our Named Executive Officers, other than the Chief Executive Officer, in conjunction with recommendations made by the Chief Executive Officer.

The 2020 individual performance objectives for the Chief Executive Officer were established in February 2020 to support the Company’s overall strategic and financial objectives, and the performance objectives for each of the other Named Executive Officers were established to support the Company’s strategic objectives as well as to support the leadership and specific goals of their respective segments, business units or functional areas. The 2020 Individual Performance Factor for each of our Named Executive Officers was assigned based on their performance against his pre-established individual performance goals as set forth below:

- Mr. Simmons: The individual performance goals set for Mr. Simmons focused on his impact and leadership in driving the Company to meet its financial guidance and corporate and strategic objectives established for the year, including in connection with our IPO and our transition to a public company. Mr. Simmons’ goals included building supplemental commercial capabilities, continuing to improve authorizations and backlog growth, strengthening our core global clinical development capabilities, refining our laboratory services strategy and meeting key talent, culture, colleague engagement and organizational development objectives.

- Mr. Scully: The individual performance goals set for Mr. Scully focused on driving the Company's financial and strategic performance through his leadership over the finance organization, including in connection with our IPO and our transition to a public company. Mr. Scully's goals included improving authorization results, attaining the Company's financial guidance for 2020, managing the Company's cost and expenses, completing the implementation of the Company's new enterprise resource planning system and strengthening our core capabilities in financial management and operations.
- Mr. Sharbaugh: The individual performance goals set for Mr. Sharbaugh focused on driving the Company's financial and strategic performance as well as the operational performance of the Clinical Development Services and Laboratory Services segments. Mr. Sharbaugh's goals included ensuring delivery of the Company's core services to customers, supporting the commercial selling effort for existing and new strategic partnerships, developing growth strategies for our core businesses, integrating the Company's site and patient access delivery model and maintaining quality and compliance standards governing the provision of the Company's services.
- Mr. Thakral: The individual performance goals set for Mr. Thakral focused on implementing the Company's commercial strategies and driving the growth of our authorizations and backlog to support the Company's financial and strategic performance. Mr. Thakral's goals included achieving authorization goals and leading commercial selling efforts for existing and new PPD BioPharma and Biotech partnerships, developing business strategies and integrating the Company's new service offerings into the commercial strategy.
- Dr. Johnston: The individual performance goals set for Dr. Johnston focused on strengthening clinical operational and financial delivery to further improve operational delivery while scaling efficiently to support future growth, with a focus on rapidly expanding segments. Dr. Johnston's goals included improving site activation cycle times and expanding access to patients, strengthening our China operations in scale and capabilities to meet anticipated market demand and expanding our functional service provider offering.

Annual Authorization Bonus for Executive Vice President, Chief Commercial Officer and President of Evidera

For 2020, in addition to his SEICP award, Mr. Thakral was entitled to the Annual Authorization Bonus pursuant to his employment agreement. The Annual Authorization Bonus for 2020 was equal to the product of (a) his annual base salary rate as of January 1, 2020 (which was $450,000), (b) his target award percentage of 52.5% and (c) the Annual Payout Percentage (as defined below). The Annual Payout Percentage for the Annual Authorization Bonus was determined under a predetermined authorization bonus leverage curve based on achievement against an "Annual Authorization Goal" set by the Compensation Committee, which goal was defined as the total dollar amount of gross authorizations added to the Company's backlog during fiscal year 2020 plus the dollar amount of positive contract modifications and adjustments made to the Company's backlog in 2020 minus the dollar amount of negative contract modifications and adjustments made to the Company's backlog in 2020 (the "Annual Payout Percentage"). The leverage curve operates in the same manner as under the SEICP, except there is no maximum Annual Payout Percentage under the Annual Authorization Bonus. Under this leverage curve, achievement of 100% of the Annual Authorization Goal yields a 100% Annual Payout Percentage. The Compensation Committee establishes the Gross Authorization Target so that the threshold performance level is reasonably likely to be achieved, while the target goal is more challenging but achievable. The following chart sets forth the leverage curve for Mr. Thakral's Annual Authorization Bonus for 2020, as determined by the Compensation Committee:

Authorization Achievement Relative to Annual Authorization Goal (%)	Leverage Ratio (#)	Annual Payout Percentage Range (%)
<90	—	—
90	Threshold	50.0
91 to 99	5.0	55.0-95.0
100	Target	100.0
101 to 130	6.67	106.67-300.0
131+	1.0	301.0+

For 2020, the Annual Authorization achieved was 113.2% of the Authorization Target. Under the Annual Authorization Bonus leverage curve, this level of annual authorization achievement relative to the Annual Authorization Goal, as adjusted by the Leverage Ratio, yielded an Annual Payout Percentage of 186.7%.

2020 Incentive Compensation Awards

Actual amounts paid under the SEICP are calculated by multiplying each Named Executive Officer's target incentive opportunity under the SEICP by the sum of (i) the weighted achievement factor for the Company Performance Award and (ii) the weighted achievement factor for the Individual Performance Award. Actual amounts paid under the Annual Authorization Bonus are calculated by multiplying Mr. Thakral's target incentive opportunity under the Annual Authorization Bonus by the annual payout percentage. The following table illustrates the calculation of the 2020 annual cash incentive awards payable to each of our Named Executive Officers under the SEICP and, with respect to Mr. Thakral, the Annual Authorization Bonus.

Name	2020 Bonus Eligible Earnings ($)	Target Bonus Opportunity (%)	Target Bonus Opportunity ($)	Combined Weighted Achievement Payout Factor (%)	Actual Payout ($)
David Simmons	1,583,793	100.0	1,583,793	110.0	1,742,173
Christopher Scully	500,395	75.0	375,296	110.0	412,825
William Sharbaugh	532,101	90.0	478,891	106.0	508,822
Anshul Thakral					
SEICP	454,902	22.5	102,353	125.0	127,942
Annual Authorization Bonus	450,000	52.5	236,250	187.0	441,079
David Johnston	416,490	50.0	208,245	115.0	238,831

Long-Term Equity Incentive Compensation

In addition to base salary and annual incentive compensation, each of our Named Executive Officers is provided long-term equity incentive compensation. The use of long-term equity incentives creates a link between executive compensation and our long-term performance, thereby creating alignment between executive and stockholder interests. In 2017, following the Recapitalization (as defined below), our Board and our stockholders approved the 2017 Plan, which provided the flexibility to grant a variety of long-term equity incentive awards, including stock options, restricted stock, restricted stock units and other stock-based awards.

Certain of our Named Executive Officers, along with other key employees, were granted options to purchase shares of our common stock under the 2017 Plan (the "2017 Plan Options") at the time of the Recapitalization or, if later, at the commencement of their employment with the Company (including in 2018 with respect to Mr. Scully) or their promotion (including an additional grant in each of 2018 and 2019 with respect to Mr. Thakral), and were eligible to receive additional awards of stock options or other equity or equity-based awards under the 2017 Plan at the discretion of the Compensation Committee. Since the Recapitalization, we have not made annual or other periodic equity grants to our Named Executive Officers or other key employees. In addition, with the completion of the Company's IPO, we do not expect to grant any additional awards under the 2017 Plan. Going forward, we expect that annual awards to our Named Executive Officers will be granted under the 2020 Plan which our Board adopted, and our stockholders approved, in connection with the IPO.

Each of our Named Executive Officers has received grants of 2017 Plan Options under the 2017 Plan pursuant to one or more stock option agreements (the "2017 Plan Stock Option Agreements"). The 2017 Plan Options granted to our Named Executive Officers consist of the following proportions of time-vesting stock options (the "2017 Plan Time Options"), EBITDA performance-vesting stock options (the "EBITDA Options") and realization event options (the "Realization Event Options") (or in the case of Mr. Simmons, liquidity event options, the "Liquidity Event Options," together with the Realization Event Options, and the EBITDA Options, the "Performance-Based Options"):

Name	2017 Plan Time Option Percentage (%)	EBITDA Option Percentage (%)	Liquidity Event/Realization Event Option Percentage (%)
David Simmons	39.73	39.73	20.54
Christopher G. Scully	41.67	41.67	16.66
William J. Sharbaugh	38.89	38.89	22.22
Anshul Thakral	33.56	33.56	32.88
David Johnston	31.25	31.25	37.50

In fiscal year 2020, the Company did not make any equity awards to its Named Executive Officers because the Compensation Committee, in consultation with the Consultant, determined that the current outstanding equity for the Named Executive officers provided sufficient retention value (or "holding power").

For further discussion of the vesting and other terms of our outstanding 2017 Plan Options, see "—Narrative Disclosure to Summary Compensation Table and Grants of Plan-Based Awards Table—Terms of Equity Awards Under the 2017 Plan.

New Equity Incentive Program for Named Executive Officers in 2021

New Equity Incentive Program

With assistance from the Consultant, the Compensation Committee analyzed competitive market data relating to executive compensation programs, including equity compensation, as well as long-term incentive plan designs, including metrics and weighting, payout and performance ranges, vehicles and vesting criteria, of the Peer Group as well as from other survey data and third-party data provided by the Consultant, and approved a new long-term equity incentive program (the "Equity Incentive Program") pursuant to which the Named Executive Officers became eligible to receive awards in calendar year 2021. Pursuant to the Equity Incentive Program, the Compensation Committee has determined to make annual grants to our Named Executive Officers with a value-based mix of 50% performance-vesting restricted stock units ("Performance Stock Units") and 50% time-based stock options (the "2020 Plan Time Options"). Awards under the Equity Incentive Program will reflect market based compensation, subject to the discretion of our Compensation Committee, and are consistent with the Peer Group and broader public company practice and with our compensation objective of providing a long-term equity incentive opportunity that aligns compensation with the creation of stockholder value and helps drive the long-term strategic goals of the Company. Awards under the Equity Incentive Program will be granted under the 2020 Plan.

With respect to each participant, the Equity Incentive Program provides for an annual equity target award value, which is expressed as a percentage of each participant's annual base salary at the time of the grant. Subject to the Compensation Committee's discretion, the annual equity target award value under the Equity Incentive Program for each Named Executive Officer is as follows: Mr. Simmons (700%), Mr. Scully (250%), Mr. Sharbaugh (300%), Mr. Thakral (200%), and Dr. Johnston (200%). As part of the Company's annual compensation-setting process, at its regularly scheduled February 11, 2021 meeting, the Compensation Committee granted Performance Stock Units and 2020 Plan Time Options to each of the Named Executive Officers based on their respective target award values pursuant to the new Equity Incentive Program. In addition, in recognition of their performance contributions during 2020 and provide additional holding power, the Compensation Committee granted each of Mr. Thakral and Dr. Johnston a special equity recognition award of time-based stock options (the "Recognition Options") under the 2020 Plan, with an aggregate grant date fair value of $2 million.

The number of 2020 Plan Time Options granted under the Equity Incentive Program is determined by dividing the annual equity target award value applicable to 2020 Plan Time Options by the Black-Scholes value per option on the grant date and rounding down to the nearest whole option. The number of Performance Stock Units granted under the Equity Incentive Program is determined by dividing the annual equity target award value applicable to Performance Stock Units by the closing price of the Company's common stock as reported on Nasdaq on the date of grant and rounding down to the nearest whole Performance Stock Unit. The total number of Performance Stock Units that ultimately vest is based on an achievement factor which ranges from a 0% payout for below threshold performance, to 50% for threshold performance, to 100% for target performance, and up to 200% for maximum performance, as described further below.

2020 Plan Options

The 2020 Plan Time Options vest and become exercisable in four equal annual installments on the first four anniversaries of the date of grant or vesting reference date, and the Recognition Options (together with the 2020 Plan Time Options, the "2020 Plan Options") vest and become exercisable on the third anniversary of the date of grant, in each case, subject to the applicable Named Executive Officer's continued employment with the Company on each applicable vesting date and will expire 10 years from the date of grant or earlier if the executive's service terminates. The 2020 Plan Options have an exercise price per share equal to the closing price of the Company's common stock as reported on Nasdaq on the date of grant. If the executive's employment terminates for any reason other than for cause, unless otherwise provided under the Termination Policy (which covers situations such as a participant's termination due to death or disability, without cause within 18 months following a change in control, or as a result of the participant's retirement, each as further discussed under "Termination Policy" below), each outstanding unvested 2020 Plan Option will terminate, and each outstanding vested 2020 Plan Option will remain exercisable for 90 days thereafter (but in no event beyond the expiration of the 10 year period from the date of grant). Upon termination of the executive for cause, all vested and unvested 2020 Plan Options terminate.

Performance Stock Units

Vesting of Performance Stock Units is based on a three-year performance period beginning on January 1, 2021 and ending on December 31, 2023. The Performance Stock Units are settled following the end of the performance period based on the Company's EBITDA compound annual growth rate ("EBITDA CAGR") during the performance period relative to the EBITDA CAGR performance targets established by the Compensation Committee. The total number of Performance Stock Units that vest is based on an achievement factor which ranges from a 0% payout for below threshold performance, to 50% for threshold performance, to 100% for target performance, and up to 200% for maximum performance. For actual performance between the specified threshold, target, and maximum levels, the resulting payout percentage will be adjusted on a linear basis. The Company will deliver to the executive one share of common stock for each vested Performance Stock Unit. If the executive's employment terminates for any reason prior to the date that the Compensation Committee certifies achievement of EBITDA CAGR during the performance period, unless otherwise provided under the Termination Policy, all unvested Performance Stock Units will be forfeited.

Stock Award Granting Policy

The annual grant of stock-based awards is made under usual circumstances on the date of the first regularly scheduled Compensation Committee meeting of the calendar year (typically held in February). In addition to annual awards, other grants may be awarded at other times (1) to attract new hires and in connection with promotions, the assumption of additional responsibilities, or to otherwise recognize employees for special achievements or for retention purposes; or (2) as may be desirable and prudent in other special circumstances. We monitor and periodically review our equity grant policies to ensure compliance with plan rules and applicable law. We do not have a program, plan or practice to time our equity grants in coordination with the release of material, non-public information.

Termination Policy

In September 2020, the Compensation Committee adopted a policy with respect to the treatment of outstanding equity awards granted under the 2020 Plan for participants, including our Named Executive Officers, who undergo a termination of employment with the Company and its affiliates (the "Termination Policy"). Application of the Termination Policy with respect to equity awards held by our executive officers and directors, was approved by the Compensation Committee and the Section 16 Subcommittee. Pursuant to the Termination Policy, (1) if a participant's employment with the Company or one of its subsidiaries is terminated due to death or disability (as defined in our 2020 Plan), then (x) the participant's 2020 Plan Options will become fully vested as of the date of such termination of employment and will remain exercisable for the one year period following such termination of employment, and (y) a prorated portion of the participant's Performance Stock Units will vest, based on target performance, and settle promptly following such termination of employment, (2) if a participant's employment with the Company or one of its subsidiaries is terminated by the Company or one of its subsidiaries without cause within 18 months following a change in control (as defined in our 2020 Plan), then (x) the participant's 2020 Plan Options will become fully vested as of the date of such termination of employment and will remain exercisable for the 90 day period following such termination of employment, and (y) the participant's Performance Stock Units will fully vest, based on target performance, and will settle promptly following such termination of employment and (3) if a participant's employment with the Company or one of its subsidiaries is terminated as a result of the participant's retirement, which is defined in the Termination Policy as a participant attaining (x) a minimum age of 55 years old and at least 10 years of credited service with the Company and/or its subsidiaries or (y) a minimum age of 60 years old and at least five years of credited service with the Company and/or its subsidiaries, (i) a prorated portion of the participant's 2020 Plan Options will become vested and will remain exercisable for the one year period following such termination of employment and (ii) a prorated portion of the participant's Performance Stock Units will vest, based on actual performance at the end of the applicable performance period, and settle promptly following the completion of such applicable performance period. The description of the termination provisions relating to the 2020 Plan Options and Performance Stock Units included under "—2020 Plan Options" and "—Performance Stock Units" above assumes the application of the Termination Policy to these awards.

Other Compensation

Benefits

We provide various employee benefit programs to our Named Executive Officers, including medical, dental, vision, life insurance, accidental death & dismemberment insurance, short-term disability, long-term disability, flexible spending accounts, wellness programs and various other voluntary benefit programs. These benefit programs are generally available to all of our U.S.-based employees.

Defined Contribution Plan

We maintain a defined contribution plan that is tax-qualified under Section 401(k) of the Internal Revenue Code of 1986, as amended (the "Code"), and that we refer to as the "401(k) Retirement Savings Plan" or the "401(k) Plan." The 401(k) Plan is offered on a nondiscriminatory basis to our full-time regular employees, including our Named Executive Officers, and our eligible part-time employees. Subject to certain limitations imposed by the Code, the 401(k) Plan permits eligible employees to defer receipt of portions of their eligible compensation by making contributions, including after-tax Roth contributions and catch-up contributions.

Matching contributions to the 401(k) Plan are made in an amount equal to 50% of each participant's pre-tax contribution (up to a maximum of 3% of the participant's annual eligible earnings), subject to certain other limits. Participants are 100% vested in their individual contributions and vest 25% per year of credited vesting service in the matching contributions until they are 100% vested in matching contributions at the completion of the fourth year of credited vesting service. Participants receive one year of vesting service for each plan year in which they have at least 1,000 hours of service.

The Compensation Committee believes that matching contributions assist us in attracting and retaining talented employees and executives. The 401(k) Plan provides an opportunity for participants to save money for retirement on a tax-deferred basis and to achieve financial security, thereby promoting retention.

Perquisites and Other Benefits

In part because our headquarters are located in Wilmington, North Carolina, which is not a major commercial airport hub, and to increase the efficiency of our executives by helping them avoid the delays of commercial air travel and maximize the use of their time, we own a corporate airplane. We have a corporate airplane policy that provides guidelines for the use of any airplane owned, leased or operated by the Company, and is intended to ensure the efficient operation of the airplane. Under their Employment Agreements (as defined below), our Chief Executive Officer and Chief Operating Officer are entitled to use the corporate airplane for personal use up to 20,000 miles per year and 10,000 miles per year, respectively. If we do not own an airplane for any period of time, Mr. Sharbaugh is entitled to receive $25,000 per year, prorated for any partial year that we do not own an airplane. Our corporate aircraft policy also allows Mr. Simmons to authorize each of our other Named Executive Officers to use the corporate airplane for personal use up to 5,000 miles per year. In addition, family members of our Named Executive Officers may, in limited circumstances, accompany them on business travel on our airplane. The aggregate incremental cost associated with personal use of our airplane by our Named Executive Officers in 2020 is included in the Summary Compensation Table below and detailed in the footnotes to that table.

In addition, the Company provides relocation benefits to newly hired executives consistent with our relocation policy. The benefits we provide to our Named Executive Officers are reflected in the "All Other Compensation" column of the Summary Compensation Table and the accompanying footnote.

Tax and Accounting Implications

The Compensation Committee operates its compensation programs with the good faith intention of complying with Section 409A of the Code. We account for equity-based payments with respect to our long-term equity incentive award programs in accordance with the requirements of ASC Topic 718.

Actions Taken in Fiscal Year 2021

2021 Base Salary Increases

In February 2021, the Compensation Committee reviewed the base salaries of our Named Executive Officers, and after taking into consideration our overall financial and operating performance in the prior year, the outlook for the current year, our targets for base salary increases for all employees, inflation, changes in the scope of each Named Executive Officer's job, individual performance, performance of the segments, business units or functions for which a Named Executive Officer is responsible, other components of compensation and other relevant factors, and the benchmarking analysis conducted by the Consultant, set the base salaries set forth in the table below for 2021:

Name	2020 Base Salary ($)	2021 Base Salary ($)	2020 to 2021 Increase (%)
David Simmons	1,566,720	1,600,000	2.0
William Sharbaugh	526,365	526,365	—
Christopher Scully	495,000	525,000	6.0
Anshul Thakral	450,000	475,000	6.0
David Johnston	412,000	475,000	15.0

(1) Amounts represent the base salary levels set by the Compensation Committee. As a result of the Company's transition in the fourth quarter of 2020 from a semimonthly to biweekly payroll schedule, each of our Named Executive Officers was paid the following amounts in excess of the base salary levels set by the Compensation Committee: Mr. Simmons—$17,073; Mr. Scully—$5,394; Mr. Sharbaugh—$5,736; Mr. Thakral—$4,904; and Dr. Johnston—$4,490.

2021 Annual Cash Incentive Compensation

In February 2021, the Compensation Committee reviewed the annual cash bonus targets for our Named Executive Officers and determined to increase Mr. Simmons' annual cash bonus target for 2021 from 100% to 150% and Dr. Johnston's annual cash bonus target for 2021 from 50% to 75%.

In February 2021, the Compensation Committee also determined to change the weighting of the components of cash incentive compensation for Mr. Thakral for 2021, as follows:

	SEICP			
Name	EBITDA Performance Award Weight (%)	Gross Authorization Performance Award Weight (%)	Individual Qualitative Performance Award Weight (%)	Annual Authorization Bonus (%)
Anshul Thakral	37.5	—	12.5	50

2020 Recognition Awards

From time to time, we have made and may in the future make, special cash and equity recognition awards to our Named Executive Officers. Certain of our Named Executive Officers received these awards in connection with their performance during fiscal year 2020, as further set forth below.

In recognition of his leadership through the Company's highly successful IPO and first year as a publicly-listed company and his impact on the Company's achievement of challenging financial targets through the COVID-19 pandemic in fiscal year 2020, Mr. Scully received a special cash recognition award of $75,000. In recognition of his exceptional application of the site and patient access delivery model to accelerate the development of COVID-19 vaccine and therapies and in doing so, his meaningful impact to the success of Operation Warp Speed, as well as his oversight of both the Global Clinical Development and Laboratories Services segments, both of which outperformed during fiscal year 2020, and his contribution to the Company's over-achievement of the year's commercial targets, Mr. Sharbaugh received a special cash recognition award of $50,000. In recognition of his impact on the Company's over-achievement of challenging commercial targets through fiscal year 2020 and his impact on the Company's high win rates of work related to the COVID-19 pandemic, both from existing and new customers, leading to an expansion of the Company's customer base, Mr. Thakral received a special cash recognition award of $75,000. In addition, in recognition of his leadership of the Global Clinical Development business unit which, through his direction, played a pivotal role in the accelerated development of numerous COVID-19 vaccines and therapies (including the Emergency Use Authorization of Moderna's COVID-19 vaccine), and in recognition of his impact on the Global Clinical Development business unit exceeding its financial targets and delivering industry-leading operational metrics in fiscal year 2020, Dr. Johnston received a special cash recognition award of $125,000.

In addition, as discussed above under "Components of 2020 Compensation Program—New Equity Incentive Program for Named Executive officers in 2021," on February 11, 2021, in recognition of their performance contributions during 2020 and in order to provide additional holding power, the Compensation Committee granted each of Mr. Thakral and Dr. Johnston the Recognition Options.

2021 Equity Incentive Program

As discussed above under "Components of 2020 Compensation Program—New Equity Incentive Program for Named Executive officers in 2021," as part of the Company's annual compensation-setting process, at its regularly scheduled February 11, 2021 meeting, the Compensation Committee granted Performance Stock Units and 2020 Plan Time Options to each of the Named Executive Officers based on their respective target award values pursuant to the new Equity Incentive Program.

Other Important Compensation Policies Affecting the Named Executive Officers

Clawback Policy

In connection with the IPO, we adopted a clawback policy for incentive compensation. The Compensation Committee determined that it may be appropriate to recover annual and/or long-term incentive compensation in specified situations. Under the policy, if the Compensation Committee determines that incentive compensation of its current and former Section 16 officers (or any other current and former employee designated by the Board or the Compensation Committee) was overpaid, in whole or in part, as a result of a restatement of the reported financial results of the Company or any of its segments due to material non-compliance with financial reporting requirements (unless due to a change in accounting policy or applicable law), and such restatement was caused or contributed, directly or indirectly, by such employee's fraud, willful misconduct or gross negligence, then the Compensation Committee will determine, in its discretion, whether to seek to recover or cancel any overpayment of incentive compensation paid or awarded based on the inaccurate financial information or restated results. The clawback policy and our 2020 Plan also provide that if a covered person engages in any detrimental activity (as defined in our 2020 Plan) as determined by the Compensation Committee, the Compensation Committee may, in its sole discretion, provide for one or more of the following: (i) cancellation of any or all of such covered person's outstanding awards; or (ii) forfeiture by the covered person of any gain realized on the vesting or exercise of awards.

Stock Ownership Guidelines

In September 2020, the Compensation Committee adopted the PPD, Inc. Executive Stock Ownership Guidelines, to be effective as of January 2021 (the "Stock Ownership Guidelines"), because it believes that the Company's executive officers should own and hold shares of the Company's common stock to further align their interests with the long-term interests of the Company's stockholders and further promote the Company's commitment to sound corporate governance.

Each executive officer is required to hold the number of shares of the Company's qualifying common stock valued at a multiple of such person's annual base salary or annual cash retainer (excluding committee retainers), as the case may be, in the amounts listed below:

Position	Individual Guideline Level
Chief Executive Officer	6x annual base salary
Other Executive officers	3x annual base salary

Each executive officer has five years from becoming subject to the guidelines to accumulate sufficient equity and achieve the ownership required by the Stock Ownership Guidelines. Subject to certain excepted dispositions, any executive officer who has not met or maintained the threshold after the date on which it becomes applicable will be required to retain 50% of (i) all vested performance-based vesting restricted stock units and (ii) vested and exercised options, in each case as awarded to him or her under the 2020 Plan (net of stock sold to satisfy the exercise price and applicable taxes). As of the Record Date, all of the Company's executive officers are in compliance with the relevant Stock Ownership Guidelines (either because they fulfill the ownership requirements or remain within the five-year period for fulfilling the ownership requirements).

Restrictions on Hedging and Pledging

The Board believes that it is undesirable for PPD's directors, officers, employees and independent contractors to engage in hedging or pledging transactions that lock in the value of holdings in the equity securities of PPD or its affiliates, including our common stock, as such transactions allow the insiders to own PPD's equity securities without the full risks and rewards of ownership and potentially separate the insiders' interests from the public stockholders.

The Board has therefore included anti-hedging and anti-pledging provisions as part of PPD's Insider Trading Policy. Directors, officers, employees and independent contractors of PPD and its affiliates are generally prohibited from: (i) selling PPD's securities short, (ii) purchasing PPD's securities on margin, or borrowing against any account in which the Company's securities are held, or pledging PPD's securities as collateral for a loan, without first obtaining pre-clearance from PPD, and (iii) engaging in any transactions (including prepaid variable forward contracts, equity swaps, collars and exchange funds) that are designed to hedge or offset any decrease in the market value of PPD's equity securities.

Compensation Committee Report

The Compensation Committee has reviewed and discussed the Compensation Discussion and Analysis with management. Based on its review and discussion with management, the Compensation Committee recommended to the Board that the Compensation Discussion and Analysis be included in the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2020 and in the Proxy Statement for the 2021 Annual Meeting of Stockholders.

Submitted by the Compensation Committee of our Board:

P. Hunter Philbrick, Chair
Jeffrey Kindler
Maria Teresa Hilado
Stephen Wise

Executive Compensation

Summary Compensation Table

The following table summarizes the total compensation paid or accrued by the Named Executive Officers for fiscal years 2020, 2019 and 2018:

2020 SUMMARY COMPENSATION TABLE

nd Principal Position	Year	Salary ($)[1]	Bonus ($)[2]	Option Awards ($)[3]	Non-Equity Incentive Plan Compensation ($)[4]	All Other Compensation ($)[5]	Total ($)
immons	2020	1,583,793	—	—	1,742,173	91,564	3,417,530
rman and Chief Executive Officer	2019	1,566,720	—	4,540,218	1,445,299	107,602	7,659,839
	2018	1,566,720	—	—	1,488,384	37,976	3,093,080
her Scully	2020	500,394	75,000	—	412,825	16,580	1,004,799
utive Vice President and Chief Financial Officer	2019	495,000	75,000	689,183	342,478	8,400	1,610,061
	2018	[6] 290,654	400,000	3,187,399	—	90,942	3,968,995
Sharbaugh	2020	532,101	50,000	—	508,822	27,858	1,118,781
f Operating Officer	2019	521,662	—	1,174,857	421,849	47,305	2,165,673
	2018	507,291	—	—	389,980	37,124	934,395
Thakral	2020	454,904	75,000	—	569,020	35,216	1,134,140
tive Vice President, Chief Commercial Officer and President of Evidera[8]	2019	[7] 408,356	—	697,152	329,249	8,400	1,443,157
	2018	345,000	—	108,503	607,157	8,250	1,068,910
hnston	2020	416,490	125,000	—	238,831	8,550	788,871
utive Vice President of Global Clinical Development							

(1) As a result of the Company's transition in the fourth quarter of 2020 from a semimonthly to biweekly payroll schedule, amounts reported for 2020 include the following amounts paid to each of our Named Executive Officers in excess of the base salary levels set by the Compensation Committee: Mr. Simmons—$17,073; Mr. Scully—$5,394; Mr. Sharbaugh—$5,736; Mr. Thakral—$4,904; and Dr. Johnston—$4,490.

(2) Amounts reported for 2020 represent the $75,000 special cash recognition award paid to Mr. Scully in recognition of his leadership through our highly successful IPO and first year as a publicly-listed company and his impact on the Company's achievement of challenging financial targets through the COVID-19 pandemic, the $50,000 special cash recognition award paid to Mr. Sharbaugh in recognition of his exceptional application of the site and patient access delivery model to accelerate the development of COVID-19 vaccine and therapies and in doing so, his meaningful impact to the success of Operation Warp Speed, as well as his oversight of both the Global Clinical Development and Laboratories Services segments, both of which outperformed during fiscal year 2020, and his contribution to the Company's over-achievement of the year's commercial targets, the $75,000 special cash recognition award paid to Mr. Thakral in recognition of his impact on the Company's over-achievement of challenging commercial targets through fiscal year 2020 and his impact on the Company's high win rates of work related to the COVID-19 pandemic, both from existing and new customers, leading to an expansion of the Company's customer base, and the $125,000 special cash recognition award paid to Dr. Johnston in recognition of his leadership of the Global Clinical Development business unit which, through his direction, played a pivotal role in the accelerated development of numerous COVID-19 vaccines and therapies and in recognition of his impact on the Global Clinical Development business unit exceeding its financial targets and delivering industry-leading operational metrics. Amount reported for 2019 represents the $75,000 special cash recognition award paid to Mr. Scully in recognition of his leadership and performance during 2019 in connection with our IPO. Amount reported for 2018 represents Mr. Scully's sign-on bonus payment of $175,000 paid to him at the time he commenced employment with the Company in May 2018, which was subject to repayment in the event of Mr. Scully's resignation without good reason or termination by us for cause, in either case prior to May 15, 2019, and a fixed bonus of $225,000 paid to him in March 2019, in lieu of his participation in the SEICP for 2018.

(3) As described in "Narrative Disclosure to Summary Compensation Table and Grants of Plan-Based Awards Table—2019 Cash Dividends," in fiscal year 2019, changes to the stock options required in connection with the May 2019 Dividend and the November 2019 Dividend were accounted for as modifications under ASC Topic 718. Amounts reported for 2019 reflect the incremental fair values calculated in accordance with ASC Topic 718 with respect to each dividend for each of our Named Executive Officers as follows:

Named Executive Officer	May 2019 Dividend	November 2019 Dividend
David Simmons	$ 4,361,137	$ 179,081
Christopher Scully	661,469	27,714
William Sharbaugh	1,128,517	46,340
Anshul Thakral	388,154	16,495

In addition, the amount reported for 2019 for Mr. Thakral includes the aggregate grant date fair value, determined in accordance with ASC Topic 718 of $292,503, for his option awards granted in 2019. Amounts reported for 2018 and 2019 represent the aggregate grant date fair value of option awards determined in accordance with ASC Topic 718. The Realization Event Options granted in 2018 and 2019 are subject to market conditions and an implied performance condition as defined under applicable accounting standards. The grant date fair values of the Realization Event Options and EBITDA Options were computed based on the probable outcome with respect to performance, which assumes 100% of the EBITDA Target is achieved (the highest level of EBITDA achievement), for the EBITDA Options. Achievement of the performance conditions for the Realization Event Options was not deemed probable on the applicable grant date and, accordingly, no value was included in the table for these awards pursuant to the SEC's disclosure rules. Assuming achievement of the performance conditions, the grant date fair values of the Realization Event Options were $637,482 for Mr. Scully, $108.503 for Mr. Thakral's 2018 grant and $146,251 for Mr. Thakral's 2019 grant. See Note 3, "Stock-based Compensation," of our audited consolidated financial statements included elsewhere in this Annual Report on Form 10-K for information regarding the assumptions used to value these awards.

(4) Amounts reported for 2020 represent the 2020 annual cash incentive awards earned pursuant to our SEICP (and Mr. Thakral's Annual Authorization Bonus). Amounts reported for 2019 represent the 2019 annual cash incentive awards earned pursuant to our SEICP (and Mr. Thakral's Annual Authorization Bonus). Amounts reported for 2018 represent the 2018 annual cash incentive awards earned pursuant to our SEICP (and Mr. Thakral's Annual Authorization Bonus). Mr. Scully, our Chief Financial Officer who commenced service in May 2018, received a fixed bonus of $225,000 in lieu of his participation in the SEICP for 2018, which is included in the "Bonus" column for 2018. Effective beginning in 2019, Mr. Scully's Employment Agreement provides for a targeted annual cash bonus of 75% of annual base salary under the SEICP. For additional information, see "—Compensation Discussion and Analysis—2020 Annual Cash Incentive Compensation."

(5) Other compensation for 2020 includes the amounts set forth in the following table:

Name	Year	Employer Contribution to 401(k) ($)	Company Aircraft ($)[a]	Total ($)
David Simmons.	2020	8,550	83,014	91,564
Christopher Scully	2020	8,550	8,030	16,580
William Sharbaugh	2020	8,550	19,308	27,858
Anshul Thakral	2020	8,550	26,666	35,216
David Johnston	2020	8,550	—	8,550

(a) Amounts represent the aggregate incremental cost of personal use of our airplane. Incremental costs include fuel costs, crew travel expenses, passenger catering expenses, trip-related maintenance costs, landing and facility fees, trip-related hangar and parking costs and other similar variable costs. In 2020, Mr. Simmons used our airplane for personal use for a total of 14,398 miles, Mr. Scully used our airplane for personal use for 1,217 miles, Mr. Sharbaugh used our airplane for personal use for a total of 3,655 miles, Mr. Thakral used our airplane for personal use for a total of 4,848 miles. In addition, family members of our Named Executive Officers have, in limited circumstances, accompanied them on business travel on our airplane for which we incurred de minimis incremental costs.

(6) Mr. Scully commenced employment with the Company in May 2018. Amount represents the portion of Mr. Scully's annual base salary paid to him in 2018.

(7) Mr. Thakral's annual base salary was increased from $400,000 to $450,000, effective November 1, 2019.

(8) In addition to his role as Executive Vice President, Chief Commercial Officer, effective as of February 1, 2021, Mr. Thakral was appointed to the role of President of Evidera.

Grants of Plan-Based Awards in 2020

The following table provides information with respect to grants of non-equity incentive awards to our Named Executive Officers during the 2020 fiscal year under the SEICP, and with respect to Mr. Thakral, under his Annual Authorization Bonus. We did not grant equity awards to any of our Named Executive Officers in 2020.

2020 GRANTS OF PLAN-BASED AWARDS

	Estimated Future Payouts Under Non-Equity Incentive Plan Awards[1]		
Name	**Threshold ($)[2]**	**Target ($)**	**Maximum ($)**
David Simmons			
2020 SEICP	76,022	1,583,793	2,633,056
Christopher Scully			
2020 SEICP	18,014	375,296	623,929
William J. Sharbaugh			
2020 SEICP	22,987	478,891	796,156
Anshul Thakral			
2020 SEICP	4,094	102,353	153,530
Annual Authorization Bonus	118,125	236,250	[3] —
David Johnston			
2020 SEICP	8,330	208,245	325,383

(1) The amounts reported in these columns reflect the cash incentive award opportunity range under our SEICP and, for Mr. Thakral, under his Annual Authorization Bonus, for 2020, the terms of which are summarized under "—Compensation Discussion and Analysis—2020 Annual Cash Incentive Compensation" above.

(2) For purposes of this table, the "Threshold" amount shown for the SEICP represents an assumption that the Named Executive Officer only earns the threshold payout under the EBITDA Performance Award, and the Company did not achieve the threshold level for the Gross Authorization Performance Award and there was no payout under the Individual Qualitative Performance Award.

(3) Mr. Thakral's Annual Authorization Bonus does not provide for a maximum payout amount.

Narrative Disclosure to Summary Compensation Table and Grants of Plan-Based Awards Table

Employment Agreements with Named Executive Officers

The following are the material provisions of the employment agreements for each of the Named Executive Officers (collectively, the "Employment Agreements").

Employment Agreement with David Simmons

Pharmaceutical Product Development, LLC and our predecessor entity, Jaguar Holding Company I, entered into an Employment Agreement with Mr. Simmons on May 17, 2012 (which was subsequently assigned to, and assumed by, the Company on May 11, 2017 and amended pursuant to that Amendment No. 1, dated April 1, 2018, as amended, the "Simmons Employment Agreement") pursuant to which Mr. Simmons serves as our Chief Executive Officer and the chairman of our Board. The Simmons Employment Agreement is extended automatically on December 31 of each year for successive 12-month periods unless either party delivers notice of non-renewal to the other no later than 60 days before the end of the applicable term. The Simmons Employment Agreement provides that Mr. Simmons' base salary may not be decreased without his consent and sets forth his minimum target bonus amount for his annual cash bonus award opportunity, as reflected in the discussion above. During his employment and for 24 months following termination, Mr. Simmons' employment agreement prohibits him from competing with our business and from soliciting our employees, customers or suppliers to terminate their employment or arrangements with the Company. Mr. Simmons is also party to a proprietary information and inventions agreement which contains a perpetual confidentiality covenant and an intellectual property assignment provision in favor of the Company. The severance provisions contained in Mr. Simmons' employment agreement are described below under "—Potential Payments Upon Termination or Change in Control—Severance Benefits Upon Termination."

Employment Agreements with other Named Executive Officers

Our other Named Executive Officers have Employment Agreements (each, as amended and/or restated, a "Named Executive Officer Employment Agreement") as follows:

- On May 2, 2018, Pharmaceutical Product Development, LLC and the Company entered into a Named Executive Officer Employment Agreement with Mr. Scully, effective for employment as of May 15, 2018, pursuant to which Mr. Scully serves as our Executive Vice President and Chief Financial Officer;
- On April 10, 2012, Pharmaceutical Product Development, LLC and Jaguar Holding Company I entered into a Named Executive Officer Employment Agreement with Mr. Sharbaugh, which was subsequently amended pursuant to that Amendment No. 1, dated February 10, 2016, assigned to, and assumed by, the Company on May 11, 2017 and further amended pursuant to that Amendment No. 2, dated March 1, 2019 pursuant to which Mr. Sharbaugh serves as our Chief Operating Officer;
- On June 15, 2016, Pharmaceutical Product Development, LLC and Jaguar Holding Company I entered into a Named Executive Officer Employment Agreement with Mr. Thakral, effective as of June 27, 2016, which was subsequently amended pursuant to that Amendment No. 1, dated September 28, 2016, assigned to, and assumed by, the Company on May 11, 2017 and further amended pursuant to that Amendment No. 2, dated April 1, 2018 and that Amendment No. 3 dated January 1, 2019, pursuant to which Mr. Thakral served as our Executive Vice President, Global Head of PPD Biotech. On November 26, 2019, Pharmaceutical Product Development, LLC and the Company entered into an amended and restated Named Executive Officer Employment Agreement with Mr. Thakral, effective as of November 1, 2019, which supersedes his then-existing Named Executive Officer Employment Agreement, which was subsequently amended by Amendment No. 1 dated February 23, 2021 and effective as of February 1, 2021, and pursuant to which Mr. Thakral serves as our Executive Vice President, Chief Commercial Officer and President of Evidera; and
- On May 22, 2013, Pharmaceutical Product Development, LLC and Jaguar Holding Company I entered into a Named Executive Officer Employment Agreement with Dr. Johnston, which was subsequently amended pursuant to that Amendment No. 1, dated December 15, 2016, assigned to, and assumed by, the Company on May 11, 2017, further amended pursuant to that Amendment No. 2, dated April 1, 2018, and further amended by Amendment No. 3 dated February 23, 2021 and effective as of February 1, 2021, pursuant to which Dr. Johnston serves as our Executive Vice President of Global Clinical Development.

Mr. Scully's Named Executive Officer Employment Agreement has an initial term which will expire on December 31, 2021 and will extend automatically for successive 12-month periods thereafter unless either party delivers a notice of non-renewal to the other no later than 60 days before the end of the applicable term. Each other Named Executive Officer Employment Agreement is extended automatically on December 31 each year for successive 12-month periods (except for Mr. Thakral whose Named Executive Officer Employment Agreement is extended automatically on June 27 of each year and Dr. Johnston whose Named Executive Officer Employment Agreement is extended automatically on May 22 of each year) unless either party delivers notice of non-renewal to the other no later than 60 days before the end of the applicable term. Each Named Executive Officer Employment Agreement provides that the base salary of the applicable Named Executive Officer may not be decreased without his consent and sets forth his minimum target bonus amount for his annual cash bonus award opportunity, as reflected in the discussion above. Each Named Executive Officer Employment Agreement provides that during the employment of the applicable Named Executive Officer and for an 18 month period following termination thereof (except for Dr. Johnston, which provides for a 12 month period following termination thereof), such Named Executive Officer is prohibited from competing with our business and from soliciting our employees, customers or suppliers to terminate their employment or arrangements with the Company. Each Named Executive Officer is also party to a proprietary information and inventions agreement which contains a perpetual confidentiality covenant and an intellectual property assignment provision in favor of the Company. The severance provisions contained in the Named Executive Officer Employment Agreements are described below under "—Potential Payments Upon Termination or Change in Control—Severance Benefits Upon Termination."

Terms of Equity Awards under the 2017 Plan

2017 Plan Time Options

Each Named Executive Officer received 2017 Plan Time Options pursuant to his respective option agreement(s). The 2017 Plan Time Options vest and become exercisable in five equal annual installments on the first five anniversaries of the date of grant or vesting reference date, subject to the applicable Named Executive Officer's continued employment with the Company on each applicable vesting date.

For additional information on changes made to certain 2017 Plan Time Options in connection with the May 2019 Dividend and the November 2019 Dividend, see “Narrative Disclosure to Summary Compensation Table and Grants of Plan-Based Awards Table—2019 Cash Dividends”.

EBITDA Options

Each Named Executive Officer received EBITDA Options pursuant to his respective 2017 Plan Stock Option Agreement. The EBITDA Options vest in five equal annual installments on December 31 of each year, subject to our attainment of a predetermined EBITDA (as defined in the 2017 Plan Stock Option Agreement) target for the applicable year and become exercisable on the date our Compensation Committee determines whether such EBITDA target has been attained, subject to the Named Executive Officer’s continued employment on December 31 of the applicable year. Actual EBITDA attained for the applicable year must be equal to or greater than 90% of the EBITDA target for any portion of the annual installment to vest. The annual installment will vest at 50% of the EBITDA Options if 90% of the EBITDA target is achieved; for each 1% increase in EBITDA achievement over 90%, the annual installment vesting percentage will increase by 5% up to a maximum of 100%. To the extent all or a portion of the installment of EBITDA Options scheduled to vest for any year do not vest due to failure to attain the EBITDA target described above, the unvested EBITDA Options from that installment are eligible for catch-up vesting in a future year upon attainment of the EBITDA target for that future year.

The EBITDA targets for the EBITDA Options were originally approved in 2017. In 2020, the Compensation Committee updated the EBITDA targets for 2020, 2021, 2022 and 2023. In making the determination to update the EBITDA targets for 2020, 2021, 2022 and 2023, the Compensation Committee considered that in 2018 the Company adopted ASC 606, that in 2019 the Company consummated several acquisitions, and that in 2020 the Company became a public company, resulting in its incurring incremental costs associated with operating as a public company. The updated EBITDA target for the 2020 vesting installment was $856.2 million. Actual EBITDA achieved in 2020 was $875.7 million, or 102.3% of the 2020 EBITDA target, which resulted in the 2020 vesting installment to vest at 100%. The annual installment vesting percentage for each of the 2018 and 2019 EBITDA Option vesting installments was 95%, such that 5% of each of the 2018 and 2019 installments of EBITDA Options did not vest but were eligible for catch-up vesting in a future year upon attainment of the EBITDA target for that future year. Upon attainment of 102.3% of the 2020 EBITDA target, resulting in the 2020 EBITDA Option installment vesting at 100%, the unvested portion of the 2018 and 2019 EBITDA Option vesting installments vested.

For additional information on changes made to certain EBITDA Options in connection with the May 2019 Dividend and the November 2019 Dividend, see “Narrative Disclosure to Summary Compensation Table and Grants of Plan-Based Awards Table—2019 Cash Dividends”.

Realization Event Options and Liquidity Event Options

Each Named Executive Officer (other than Mr. Simmons) received Realization Event Options pursuant to his respective 2017 Plan Stock Option Agreement and Mr. Simmons received Liquidity Event Options pursuant to his 2017 Plan Stock Option Agreement. The Realization Event Options and Liquidity Event Options held by our Named Executive Officers, as applicable, vest and become exercisable in the event our Sponsors receive proceeds (i) of at least 2.3 times their investment in our common stock and (ii) that result in an annual, compounded pre-tax internal rate of return of at least 15% on their investment (with respect to Mr. Simmons, a “Simmons Liquidity Event” and with respect to each other Named Executive Officer, a “Realization Event”). In addition, in the case of Mr. Simmons, if a Simmons Liquidity Event or, in the case of the other Named Executive Officers, a Change of Control Transaction (as defined in the Stockholders Agreement described below under “–Call Rights and Put Rights”), has not occurred prior to the third anniversary of the IPO, the Liquidity Event Options or the Realization Events, as applicable, will vest at such time if (i) the effective multiple on invested capital of our Sponsors’ investment in our common stock is at least 2.3 times and (ii) our Sponsors’ effective annual, compounded pre-tax internal rate of return is at least 15% on their investment in our common stock.

Discretionary Authority of Compensation Committee

The Compensation Committee has the ability to make all determinations under the 2017 Plan in its sole discretion. In addition, pursuant to the 2017 Plan Stock Option Agreements of our Named Executive Officers, the Compensation Committee has the ability in its discretion to accelerate the vesting of any portion of a 2017 Option that does not otherwise vest. This discretionary authority allows the Compensation Committee to determine that the Performance-Based Options granted to our Named Executive Officers have vested absent attainment of the relevant performance goal(s) under the relevant terms of the 2017 Plan Stock Option Agreements, or to reduce or increase the amount of Performance-Based Options that would have vested given the level of attainment of the relevant performance goal(s) under the relevant terms of the 2017 Plan Stock Option Agreements. In fiscal year 2020, the Compensation Committee did not exercise this discretionary authority.

Forfeiture and Acceleration

In connection with a termination for "cause" (as defined in the 2017 Plan) all unvested options will be immediately forfeited. In addition, other than the potential vesting that may occur in connection with certain terminations or other events, all unvested options will be forfeited upon the Named Executive Officer's termination of employment (other than for "cause"). Following certain terminations or other events, the Named Executive Officers are entitled to accelerated vesting of their stock options as further described below under "—Potential Payments Upon Termination or Change in Control—Accelerated Vesting of Equity Awards."

Exercise of Options

Vested 2017 Plan Options held by our Named Executive Officers may not be exercised to any extent by anyone after the first to occur of the following events: (i) the tenth anniversary of the date of grant of the 2017 Plan Options; (ii) except for such longer period of time as our Compensation Committee may otherwise approve, 90 days following such Named Executive Officer's termination of employment for any reason other than cause, death or "disability" (as defined in the 2017 Plan) (or, in the case of 2017 Plan Options which vest following such termination of employment, 90 days following the date on which such 2017 Plan Options become vested); (iii) except as our Compensation Committee may otherwise approve, the Named Executive Officer's termination of employment for cause; or (iv) except for such longer period of time as our Compensation Committee may otherwise approve, 12 months following the Named Executive Officer's termination of employment by reason of the Named Executive Officer's death or disability; provided, however, that with respect to any 2017 Plan Time Options held by Mr. Simmons that vest as a result of the achievement of the EBITDA target for the EBITDA Options in the year in which such termination of employment occurs, the exercise period in clause (iv) would be extended until the first anniversary of the date on which our Compensation Committee certified achievement of such EBITDA target.

Call Rights and Put Rights

In connection with their initial equity awards, each of our Named Executive Officers became party the Stockholders Agreement. Pursuant to the Stockholders Agreement, the Company and our Sponsors have the right to repurchase the shares of our common stock (including those issued in respect of the exercise of options) held by our Named Executive Officers (i) in connection with any termination of employment, during the period beginning on the date of such termination of employment and ending on the first anniversary of the later of (x) the date of such termination of employment or (y) as applicable, the date of the last exercise of any options or (ii) in connection with any breach of the restrictive covenants applicable to such Named Executive Officer, during the period beginning on the date of such breach and ending on the first anniversary of such date (the "call right").

The purchase price payable upon exercise of the call right is (i) in the event of a termination event other than a termination of employment by the Company for cause (as defined in the Stockholders Agreement), the fair market value of our common stock as of the date the call right is being exercised or (ii) in the event of any termination of employment by the Company for cause, or in connection with any breach of the restrictive covenants applicable to such Named Executive Officer, the lesser of (x) the fair market value of our common stock as of the date the call right is being exercised and (y) the aggregate purchase price paid for such shares of our common stock by such Named Executive Officer, as proportionately adjusted for any splits, reverse stock splits, combinations, recapitalizations or similar transactions. Notwithstanding the foregoing, the call right applicable to shares of our common stock held by Mr. Simmons terminated on the date of our IPO.

We entered into a side letter to the Stockholders Agreement with each of our Named Executive Officers, which, in part, provided each of our Named Executive Officers with the right to cause the Company to repurchase all, or any portion of, the shares of our common stock held by such Named Executive Officer at fair market value following certain terminations of employment (the "put right"). For the one-year period following the applicable Named Executive Officer's termination of employment (i) as a result of his death or disability, (ii) with respect to Messrs. Simmons and Sharbaugh, by the Company without cause (as defined in the applicable Employment Agreement and with respect to Mr. Sharbaugh, solely with respect to shares of common stock issued to him in connection with the recapitalization), or (iii) with respect to Mr. Simmons, by him for good reason, the Named Executive Officer (or his guardian, executive, administrator or applicable trustee generally having control over the shares of common stock held by such Named Executive Officer) had the right to exercise the put right. The put right for each Named Executive Officer terminated on the first anniversary of the IPO.

2019 Cash Dividends

In May 2019, our Board declared and paid a cash dividend of $3.89 per share of the Company's outstanding common stock (the "May 2019 Dividend"). Under the terms of the 2017 Plan, an adjustment to the then outstanding 2017 Plan Time Options and Performance-Based Options was determined to be equitable and necessary in order to prevent the dilution or enlargement of benefits under the 2017 Plan. Therefore, in connection with the May 2019 Dividend, we treated the 2017 Plan Options then held by all employees, including our Named Executive Officers, as follows:

- With respect to 2017 Plan Time Options (both vested and unvested) and EBITDA Options (vested only), the Named Executive Officers were each entitled to a payment in an amount equal to (x) the number of shares underlying such 2017 Plan Time Options and EBITDA Options multiplied by (y) the May 2019 Dividend amount, less applicable tax withholdings, and payable in accordance with the following schedule:
    - 1/3 of such payment was paid in May 2019;
    - 1/3 of such payment was paid in October 2020; and
    - 1/3 of such payment will be paid to the applicable Named Executive Officer in September 2021, subject to (x) the applicable Named Executive Officer's continued employment through such date and (y) the accelerated vesting provisions included in the applicable 2017 Plan Stock Option Agreement.
- With respect to outstanding unvested Performance-Based Options, in fiscal year 2019, we reduced the per share exercise prices of such 2017 Plan Options by the per share May 2019 Dividend amount.

As of December 31, 2020, the remaining unpaid stock option bonuses for our Named Executive Officers were as follows: Mr. Simmons—$3,239,186; Mr. Scully—$497,432; Mr. Sharbaugh—$838,193; Mr. Thakral—$286,081; and Dr. Johnston—$299,355.

In November 2019, our Board declared and paid a cash dividend of $0.57 per share of the Company's outstanding common stock (the "November 2019 Dividend"). Under the terms of the 2017 Plan, an adjustment to the then outstanding 2017 Plan Time Options and Performance-Based Options was determined to be equitable and necessary in order to prevent the dilution or enlargement of benefits under the 2017 Plan. Therefore, in connection with the November 2019 Dividend, we treated the 2017 Plan Options then held by all employees, including our Named Executive Officers, as follows:

- With respect to 2017 Plan Time Options (both vested and unvested) and EBITDA Options (vested only), the Named Executive Officers were each entitled to a payment in an amount equal to (x) the number of shares underlying such 2017 Plan Time Options and EBITDA Options multiplied by (y) the November 2019 Dividend amount, less applicable tax withholdings, and such payment was made in December 2019.
- With respect to outstanding unvested Performance-Based Options, in fiscal year 2019, we reduced the per share exercise prices of such options by the per share November 2019 Dividend amount.

In accordance with FASB Accounting Standards Codification Topic 718, Compensation—Stock Compensation ("ASC Topic 718"), changes to the 2017 Plan Options required in connection with each of the May 2019 Dividend and the November 2019 Dividend were accounted for as modifications in fiscal year 2019. Under ASC Topic 718, only the modifications to the 2017 Plan Time Options and the vested EBITDA Options resulted in incremental compensation expense and incremental fair value. In accordance with the SEC's disclosure rules, for fiscal year 2019, such incremental fair value for each of our Named Executive Officers was reflected in the "Option Awards" column of the Summary Compensation Table.

Outstanding Equity Awards at 2020 Year End

The following table includes certain information with respect to stock options held by the Named Executive Officers as of December 31, 2020:

OUTSTANDING EQUITY AWARDS AT 2020 FISCAL YEAR END

		Option Awards[1]				
	Grant Date	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Equity Incentive Plan Awards: Number of Securities Underlying Unexercised Unearned Options (#)	Option Exercise Price ($)[2]	Option Expiration Date
immons						
Time Options[3]	5/11/2017	796,318	770,876		15.05	5/11/2027
EBITDA Options[3]	5/11/2017	751,605			15.05	5/11/2027
EBITDA Options[3]	5/11/2017	710,148		385,441	10.59	5/11/2027
Liquidity Event Options[3]	5/11/2017			996,824	10.59	5/11/2027
ɔher Scully						
Time Options[4]	6/21/2018	128,986	193,478		15.51	6/21/2028
EBITDA Options[4]	6/21/2018	61,268			15.51	6/21/2028
EBITDA Options[4]	6/21/2018	132,211		128,985	11.05	6/21/2028
Realization Event Options[4]	6/21/2018			128,986	11.05	6/21/2028
Sharbaugh						
Time Options[3]	5/11/2017	279,111	186,073		15.05	5/11/2027
EBITDA Options[3]	5/11/2017	181,420			15.05	5/11/2027
EBITDA Options[3]	5/11/2017	190,725		93,038	10.59	5/11/2027
Realization Event Options[3]	5/11/2017			265,819	10.59	5/11/2027
Thakral						
Time Options[3]	5/11/2017	89,715	59,808		15.05	5/11/2027
EBITDA Options[3]	5/11/2017	58,313			15.05	5/11/2027
EBITDA Options[3]	5/11/2017	61,303		29,907	10.59	5/11/2027
Realization Event Options[3]	5/11/2017			132,909	10.59	5/11/2027
Time Options[5]	12/14/2018	5,143	7,710		19.45	12/14/2028
EBITDA Options[5]	12/14/2018	5,142		7,711	14.99	12/14/2028
Realization Event Options[5]	12/14/2018			25,707	14.99	12/14/2028
Time Options[6]	11/26/2019	4,609	18,432		21.70	11/26/2029
EBITDA Options[6]	11/26/2019	4,609		18,432	21.70	11/26/2029
Realization Event Options[6]	11/26/2019			23,041	21.70	11/26/2029
ɔhnston						
Time Options[3]	5/11/2017	99,684	66,453		15.05	5/11/2027
EBITDA Options[3]	5/11/2017	64,793			15.05	5/11/2027
EBITDA Options[3]	5/11/2017	68,115		33,228	10.59	5/11/2027
Realization Event Options[3]	5/11/2017			199,364	10.59	5/11/2027

(1) The detailed grant and vesting provisions of the 2017 Plan Options are discussed above in "—Narrative Disclosure to Summary Compensation Table and Grants of Plan-Based Awards Table—Terms of Equity Awards Under the 2017 Plan."

(2) In connection with each of the May 2019 Dividend and the November 2019 Dividend, the exercise prices for then outstanding unvested Performance-Based Options were reduced by the per share May 2019 Dividend amount and the per share November 2019 Dividend amount, respectively. See "—2019 Cash Dividends."

(3) Represents 2017 Plan Options granted to Messrs. Simmons, Sharbaugh, Thakral and Johnston in connection with the recapitalization. The remaining two annual installments of 2017 Plan Time Options vest equally on May 11, 2021 and 2022, subject to each respective individual's continued employment on each vesting date. A portion of the unvested 2017 Plan Time Options granted to Mr. Simmons vested as of immediately prior to the IPO such that 50% of the total number of 2017 Plan Time Options granted to Mr. Simmons were vested and exercisable as of immediately prior to the IPO. 100% of the EBITDA Options vesting installment vested on December 31, 2020, resulting in the catch-up vesting of 5% of the 2018 and 2019 EBITDA Options vesting installments. The remaining annual installment of EBITDA Options vests on December 31, 2021, subject to attainment of the predetermined EBITDA target for the 2021 fiscal year. The Liquidity Event Options granted to Mr. Simmons vest immediately prior to a Simmons Liquidity Event and the Realization Event Options granted to Messrs. Sharbaugh, Thakral and Johnston vest immediately prior to a Realization Event, each as described in more detail under "—Narrative Disclosure to Summary Compensation Table and Grants of Plan-Based Awards Table—Terms of Equity Awards Under the 2017 Plan" above.

(4) Represents 2017 Plan Options granted to Mr. Scully in connection with the commencement of his employment in May 2018. The remaining three annual installments of 2017 Plan Time Options vest equally on May 15, 2021, 2022 and 2023, subject to his continued employment on each vesting date. 100% of the EBITDA Options vesting installment vested on December 31, 2020, resulting in the catch-up vesting of 5% of the 2019 EBITDA Options vesting installment. The remaining three annual installments of EBITDA Options vest equally on December 31, 2021 and 2022, subject to attainment of the predetermined EBITDA target for the 2021 and 2022 fiscal years. The Realization Event Options vest immediately prior to a Realization Event, as described in more detail under "—Narrative Disclosure to Summary Compensation Table and Grants of Plan-Based Awards Table—Terms of Equity Awards Under the 2017 Plan" above.

(5) Represents 2017 Plan Options granted to Mr. Thakral in connection with his promotion to Executive Vice President, Global Head of PPD Biotech, effective January 2019. The three remaining annual installments of 2017 Plan Time Options vest equally on December 14, 2021, 2022 and 2023, subject to his continued employment on each vesting date. 100% of the EBITDA Options vesting installment vested on December 31, 2020, resulting in the catch-up vesting of 5% of the 2019 EBITDA Options vesting installment. The remaining three annual installments of EBITDA Options vest equally on December 31, 2021, 2022 and 2023, subject to our attainment of the predetermined EBITDA target for the 2021, 2022 and 2023 fiscal years. The Realization Event Options vest immediately prior to a Realization Event, as described in more detail under "—Narrative Disclosure to Summary Compensation Table and Grants of Plan-Based Awards Table—Terms of Equity Awards Under the 2017 Plan" above.

(6) Represents 2017 Plan Options granted to Mr. Thakral in connection with his promotion to Executive Vice President, Chief Commercial Officer, effective November 2019. The remaining four annual installments of 2017 Plan Time Options vest equally on November 26, 2021, 2022, 2023 and 2024, subject to his continued employment on each vesting date. 100% of the EBITDA Options vesting installment vested on December 31, 2020. The remaining four annual installments of EBITDA Options vest equally on December 31, 2021, 2022, 2023 and 2024, subject to our attainment of the predetermined EBITDA target for the 2021, 2022, 2023 and 2024 fiscal years. The Realization Event Options vest immediately prior to a Realization Event, as described in more detail under "—Narrative Disclosure to Summary Compensation Table and Grants of Plan-Based Awards Table—Terms of Equity Awards Under the 2017 Plan" above.

Option Exercises and Stock Vested During Fiscal Year 2020

The following table includes information regarding the amounts received by our Named Executive Officers upon exercise of options during 2020:

	Option Awards	
Name	**Number of Shares Acquired on Exercise (#)**	**Value Realized on Exercise(1) ($)**
David Simmons	260,000	2,999,750
Christopher Scully	—	—
William Sharbaugh	—	—
Anshul Thakral	—	—
David Johnston	—	—

(1) For the exercise of 180,000 options by Mr. Simmons on January 17, 2020, prior to our IPO, represents the value of exercised options calculated by multiplying (i) the gross number of shares of our common stock acquired upon exercise by (ii) the excess of the per share fair market value of our common stock on the date of exercise, as determined by the most current valuation of our common stock prior to such exercise, over the exercise price of the options. For the remaining option exercises by Mr. Simmons, represents the value of exercised options calculated by multiplying (i) the gross number of shares of our common stock acquired upon exercise by (ii) the difference between the closing market price of our common stock on the exercise date and the exercise price of the options.

Pension Benefits and Nonqualified Deferred Compensation

We do not offer any pension or nonqualified deferred compensation plans to our Named Executive Officers.

Potential Payments Upon Termination or Change in Control

Severance Benefits upon Termination

David Simmons

Pursuant to the terms of the Simmons Employment Agreement, upon our termination of Mr. Simmons' employment without cause (as defined in the Simmons Employment Agreement) (which includes our non-extension of the term) or by Mr. Simmons for good reason, or due to his death or disability (each as defined in the Simmons Employment Agreement), subject to his timely execution, and non-revocation, of a general release of claims in our favor (except in the event of his death) and continued compliance with the restrictive covenants described above and in his proprietary information and inventions agreement, Mr. Simmons would be entitled to receive: (i) an amount in cash equal to the sum of (x) 2.0 times his annual base salary (as defined in his employment agreement) and (y) 1.5 times his annual target bonus (as defined in his employment agreement), payable in regular installments over a 24-month period in accordance with our regular payroll practices, and (ii) monthly payments for up to a 24-month period equal to the COBRA premiums required to continue the group medical, dental and vision coverage in effect on the termination date for Mr. Simmons and his dependents. If such a termination occurs within two years following a change in control (as defined in the Simmons Employment Agreement), subject to Mr. Simmons' timely execution, and non-revocation, of a general release of claims against the Company and continued compliance with the restrictive covenants described above and in his proprietary information and inventions agreement, with regard to the cash payments made pursuant to (i) above, he would be entitled to receive a lump-sum payment, instead of installment payments, payable within 60 days of his termination of employment; provided that if such termination results from Mr. Simmons' resignation due to him not becoming the Chief Executive Officer of the ultimate parent of any successor entity or division operating our business following the change in control, the lump-sum payment would be equal to the sum of (x) 1.0 times his annual base salary and (y) 1.0 times his annual target bonus. In the event of a transaction which would subject any payments, awards, benefits or distributions for the benefit of Mr. Simmons to the excise tax imposed by Section 4999 of the Code or any interest or penalties are incurred with respect to such excise tax by Mr. Simmons (such excise tax, together with any such interest and penalties, the "Excise Tax"), then Mr. Simmons will be entitled to receive a one-time reimbursement equal to the amount of the Excise Tax.

Other Named Executive Officers

Pursuant to the terms of the Named Executive Officer Employment Agreements, upon our termination of the applicable Named Executive Officer's employment without cause (as defined in the applicable Named Executive Officer Employment Agreement) (which includes our non-extension of the term) or by the applicable Named Executive Officer for good reason (as defined in the applicable Named Executive Officer Employment Agreement), subject to his timely execution, and non-revocation, of a general release of claims in our favor and continued compliance with the restrictive covenants described above and in his proprietary information and inventions agreement, (A) each of Messrs. Scully, Sharbaugh and Thakral would be entitled to receive: (i) an amount in cash equal to (x) 1.5 times his annual base salary (as defined in the applicable employment agreement), payable in regular installments over an 18-month period in accordance with our regular payroll practices, and (y) a prorated portion of his annual target bonus (as defined in the applicable employment agreement) for the year in which termination occurs, payable in a lump sum within 30 days of his termination of employment, and (ii) monthly payments for up to an 18-month period equal to the COBRA premiums required to continue the group medical, dental and vision coverage in effect on the termination date for the applicable Named Executive Officer and his dependents and (B) Dr. Johnston would be entitled to receive: (i) an amount in cash equal to (x) 1.0 times his annual base salary (as defined in his employment agreement), payable in regular installments over a 12-month period in accordance with our regular payroll practices, and (y) a prorated portion of his annual target bonus (as defined in his employment agreement) for the year in which termination occurs, payable in a lump sum within 30 days of his termination of employment, and (ii) monthly payments for up to a 12-month period equal to the COBRA premiums required to continue the group medical, dental and vision coverage in effect on the termination date for Dr. Johnston and his dependents.

Assuming a termination of employment effective as of December 31, 2020 (i) by the Company without cause (including non-extension of the term), (ii) by the Named Executive Officer for good reason or (iii) due to the Named Executive Officer's death or disability, each of the specified Named Executive Officers in the table below would have received the following severance payments and benefits:

	Payment Type	Termination Without Cause (Including Non-Extension of Term) ($)	Termination for Good Reason ($)	Termination due to Death or Disability ($)
immons	Cash Severance[1]	5,483,520	5,483,520	5,483,520
	Benefit Continuation[2]	27,121	27,121	27,121
	Total	**5,510,641**	**5,510,641**	**5,510,641**
her Scully	Cash Severance[3]	1,113,750	1,113,750	—
	Benefit Continuation[2]	13,850	13,850	—
	Total	**1,127,600**	**1,127,600**	**—**
Sharbaugh	Cash Severance[3]	1,263,276	1,263,276	—
	Benefit Continuation[2]	20,939	20,939	—
	Total	**1,284,215**	**1,284,215**	**—**
Thakral	Cash Severance[3]	1,012,500	1,012,500	—
	Benefit Continuation[2]	49,629	49,629	—
	Total	**1,062,129**	**1,062,129**	**—**
ohnston	Cash Severance[4]	618,000	618,000	—
	Benefit Continuation[2]	13,959	13,959	—
	Total	**631,959**	**631,959**	—

(1) Amount represents the sum of (i) 2.0 times annual base salary and (ii) 1.5 times the annual target bonus for 2020; however, if the resignation for good reason resulted from Mr. Simmons not becoming the Chief Executive Officer of the ultimate parent of any successor entity or division operating our business following a change in control, the amount would be equal to the sum of (i) 1.0 times annual base salary and (ii) 1.0 times the annual target bonus for 2020, or $3,133,440.

(2) Amounts represent monthly payments equal to the COBRA premiums required for continuation of group medical, dental and vision benefits for the Named Executive Officer and the Named Executive Officer's dependents for up to 24 months for Mr. Simmons, 18 months for each of Messrs. Scully, Sharbaugh, and Thakral, and 12 months for Dr. Johnston.

(3) Amount represents the sum of (i) 1.5 times annual base salary and (ii) 1.0 times the annual target bonus for 2020.

(4) Amount represents the sum of (i) 1.0 times annual base salary and (ii) 1.0 times the annual target bonus for 2020.

Accelerated Vesting of Equity Awards

David Simmons

Pursuant to Mr. Simmons' 2017 Plan Stock Option Agreements, his options are subject to vesting acceleration in the following circumstances:

Mr. Simmons – Qualifying Termination

2017 Plan Time Options. Vesting of Mr. Simmons' 2017 Plan Time Options is partially accelerated upon his termination by the Company without cause, by him for good reason, or due to his death or disability, subject to his timely execution, and non-revocation, of a general release of claims in favor of the Company (except in the event of Mr. Simmons' death). Upon such termination, a prorated portion of the next installment of 2017 Plan Time Options scheduled to vest following such termination will vest and become exercisable based on the number of days Mr. Simmons was employed from the date on which the last annual installment of 2017 Plan Time Options vested to the termination date. In addition, if we determine that we attained the applicable EBITDA target for the EBITDA Options for the year of such termination, then, to the extent vesting of his 2017 Plan Time Options has not already been accelerated, Mr. Simmons' unvested 2017 Plan Time Options that would have become vested had he remained employed through the first anniversary of such termination will vest and become exercisable.

EBITDA Options. With respect to Mr. Simmons' termination by the Company without cause, or by him for good reason, subject to his timely execution, and non-revocation, of a general release of claims in favor of the Company, a prorated portion of the next installment of EBITDA Options scheduled to vest following such termination (including pursuant to any catch-up provision) will vest based on the number of days Mr. Simmons was employed during the applicable year, provided and to the extent that our Compensation Committee determines that the predetermined EBITDA target for the year of such termination has been achieved. Except in the event of a termination for cause, if Mr. Simmons's employment is terminated following the end of a fiscal year, but prior to the date that our Compensation Committee has determined achievement with respect to the applicable EBITDA target for such fiscal year, Mr. Simmons' EBITDA Options will remain eligible to vest and become exercisable on the date such determination is made to the extent our Compensation Committee has determined that the EBITDA target for such fiscal year has been achieved.

Liquidity Event Options. Upon Mr. Simmons' termination by the Company without cause, or by him for good reason, a pro-rata portion of the Liquidity Event Options held by Mr. Simmons, based on the number of days Mr. Simmons was employed during the five-year period following the date of grant of the Options, will remain eligible to vest following such termination.

Mr. Simmons – Initial Public Offering

Pursuant to Mr. Simmons' 2017 Plan Stock Option Agreement, in fiscal year 2020, a portion of his unvested 2017 Plan Time Options vested and became exercisable immediately prior to the IPO such that 50% of his 2017 Plan Time Options were vested and exercisable as of immediately prior to the IPO. No other options vested solely in connection with the occurrence of the IPO.

Mr. Simmons – Performance Liquidity Event

Under Mr. Simmons' 2017 Plan Stock Option Agreement, the EBITDA Options held by Mr. Simmons vest and become exercisable immediately prior to our Sponsors' receipt of proceeds (i) of at least 2.0 times their investment in our common stock and (ii) that result in an annual, compounded pre-tax internal rate of return of at least 17.5% on their investment ((i) and (ii), with respect to Mr. Simmons (a "Performance Liquidity Event")). No other options are subject to accelerated vesting in connection with the occurrence of a Performance Liquidity Event.

Mr. Simmons – Change of Control Transaction

Under Mr. Simmons' 2017 Plan Stock Option Agreement, a Change of Control Transaction generally would occur if any person acquires at least 50% of our voting securities in a transaction or a series of related transactions, or we sold substantially all of our assets (other than to our Sponsors). A Change of Control Transaction could include a Performance Liquidity Event or a Simmons Liquidity Event, each of which is described above.

2017 Plan Time Options. Subject to Mr. Simmons remaining employed with the Company through such date, upon a Change of Control Transaction, all then-unvested 2017 Plan Time Options will vest and become exercisable immediately prior to such transaction.

EBITDA Options. There is no accelerated vesting of EBITDA Options in connection with a Change of Control Transaction (except if such Change of Control Transaction constitutes a Performance Liquidity Event).

Liquidity Event Options. In the event that the Liquidity Event Options have not otherwise vested, in the event of a Change of Control Transaction on or prior to the fifth anniversary of the date of grant, if our Compensation Committee determines that both (i) the total enterprise value of the Company is greater than 14 times the EBITDA of the Company for the 12 months ending on the last day of the most recently completed calendar quarter of the Company prior to execution of the definitive agreement providing for such Change of Control Transaction and (ii) certain EBITDA thresholds were met in the most recently completed fiscal year prior to the fiscal year in which the Change of Control Transaction is completed, then 100% of Liquidity Event Options will vest.

In addition, in the event of Mr. Simmons' termination of employment by the Company without cause, or by him for good reason, and either (i) a Change of Control Transaction or a transaction which would result in a Performance Liquidity Event or a Simmons Liquidity Event (a) with respect to which definitive transaction documents are executed prior to or within three months after the date of such termination of employment and (b) that is consummated within 12 months after the date of such termination of employment or (ii) an extraordinary dividend or distribution, regardless of whether any definitive transaction documents are executed, which would result in a Performance Liquidity Event or a Simmons Liquidity Event that occurs prior to or within three months after the date of such termination of employment, any portion of the Options that would otherwise have vested and become exercisable as a result of such event in (i) or (ii) above had he remained employed through the date of such event will vest and become exercisable as of such date, subject to his timely execution, and non-revocation, of a general release of claims in favor of the Company.

Other Named Executive Officers

Pursuant to our other Named Executive Officers' 2017 Plan Stock Option Agreements, their 2017 Plan Options are subject to vesting acceleration in the following circumstances:

Other Named Executive Officers – Qualifying Termination

2017 Plan Time Options. Vesting of each of the other Named Executive Officer's 2017 Plan Time Options is partially accelerated upon the Named Executive Officer's termination by the Company without cause, or by the Named Executive Officer for good reason, subject to the Named Executive Officer's timely execution, and non-revocation, of a general release of claims in favor of the Company. Upon such termination, a prorated portion of the next installment of 2017 Plan Time Options scheduled to vest following such termination will vest and become exercisable as of the date such release of claims becomes effective and non-revocable based on the number of days the Named Executive Officer was employed from the date on which the last annual installment of 2017 Plan Time Options vested to the termination date.

EBITDA Options. With respect to each other Named Executive Officer, upon the Named Executive Officer's termination by the Company without cause, or by the Named Executive Officer for good reason, subject to the Named Executive Officer's timely execution, and non-revocation, of a general release of claims in favor of the Company, a pro-rated portion of the next installment of EBITDA Options scheduled to vest following such termination will vest based on the number of days the Named Executive Officer was employed during the applicable year, provided and to the extent that our Compensation Committee determines that the predetermined EBITDA target for the year of such termination has been achieved. In the event of a termination of the Named Executive Officer's employment without cause or by the Named Executive Officer for good reason, in each case, following the end of a fiscal year, but prior to the date that our Compensation Committee has determined achievement with respect to the applicable EBITDA target for such fiscal year, subject to the Named Executive Officer's timely execution, and non-revocation, of a general release of claims in favor of the Company, the annual installment for such fiscal year will remain eligible to vest and become exercisable on the date such determination is made to the extent our Compensation Committee has determined that the EBITDA target for such fiscal year has been achieved.

Realization Event Options. There is no accelerated vesting of Realization Event Options in connection with qualifying terminations of employment.

Other Named Executive Officers – Significant Sale

Under each other Named Executive Officer's 2017 Plan Stock Option Agreement, a Significant Sale generally would occur if our Sponsors sold more than 50% of their equity investment in the Company. A Significant Sale could include a Change of Control Transaction, a Liquidity Event, a Qualifying Sale (in each case, as described below) and/or a Realization Event. Upon the occurrence of a Significant Sale, if the total percentage of the Named Executive Officer's vested 2017 Plan Time Options is less than the percentage of our Sponsors' investment sold in connection with the Significant Sale, then a portion of the Named Executive Officer's unvested 2017 Plan Time Options will vest and become exercisable immediately prior to the Significant Sale such that the total percentage of the Named Executive Officer's vested 2017 Plan Time Options is equal to the percentage of our Sponsors' investment sold in connection with such Significant Sale. No other Options are subject to accelerated vesting in connection with the occurrence of a Significant Sale (except with respect to a Qualifying Sale, Liquidity Event, Realization Event or a Change of Control Transaction).

Other Named Executive Officers – Qualifying Sale

Under each other Named Executive Officer's 2017 Plan Stock Option Agreement, a Qualifying Sale generally would occur if our Sponsors sold more than 50% of their equity investment in the Company (i.e., a Significant Sale occurs) and, prior to or in connection with such sale, our Sponsors received proceeds (i) of at least 2.0 times their investment in our common stock and (ii) an annual, compounded pre-tax internal rate of return of at least 17.5% on their investment. A Qualifying Sale could include a Change of Control Transaction, a Liquidity Event or a Realization Event. Upon the occurrence of a Qualifying Sale, if the total percentage of the Named Executive Officer's vested EBITDA Options is less than the percentage of our Sponsors' investment sold in connection with the Qualifying Sale, then a portion of the Named Executive Officer's unvested EBITDA Options will vest and become exercisable immediately prior to the Qualifying Sale such that the total percentage of the Named Executive Officer's vested EBITDA Options is equal to the percentage of our Sponsors' investment sold in connection with the Qualifying Sale. No other Options are subject to accelerated vesting in connection with the occurrence of a Qualifying Sale (except with respect to a Significant Sale, Liquidity Event, Realization Event or Change of Control Transaction).

Other Named Executive Officers – Liquidity Event

Under each other Named Executive Officer's 2017 Plan Stock Option Agreement, subject to the applicable Named Executive Officer remaining employed with the Company through such date, upon (i) our Sponsors having sold more than 70% of their equity investment in the Company or (ii) a sale of substantially all of our assets (other than to our Sponsors or one of their affiliates) (a "Liquidity Event"), all then-unvested 2017 Plan Time Options will vest and become exercisable immediately prior to such event. No other Options are subject to accelerated vesting in connection with the occurrence of a Liquidity Event (except as set forth below with respect to the achievement of the Liquidity Hurdles).

Other Named Executive Officers – Liquidity Hurdle Achievement

Under each other Named Executive Officer's 2017 Plan Stock Option Agreement, the EBITDA Options held by our Named Executive Officers vest and become exercisable immediately prior to our Sponsors' receipt of proceeds (i) of at least 2.0 times their investment in our common stock and (ii) that result in an annual, compounded pre-tax internal rate of return of at least 17.5% on their investment ((i) and (ii), the "Liquidity Hurdles"); provided, that such proceeds are received by our Sponsors in connection with a Liquidity Event. No other Options are subject to accelerated vesting in connection with the achievement of the Liquidity Hurdles in connection with a Liquidity Event.

Other Named Executive Officers – Change of Control Transaction

Under the 2017 Plan Stock Option Agreements, a Change of Control Transaction generally would occur if any person acquires at least 50% of our voting securities in a transaction or a series of relate transactions, or we sold substantially all of our assets (other than to our Sponsors). A Change of Control Transaction could include a Significant Sale, Qualifying Sale, Liquidity Event or Realization Event, each of which are described above.

2017 Plan Time Options. Under each other Named Executive Officer's option agreement, in the event of the Named Executive Officer's termination by the Company without cause, by the Named Executive Officer for good reason or due to the Named Executive Officer's death or disability, subject to the Named Executive Officer's timely execution, and non-revocation, of a general release of claims in favor of the Company (except in the event of the Named Executive Officer's death), in each case, on or following the occurrence of a Change of Control Transaction, all then-unvested 2017 Plan Time Options shall vest and become exercisable as of the date such release of claims becomes effective and non-revocable.

EBITDA Options. There is no accelerated vesting of EBITDA Options in connection with a Change of Control Transaction (except if such Change of Control Transaction constitutes a Qualifying Sale or a Liquidity Event in which the Liquidity Hurdles are achieved).

Realization Event Options. In the event that the Realization Event Options have not otherwise vested, in the event of a Change of Control Transaction on or prior to the fifth anniversary of the date of grant, if our Compensation Committee determines that both (i) the total enterprise value of the Company is greater than 14 times the EBITDA of the Company for the 12 months ending on the last day of the most recently completed calendar quarter of the Company prior to execution of the definitive agreement providing for such Change of Control Transaction and (ii) certain EBITDA thresholds were met in the most recently completed fiscal year prior to the fiscal year in which the Change of Control Transaction is completed, then, except with respect to the Realization Event Options granted to Mr. Thakral in 2019, 100% of Realization Event Options will vest.

In addition, in the event of each other Named Executive Officer's termination of employment by the Company without cause, or by such Named Executive Officer for good reason, and a Realization Event or Liquidity Event that either (i) is consummated within three months after the date of such termination of employment or (ii) if definitive transaction documents are executed within three months after the date of such termination of employment, is consummated within 12 months after the date of such termination of employment, any portion of the Options that would otherwise have vested and become exercisable as a result of such event in (i) or (ii) above had he remained employed through the date of such event will vest and become exercisable as of such date, subject to the Named Executive Officer's timely execution, and non-revocation, of a general release of claims in favor of the Company.

Assuming a hypothetical vesting acceleration event occurred on December 31, 2020, the following table sets forth the amounts the Named Executive Officers would have received from such accelerated vesting. Furthermore, the amounts shown in the table do not include amounts that may have been payable to a Named Executive Officer upon the sale or purchase of his vested equity pursuant to the exercise of put or call rights.

ne	Equity Award[1]	Qualifying Termination ($)[2]	Significant Sale ($)[3]	Qualifying Sale ($)[4]	Liquidity Event ($)[5]	Performance Liquidity Event / Liquidity Hurdle Achievement ($)[6]	Change of Control Transaction/ Termination Following a Change of Control Transaction ($)[7]
id Simmons							
	Time Options	4,736,971	—	—	—	—	14,777,693
	EBITDA Options	10,018,695	—	—	—	—	—
	Liquidity Event Options	—	—	—	—	—	—
	Total	**14,755,666**	**—**	**—**	**—**	**—**	**14,777,693**
istopher G. Scully							
	Time Options	760,375	663,656	—	3,619,973	—	3,619,973
	EBITDA Options	1,643,726	—	—	—	—	—
	Realization Event Options	—	—	—	—	—	—
	Total	**2,404,101**	**663,656**	**—**	**3,619,973**	**—**	**3,619,973**
iam J. Sharbaugh							
	Time Options	1,143,407	—	—	3,567,019	—	3,567,019
	EBITDA Options	2,418,318	—	—	—	—	—
	Realization Event Options	—	—	—	—	—	—
	Total	**3,561,725**	**—**	**—**	**3,567,019**	**—**	**3,567,019**
hul Thakral							
	Time Options	374,815	110,287	—	1,491,179	—	1,491,179
	EBITDA Options	886,892	—	—	—	—	—
	Realization Event Options	—	—	—	—	—	—
	Total	**1,261,707**	**110,287**	**—**	**1,491,179**	**—**	**1,491,179**
id Johnston							
	Time Options	408,341	—	—	1,273,904	—	1,273,904
	EBITDA Options	863,677	—	—	—	—	—
	Realization Event Options	—	—	—	—	—	—
	Total	**1,272,018**	**—**	**—**	**1,273,904**	**—**	**1,273,904**

(1) Amounts reported are based on a price per share of our common stock of $34.22, which was the closing market price of our common stock on December 31, 2020. For additional details regarding the treatment of the 2017 Plan Options under each of the termination events in this table, see "—Accelerated Vesting of Equity Awards" above.

(2) Amounts reported reflect partial accelerated vesting of 2017 Plan Time Options held by each Named Executive Officer in connection with certain qualifying terminations of employment. The next installment of EBITDA Options scheduled to vest following certain qualifying terminations of employment will remain eligible to vest and become exercisable provided and to the extent that the Compensation Committee determines that the predetermined EBITDA target has been achieved, subject to the execution of a general release of claims in favor of the Company by the Named Executive Officer. Amounts reported reflect the 2020 vesting installment vesting at 100% based on actual performance.

(3) Assumes that a Significant Sale occurs in which the Sponsors sell 51% of their equity investment in the Company. With respect to the Named Executive Officers other than Mr. Simmons, the amounts reported reflect partial accelerated vesting of 2017 Plan Time Options immediately prior to the Significant Sale such that the total percentage of the Named Executive Officer's vested 2017 Plan Time Options is equal to 51% (the percentage of the Sponsors' assumed investment sold in connection with such Significant Sale). The total percentage of Mr. Sharbaugh's vested 2017 Plan Time Options already exceeds 51%, such that no partial accelerated vesting of his 2017 Plan Time Options immediately prior to a Significant Sale would occur.

(4) Upon a Qualifying Sale, if the total percentage of the vested EBITDA Options held by each of our Named Executive Officers other than Mr. Simmons is less than the percentage of our Sponsors' investment sold in connection with the Qualifying Sale, then a portion of the Named Executive Officer's unvested EBITDA Options will vest and become exercisable immediately prior to the Qualifying Sale such that the total percentage of the Named Executive Officer's vested EBITDA Options is equal to the percentage of our Sponsors' investment sold in connection with the Qualifying Sale. Amounts reported assume that a Significant Sale occurs but such Significant Sale would not have constituted a Qualifying Sale and therefore there would have been no accelerated vesting of EBITDA Options.

(5) Amounts reported reflect full accelerated vesting of 2017 Plan Time Options for each of the Named Executive Officers other than Mr. Simmons in connection with a Liquidity Event.

(6) Vesting of EBITDA Options fully accelerates for Mr. Simmons in the event of a Performance Liquidity Event and, for each of the other Named Executive Officers, in the event that the Liquidity Hurdles are achieved in connection with a Liquidity Event. Amounts reported for Mr. Simmons assume that a Performance Liquidity Event would not have occurred and, for each of the Named Executive Officers other than Mr. Simmons, that the Liquidity Hurdles would not have been achieved in connection with a Liquidity Event and therefore there would have been no accelerated vesting of EBITDA Options.

(7) Amounts reported reflect full accelerated vesting of 2017 Plan Time Options for Mr. Simmons in connection with a Change of Control Transaction and, for each of the Named Executive Officers other than Mr. Simmons, in the event of a termination by the Company without cause, by the Named Executive Officer for good reason or due to the Named Executive Officer's death or disability following a Change of Control Transaction. In addition, in the event that Mr. Simmons' Liquidity Event Options and the other Named Executive Officers' Realization Event Options (other than the Realization Event Options granted to Mr. Thakral in 2019) have not otherwise vested either prior to or in connection with a Change of Control Transaction, such options would fully vest in connection with a Change of Control Transaction if the enterprise value of the Company exceeds the required multiple of 2020 EBITDA and certain EBITDA thresholds were met in 2019. Amounts reported assume that the Liquidity Event Options and Realization Options do not vest in connection with a Change of Control Transaction.

Director Compensation

Under our Corporate Governance Guidelines, the compensation of independent directors is determined by the Board upon recommendation of the Compensation Committee. In connection with the IPO and with assistance from the Consultant, we analyzed competitive market data relating to director compensation programs, including cash retainers, equity awards, board and committee meeting fees, committee chair and member retainers, pay mix and stock ownership guidelines, from the Peer Group. As a result of this analysis, in connection with the IPO, our Board approved a new Non-Employee Director compensation program.

Pursuant to the Company's Non-Employee Director compensation program, we pay annual compensation to each member of our Board who is not either (i) an employee of the Company or any parent or subsidiary of the Company or (ii) an employee of our Sponsors or their respective affiliates (excluding portfolio companies) (each, a "Non-Employee Director"). We do not pay any compensation to a director who is not a Non-Employee Director.

Maria Teresa Hilado, Colin Hill and Jeffrey Kindler were our Non-Employee Directors in 2020.

Under the new program, in fiscal year 2020 each Non-Employee Director received an annual retainer of $200,000, consisting of an annual cash retainer of $100,000 and an annual restricted stock unit award with respect to a number of shares of our common stock having an aggregate grant date fair market value of $100,000. Subject to the Non-Employee Director's continued service to the Company on the applicable vesting date, the restricted stock unit award vests on the earlier of the first anniversary of the date of grant and the first regularly scheduled annual meeting of stockholders following the date of grant.

As part of this program, the chairpersons and members of the following committees also receive the additional fixed annual cash retainers (payable in quarterly installments in arrears) listed below. We reimburse all directors for travel and other expenses directly related to director activities and responsibilities.

Committee	Committee Member Retainer	Committee Chair Retainer
Audit Committee	$ 10,000	$ 25,000
Compensation Committee	7,500	20,000
Nominating and Corporate Governance Committee	5,000	15,000

None of our directors receive separate compensation for attending meetings of our Board or any committees thereof.

In connection with the IPO, we also adopted stock ownership guidelines for our Non-Employee Directors in order to better align our eligible directors' financial interests with those of our stockholders by requiring such directors to own a minimum level of our shares. For additional information, see "—Compensation Discussion and Analysis—Other Important Compensation Policies Affecting the Named Executive Officers—Stock Ownership Guidelines."

The following table summarizes the compensation paid to or earned by our Non-Employee Directors in 2020:

2020 DIRECTOR COMPENSATION

Name[1]	Fees Earned or Paid in Cash ($)	Stock Awards[2] ($)	Total ($)
Maria Teresa Hilado	132,500	100,000	232,500
Colin Hill	105,000	100,000	205,000
Jeffrey B. Kindler	117,500	100,000	217,500

(1) As discussed above, we pay annual compensation to each member of our Board who is not either (i) an employee of the Company or any parent or subsidiary of the Company or (ii) an employee of our Sponsors or their respective affiliates (excluding portfolio companies). We do not pay any compensation to a director who is not a Non-Employee Director. Maria Teresa Hilado, Colin Hill and Jeffrey Kindler were our Non-Employee Directors in 2020. Mr. Simmons receives compensation for his service as Chief Executive Officer, as disclosed in "Compensation Discussion and Analysis" and "Executive Compensation" above.

(2) Amounts shown are the aggregate grant date fair value of awards computed in accordance with FASB ASC Topic 718, excluding the effect of estimated forfeitures. For a discussion of the assumptions made in such valuation, see Note 3, "Stock-based Compensation," of our audited consolidated financial statements included elsewhere in this Annual Report on Form 10-K. As of December 31, 2020, the aggregate number of outstanding unvested restricted stock units held by each Non-Employee Director was 3,728 and the aggregated number of outstanding unvested restricted shares held by each Non-Employee director was 501.

Compensation Committee Interlocks and Insider Participation

Compensation decisions are made by our Compensation Committee. None of our current or former executive officers or employees currently serves, or has served during our last completed fiscal year, as a member of our Compensation Committee and, during that period, none of our executive officers served as a member of the compensation committee (or other committee serving an equivalent function) of any other entity whose executive officers served as a member of our Board.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

Securities Authorized for Issuance Under Equity Compensation Plans

In connection with our IPO, our Board adopted, and our stockholders approved, the 2020 Plan, pursuant to which we may grant awards of (i) incentive and nonqualified stock options; (ii) stock appreciation rights; (iii) restricted stock; (iv) restricted stock units; and (v) other equity-based award or cash-based incentive awards. Outstanding awards under the 2017 Plan continue to be governed by the terms of such plan and the applicable award agreement. Following our IPO, our Board determined that no new awards will be granted under the 2017 Plan.

The following table provides information with respect to our compensation plans under which equity compensation was authorized as of December 31, 2020. All numbers in the following table are presented after giving effect to the 1.8-for-1 stock split of our common stock that was effected on January 15, 2020.

Plan category	Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)	Weighted-average exercise price of outstanding options, warrants and rights (b)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) (c)
Equity compensation plan approved by security holders [1]	18,597,979[2][3]	14.37[4]	37,733,096[3][5]
Equity compensation plans not approved by security holders [6]	—	—	—
Total	18,597,979	14.37	37,733,096

[1] The amounts shown in this row include securities issuable under the 2020 Plan and upon settlement of outstanding awards under the 2017 Plan. The number of shares available for awards under the 2020 Plan (the "Plan Share Reserve") is automatically increased on the first day of each fiscal year following fiscal year 2020 by a number of shares of common stock equal to the lesser of (i) the positive difference, if any, between (A) 10% of the outstanding common stock of the Company (on a fully diluted basis) on the last day of the immediately preceding fiscal year, and (B) the Plan Share Reserve on the last day of the immediately preceding fiscal year, and (ii) a lower number of shares of common stock as may be determined by the Board.

[2] Includes an aggregate of 718,179 shares of common stock issuable in settlement of outstanding awards of restricted stock units, 257,116 shares of common stock issuable in settlement of outstanding awards of Performance Stock Units and 17,622,684 shares of common stock issuable upon exercise of outstanding stock options. Excludes an aggregate of 1,503 shares of common stock subject to outstanding awards of restricted stock.

[3] The number of shares to be issued in respect of outstanding EBITDA Options and Performance Stock Units assumes the that the maximum level of performance applicable to the EBITDA Options and Performance Stock Units will be achieved.

[4] Weighted-average exercise price of outstanding options; excludes restricted stock units and Performance Stock Units.

[5] Includes 37,733,096 securities available for future issuance under the 2020 Plan, including non-qualified stock options, incentive stock options, stock appreciation rights, restricted stock units, restricted stock, performance-based awards and other equity-based awards. Following our IPO, our Board determined that no new awards will be granted under the 2017 Plan.

[6] We do not have any equity compensation plans or arrangements that have not been approved by our stockholders.

A description of our equity compensation plan can be found in Note 4, “Stock-Based Compensation,” of our audited consolidated financial statements included elsewhere in this Annual Report on Form 10-K.

Security Ownership of Certain Beneficial Owners and Management

The following table and accompanying footnotes set forth information with respect to the beneficial ownership of the common stock of PPD, Inc. as of February 19, 2021 unless otherwise indicated below by:

- each person known by us to beneficially own more than 5% of our outstanding shares of common stock;
- each of our directors;
- each of our named executive officers; and
- our directors and executive officers as a group.

Beneficial ownership for the purposes of the following table is determined in accordance with the rules and regulations of the SEC. A person is a “beneficial owner” of a security if that person has or shares “voting power,” which includes the power to vote or to direct the voting of the security, or “investment power,” which includes the power to dispose of or to direct the disposition of the security or has the right to acquire such powers within 60 days of February 19, 2021. The percent of common stock calculations are based on the 350,309,157 shares of our common stock outstanding as of February 19, 2021.

Unless otherwise noted in the footnotes to the following table, and subject to applicable community property laws, to our knowledge, the persons named in the table have sole voting and investment power with respect to their beneficially owned common stock.

Except as otherwise indicated in the footnotes below, the address of each beneficial owner is c/o PPD, Inc., 929 North Front Street, Wilmington, North Carolina 28401.

Name of Beneficial Owner	Common Stock Beneficially Owned	
	Shares	Percentage (%)
5% Stockholders:		
H&F Investors[1]	132,841,266	37.9
Carlyle Investor[2]	55,722,733	15.9
Platinum Investor[3]	21,453,252	6.1
GIC Investor[4]	21,453,252	6.1
Directors and Named Executive Officers:		
David Simmons[5]	3,771,765	1.1
Joe Bress[6]	—	—
Stephen Ensley[7]	—	—
Maria Teresa Hilado[8]	33,471	*
Colin Hill[9]	10,438	*
Jeffrey Kindler[10]	112,095	*
P. Hunter Philbrick[7]	—	—
Allen Thorpe[7]	—	—
Stephen Wise[6]	—	—
William Sharbaugh[11]	1,103,741	*
Christopher Scully[12]	348,465	*
Anshul Thakral[13]	263,059	*
David Johnston[14]	285,699	*
All directors and executive officers as a group (19 persons)[15]	**6,694,801**	**1.9**

* Indicates beneficial ownership of less than 1%.

[1] Based on the Schedule 13G filed with the SEC on February 12, 2021. Hellman & Friedman Capital Partners VII, L.P. directly holds 52,884,036 shares of Common Stock, Hellman & Friedman Capital Partners VII (Parallel), L.P. directly holds 20,244,387 shares of Common Stock, HFCP VII (Parallel-A), L.P. directly holds 3,630,740 shares of Common Stock, H&F Executives VII, L.P. directly holds 359,372 shares of Common Stock, Hellman & Friedman Capital Partners VIII, L.P. directly holds 35,622,429 shares of Common Stock, Hellman & Friedman Capital Partners VIII (Parallel), L.P. directly holds 15,987,409 shares of Common Stock, HFCP VIII (Parallel-A), L.P. directly holds 3,021,286 shares of Common Stock, H&F Executives VIII, L.P. directly holds 934,469 shares of Common Stock, and H&F Associates VIII, L.P. directly holds 157,138 shares of Common Stock. The general partner of each of Hellman & Friedman Capital Partners VII, L.P., Hellman & Friedman Capital Partners VII (Parallel), L.P., HFCP VII (Parallel-A), L.P. and H&F Executives VII, L.P. (collectively, the "H&F VII Funds") is Hellman & Friedman Investors VII, L.P. The general partner of Hellman & Friedman Investors VII, L.P. is H&F Corporate Investors VII, Ltd. The general partner of each of Hellman & Friedman Capital Partners VIII, L.P., Hellman & Friedman Capital Partners VIII (Parallel), L.P., HFCP VIII (Parallel-A), L.P., H&F Executives VIII, L.P. and H&F Associates VIII, L.P. (collectively, the "H&F VIII Funds") is Hellman & Friedman Investors VIII, L.P. The general partner of Hellman & Friedman Investors VIII, L.P. is H&F Corporate Investors VIII, Ltd. A three member board of directors of each of H&F Corporate Investors VII, Ltd. and H&F Corporate Investors VIII, Ltd. has investment discretion over the shares held by the H&F VII Funds and the H&F VIII Funds, respectively. Each of the members of the boards of directors disclaims beneficial ownership of such shares.The address of each entity named in this footnote is c/o Hellman & Friedman LLC, 415 Mission Street, Suite 5700, San Francisco, California 94105.

[2] Based on the Schedule 13G filed with the SEC on February 12, 2021. Reflects shares directly held by Carlyle Partners VI Holdings II, L.P. (the "Carlyle Investor"). Carlyle Group Management L.L.C. holds an irrevocable proxy to vote a majority of the shares of The Carlyle Group Inc., which is a publicly traded entity listed on Nasdaq. The Carlyle Group Inc. is the sole member of Carlyle Holdings II GP L.L.C., which is the managing member of Carlyle Holdings II L.L.C., which, with respect to the securities reported herein, is the managing member of CG Subsidiary Holdings L.L.C., which is the general partner of TC Group Cayman Investment Holdings, L.P., which is the general partner of TC Group Cayman Investment Holdings Sub L.P., which is the sole member of TC Group VI, L.L.C., which is the general partner of TC Group VI, L.P., which is the general partner of the Carlyle Investor. Accordingly, each of the foregoing entities may be deemed to share beneficial ownership of the securities held of record by the Carlyle Investor. The address of each of TC Group Cayman Investment Holdings, L.P. and TC Group Cayman Investment Holdings Sub L.P. is c/o Walkers, Cayman Corporate Center, 27 Hospital Road, George Town, Grand Cayman KY1-9008, Cayman Islands. The address of each of the other entities named in this footnote is c/o The Carlyle Group Inc., 1001 Pennsylvania Avenue, NW, Suite 220 South, Washington, D.C. 20004.

[3] Based on the Schedule 13G filed with the SEC on February 2, 2021. Platinum Falcon B 2018 RSC Limited (the "Platinum Investor") is the direct owner of, and has shared voting and dispositive power over, 21,453,252 shares of common stock. ADIA is the direct owner of, and has sole voting and dispositive power over, 15,999 shares of common stock. In addition, the Platinum Investor is a wholly owned subsidiary of ADIA, such that pursuant to the rules and regulations of the SEC, ADIA may be deemed to be the beneficial owner of the shares of common stock directly held by the Platinum Investor. The principal business address of ADIA is 211 Corniche Street, P.O. Box 3600, Abu Dhabi, United Arab Emirates 3600. The principal business address of the Platinum Investor is Level 26, Al Khatem Tower, Abu Dhabi Global Market Square, Al Maryah Island, Abu Dhabi, United Arab Emirates.

[4] Based on the Schedule 13G filed with the SEC on February 12, 2021. Reflects shares directly held by Clocktower Investment Pte Ltd. (the "GIC Investor"). The GIC Investor shares the power to vote and the power to dispose of these shares with GIC Special Investments Pte. Ltd. ("GIC SI"), and GIC, both of which are private limited companies incorporated in Singapore. GIC SI is wholly owned by GIC and is the private equity investment arm of GIC. GIC is a fund manager and only has two clients – the Government of Singapore ("GoS") and the Monetary Authority of Singapore ("MAS"). Under the investment management agreement with GoS, GIC has been given the sole discretion to exercise the voting rights attached to, and the disposition of, any shares managed on behalf of GoS. As such, GIC has the sole power to vote and power to dispose of 81,544 shares of Common Stock, par value $0.01 per share, of the Issuer beneficially owned by it. GIC shares power to vote and dispose of 26,700 shares of Common Stock, par value $0.01 per share, of the Issuer beneficially owned by it with MAS. The business address for each of the GIC Investor, GIC and GIC SI is 168 Robinson Road, #37-01 Capital Tower, Singapore 068912.

[5] Includes 693,695 shares held by the 2015 Simmons Family Gift Trust U/A dated June 18, 2015 of which Mr. Simmons' spouse is a Trustee, 669,999 shares held by the David S. Simmons Revocable Trust dated November 13, 2009 of which Mr. Simmons is a Trustee, 30,000 shares held by the David and Melissa Simmons Family Foundation, of which Mr. Simmons is a Trustee, 120,000 shares held by the Melissa B. Simmons Irrevocable Trust dated November 9, 2020 of which Mr. Simmons is a Trustee, and 2,258,071 shares issuable upon the exercise of options exercisable within 60 days following February 19, 2021.

[6] The address of each of Messrs. Bress and Wise is c/o The Carlyle Group Inc., 1001 Pennsylvania Avenue, NW, Suite 2200 South, Washington, D.C. 20004.

[7] The address of each of Messrs. Ensley, Philbrick and Thorpe is c/o Hellman & Friedman LLC, 415 Mission Street, Suite 5700, San Francisco, California 94105.

[8] Includes 501 shares of restricted common stock.

[9] Includes 501 shares of restricted common stock.

[10] Includes 501 shares of restricted common stock and 18,500 shares held by the Jeffrey B. Kindler 2020 Irrevocable Trust of which Mr. Kindler's spouse is a Trustee.

[11] Includes 90,000 shares held by William Sharbaugh, III 2020 Grantor Retained Annuity Trust u/a 01/15/2020 of which Mr. Sharbaugh is a Trustee and 651,256 shares issuable upon the exercise of options exercisable within 60 days following February 19, 2021.

[12] Includes 322,465 shares issuable upon the exercise of options exercisable within 60 days following February 19, 2021.

[13] Includes 228,833 shares issuable upon the exercise of options exercisable within 60 days following February 19, 2021.

[14] Includes 232,592 shares issuable upon the exercise of options exercisable within 60 days following February 19, 2021.

[15] Includes 4,369,682 shares issuable upon the exercise of options exercisable within 60 days following February 19, 2021 and 1,503 shares of restricted common stock held by our current executive officers and directors.

Item 13. Certain Relationships and Related Transactions, and Director Independence

Transactions with Related Persons

Since January 1, 2020, we have engaged in certain transactions with our directors, executive officers and holders of more than 5% of our voting securities and their affiliates, which we collectively refer to as "related persons."

Transactions with the Majority Sponsors

During part of fiscal year 2020, we were party to consulting services agreements with affiliates of each of Hellman & Friedman and Carlyle pursuant to which we paid such Majority Sponsor affiliates a fee for advisory, consulting and other services provided to us and our subsidiaries. Pursuant to the agreements, subject to certain conditions, we were required to pay an annual sponsor management fee to such Majority Sponsor affiliates of 0.5% of the preceding year's EBITDA (as calculated according to the agreements), calculated annually and payable on a quarterly basis. We also reimbursed such Majority Sponsor affiliates' reasonable out-of-pocket expenses incurred in connection with services provided pursuant to the consulting services agreements. Additionally, we agreed to indemnify such Majority Sponsor affiliates against all actions, causes of action, suits, claims, liabilities, losses, damages, costs and expenses incurred by such Majority Sponsor affiliates in connection with the services provided by such Majority Sponsor affiliates to us pursuant to the consulting services agreements. For the year ended December 31, 2020, we incurred $0.4 million for out-of-pocket expenses and services rendered under the consulting services agreements. The consulting services agreements terminated pursuant to their terms upon completion of our IPO on February 10, 2020.

On August 18, 2015, Jaguar Holding Company II and Pharmaceutical Product Development, LLC entered into the 2015 Credit Agreement that, as amended, provided for the 2015 Term Loan totaling $3.1 billion. Borrowings under the 2015 Term Loan bore interest at a variable rate, at the Company's option, of either (i) a Eurocurrency rate based on LIBOR for a specific interest period plus an applicable margin, subject to a Eurocurrency rate floor of 1.00%, or (ii) an alternate base rate plus an applicable margin, subject to a base rate floor of 2.00%. The margins for the 2015 Term Loan were fixed at 2.50% per annum for Eurocurrency rate loans and 1.50% per annum for base rate loans. For the year ended December 31, 2020, the interest rate on the 2015 Term Loan was based on the Eurocurrency loan rate. For the year ended December 31, 2020, we paid $115.1 million of interest and $32.4 million of principal for the 2015 Term Loan. The largest amount of principal outstanding during fiscal year 2020 was $3,100.0 million. For the year ended December 31, 2020, we paid $1.6 million of interest and $0.4 million of principal to affiliates of Carlyle, one of our Majority Sponsors, for the 2015 Term Loan.

On January 13, 2021, the Company and Co-Borrower entered into the New Term Loan. Borrowings under the New Term Loan bear interest, initially, at a rate equal to, at our option, either (a) Adjusted LIBOR plus a margin of 2.25% with a "LIBOR floor" of 0.50% or (b) Base Rate plus a margin of 1.25%, with a "Base Rate floor" of 1.50%. The interest rate on the New Term Loan is currently based on the Eurocurrency loan rate. As of February 19, 2021, the amount of the New Term Loan outstanding was $3,050.0 million. Affiliates of Carlyle, one of the Majority Sponsors, had funded commitments in the New Term Loan totaling $88.1 million as of February 19, 2021.

Recapitalization and Related Transactions

As a result of the recapitalization of the Company in 2017 (the "Recapitalization"), the Company incurred certain future obligations associated with potential additional recapitalization consideration to holders of the company's common stock and stock options, including the Company's majority owners, affiliates of Carlyle and affiliates of Hellman & Friedman, as well as independent directors and members of management of the Company (the "Pre-Closing Holders"). Pursuant to the terms and conditions of the Recapitalization, the Pre-Closing Holders are entitled to receive consideration based on future payments received by the Company in respect of the existing investment portfolio at the time of the merger (the "Recapitalization Investment Portfolio"). The consideration represents the right to receive future payments from the Company determined by reference to the cash proceeds received by the Company from the Recapitalization Investment Portfolio, net of taxes and other expenses of the Company deemed attributable to the Recapitalization Investment Portfolio and capital contributions made by the Company in respect of the Recapitalization Investment Portfolio after the Recapitalization (the "Recapitalization Investment Portfolio Liability").

The "Pre-Closing Holders" include the Majority Sponsors and directors and officers of the Company (the "Related Pre-Closing Holders"). During the year ended December 31, 2020, the Company paid $20.5 million to the Pre-Closing Holders in distributions related to the Recapitalization Investment Portfolio Liability and $19.3 million to the Related Pre-Closing Holders in distributions related to the Recapitalization Investment Portfolio Liability. In January 2021, the Company paid $12.8 million to the Pre-Closing Holders in distributions related to the Recapitalization Investment Portfolio Liability and $12.1 million to the Related Pre-Closing Holders in distributions related to the Recapitalization Investment Portfolio Liability. For additional information on the Recapitalization, see Note 1, "Basis of Presentation and Summary of Significant Accounting Policies," of our audited consolidated financial statements included elsewhere in this Annual Report on Form 10-K.

Second Amended and Restated Stockholders Agreement

We are parties to the Stockholders Agreement with the Sponsors and members of management.

Nomination of Directors

For information regarding the provisions in the Stockholders Agreement regarding the nomination of directors to our Board, see Item 10, "Directors and Executive Officers of the Registrant and Corporate Governance—Board of Directors," included elsewhere in this Annual Report on Form 10-K for additional information.

Registration Rights

Pursuant to the Stockholders Agreement, Hellman & Friedman, Carlyle, ADIA and GIC have certain rights to have their securities registered by the Company under the Securities Act. Hellman & Friedman and Carlyle are entitled to an unlimited number of "demand" registrations and ADIA and GIC are each entitled to one "demand" registration, subject in each case to certain limitations. Each stockholder that holds registration rights is also entitled to customary "piggyback" registration rights. In addition, the Stockholders Agreement provides that the Company pay certain expenses of the stockholders relating to such registrations and indemnify them against certain liabilities which may arise under the Securities Act.

In September 2020, the Company completed an underwritten secondary public offering of 43.7 million shares of common stock sold by the Sponsors and our director, Mr. Hill, including 5.7 million shares of common stock pursuant to the full exercise of the underwriters' option to purchase additional shares that resulted in total aggregate proceeds of approximately $1.4 billion to the selling stockholders (the "Secondary Offering"). The Company did not offer any common stock in the Secondary Offering and did not receive any proceeds from the sale of the shares of common stock. Pursuant to the terms of the Stockholders Agreement, we paid approximately $1.9 million of fees and expenses incurred in connection with the Secondary Offering.

Transfer Restrictions and Tag-Along

Except as provided below, neither Hellman & Friedman nor Carlyle may transfer shares of the Company pursuant to Rule 144 or make an in-kind distribution without the prior written consent of the other party until the either (i) Hellman & Friedman or Carlyle is no longer entitled to nominate any directors or (ii) Hellman & Friedman or Carlyle own less than 10% of the Company's outstanding shares.

Except for certain permitted transfers, prior to the first anniversary of the Company's IPO, ADIA, GIC and the other stockholders party to the Stockholders Agreement (other than Hellman & Friedman and Carlyle) could not transfer any shares of the Company without the prior written consent of the Company's Board.

Except for registrations (i) relating solely to employee benefit plans, (ii) pursuant to Form S-4 or S-8, (iii) pursuant to an exchange, (iv) relating solely to dividend reinvestment plans and (v) of convertible debt securities or preferred stock issued under Rule 144A/Reg S, all stockholders party to the Stockholders Agreement have customary piggyback rights in the event that another stockholder exercises its registration rights under the Stockholders Agreement.

In connection with the Secondary Offering in September 2020, the Board released the stockholders party to the Stockholders Agreement, other than the Sponsors and David Simmons, William Sharbaugh, Christopher Scully and their respective permitted transferees (the "Released Persons") from the transfer restrictions set forth in Article IV of the Stockholders Agreement with respect to shares owned by such stockholder (and related permitted transferees) and shares underlying vested options held by such stockholder (the "Restricted Shares") as follows:

- the executive officers were released from the transfer restrictions with respect to an amount of Restricted Shares equal to the aggregate amount of such Restricted Shares held by such executive officer (and related permitted transferees) multiplied by 16.1% (calculated by dividing the number of shares that the Sponsor selling the most shares in the Secondary Offering sold over the aggregate amount of shares held by such Sponsor immediately prior to the Secondary Offering); and
- all other Released Persons were released from the transfer restrictions set forth in Article IV of the Stockholders Agreement in full and without limitation.

Put and Call Rights

Pursuant to the Stockholders Agreement, certain members of management have the right to require that the Company purchase all, or any portion of, the shares of the Company held by such member of management in the event of termination of employment by such member of management for good reason or by the Company without cause. In connection with any termination of a member of management for cause or breach of certain restrictive covenants, the Company has the option to repurchase such member of management's applicable shares.

Reimbursement of Fees

Pursuant to the Stockholders Agreement, the Company has also agreed to pay directly or reimburse the Sponsors for actual and reasonable out-of-pocket costs and expenses incurred by the Sponsors in connection with the monitoring of their investments in the Company or in order to make legally required filings relating to the ownership of equity securities in the Company.

Indemnification

The Company has agreed to indemnify the Sponsors and certain of their representatives from any liabilities, losses, damages and costs and out-of-pocket expenses arising out of or relating to (i) fiduciary or similar duties to the Company resulting from such Sponsor's ownership of securities of the Company or its control or ability to influence the Company (unless arising out of a breach of this Agreement by the Sponsor or its representatives or to the extent the ability to control the Company derives from such person's capacity as an officer or director of the Company) or (ii) the business, operations, properties, assets or other rights or liabilities of the Company.

Indemnification of Directors and Officers

We have entered into an indemnification agreement with each of our directors and executive officers. The indemnification agreements, together with our amended and restated bylaws, provide that we will jointly and severally indemnify each indemnitee to the fullest extent permitted by the Delaware general corporation law from and against all loss and liability suffered and expenses, judgments, fines and amounts paid in settlement actually and reasonably incurred by or on behalf of the indemnitee in connection with any threatened, pending, or completed action, suit or proceeding that arises by reason of their status or service as executive officers or directors. Additionally, we agreed to advance to the indemnitee all out-of-pocket costs of any type or nature whatsoever incurred in connection therewith.

Related Person Transaction Policy

We have a written policy on transactions with related persons, which we refer to as our "related person transaction policy." Our related person transaction policy requires that all "related person transactions" (defined as any transaction that is anticipated would be reportable by us under Item 404(a) of Regulation S-K in which we were or are to be a participant and the amount involved exceeds $120,000 and in which any related person had or will have a direct or indirect material interest) and all material facts with respect thereto be disclosed to the Board or the Audit Committee. The policy provides that in reviewing a related person transaction, the Board or the Audit Committee, as applicable, will consider all relevant facts and circumstances, including the relationship of the related person to the Company, the nature and extent of the related person's interest in the transaction, the material terms of the transaction, the importance and fairness of the transaction to both the Company and the related person, the business rationale for the transaction, whether the transaction would likely impair the judgment of a director or executive officer to act in the best interest of the Company, and any other matters that the Board or the Audit Committee, as applicable, deems appropriate. Our related person transaction policy provides that no related person transaction will be executed without the approval or ratification of our Board or the Audit Committee.

In addition, all of our employees, officers and directors are required to comply with the Code of Conduct. The Code of Conduct addresses, among other things, what actions are required when potential conflicts of interest may arise, including those from related party transactions. Specifically, if an employee, officer or director believes a conflict of interest exists or may arise, he or she is required to disclose promptly the existence of the conflict, or potential conflict, to PPD's Legal Department, General Counsel or Audit Committee Chair, as appropriate, who will evaluate the conflict and take the appropriate action, if any, to ensure that our interests are protected.

Since January 1, 2020, there have been no transactions that were required to be reported under "Related Person Transactions" where the procedures described above did not require review, approval or ratification or where these procedures were not followed.

Director Independence

All of our directors, other than Mr. Simmons, qualify as "independent" in accordance with the listing requirements of Nasdaq. The Nasdaq independence definition includes a series of objective tests, including that the director is not, and has not been for at least three years, one of our employees and that neither the director nor any of his or her family members has engaged in various types of business dealings with us. In addition, as required by Nasdaq rules, our Board has made a determination as to each independent director that no relationships exist, which, in the opinion of our Board, would interfere with the exercise of independent judgment in carrying out the responsibilities of a director. In making these determinations, our Board reviewed and discussed information provided by the directors to us with regard to each director's business and personal activities and relationships as they may relate to us and our management. Mr. Simmons is not independent because he is the Chairman and Chief Executive Officer of the Company.

The standing committees of our Board consist of an Audit Committee, a Compensation Committee, and a Nominating and Corporate Governance Committee. The current members of our Audit Committee are Ms. Hilado and Messrs. Hill and Kindler. The current members of our Compensation Committee are Ms. Hilado and Messrs. Philbrick, Kindler and Wise. The current members of our Nominating and Corporate Governance Committee are Messrs. Thorpe, Hill and Wise. The Board has determined that each director serving on the Audit, Compensation, and Nominating and Corporate Governance committees is an independent director as required by such Nasdaq and SEC rules applicable to such committee service. In addition, our Board has determined that each of Ms. Hilado and Mr. Kindler qualify as an "audit committee financial expert" as such term is defined in Item 407(d)(5) of Regulation S-K.

Item 14. Principal Accountant Fees and Services

Audit and Non-Audit Fees

The following table presents fees for professional services rendered by Deloitte & Touche LLP for the audit of our financial statements for 2020 and 2019 and fees billed for other services rendered by Deloitte & Touche LLP during those periods:

(in thousands)	2020	2019
Fee category:		
Audit fees[1]	$ 4,075	$ 4,646
Audit-related fees[2]	885	1,381
Tax fees[3]	47	31
All other fees[4]	4	4
Total fees	$ 5,011	$ 6,062

[1] Includes the aggregate fees recognized in each of the last two fiscal years for professional services rendered by Deloitte & Touche LLP for (1) the reviews and audit of our quarterly and annual financial statements, respectively, (2) statutory audits services and (3) consultation on accounting and reporting matters related to the audit and audit services. In 2019, audit fees also includes fees associated with the IPO.

[2] Includes the aggregate fees recognized in each of the last two fiscal years for professional services rendered by Deloitte & Touche LLP for work performed in connection with SEC filings related to registration statements and comfort letters issued to underwriters.

[3] Includes the aggregate fees recognized in each of the last two fiscal years for professional services rendered by Deloitte & Touche LLP for tax compliance, tax advice and/or tax planning.

[4] Includes the aggregate fees recognized in each of the last two fiscal years for products and services provided by Deloitte & Touche LLP, other than those services described above, primarily related to the annual subscription fee for the Deloitte & Touche LLP accounting research tool.

Audit Committee Pre-Approval Policies and Procedures

The Audit Committee has adopted policies and procedures that require the pre-approval of audit, audit-related and permissible non-audit services provided by Deloitte & Touche LLP. During 2020 and 2019, all audit, audit-related and permissible non-audit services provided by Deloitte & Touche LLP were pre-approved by the Audit Committee. The Audit Committee has considered the provision of these services by Deloitte & Touche LLP and has determined that the services are compatible with Deloitte & Touche LLP maintaining its independence.

Part IV

Item 15. Exhibits and Financial Statement Schedules

(a) The following documents are filed as part of this report:

(1) Financial Statements

The following consolidated financial statements and related notes of PPD, Inc. and its subsidiaries, and the independent registered public accounting firm's report thereon, are included in Part II, Item 8 of this Annual Report on Form 10-K:

The audited financial statements of venBio Global Strategic Fund, L.P. as of December 31, 2020 and for the year ended December 31, 2020 are provided by PPD, Inc. as separate financial statements of subsidiaries not consolidated pursuant to Rule 3-09 of Regulation S-X, and are incorporated by reference herein from Exhibit 99.1 hereto.

The unaudited financial statements of venBio Global Strategic Fund, L.P. as of December 31, 2019 and for the year ended December 31, 2019 are provided by PPD, Inc. as separate financial statements of subsidiaries not consolidated pursuant to Rule 3-09 of Regulation S-X, and are incorporated by reference herein from Exhibit 99.2 hereto.

The unaudited financial statements of venBio Global Strategic Fund, L.P. as of December 31, 2018 and for the year ended December 31, 2018 are provided by PPD, Inc. as separate financial statements of subsidiaries not consolidated pursuant to Rule 3-09 of Regulation S-X, and are incorporated by reference herein from Exhibit 99.3 hereto.

(2) Financial Statements Schedules

All other schedules are omitted, since the required information is not applicable or is not present in amounts sufficient to require submission of the schedule, or because the information required is included in the consolidated financial statements and notes thereto.

(3) Exhibits required by Item 601 of Regulation S-K.

The exhibits listed in the accompanying Exhibit Index preceding the signature page are filed or furnished as a part of this report and are incorporated herein by reference.

(b) Exhibits

EXHIBIT INDEX

Exhibit Number	Exhibit Description	Incorporated by Reference			
		Form	File No.	Exhibit	Filing Date
2.1	Recapitalization Merger Agreement, dated as of April 26, 2017, between Eagle Holding Company I, Eagle Holding Company II, LLC, Eagle Reorganization Merger Sub, Inc., Eagle Buyer, Inc. and Jaguar Holding Company I	-	-	-	Filed Herewith
3.1	Amended and Restated Certificate of Incorporation of PPD, Inc.	8-K	001-39212	3.1	February 10, 2020
3.2	Amended and Restated Bylaws of PPD, Inc.	8-K	001-39212	3.2	February 10, 2020
4.1	Form of Stock Certificate	S-1/A	333-235860	4.1	January 16, 2020
4.2	Description of PPD, Inc.'s Securities	10-K	001-39212	4.5	March 5, 2020
4.3	Indenture, dated as of June 5, 2020, between Jaguar Holding Company II, PPD Development, L.P. and Wilmington Trust, National Association, as trustee	8-K	001-39212	4.1	June 5, 2020
4.4	Form of 4.625% Senior Note due 2025 (included in Exhibit 4.3)	8-K	001-39212	4.1	June 5, 2020
4.5	Form of 5.000% Senior Note due 2028 (included in Exhibit 4.3)	8-K	001-39212	4.1	June 5, 2020
10.1	Second Amended and Restated Stockholders Agreement by and among PPD, Inc. and the other parties named therein	8-K	001-39212	10.1	February 10, 2020
10.2*	Side Letter to the Stockholders Agreement, dated as of May 11, 2017, by and among David Simmons, Hellman & Friedman Capital Partners VIII, L.P., Hellman & Friedman Capital Partners VII, L.P., Carlyle Partners VI Holdings II, L.P., and Eagle Holding Company I	S-1/A	333-235860	10.2	January 16, 2020
10.3*	Side Letter to the Stockholders Agreement, dated as of May 2, 2018, by and among Christopher G. Scully, Hellman & Friedman Capital Partners VIII, L.P., Hellman & Friedman Capital Partners VII, L.P., Carlyle Partners VI Holdings II, L.P., and Eagle Holding Company I	S-1/A	333-235860	10.3	January 16, 2020
10.4*	Side Letter to the Stockholders Agreement, dated as of May 11, 2017, by and among William Sharbaugh, Hellman & Friedman Capital Partners VIII, L.P., Hellman & Friedman Capital Partners VII, L.P., Carlyle Partners VI Holdings II, L.P., and Eagle Holding Company I	S-1/A	333-235860	10.4	January 16, 2020
10.5*	Side Letter to the Stockholders Agreement, dated as of May 11, 2017, by and among David Johnston, Hellman & Friedman Capital Partners VIII, L.P., Hellman & Friedman Capital Partners VII, L.P., Carlyle Partners VI Holdings II, L.P., and Eagle Holding Company I	-	-	-	Filed Herewith
10.6*	Side Letter to the Stockholders Agreement, dated as of May 11, 2017, by and among Anshul Thakral, Hellman & Friedman Capital Partners VIII, L.P., Hellman & Friedman Capital Partners VII, L.P., Carlyle Partners VI Holdings II, L.P., and Eagle Holding Company I	S-1/A	333-235860	10.6	January 16, 2020
10.7	Credit Agreement, dated as of August 18, 2015, between Jaguar Holding Company II, Pharmaceutical Product Development, LLC, Jaguar Holding Company I, LLC, Credit Suisse AG, Cayman Islands Branch, as Administrative Agent, Collateral Agent and L/C Issuer and each lender from time to time party thereto	S-1/A	333-235860	10.7	January 16, 2020

10.8	Amendment No. 1 to the Credit Agreement, dated as of May 31, 2016, between Jaguar Holding Company II, Pharmaceutical Product Development, LLC, Jaguar Holding Company I, LLC, Credit Suisse AG, Cayman Islands Branch, as Administrative Agent, Collateral Agent and L/C Issuer and each lender from time to time party thereto	S-1/A	333-235860	10.8	January 16, 2020
10.9	Amendment No. 2 to the Credit Agreement, dated as of November 10, 2016, between Jaguar Holding Company II, Pharmaceutical Product Development, LLC, Jaguar Holding Company I, LLC, Credit Suisse AG as Administrative Agent, Collateral Agent and L/C Issuer and each lender from time to time party thereto	S-1/A	333-235860	10.9	January 16, 2020
10.10	Amendment No. 3 to the Credit Agreement, dated as of May 30, 2017, between Jaguar Holding Company II, Pharmaceutical Product Development, LLC, Jaguar Holding Company I, LLC, Credit Suisse AG, Cayman Islands Branch, as Administrative Agent, Collateral Agent and L/C Issuer and each lender from time to time party thereto	S-1/A	333-235860	10.10	January 16, 2020
10.11	Amendment No. 4 to the Credit Agreement, dated as of March 29, 2018, between Jaguar Holding Company II, Pharmaceutical Product Development, LLC, Jaguar Holding Company I, LLC, Credit Suisse AG, Cayman Islands Branch, as Administrative Agent, Collateral Agent and L/C Issuer and each lender from time to time party thereto	S-1/A	333-235860	10.11	January 16, 2020
10.12	Amendment No. 5 to the Credit Agreement, dated as of April 23, 2019, between Jaguar Holding Company II, Pharmaceutical Product Development, LLC, Jaguar Holding Company I, LLC, Credit Suisse AG, Cayman Islands Branch, as Administrative Agent, Collateral Agent and L/C Issuer and each lender from time to time party thereto	S-1/A	333-235860	10.12	January 16, 2020
10.13	Holdings Guaranty, dated as of August 18, 2015, between Jaguar Holding Company I, as Guarantor, and Credit Suisse AG, Cayman Islands Branch, as Administrative Agent	S-1/A	333-235860	10.13	January 16, 2020
10.14	Subsidiary Guaranty, dated as of August 18, 2015, the Guarantors, as defined therein, the Additional Guarantors as defined therein, and Credit Suisse AG, Cayman Islands Branch, as Administrative Agent and Collateral Agent	S-1/A	333-235860	10.14	January 16, 2020
10.15	Security Agreement, dated as of August 18, 2015, between the Grantors, as defined therein, and Credit Suisse AG, Cayman Islands Branch, as Collateral Agent	S-1/A	333-235860	10.15	January 16, 2020
10.16*	Form of Indemnification Agreement between PPD, Inc. and directors and executive officers of PPD, Inc.	S-1/A	333-235860	10.16	January 16, 2020
10.17*	Employment Agreement, dated as of May 17, 2012, by and among David Simmons, Pharmaceutical Product Development, LLC, and Jaguar Holding Company I (the "Simmons Employment Agreement")	S-1/A	333-235860	10.17	January 16, 2020
10.18*	Assignment and Assumption Agreement, dated as of May 11, 2017, by and among Jaguar Holding Company I, Eagle Holding Company I, Pharmaceutical Product Development, LLC, and David Simmons	S-1/A	333-235860	10.18	January 16, 2020
10.19*	Amendment No. 1 to the Simmons Employment Agreement, dated as of April 1, 2018	S-1/A	333-235860	10.19	January 16, 2020
10.20*	Employment Agreement, dated as of May 2, 2018, between Christopher G. Scully, Pharmaceutical Product Development, LLC, and, solely for purposes of Sections 1(c), 2(h), 9(m), and (9)(n) thereof, Eagle Holding Company I	S-1/A	333-235860	10.20	January 16, 2020
10.21*	Employment Agreement, dated as of April 10, 2012, between William J. Sharbaugh, Pharmaceutical Product Development, LLC, and, solely for purposes of Sections 9(l)(vii) and (9)(n) thereof, Jaguar Holding Company I (the "Sharbaugh Employment Agreement")	S-1/A	333-235860	10.21	January 16, 2020

10.22*	Amendment No. 1 to the Sharbaugh Employment Agreement, dated as of February 10, 2016	S-1/A	333-235860	10.22	January 16, 2020
10.23*	Assignment and Assumption Agreement, dated as of May 11, 2017, by and among Jaguar Holding Company I, Eagle Holding Company I, Pharmaceutical Product Development, LLC, and William Sharbaugh	S-1/A	333-235860	10.23	January 16, 2020
10.24*	Amendment No. 2 to the Sharbaugh Employment Agreement, dated as of March 1, 2019	S-1/A	333-235860	10.24	January 16, 2020
10.25*	Employment Agreement, dated as of May 22, 2013, between David Johnston, Pharmaceutical Product Development, LLC, and, solely for purposes of Section 9(n) thereof, Jaguar Holding Company I (the "Johnston Employment Agreement")	-	-	-	Filed Herewith
10.26*	Amendment No. 1 to the Johnston Employment Agreement, dated as of December 15, 2016	-	-	-	Filed Herewith
10.27*	Amendment No. 2 to the Johnston Employment Agreement, dated as of April 1, 2018	-	-	-	Filed Herewith
10.28*	Assignment and Assumption Agreement, dated as of May 11, 2017, by and among Jaguar Holding Company I, Eagle Holding Company I, Pharmaceutical Product Development, LLC, and David Johnston	-	-	-	Filed Herewith
10.29	Credit Agreement, dated as of January 13, 2021, by and among PPD, Inc., PPD Development, L.P., each lender from time to time party thereto, each L/C Issuer party thereto and JPMorgan Chase Bank, N.A., as Administrative Agent, Collateral Agent and a L/C Issuer	8-K	001-39212	10.1	January 14, 2021
10.30*	Amended and Restated Employment Agreement, effective as of November 1, 2019, between Anshul Thakral, Pharmaceutical Product Development, LLC, and, solely for purposes of Sections 2(g), 9(m), and (9)(n) thereof, Eagle Holding Company I (the "Thakral Employment Agreement")	S-1/A	333-235860	10.30	January 16, 2020
10.31*	Amended and Restated Consulting Services Agreement, dated as of May 11, 2017, between PPD Development, L.P., Carlyle Investment Management L.L.C., and, solely for purposes of Section 1(a) thereof, Jaguar Holding Company I	S-1/A	333-235860	10.31	January 16, 2020
10.32*	Amended and Restated Consulting Services Agreement, dated as of May 11, 2017, between PPD Development, L.P., Hellman & Friedman LP, and, solely for purposes of Section 1(a) thereof, Jaguar Holding Company I	S-1/A	333-235860	10.32	January 16, 2020
10.33*	Eagle Holding Company I 2017 Equity Incentive Plan	S-1/A	333-235860	10.33	January 16, 2020
10.34*	Form of Nonqualified Stock Option Agreement under the Eagle Holding Company I 2017 Equity Incentive Plan (David Simmons)	S-1/A	333-235860	10.34	January 16, 2020
10.35*	Form of Nonqualified Stock Option Agreement under the Eagle Holding Company I 2017 Equity Incentive Plan (Christopher G. Scully and William J. Sharbaugh)	S-1/A	333-235860	10.35	January 16, 2020
10.36*	Form of Nonqualified Stock Option Agreement under the Eagle Holding Company I 2017 Equity Incentive Plan (Anshul Thakral for 2017 and 2018 and David Johnston for all years presented)	S-1/A	333-235860	10.36	January 16, 2020
10.37*	Form of Nonqualified Stock Option Agreement under the Eagle Holding Company I 2017 Equity Incentive Plan (Anshul Thakral for 2019)	S-1/A	333-235860	10.37	January 16, 2020
10.38*	PPD, Inc. 2020 Omnibus Incentive Plan	S-1/A	333-235860	10.38	January 27, 2020
10.39*	Form of Option Grant Notice and Agreement under the PPD, Inc. 2020 Omnibus Incentive Plan	S-1/A	333-235860	10.39	January 27, 2020
10.40*	Form of Restricted Stock Grant Notice and Agreement under the PPD, Inc. 2020 Omnibus Incentive Plan	S-1/A	333-235860	10.40	January 27, 2020
10.41*	Form of Restricted Stock Unit Grant Notice and Agreement for Directors under the PPD, Inc. 2020 Omnibus Incentive Plan	S-1/A	333-235860	10.41	January 27, 2020

10.42*	Form of Restricted Stock Unit Grant Notice and Agreement for Employees under the PPD, Inc. 2020 Omnibus Incentive Plan	S-1/A	333-235860	10.42	January 27, 2020
10.43*	Form of PSU Grant Notice and Agreement for Employees under the PPD, Inc. 2020 Omnibus Incentive Plan	-	-	-	Filed Herewith
10.44*	Amendment No. 3 to the Johnston Employment Agreement, dated as of February 23, 2021	-	-	-	Filed Herewith
10.45*	Amendment No. 1 to the Thakral Employment Agreement, dated as of February 23, 2021	-	-	-	Filed Herewith
21.1	Subsidiaries of the Registrant	-	-	-	Filed Herewith
23.1	Consent of Deloitte & Touche LLP	-	-	-	Filed Herewith
23.2	Consent of KPMG LLP	-	-	-	Filed Herewith
31.1	Certification of Principal Executive Officer pursuant to Exchange Act Rules 13a-14(a) and 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002	-	-	-	Filed Herewith
31.2	Certification of Principal Financial Officer pursuant to Exchange Act Rules 13a-14(a) and 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002	-	-	-	Filed Herewith
32.1^	Certification of Principal Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	-	-	-	Filed Herewith
32.2^	Certification of Principal Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	-	-	-	Filed Herewith
99.1	The audited financial statements of venBio Global Strategic Fund, L.P. as of December 31, 2020 and for the year ended December 31, 2020, pursuant to Rule 3-09 of Regulation S-X	-	-	-	Filed Herewith
99.2	The unaudited financial statements of venBio Global Strategic Fund, L.P. as of December 31, 2019 and for the year ended December 31, 2019, pursuant to Rule 3-09 of Regulation S-X	-	-	-	Filed Herewith
99.3	The unaudited financial statements of venBio Global Strategic Fund, L.P. as of December 31, 2018 and for the year ended December 31, 2018, pursuant to Rule 3-09 of Regulation S-X	-	-	-	Filed Herewith
101.INS	Inline XBRL Instance Document - the Instance Document does not appear in the interactive data file because its XBRL tags are embedded within the Inline XBRL document.	-	-	-	Filed Herewith
101.SCH	Inline XBRL Taxonomy Extension Schema Document	-	-	-	Filed Herewith
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document	-	-	-	Filed Herewith
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document	-	-	-	Filed Herewith
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document	-	-	-	Filed Herewith
101.PRE	Inline Taxonomy Extension Presentation Linkbase Document	-	-	-	Filed Herewith
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)	-	-	-	Filed Herewith

* Denotes management contract or compensatory plan or arrangement.

^ Furnished herewith. The certifications attached as Exhibit 32.1 and 32.2 that accompany this Annual Report on Form 10-K are deemed furnished and not filed with the Securities and Exchange Commission and are not to be incorporated by reference into any filing of PPD, Inc. under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, whether made before or after the date of this Annual Report on Form 10-K, irrespective of any general incorporation language contained in such filing.

Item 16. Form 10-K Summary

None.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

PPD, Inc.

By:	/s/ Christopher G. Scully
Name:	Christopher G. Scully
Title:	Executive Vice President and Chief Financial Officer (On behalf of the Registrant and as Principal Financial Officer)

Date: February 26, 2021

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed by the following persons on behalf of the registrant and in the capacities indicated on February 26, 2021.

Signature	Title
/s/ David Simmons David Simmons	Chief Executive Officer and Chairman (Principal Executive Officer)
/s/ Christopher G. Scully Christopher G. Scully	Executive Vice President and Chief Financial Officer (Principal Financial Officer)
/s/ Glen Donovan Glen Donovan	Chief Accounting Officer (Principal Accounting Officer)
/s/ Joe Bress Joe Bress	Director
/s/ Stephen Ensley Stephen Ensley	Director
/s/ Maria Teresa Hilado Maria Teresa Hilado	Director
/s/ Colin Hill Colin Hill	Director
/s/ Jeffrey B. Kindler Jeffrey B. Kindler	Director
/s/ P. Hunter Philbrick P. Hunter Philbrick	Director
/s/ Allen R. Thorpe Allen R. Thorpe	Director
/s/ Stephen H. Wise Stephen H. Wise	Director

AGREEMENT AND PLAN OF MERGER

dated as of

April 26, 2017

by and among

Eagle Holding Company I

Eagle Holding Company II, LLC

EAGLE REORGANIZATION MERGER SUB, INC.

EAGLE BUYER, INC.

and

JAGUAR HOLDING COMPANY I

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Annexes

AGREEMENT AND PLAN OF MERGER

This Agreement and Plan of Merger (this "Agreement"), dated as of April 26, 2017, is entered into by and among Eagle Holding Company I, a Delaware corporation ("Parent"), Eagle Holding Company II, LLC, a Delaware limited liability company and wholly owned subsidiary of Parent ("Holdings"), Eagle Reorganization Merger Sub, Inc., a Delaware corporation and a wholly owned subsidiary of Holdings ("Merger Sub"), Eagle Buyer, Inc., a Delaware corporation ("Buyer"), and Jaguar Holding Company I, a Delaware corporation (together with its successors and assigns, the "Company").

RECITALS

WHEREAS, the respective Boards of Directors of Parent, Holdings, Merger Sub, Buyer, and the Company have approved and declared advisable this Agreement and the transactions contemplated hereby, including the Reorganization Merger (as defined below), the Conversion (as defined below) and the Merger (defined below) upon the terms and subject to the conditions of this Agreement and in accordance with the DGCL (defined below);

WHEREAS, the respective Boards of Directors of Parent, Merger Sub, Buyer and the Company have determined that this Agreement and the transactions contemplated hereby, including, as applicable, the Reorganization Merger, the Conversion and the Merger are in furtherance of and consistent with their respective business strategies and are fair to, and in the best interest of, their respective stockholders; and

WHEREAS, in order to induce Buyer to enter into this Agreement, simultaneously with the execution of this Agreement, Carlyle Investment Management L.L.C., Hellman & Friedman LP and certain of their respective Affiliates executed and delivered to Buyer a letter agreement (the "Sponsor Support Letter") pursuant to which, and subject to the terms and conditions thereof, such affiliates agreed to certain matters as set forth therein.

NOW, THEREFORE, in consideration of the foregoing and the respective representations, warranties, covenants and agreements set forth in this Agreement and intending to be legally bound hereby, Parent, Holdings, Merger Sub, Buyer, and the Company agree as follows:

ARTICLE I.
CERTAIN DEFINITIONS

1.1 Definitions. As used herein, the following terms shall have the following meanings:

"Acquisition Proposal" means, other than the transactions contemplated by this Agreement, any third Person offer, proposal or inquiry relating to the (a) acquisition, merger, consolidation, reorganization, liquidation, recapitalization, share exchange or other business combination transaction with respect to the Company or any of its Subsidiaries, (b) issuance or sale of any significant portion of the shares of capital stock or other equity securities of the Company or any of its Subsidiaries or (c) sale, lease, exchange or other disposition of any significant portion of the properties or assets of the Company and its Subsidiaries (on a consolidated basis).

"Action" means any claim, charge, action, suit, audit, assessment, mediation, arbitration, inquiry, proceeding or investigation, in each case, by or before any Governmental Authority.

"Additional Merger Consideration" means (i) with respect to any Common Share, Rollover Share or Vested Option, (A) the applicable portion of the Earn-Out Amounts determined in accordance with Section 3.8 plus (B) the applicable portion of the Company Tax Benefits (and any other amounts) determined in accordance with Section 3.9, and (ii) in the aggregate, all the Earn-Out Amounts determined in accordance with Section 3.8 plus (B) all of the Company Tax Benefits (and any other amounts) determined in accordance with Section 3.9.

"Adjusted Federal Tax Rate" has the meaning specified in Section 3.9(b).

"Affiliate" means, with respect to any specified Person, any Person that, directly or indirectly, controls, is controlled by, or is under common control with, such specified Person, through one or more intermediaries or otherwise; provided, prior to the Effective Time, (x) Parent and its controlled Affiliates shall not be deemed to be an Affiliate of the Company or any of its Subsidiaries, and the Company and its Subsidiaries shall not be deemed to be an Affiliate of Parent and its controlled Affiliates and (y) Buyer shall not be deemed an Affiliate of Parent, its controlled Affiliates, the Company or any of their respective Subsidiaries, and Parent, its controlled Affiliates, the Company or any of their respective Subsidiaries shall not be deemed an Affiliate of Buyer. For the avoidance of doubt, following the Closing, Affiliates of Parent shall include the Company and its Subsidiaries.

"Aggregate Fully-Diluted Common Shares" means the sum of (i) the aggregate number of Common Shares (including shares of Parent Restricted Stock, but excluding for the avoidance of doubt Rollover Shares) held by all Pre-Closing Holders immediately prior to the Effective Time, plus (ii) the aggregate number of shares of Parent Common Stock issuable upon the exercise in full of all Vested Options held by all Pre-Closing Holders immediately prior to the Effective Time, plus (iii) the aggregate number of Dissenting Shares immediately prior to the Effective Time, plus (iv) the aggregate number of Rollover Shares held by all Rollover Sellers immediately prior to the Rollover Closing, plus (v) the aggregate number of Reorganization Merger Dissenting Shares, plus (v) any Repurchased Shares.

"Agreement" has the meaning specified in the preamble hereto.

"Antitrust Authority" means the Antitrust Division of the United States Department of Justice, the United States Federal Trade Commission or the antitrust or competition Law authorities of any other jurisdiction (whether United States, foreign or multinational).

"Applicable Federal Tax Rate" has the meaning specified in Section 3.9(b).

"Approval Laws" has the meaning specified in Section 8.1(a).

"Assumed Payroll Cost Amount" means an amount equal to $5,602,717 if Parent, after consultation with the CP VI Investors and the HFCP VIII Investors, reasonably determines that one or more transactions contemplated by this Agreement constitute a Covered Transaction and, otherwise, $5,587,947.

"Assumed Transaction Tax Deduction Amount" means an amount equal to $290,356,777 if Parent, after consultation with the CP VI Investors and the HFCP VIII Investors, reasonably determines that one or more transactions contemplated by this Agreement constitute a Covered Transaction and, otherwise, $268,457,224.

"Blue Spectrum Investors" means Blue Spectrum ZA 2015 L.P., a Cayman Island exempted limited partnership, together with their successors and permitted assigns.

"Book-Entry Shares" has the meaning specified in Section 3.3(b).

"Business Day" means any day that is not a Saturday, a Sunday or other day on which the Federal Reserve Bank of New York is closed.

"Buyer" has the meaning specified in the preamble hereto.

"Buyer Cure Period" has the meaning specified in Section 11.1(c).

"Buyer Related Parties" means Buyer, the Equity Financing Sources, any of their respective former, current or future stockholders, managers, members, directors, partners, officers, Affiliates and agents and any former, current or future stockholders, managers, members, directors, partners, officers, Affiliates and agents of any of the foregoing, and any successor or assign of the foregoing.

"Cancelled Shares" has the meaning specified in Section 3.1(a).

"Cash Per Share Merger Consideration" has the meaning specified in Section 3.1(a).

"Certificate of Merger" has the meaning specified in Section 2.2(a).

"Certificate of Reorganization Merger" has the meaning specified in Section 2.1(a).

"Certificates" has the meaning specified in Section 3.3(b).

"Change of Control Payment" has the meaning specified in Section 3.9(b).

"Change of Control Transaction" has the meaning specified in Section 3.9(b).

"Closing" has the meaning specified in Section 2.4.

"Closing Date" has the meaning specified in Section 2.4.

"Code" means the Internal Revenue Code of 1986, as amended.

"Commitment Funding Shortfall" means the excess (if any) of (i) the aggregate amount of all Investment Portfolio commitments that the Company reasonably expects to be funded in the twelve (12) months immediately following the date of determination over (ii) the aggregate amount of the Reserve Account at such time.

"Commitment Letters" has the meaning specified in Section 5.6.

"Common Share" has the meaning specified in Section 3.1(a).

"Common Stock" means the common stock, par value $0.01 per share, of the Company.

"Company" has the meaning specified in the preamble hereto, and from and after the Reorganization Merger Effective Time shall be deemed to refer to the Reorganization Merger Surviving Company.

"Company Benefit Plan" has the meaning specified in Section 4.13(a).

"Company Cure Period" has the meaning specified in Section 11.1(b).

"Company Group" means the Company and its Subsidiaries.

"Company Options" has the meaning specified in Section 2.1(c)(iv).

"Company Related Parties" means the Company and any of its former, current or future stockholders, managers, members, directors, partners, officers, Affiliates and agents and any former, current or future stockholders, managers, members, directors, partners, officers, Affiliates and agents of any of the foregoing and any successor or assign of the foregoing.

"Company Restricted Shares" has the meaning specified in Section 2.1(c)(iii).

"Company Service" has the meaning specified in Section 4.26(a).

"Company Tax Benefit" has the meaning specified in Section 3.9(b).

"Constituent Corporations" has the meaning specified in Section 2.1.

"Continuing Employees" has the meaning specified in Section 8.2(a).

"Contracting Parties" has the meaning specified in Section 12.15.

"Contracts" means any written legally binding contracts, agreements, subcontracts, leases, licenses and purchase orders.

"Covered Transaction" means a transaction described in Treasury Regulation Section 1.263(a)-5(e)(3)(ii).

"Conversion" has the meaning specified in Section 2.1(d).

"Conversion Effective Time" has the meaning specified in Section 2.1(d).

"CP V Investors" means Carlyle Partners V, L.P., Carlyle Partners V-A, L.P., CP V Coinvestment A, L.P., CP V Coinvestment B, L.P., Carlyle-PPD Coinvestment, L.P., and each of their respective successors and permitted assigns.

"CP VI Investors" means Carlyle Partners VI, L.P., and each of its respective successors and permitted assigns.

"Current Representation" has the meaning specified in Section 12.16(a).

"Debt Financing" means debt financing to be incurred by Holdings at the Closing on terms that are substantially consistent with the term sheet set forth in Schedule 1.1(a), or otherwise acceptable to Buyer, and that results in Holdings receiving at least Five Hundred Million Dollars ($500,000,000) of gross proceeds at the Closing.

"Debt Violation" has the meaning specified in Section 3.10.

"Deferred Payment Amount" means Two Billion Dollars ($2,000,000,000).

"Deferred Payment Date" means September 29, 2017.

"Deferred Payment Shares" means (x) with respect to the HFCP VII Investors, a number (rounded down to the nearest whole number) of Common Shares owned in the aggregate by the HFCP VII Investors equal to (A) 16.9% of the Deferred Payment Amount divided by (B) the Cash Per Share Merger Consideration, and (y) with respect to the CP V Investors, a number (rounded down to the nearest whole number) of Common Shares owned in the aggregate by the CP V Investors equal to (A) 83.1% of the Deferred Payment Amount divided by (B) the Cash Per Share Merger Consideration.

"Designated Person" has the meaning specified in Section 12.16(a).

"DGCL" has the meaning specified in Section 2.1(a).

"Dissenting Shares" has the meaning specified in Section 3.6.

"Dissenting Stockholders" has the meaning specified in Section 3.6.

"Earn-Out Amount" has the meaning specified in Section 3.8(b).

"Earn-Out Percentage" means, (i) with respect to Earn-Out Amounts, Company Tax Benefits or any Change of Control Payment paid on or prior to the fifth anniversary of the Closing Date, with respect to any Pre-Closing Holder, such Pre-Closing Holder's Fully-Diluted Percentage and (ii) with respect to Earn-Out Amounts, Company Tax Benefits or any Change of Control Payment that are not paid until after the fifth anniversary of the Closing Date, (A) with respect to any U.S. Pre-Closing Holder in respect of such U.S. Pre-Closing Holder's Vested Options held by such holder immediately prior to the Effective Time, zero, and (B) with respect to any Pre-Closing Holder in respect of (1) such Pre-Closing Holder's Common Shares held by such holder immediately prior to the Effective Time, (2) if such Pre-Closing Holder is not a U.S. Pre-Closing Holder, such Pre-Closing Holder's Vested Options held by such holder immediately prior to the Effective Time and (3) if such Pre-Closing Holder is a Rollover Seller, the Rollover Shares held by such Rollover Seller immediately prior to the Rollover Closing, a ratio (expressed as a percentage) equal to (x) the sum of (i) the number of Common Shares (including shares of Parent Restricted Stock, but excluding Rollover Shares) held by such holder immediately prior to

the Effective Time (including any such shares issued in respect of Vested Options exercised immediately prior to the Effective Time), plus (ii) the number of shares of Parent Common Stock issuable upon the exercise of any Vested Options held by such holder immediately prior to the Effective Time (excluding, for the avoidance of doubt, shares of Parent Common Stock issued in respect of Vested Options exercised prior to the Effective Time), plus (iii) the number of Rollover Shares held by such holder immediately prior to the Rollover Closing divided by (y) the sum of (1) the aggregate number of Common Shares (including shares of Parent Restricted Stock) held by all Pre-Closing Holders immediately prior to the Effective Time (including any such shares issued in respect of Vested Options exercised immediately prior to the Effective Time), plus (2) the aggregate number of shares of Parent Common Stock issuable upon exercise in full of all Vested Options held by all Pre-Closing Holders (other than U.S. Pre-Closing Holders) immediately prior to the Effective Time (excluding, for the avoidance of doubt, shares of Parent Common Stock issued in respect of Vested Options exercised prior to the Effective Time), plus (3) the aggregate number of Dissenting Shares immediately prior to the Effective Time, plus (4) the aggregate number of Rollover Shares held by all Rollover Sellers immediately prior to the Rollover Closing, plus (5) the aggregate number of all Reorganization Merger Dissenting Shares, plus (6) any Repurchased Shares.

"Effective Time" has the meaning specified in Section 2.4.

"Environmental Laws" means any and all Laws relating to Hazardous Materials or the protection of the environment, as in effect on and as interpreted as of the date hereof.

"Equity Commitment Letter" has the meaning specified in Section 5.6.

"Equity Financing" has the meaning specified in Section 5.6.

"Equity Financing Sources" means the HFCP VIII Investors, the CP VI Investors, the GIC Investors, the Blue Spectrum Investors and the Sponsor Rollover Sellers.

"Equity Plan" means the Jaguar Holding Company I Amended and Restated 2011 Equity Incentive Plan, as amended from time to time.

"ERISA" has the meaning specified in Section 4.13(a).

"Excess Tax Deductions" has the meaning specified in Section 3.9(b).

"Exchange Agent" has the meaning specified in Section 3.3(a).

"Existing Credit Agreement" means that certain Credit Agreement, dated as of August 18, 2015, by and among Jaguar Holding Company II, Pharmaceutical Product Development, LLC, the Company, and the lenders and certain other parties thereto.

"Existing Indenture" means that certain Indenture, dated as of August 18, 2015, by and among Jaguar Holding Company II, Pharmaceutical Product Development, LLC, the guarantors party thereto and Wilmington Trust, National Association.

"Existing Representation" has the meaning specified in Section 12.16(a).

"FDA" has the meaning specified in Section 4.26(b).

"Financial Statements" has the meaning specified in Section 4.8.

"Financing" has the meaning specified in Section 5.6.

"Financing Purposes" has the meaning specified in Section 5.6.

"Fully-Diluted Percentage" means, with respect to any Pre-Closing Holder, a ratio (expressed as a percentage) equal to (x) the sum of (A) the number of Common Shares (including shares of Parent Restricted Stock, but excluding for the avoidance of doubt Rollover Shares) held by such holder immediately prior to the Effective Time, plus (B) the number of shares of Parent Common Stock issuable upon the exercise of any Vested Options held by such holder immediately prior to the Effective Time, plus (C) the aggregate number of Rollover Shares held by such holder immediately prior to the Rollover Closing, divided by (y) the Aggregate Fully-Diluted Common Shares.

"Fundamental Company Representations" means the representations and warranties set forth in Section 4.1(a) (Corporate Organization of the Company), Section 4.3 (Due Authorization), Section 4.6 (Capitalization of the Company), Section 4.7 (Capitalization of Subsidiaries) solely with respect to Pharmaceutical Product Development, LLC and each Subsidiary of the Company that directly or indirectly owns equity interests in Pharmaceutical Product Development, LLC, and Section 4.28 (Restricted Payment Capacity).

"Funding Amount" has the meaning specified in Section 3.3.

"GAAP" means United States generally accepted accounting principles, consistently applied.

"GIC Investors" means Clocktower Investment Pte Ltd., a Singapore private limited company, together with its successors and permitted assigns.

"Governmental Authority" means any federal, state, provincial, municipal, local or foreign government, governmental authority, regulatory or administrative agency, governmental commission, department, board, bureau, agency, instrumentality, court or tribunal, or any mediator, arbitrator or arbitral body.

"Governmental Order" means any order, judgment, injunction, decree, writ, stipulation, ruling, verdict, determination or award, in each case, made, issued or entered by or with any Governmental Authority.

"Hazardous Material" means any substance, material or waste that is listed, classified or regulated by a Governmental Authority as a "toxic substance", "hazardous substance" or "hazardous material" or words of similar meaning and regulatory effect.

"HFCP VII Investors" means Hellman & Friedman Capital Partners VII, L.P., Hellman & Friedman Capital Partners VII (Parallel), L.P., HFCP VII (Parallel-A), L.P. and H&F Executives VII, L.P., together with their respective successors and permitted assigns.

"HFCP VIII Investors" means Hellman & Friedman Capital Partners VIII, L.P., Hellman & Friedman Capital Partners VIII (Parallel), L.P., HFCP VIII (Parallel-A), L.P., H&F Executives VIII, L.P. and H&F Associates VIII, L.P., together with their respective successors and permitted assigns.

"HSR Act" means the Hart-Scott-Rodino Antitrust Improvements Act of 1976, as amended.

"Hypothetical Base Income" has the meaning specified in Section 3.9(b).

"Hypothetical Reduced Income" has the meaning specified in Section 3.9(b).

"Information or Document Request" means any request or demand for the production, delivery or disclosure of documents or other evidence, or any request or demand for the production of witnesses for interviews or depositions or other oral or written testimony, by any Governmental Authority relating to the transactions contemplated hereby or by any third party challenging the transactions contemplated hereby, including any so called "second request" for additional information or documentary material or any civil investigative demand made or issued by the Antitrust Division of the United States Department of Justice or the United States Federal Trade Commission or any subpoena, interrogatory or deposition by any Governmental Authority.

"Intellectual Property" means all intellectual property rights of every kind and nature however denominated, as they exist throughout the world, including any of the following: (i) patents and patent applications; (ii) registered and unregistered trademarks, service marks and trade names, pending trademark and service mark registration applications, and intent-to-use registrations or similar reservations of marks; (iii) registered and unregistered copyrights, and applications for registration of copyright; (iv) internet domain names; (v) trade secrets, know-how and other proprietary rights; and (vi) rights in computer software and technology.

"Interim Investors Agreement" means that certain Interim Investors Agreement, dated as of the date hereof, by and among Buyer and each of the Equity Financing Sources.

"Investment Portfolio" has the meaning specified in Section 3.8(a).

"Law" means any statute, law, ordinance, rule, regulation or Governmental Order, in each case, of any Governmental Authority.

"Leased Real Property" means all real property leased by the Company or any of its Subsidiaries, the lease of which may not be terminated by the Company or its Subsidiaries, at will or by giving notice of 90 days or less, without cost or penalty and pursuant to which the Company or any of its Subsidiaries leases 70,000 or more rentable square feet.

"Letter of Transmittal" has the meaning specified in Section 3.3(b).

"Lien" means any mortgage, deed of trust, deed to secure debt, pledge, charge, hypothecation, encumbrance, security interest or other lien of any kind.

"Material Adverse Effect" means, (i) with respect to the Company, a material adverse effect on the business, assets, liabilities, results of operations or financial condition of the

Company and its Subsidiaries, taken as a whole; provided, however, that in no event will any of the following (or the effect of any of the following), alone or in combination, be deemed to constitute, or be taken into account in determining whether there has been or will be, a "Material Adverse Effect" on or in respect of the Company: (A) any change in Law, regulatory policies, accounting standards or principles (including GAAP) or any guidance relating thereto or interpretation thereof, (B) any change in interest rates or economic, political, business or financial market conditions generally (including any changes in credit, financial, commodities, securities or banking markets), (C) any change generally affecting any of the industries in which the Company or any of its Subsidiaries operates or the economy as a whole, (D) except for purposes of the representations and warranties set forth in Sections 4.3, 4.4, 4.5, and 4.13(f), the announcement or the execution of this Agreement, the pendency or consummation of the Merger or the performance of this Agreement, including (to the extent arising therefrom) losses or threatened losses of employees, customers, vendors, distributors or others having relationships with the Company or any of its Subsidiaries as a result of the foregoing, (E) the compliance with the terms of this Agreement (other than Section 7.1) or any action taken or not taken at the written request of Buyer or as required or contemplated by this Agreement (other than Section 7.1), (F) any natural disaster, (G) any acts of terrorism, sabotage, war, the outbreak or escalation of hostilities, weather conditions, change in geopolitical conditions or other force majeure events, or (H) any failure of the Company or its Subsidiaries to meet any projections or forecasts, provided that this clause (H) shall not prevent a determination that any change or effect underlying such failure to meet projections or forecasts has resulted in a Material Adverse Effect (to the extent such change or effect is not otherwise excluded from this definition of Material Adverse Effect); except, in the case of clauses (A), (B), (C), (F) and (G) above, to the extent that any such change, condition, event or effect has a disproportionate and adverse effect on the Company or its Subsidiaries relative to other businesses in the industries in which the Company or its Subsidiaries operate; and (ii) with respect to Parent, Holdings, Merger Sub or Buyer, a material adverse effect on the ability of Parent, Holdings, Merger Sub or Buyer, in a timely manner, to enter into, to perform its obligations under, or to consummate the transactions contemplated by, this Agreement.

"Merger" has the meaning specified in Section 2.2(a).

"Merger Consent" has the meaning specified in Section 9.2.

"Merger Consideration" means (i) the aggregate amount payable with respect to Common Shares and Vested Options in respect of Cash Per Share Merger Consideration (net of exercise prices in the case of Vested Options) plus (ii) the aggregate Additional Merger Consideration.

"Merger Sub" has the meaning specified in the preamble hereto.

"Multiemployer Plan" has the meaning specified in Section 4.13(d).

"Net Earn-Out Tax" has the meaning specified in Section 3.8(b).

"Nonparty Affiliates" has the meaning specified in Section 12.15.

"Option" has the meaning specified in Section 3.2(a).

"Option Rollover Amount" means, with respect to a Pre-Closing Holder of Vested Options, an amount equal to the applicable Option Rollover Percentage of the sum of (i) the aggregate Per Option Closing Consideration and (ii) Unpaid Bonuses, in each case payable to such Pre-Closing Holder determined without giving effect to any applicable withholding or deduction, including pursuant to Section 3.7.

"Option Rollover Percentage" means, with respect to a Pre-Closing Holder of Vested Options, (i) if such holder is currently an employee of the Company or any of its Subsidiaries and in connection therewith has a title of Vice President, 10%, (ii) if such holder is currently an employee of the Company or any of its Subsidiaries and in connection therewith has a title of Senior Vice President, 20%, (iii) if such holder is currently an employee of the Company or any of its Subsidiaries and in connection therewith has a title of Executive Vice President or higher, 25%, and (iv) if none of clauses (i), (ii) or (iii) apply, 0%.

"Owned Real Property" means all real property owned by the Company or any of its Subsidiaries.

"Parent" has the meaning specified in the preamble hereto.

"Parent Common Stock" shall mean common stock of Parent prior to the Effective Time, par value $0.01 per share. For the avoidance of doubt, in no event shall any Parent Common Stock be deemed Surviving Corporation Non-Voting Common Stock or Surviving Corporation Voting Common Stock.

"Parent Related Parties" means Parent, Holdings, Merger Sub, any of their respective former, current or future stockholders, managers, members, directors, partners, officers, Affiliates and agents and any former, current or future stockholders, managers, members, directors, partners, officers, Affiliates and agents of any of the foregoing and any successor or assign of the foregoing.

"Parent Restricted Stock" has the meaning specified in Section 3.1(a).

"Per Option Closing Consideration" has the meaning specified in Section 3.2(b).

"Permitted Liens" means (i) mechanics, materialmen's and similar Liens with respect to any amounts not yet due and payable or which are being contested in good faith through (if then appropriate) appropriate proceedings, (ii) Liens for Taxes not yet delinquent or which are being contested in good faith through (if then appropriate) appropriate proceedings, (iii) Liens securing rental payments under capital lease agreements, (iv) Liens on real property (including easements, covenants, rights of way and similar restrictions of record) that (A) are matters of record or would be disclosed by a current, accurate survey or physical inspection of such real property, or (B) do not materially interfere with the present uses of such real property, (v) to the extent terminated in connection with the payment of indebtedness at the Closing, Liens securing payment, or any other obligations, of the Company or its Subsidiaries with respect to such indebtedness, (vi) Liens constituting a lease, sublease, license or occupancy agreement that gives any third party any right to occupy any real property, (vii) other Liens arising in the ordinary course of business and not incurred in connection with the borrowing of money and not interfering materially, individually or in the aggregate, with the ordinary conduct of the business

of the Company or its Subsidiaries as currently conducted, and (viii) Liens described on Schedule 1.1(b).

"Person" means any individual, firm, corporation, partnership, limited liability company, incorporated or unincorporated association, joint venture, joint stock company, governmental agency or instrumentality or other entity of any kind.

"Post-Closing Matters" has the meaning specified in Section 12.16(a).

"Post-Closing Representation" has the meaning specified in Section 12.16(a).

"Pre-Closing Designated Persons" has the meaning specified in Section 12.16(b).

"Pre-Closing Holders" means all (i) Persons who hold one or more Common Shares (including shares of Parent Restricted Stock) and/or Vested Options immediately prior to the Effective Time and (ii) Rollover Sellers.

"Pre-Closing Privilege" has the meaning specified in Section 12.16(b).

"Prior Company Counsel" has the meaning specified in Section 12.16(a).

"Realized Tax Deductions" has the meaning specified in Section 3.9(b).

"Recapitalized Shares" has the meaning specified in Section 3.1(a).

"Remedies Exception" has the meaning specified in Section 4.3.

"Reorganization Merger" has the meaning specified in Section 2.1(a).

"Reorganization Merger Dissenting Shares" has the meaning specified in Section 2.1(c)(iv).

"Reorganization Merger Effective Time" has the meaning specified in Section 2.1(b).

"Reorganization Merger Surviving Company" has the meaning specified in Section 2.1(a).

"Repurchased Shares" has the meaning specified in Section 7.1(a)(ii).

"Reserve Account" shall mean, at the time of determination, the aggregate amount of all Earn-Out Amounts that have been set aside and not paid to the Pre-Closing Holders pursuant to Section 3.8(c) and that have not been used to fund Investment Portfolio commitments.

"Restricted Payment Limitation" has the meaning specified in Section 3.10.

"Rollover Agreements" means those rollover agreements, each between a holder of Common Stock and Buyer, pursuant to which such holder agrees to contribute prior to the Closing a number of shares of Parent Common Stock to Buyer in exchange for equity interests of Buyer plus the right to receive certain payments.

"Rollover Closing" means the Investment Closing as defined in the applicable Rollover Agreement.

"Rollover Sellers" means each holder of Common Stock that contributes Rollover Shares pursuant to a Rollover Agreement.

"Rollover Shares" means each share of Parent Common Stock held by a Rollover Seller that is contributed or otherwise transferred to Buyer at the Rollover Closing pursuant to the terms and conditions of the applicable Rollover Agreement.

"Schedules" has the meaning specified in the first sentence of Article IV.

"Section 3.9 Return" has the meaning specified in Section 3.9(b).

"Sponsor Rollover Agreement" means each Rollover Agreement that a Sponsor Rollover Seller is party to.

"Sponsor Rollover Seller" means each HFCP VII Investor that is a Rollover Seller.

"Stockholders Agreement" means that certain First Amended and Restated Stockholders Agreement of the Company, dated as of March 16, 2012, by and among the Company and the other Persons party thereto.

"Subsidiary" means, with respect to a Person, a corporation or other entity of which more than 50% of the voting power of the equity securities or equity interests is owned, directly or indirectly, by such Person.

"Surviving Corporation" has the meaning specified in Section 2.2(b).

"Surviving Corporation Non-Voting Common Stock" means the non-voting common stock, par value $0.01 per share, of the Surviving Corporation.

"Surviving Corporation Voting Common Stock" means the voting common stock, par value $0.01 per share, of the Surviving Corporation.

"Tax Returns" means any return, declaration, report, statement, information statement or other document filed or required to be filed with respect to Taxes, including any schedules or attachments thereto and any amendments or supplements of any of the foregoing.

"Taxes" means all federal, state, local, foreign or other tax, including all income, gross receipts, license, payroll, employment, excise, severance, stamp, occupation, premium, windfall profits, environmental, customs duties, capital stock, ad valorem, value added, inventory, franchise, profits, withholding, escheat, abandoned or unclaimed property obligation, social security (or similar), unemployment, disability, real property, personal property, sales, use, transfer, registration, alternative or add-on minimum, or estimated tax, and including any interest, fine, penalty or addition thereto.

"Terminating Buyer Breach" has the meaning specified in Section 11.1.

"Terminating Company Breach" has the meaning specified in Section 11.1(b).

"Termination Date" has the meaning specified in Section 11.1(b).

"Top Customers" has the meaning specified in Section 4.25.

"Top Suppliers" has the meaning specified in Section 4.25.

"Transaction Agreements" has the meaning specified in Section 12.10.

"U.S. Pre-Closing Holder" means any Pre-Closing Holder that is subject to income Tax in the United States.

"Unfunded CP VI Amount" has the meaning specified in Section 3.3(c).

"Unfunded HCP VIII Amount" has the meaning specified in Section 3.3(c).

"Unpaid Bonuses" means any cash bonuses with respect to a Vested Option that are unpaid as of immediately prior to the Effective Time and are related to dividend payments previously made to stockholders of the Company.

"Value" means, with respect to each share of Surviving Corporation Voting Common Stock or Surviving Corporation Non-Voting Common Stock, an amount equal to $27.086.

"Vested Options" has the meaning specified in Section 3.2(a).

1.2 Construction.

(a) Unless the context of this Agreement otherwise requires, (i) words of any gender include each other gender; (ii) words using the singular or plural number also include the plural or singular number, respectively; (iii) the terms "hereof," "herein," "hereby," "hereto" and derivative or similar words refer to this entire Agreement; (iv) the terms "Article", "Section", "Schedule" or "Annex" refer to the specified Article or Section of, or Schedule or Annex to, this Agreement; (v) the word "including" shall mean "including, without limitation," and (vi) the word "or" shall be disjunctive but not exclusive.

(b) Unless the context of this Agreement otherwise requires, and except with respect to the Schedules, references to agreements and other documents shall be deemed to include all subsequent amendments and other modifications thereto.

(c) Unless the context of this Agreement otherwise requires, references to statutes shall include all rules and regulations promulgated thereunder and any references to a particular Law shall refer to such Law as amended from time to time through and until the date of this Agreement.

(d) The language used in this Agreement shall be deemed to be the language chosen jointly by the parties to express their mutual intent and no rule of strict construction shall be applied against any party.

(e) Whenever this Agreement refers to a number of days, such number shall refer to calendar days unless Business Days are specified.

(f) The phrase "to the extent" shall mean the degree to which a subject or other thing extends, and such phrase shall not mean simply "if".

(g) All accounting terms used herein and not expressly defined herein shall have the meanings given to them under GAAP.

(h) All amounts payable pursuant to this Agreement shall be paid in U.S. dollars, and all references to "$" or "dollars" shall mean the lawful currency of the United States of America.

1.3 Knowledge. As used herein, the phrase "to the knowledge" of any party shall mean the actual knowledge (without any implied duty to investigate) of (a) in the case of the Company, David Simmons, Judd Hartman, Robert Hureau, William Sharbaugh and Ed Murray, and (b) in the case of all other Persons, such Person's executive officers.

ARTICLE II.
REORGANIZATION; THE MERGER; CLOSING

2.1 Reorganization.

(a) Reorganization Merger. Upon the terms and subject to the conditions set forth in this Agreement and in accordance with the applicable provisions of the General Corporation Law of the State of Delaware (the "DGCL"), Merger Sub shall merge with and into the Company at the Reorganization Merger Effective Time and the Company (the "Reorganization Merger Surviving Company") shall continue as the surviving corporation and a wholly owned subsidiary of Holdings (the "Reorganization Merger"). The effect of the Reorganization Merger shall be as provided in this Agreement and the applicable provisions of the DGCL.

(b) Reorganization Merger Effective Time. As soon as practicable at the Closing, and prior to completion of the Conversion, the Merger and any other actions set forth in this Agreement to be taken at the Closing, Merger Sub and the Company shall cause the certificate of merger with respect to the Reorganization Merger in the form attached hereto as Annex E (the "Certificate of Reorganization Merger") to be executed, acknowledged and filed with the Secretary of State of the State of Delaware as provided in Section 251 of the DGCL. The Reorganization Merger shall become effective at the time when the Certificate of Reorganization Merger has been duly filed with the Secretary of State of the State of Delaware or at such later time as may be agreed by Merger Sub and the Company in writing and specified in the Certificate of Reorganization Merger (the "Reorganization Merger Effective Time").

(c) Effects of the Reorganization Merger.

(i) Reorganization Merger Surviving Company. At and after the Reorganization Merger Effective Time, the Reorganization Merger Surviving Company shall possess all of the rights, property, privileges, powers and franchises, of a public as well as a private nature, of Merger Sub and the Company, and shall become subject to all the debts, restrictions, disabilities and duties of each of Merger Sub and the Company.

(ii) Certificate of Incorporation, Bylaws, and Directors and Officers of the Reorganization Merger Surviving Company. At the Reorganization Merger Effective Time, (x) the certificate of incorporation of the Company in effect immediately prior to the Reorganization Merger Effective Time shall be the certificate of incorporation of the Reorganization Merger Surviving Company, (y) the bylaws of the Company in effect immediately prior to the Reorganization Merger Effective Time shall be the bylaws of the Reorganization Merger Surviving Company, and (z) the directors and officers of the Company immediately prior to the Reorganization Merger Effective Time shall continue as the directors and officers of the Reorganization Merger Surviving Company, each to hold office in accordance with the certificate of incorporation and bylaws of the Reorganization Merger Surviving Company.

(iii) Treatment of Shares. At the Reorganization Merger Effective Time, by virtue of the Reorganization Merger and without any further action on the part of any stockholder of Merger Sub or the Company: (x) each share of Common Stock that is issued and outstanding immediately prior to the Reorganization Merger Effective Time (other than the shares that are to be cancelled in accordance with clause (y) below and the Reorganization Merger Dissenting Shares) shall be automatically cancelled and converted into one (1) validly issued, fully paid and nonassessable share of Parent Common Stock (and any shares of Parent Common Stock issued in respect of restricted shares of Common Stock (the "Company Restricted Shares") shall continue to be subject to the same restrictions as in effect with respect to such Company Restricted Shares immediately prior to the Reorganization Merger Effective Time); (y) each share of Common Stock that is held by the Company in treasury or otherwise shall be automatically cancelled and retired and shall cease to exist, and no consideration shall be delivered or receivable in exchange therefor; and (z) each share of common stock of Merger Sub shall be converted into one share of common stock, par value $0.01 per share, of the Reorganization Merger Surviving Company. All outstanding certificates that represented shares of Common Stock immediately prior to the Reorganization Merger Effective Time shall be deemed for all purposes to evidence ownership of and represent the same number of shares of Parent Common Stock at and after the Reorganization Merger Effective Time. At and after the Reorganization Merger Effective Time, no transfer of shares of Common Stock that were outstanding immediately prior to the Reorganization Merger Effective Time shall be registered in the transfer books of the Company.

(iv) Treatment of Options. At the Reorganization Merger Effective Time, Parent shall assume the Equity Plan and each option to purchase shares of Common Stock (the "Company Options") that is issued and outstanding immediately prior to the Reorganization Merger Effective Time shall convert into an equivalent option to purchase the same number of shares of Parent Common Stock on the same terms and conditions (including the exercise price per share of Parent Common Stock applicable to each such option) and subject to the same vesting requirements, in each case, as were in effect immediately prior to the Reorganization Merger Effective Time. Parent and Company (including their respective Board of Directors) shall each take or cause to be taken any and all actions reasonably necessary to give effect to the treatment of the options set forth in this Section 2.1(c)(iv).

(v) Repurchase of Parent Common Stock. Immediately following the Reorganization Merger Effective Time, each share of Parent Common Stock held by the HFCP VII Investors and the CP V Investors immediately prior to the Reorganization Merger Effective Time shall be repurchased by Parent at a price per share equal to $1.00, such price being equal to the same price per share that the HFCP VII Investors and the CP V Investors initially paid for such shares.

(vii) Reorganization Merger Dissenter's Rights. Notwithstanding anything in this Agreement to the contrary, shares (the "Reorganization Merger Dissenting Shares") of Common Stock issued and outstanding immediately prior to the Reorganization Merger Effective Time that are held by any holder who is entitled to demand and properly demands appraisal of such shares pursuant to, and who complies in all respects with, the provisions of Section 262 of the DGCL shall not be converted into Parent Common Stock as provided in Section 2.1(c)(iii), but instead such holder shall be entitled to payment of the fair value of such shares in accordance with the provisions of Section 262 of the DGCL. At the Reorganization Merger Effective Time, all Reorganization Merger Dissenting Shares shall no longer be outstanding and shall automatically be canceled and shall cease to exist, and each holder of Reorganization Merger Dissenting Shares shall cease to have any rights with respect thereto, except the right to receive the fair value of such Reorganization Merger Dissenting Shares in accordance with the provisions of Section 262 of the DGCL. Notwithstanding the foregoing, if any such holder shall fail to perfect or otherwise shall waive, withdraw or lose the right to appraisal under Section 262 of the DGCL or a court of competent jurisdiction shall determine that such holder is not entitled to the relief provided by Section 262 of the DGCL, then the right of such holder to be paid the fair value of such holder's Dissenting Shares under Section 262 of the DGCL shall cease and each such Dissenting Share shall be deemed to have been converted at the Reorganization Merger Effective Time into Parent Common Stock as provided in Section 2.1(c)(iii). The Company shall deliver prompt notice to Buyer of any demands for appraisal of any shares of Common Stock with respect to the Reorganization Merger, and Buyer shall have the right to participate in all negotiations and proceedings with respect to such demands. Prior to the Effective Time, the Company shall not, without the prior written consent of Buyer, make any payment with respect to, or settle or offer to settle, any such demands, or agree to do any of the foregoing.

(d) Conversion. Upon the terms and subject to the conditions set forth in this Agreement and in accordance with the applicable provisions of the DGCL and the Delaware Limited Liability Company Act ("DLLCA"), at the Conversion Effective Time, the Reorganization Merger Surviving Company shall be converted from a Delaware corporation to a Delaware limited liability company (the "Conversion") and in connection with the Conversion, each share of common stock of the Reorganization Merger Surviving Company shall be automatically converted into one limited liability company interest of the resulting Delaware limited liability company. The effect of the Conversion shall be as provided in this Agreement and the applicable provisions of the DGCL and the DLLCA. Immediately following (and not prior to) the Reorganization Merger Effective Time and the consummation of the transactions contemplated in Section 2.1(c)(v) and prior to the consummation of the Merger, the Company shall cause the certificate of conversion in the form attached hereto as Annex F (the "Certificate

of Conversion") to be executed, acknowledged and filed with the Secretary of State of the State of Delaware in accordance with the DGCL and the DLLCA. The Conversion shall become effective at the time when the Certificate of Conversion has been duly filed with the Secretary of State of the State of Delaware or at such later time as may be agreed by Buyer and the Company in writing and specified in the Certificate of Conversion (the "Conversion Effective Time").

(e) Tax Treatment. The parties agree that the Reorganization Merger and the Conversion, considered together as a single integrated transaction for U.S. federal income tax purposes, shall be treated as a reorganization within the meaning of Section 368(a)(1)(F) of the Code and that this Agreement shall constitute a "plan of reorganization" within the meaning of Treasury Regulation Section 1.368-3(a).

2.2 The Merger.

(a) Upon the terms and subject to the conditions set forth in this Agreement, and in accordance with the applicable provisions of the DGCL, Buyer and Parent (Buyer and Parent sometimes being referred to herein as the "Constituent Corporations") shall cause Buyer to be merged with and into Parent effective as of the Effective Time, with Parent being the surviving corporation (the "Merger"). The Merger shall be consummated at the Effective Time in accordance with this Agreement and evidenced by a certificate of merger relating to the Merger in substantially the form of Annex A (the "Certificate of Merger").

(b) Upon consummation of the Merger, the separate corporate existence of Buyer shall cease and Parent, as the surviving corporation of the Merger (hereinafter referred to for the periods at and after the Effective Time as the "Surviving Corporation"), shall continue its corporate existence under the DGCL.

2.3 Effects of the Merger. At and after the Effective Time, the effect of the Merger shall be as provided in this Agreement and the applicable provisions of the DGCL. Without limiting the foregoing, the Surviving Corporation shall thereupon and thereafter possess all of the rights, property, privileges, powers and franchises, of a public as well as a private nature, of the Constituent Corporations, and shall become subject to all the debts, restrictions, disabilities and duties of each of the Constituent Corporations.

2.4 Closing; Effective Time. Subject to the terms and conditions of this Agreement, the closing of the Reorganization Merger, the Conversion and the Merger (the "Closing") shall take place at the offices of Latham & Watkins LLP, 555 Eleventh Street, N.W., Washington, DC 20004, at 10:00 a.m. (Eastern time) on the date which is two (2) Business Days after the date on which all conditions set forth in Article X shall have been satisfied or waived (other than those conditions that by their nature are to be satisfied at the Closing, but subject to the satisfaction or waiver of such conditions) or such other time and place as Buyer and the Company may mutually agree. The date on which the Closing actually occurs is referred to in this Agreement as the "Closing Date". Subject to the satisfaction or waiver of all of the conditions set forth in Article X, and provided this Agreement has not theretofore been terminated pursuant to its terms, immediately after (and not prior to) the Conversion Effective Time, Buyer and Parent shall cause the Certificate of Merger to be executed, acknowledged and filed with the Secretary of State of the State of Delaware as provided in Section 251 of the DGCL. The Merger shall become

effective at the time when the Certificate of Merger has been duly filed with the Secretary of State of the State of Delaware or at such later time as may be agreed by Buyer and the Company in writing and specified in the Certificate of Merger (the "Effective Time").

2.5 Certificate of Incorporation and Bylaws of the Surviving Corporation.

(a) At the Effective Time, the certificate of incorporation of Parent shall be amended as of the Effective Time to read in its entirety in the form of the certificate of incorporation attached hereto as Annex B, and, as so amended, shall become the certificate of incorporation of the Surviving Corporation until thereafter amended in accordance with the applicable provisions of the DGCL and such certificate of incorporation.

(b) The parties hereto shall take all actions necessary so that the bylaws of Parent in effect immediately prior to the Effective Time shall, from and after the Effective Time, be amended in their entirety to read as set forth in the form of the bylaws attached hereto as Annex C, and, as so amended, shall be the bylaws of the Surviving Corporation until thereafter amended in accordance with the applicable provisions of the DGCL, the certificate of incorporation of the Surviving Corporation and such bylaws.

2.6 Directors and Officers of the Surviving Corporation.

(a) The directors of Buyer immediately prior to the Effective Time shall be the directors of the Surviving Corporation immediately after the Effective Time, each to hold office in accordance with the certificate of incorporation and bylaws of the Surviving Corporation until their respective successors are duly elected or appointed and qualified or until their earlier death, resignation or removal in accordance with the certificate of incorporation and bylaws of the Surviving Corporation.

(b) The officers of Parent immediately prior to the Effective Time shall be the officers of the Surviving Corporation immediately after the Effective Time, each to hold office in accordance with the certificate of incorporation and bylaws of the Surviving Corporation until their respective successors are duly appointed or until their earlier death, resignation or removal in accordance with the certificate of incorporation and bylaws of the Surviving Corporation.

ARTICLE III.
EFFECTS OF THE MERGER ON THE CAPITAL STOCK AND EQUITY AWARDS

3.1 Conversion of Company Shares, Parent Restricted Stock.

(a) At the Effective Time, by virtue of the Merger and without any further action on the part of any stockholder of Parent or Buyer, (i) each share of Parent Common Stock held by Buyer, or Parent in treasury or otherwise, shall be canceled and retired and shall cease to exist, and no consideration shall be delivered or receivable in exchange therefor (such shares, "Cancelled Shares"), and (ii) each share of Parent Common Stock held by any Subsidiary of Parent (such shares, the "Recapitalized Shares") shall remain outstanding and shall be converted into that number of shares of Surviving Corporation Voting Common Stock that bears the same ratio to the aggregate number of outstanding shares of common stock of the Surviving Corporation immediately after the Effective Time as the number of such shares of Common

Stock held by such Subsidiary immediately prior to the Effective Time bore to the number of Aggregate Fully-Diluted Common Shares. At the Effective Time, by virtue of the Merger and without any action on the part of any holder of Parent Common Stock, each share (a "Common Share") of Parent Common Stock (including restricted shares of Parent Common Stock (the "Parent Restricted Stock")) that is issued and outstanding immediately prior to the Effective Time (other than (x) Cancelled Shares, (y) Recapitalized Shares and (z) Dissenting Shares, which Cancelled Shares, Recapitalized Shares and Dissenting Shares shall not constitute "Common Shares" hereunder, and for the avoidance of doubt "Common Shares" shall not include any Parent Common Stock underlying unexercised Options or any Rollover Shares) shall thereupon be canceled and converted into and become the right to receive from Buyer, without interest, (x) $27.086 in cash (the "Cash Per Share Merger Consideration") plus (y) the applicable portion of the Additional Merger Consideration in accordance with Sections 3.8 and 3.9.

(b) At the Effective Time, by virtue of the Merger and without any action on the part of Buyer, (x) each share of non-voting common stock, par value $0.01 per share, of Buyer shall be converted into one share of Surviving Corporation Non-Voting Common Stock, and (y) each share of voting common stock, par value $0.01 per share, of Buyer shall be converted into one share of Surviving Corporation Voting Common Stock.

(c) Immediately prior to the Effective Time, by virtue of the Merger and without any action on the part of Parent, Buyer, or the Pre-Closing Holders of Parent Restricted Stock, each share of Parent Restricted Stock will become fully vested and all forfeiture restrictions thereon shall lapse and shall be treated as a Common Share or a Rollover Share, as applicable, for purposes of this Article III.

(d) From and after the Effective Time, (i) holders of Certificates and Book-Entry Shares shall cease to have any rights as stockholders of Parent and (ii) the consideration paid pursuant to this Article III upon the surrender of Certificates and Book-Entry Shares in accordance with the terms hereof shall be deemed to have been paid in full satisfaction of all rights pertaining to the Common Shares, subject to the continuing rights of the Pre-Closing Holders under this Agreement. If, between the date of this Agreement and the Effective Time, the shares of Parent Common Stock are changed into a different number or class of shares by means of any stock split, division or subdivision of shares, stock dividend, reverse stock split, consolidation of shares, reclassification or other similar transaction, then the portion of the Merger Consideration attributable to a Common Share, Rollover Share or Vested Option (and the defined terms related thereto) shall be equitably adjusted.

3.2 Treatment of Options.

(a) All options to purchase shares of Parent Common Stock ("Options"), whether or not vested or exercisable, that are outstanding immediately prior to the Effective Time shall become fully vested and exercisable as of immediately prior to the Effective Time but following the Conversion Effective Time (such options, the "Vested Options").

(b) As a result of the Merger, each Vested Option shall be cancelled and converted into the right to receive (i) the product of (x) the excess (if any) of the Cash Per Share Merger Consideration over the applicable exercise price multiplied by (y) the aggregate number of shares of Parent Common Stock issuable upon exercise of such Vested Option (this clause (i), the "Per

Option Closing Consideration"), (ii) Unpaid Bonuses with respect to such Vested Option, and (iii) the applicable portion of the Additional Merger Consideration with respect to such Vested Option in accordance with Sections 3.8 and 3.9, in each case without interest and subject to any applicable withholding or deduction (including pursuant to Section 3.7). Except as required by the terms of any agreement between the Company and the applicable Pre-Closing Holder of Vested Options or as otherwise agreed to between Buyer and the applicable Pre-Closing Holder of Vested Options, a portion of the aggregate Per Option Closing Consideration payable to each Pre-Closing Holder of Vested Options in an amount equal to the Option Rollover Amount shall be paid in the form of validly issued, fully paid and nonassessable shares of Surviving Corporation Non-Voting Common Stock issued by the Surviving Corporation to such Pre-Closing Holder of Vested Options immediately following the Closing with an aggregate Value equal to the Option Rollover Amount; provided, that the number of shares of Surviving Corporation Non-Voting Common Stock to be issued pursuant to this Section 3.2(b) shall, at the sole discretion of the Surviving Corporation, be rounded up to the next whole number to the extent needed to avoid the issuance of fractional shares (and the cash portion of the aggregate Per Option Closing Consideration and Unpaid Bonuses shall be reduced by a corresponding amount). The Surviving Corporation Non-Voting Common Stock to be issued by the Surviving Corporation pursuant to this Section 3.2(b) shall be issued pursuant to the Equity Plan.

(c) The aggregate cash portion of the Per Option Closing Consideration and any Unpaid Bonuses payable to each Pre-Closing Holder of Vested Options shall be paid by the Surviving Corporation (or the Surviving Corporation shall cause such payments to be made), less Taxes required to be withheld under applicable Law due to the treatment of Options set forth in this Section 3.2 (which taxes the employer of such Pre-Closing Holder of Vested Options will remit to the applicable Governmental Authority), through the Company's or its Subsidiaries' payroll system no later than the next regularly occurring payroll payment date occurring at least fifteen (15) Business Days after the Closing Date.

(d) Each of the Company, Parent and Buyer (and their respective Board of Directors) shall each take or cause to be taken any and all actions reasonably necessary to give effect to the treatment of Options set forth in this Section 3.2.

3.3 Payment and Exchange of Certificates and Book-Entry Shares.

(a) At the Closing, Buyer shall pay or cause to be paid to an exchange agent (the "Exchange Agent") selected by the Company and reasonably acceptable to Buyer by wire transfer of immediately available funds, an amount (the "Funding Amount") equal to (i) the Cash Per Share Merger Consideration multiplied by the aggregate number of Common Shares held by all Pre-Closing Holders as of immediately prior to the Effective Time less (ii) the Deferred Payment Amount; provided that Buyer will promptly thereafter pay or cause to be paid to the Exchange Agent any amounts by which the Funding Amount increases due to any Dissenting Shares becoming Common Shares in accordance with Section 3.6. Buyer shall pay or cause to be paid the fees and expenses of the Exchange Agent.

(b) After the Effective Time but subject to clause (c) below, (x) each Pre-Closing Holder of Common Shares represented by an outstanding certificate or outstanding certificates for such Common Shares (collectively, the "Certificates"), upon surrender to the Exchange Agent of such Certificate(s) and a letter of transmittal in the form attached hereto as Annex D

("Letter of Transmittal"), and (y) each Pre-Closing Holder of non-certificated Common Shares represented by book-entry (collectively, the "Book-Entry Shares"), upon surrender to the Exchange Agent of a Letter of Transmittal, shall, in the case of clauses (x) and (y), be entitled to receive in exchange therefor (i) from the Exchange Agent an amount in cash equal to the product of (x) the Cash Per Share Merger Consideration multiplied by (y) the aggregate number of Common Shares surrendered in the applicable Letter of Transmittal and (ii) the applicable portion of the Additional Merger Consideration with respect to such Common Shares in accordance with Sections 3.8 and 3.9. Notwithstanding the foregoing but subject to clause (c) below, in the event that any CP V Investor or HFCP VII Investor delivers the Letter of Transmittal and, if applicable, the Certificate(s) representing such Common Shares to Buyer at least two (2) Business Days prior to the Closing, the Surviving Corporation shall pay or cause to be paid the aggregate amount of the Cash Per Share Merger Consideration to which such holder is entitled in consideration therefor directly to such holder at the Closing by wire transfer of immediately available funds and the Funding Amount payable to the Exchange Agent shall be reduced by such amount. Pending such surrender and exchange of a Pre-Closing Holder's Certificate(s) or Book-Entry Shares, as applicable, a holder's Certificate(s) and Book-Entry Shares, as applicable, shall be deemed for all purposes to evidence such holder's right to receive the portion of the Cash Per Share Merger Consideration and the Additional Merger Consideration into which such Common Shares shall have been converted as a result of the Merger.

(c) Notwithstanding anything to the contrary in this Agreement, payment of the Cash Per Share Merger Consideration with respect to each Deferred Payment Share will be deferred, without interest, until the Deferred Payment Date; provided, that (x) to the extent the CP VI Investors do not fund all or any portion of their Equity Financing on the Deferred Payment Date pursuant to their Commitment Letters (such unfunded portion, the "Unfunded CP VI Amount"), payment with respect to a number of Deferred Payment Shares (rounded up to the nearest whole number) held by the CP V Investors (and not any other Pre-Closing Holder) equal to (i) the Unfunded CP VI Amount divided by (ii) the Cash Per Share Merger Consideration will be further deferred, without interest, and will only be paid to the CP V Investors at such time that the CP VI Investors pays the full Unfunded CP VI Amount and (y) to the extent the HFCP VIII Investors do not fund all or any portion of their Equity Financing on the Deferred Payment Date pursuant to their Commitment Letters (such unfunded portion, the "Unfunded HFCP VIII Amount"), payment with respect to a number of Deferred Payment Shares (rounded up to the nearest whole number) held by the HFCP VII Investors (and not any other Pre-Closing Holder) equal to (i) the Unfunded HFCP VIII Amount divided by (ii) the Cash Per Share Merger Consideration will be further deferred, without interest, and will only be paid to the HFCP VII Investors at such time that the HFCP VIII Investors pays the full Unfunded HFCP VIII Amount. Subject to the proviso in the preceding sentence, on the Deferred Payment Date, the Surviving Corporation shall pay or cause to be paid to the applicable Pre-Closing Holder of Deferred Payment Shares, by wire transfer of immediately available funds to the account set forth in its Letter of Transmittal (or as otherwise designated by such Pre-Closing Holder in writing to the Surviving Corporation at least two (2) Business Days prior to the Deferred Payment Date), an amount equal to the product of (x) the Cash Per Share Merger Consideration multiplied by (y) the aggregate number of Deferred Payment Shares held by such Pre-Closing Holder, without interest.

3.4 Exchange Agent. Promptly following the date which is one year after the Effective Time, the Surviving Corporation shall instruct the Exchange Agent to deliver to the Surviving Corporation all cash, Certificates and other documents in its possession relating to the transactions contemplated hereby, and the Exchange Agent's duties shall terminate. Thereafter, each Pre-Closing Holder of a Certificate or Book-Entry Shares (other than Certificates or Book-Entry Shares, as applicable, representing Dissenting Shares) may surrender such Certificate and Book-Entry Shares to the Surviving Corporation and (subject to applicable abandoned property, escheat and similar Laws) receive in consideration therefor, and the Surviving Corporation shall promptly pay or cause to be paid the portion of the Merger Consideration deliverable in respect thereof as determined in accordance with this Article III without any interest thereon.

3.5 Lost Certificate. In the event any Certificate has been lost, stolen or destroyed, upon the making of an affidavit of that fact by the Person claiming such Certificate to be lost, stolen or destroyed and, if required by the Surviving Corporation, the posting by such Person of a bond in customary amount and upon such customary terms as may be required by the Surviving Corporation as indemnity against any claim that is made against it or the Surviving Corporation with respect to such Certificate, the Exchange Agent shall issue in exchange for such lost, stolen or destroyed Certificate the Merger Consideration deliverable in respect thereof as determined in accordance with this Article III.

3.6 Dissenting Shares. Notwithstanding the foregoing provisions of this Article III, shares (each, a "Dissenting Share") of Parent Common Stock held by Persons who object to the Merger and comply with the provisions of the DGCL concerning the rights of holders of Parent Common Stock to dissent from the Merger and require appraisal of their shares of Parent Common Stock (the "Dissenting Stockholders") shall not be converted into a right to receive any portion of the Merger Consideration and the holders thereof shall be entitled to such rights as are granted by Section 262 of the DGCL. Each holder of Dissenting Shares who becomes entitled to payment for such shares pursuant to Section 262 of the DGCL shall receive payment therefor from the Surviving Corporation in accordance with the DGCL; provided, however, that (i) if any such holder of Dissenting Shares shall have failed to establish such holder's entitlement to appraisal rights as provided in Section 262 of the DGCL, or (ii) if any such holder of Dissenting Shares shall have effectively withdrawn such holder's demand for appraisal of such shares or lost such holder's right to appraisal and payment for such holder's shares under Section 262 of the DGCL, such holder shall forfeit the right to appraisal of such shares and each such share shall not constitute a Dissenting Share and shall be treated as if it had been a Common Share immediately prior to the Effective Time and converted, as of the Effective Time, into a right to receive from the Surviving Corporation the portion of the Merger Consideration deliverable in respect thereof as determined in accordance with this Article III, without any interest thereon (and such holder shall be treated as a Pre-Closing Holder). The Company and Parent will give Buyer reasonable notice of all written notices received by the Company or Parent pursuant to Section 262 of the DGCL. Without the prior written consent of Buyer (which shall not be unreasonably withheld, conditioned or delayed), the Company and Parent shall not voluntarily make any payment with respect to, or settle or offer to settle, any such demand for payment. From and after the Effective Time, all Dissenting Shares shall no longer be outstanding and shall automatically be canceled and shall cease to exist, and no stockholder who has properly exercised and perfected appraisal rights pursuant to Section 262 of the DGCL shall have any rights with respect to such Dissenting

Shares, except the right to receive the fair value of such Dissenting Shares in accordance with the provisions of Section 262 of the DGCL, or be entitled to vote his or her shares of Parent Common Stock for any purpose or receive payment of dividends or other distributions with respect to his or her shares of Parent Common Stock (except dividends and distributions payable to stockholders of record at a date which is prior to the Effective Time).

3.7 Withholding. Parent, Buyer, the Company, the Company's Subsidiaries, the Exchange Agent and any other applicable withholding agent shall be entitled to deduct and withhold from the consideration otherwise payable or deliverable in connection with the transactions contemplated by this Agreement, to any Person such amounts that Parent, Buyer, the Company, the Company's Subsidiaries, the Exchange Agent or any other applicable withholding agent are required to deduct and withhold with respect to any such deliveries and payments under the Code or any provision of state, local, provincial or foreign Law (including in connection with the vesting or exercise of Parent Restricted Stock and Options); provided, however, that prior to making any such deduction or withholding from any payments in respect of Common Shares or Dissenting Shares (other than backup withholding or withholding with respect to compensatory amounts or as a failure of the Company to comply with the covenant set forth in Section 9.4 on or prior to the Closing Date), the applicable withholding entity shall use all reasonable best efforts to provide reasonable advance notice to the applicable recipient of the amounts subject to withholding and a reasonable opportunity in advance of such withholding for such recipient and/or the Company to provide forms or other evidence that would exempt such amounts from withholding tax. To the extent that amounts are so withheld and duly and timely deposited with the appropriate Governmental Authority, such withheld amounts shall be treated for all purposes of this Agreement as having been paid to the Person in respect of which such deduction and withholding was made.

3.8 Investment Portfolio Earn-Out.

(a) Each party hereto acknowledges and agrees that the value of the interests held by the Company and/or one or more of its Subsidiaries in the entities set forth on Schedule 3.8 (collectively, such interests being referenced herein as the "Investment Portfolio") has not been reflected in the Cash Per Share Merger Consideration, and that the value of such Investment Portfolio shall be determined and payable to the Pre-Closing Holders (including Rollover Sellers) as Additional Merger Consideration in accordance with Section 3.8(b), subject to Section 3.10.

(b) Subject to Section 3.8(c) and Section 3.10, Buyer and Parent hereby agree that, promptly (and in any event within fifteen (15) Business Days) following the receipt by Parent or any of its Subsidiaries of any distributions or other consideration in respect of the Investment Portfolio, Parent shall pay or cause to be paid to each Pre-Closing Holder an amount, without interest, equal to (i) the amount of such distribution or other consideration, in each case, net of the sum of any out-of-pocket expenses (including withholding Taxes, the employer portion of payroll Taxes and income Taxes) reasonably incurred by Parent and its Subsidiaries following the Closing (x) in the collection, receipt and payment of such amounts or (y) as a result of the ownership of such Investment Portfolio (each such net amount, subject to the proviso to this sentence, an "Earn-Out Amount"), multiplied by (ii) such Pre-Closing Holder's Earn-Out Percentage, less any applicable withholding tax; provided, however, that, if following the Closing Date, Parent or any of its Subsidiaries is required to fund any commitment with respect

to the Investment Portfolio, the amount of such commitment shall be first funded from the Reserve Account (thereby reducing the amount of the Reserve Account dollar for dollar) and to the extent such commitment exceeds the amount of the Reserve Account, the excess amount of such commitment shall be taken into account as an offset in determining the amount of the next Earn-Out Amount (and, to the extent the amount of such funded commitment exceeds the amount that would (but for this proviso) be the amount of the next Earn-Out Amount, the excess shall be taken into account as an offset in determining subsequent Earn-Out Amounts until fully applied). In calculating the Earn-Out Amount, the amount of income Taxes taken into account shall be an amount equal to the excess of (A) the cumulative amount for taxable periods (or portions thereof) commencing after the Closing Date of the product of (i) the amount of income or gain recognized by Parent or any of its Subsidiaries from the Investment Portfolio (net of losses from the Investment Portfolio for such taxable periods (or portions thereof) that are available to offset such income or gain and ignoring, for this purpose, (I) any of Parent's or any of its Subsidiaries' other Tax attributes and (II) any utilization of such losses from the Investment Portfolio to reduce income or gain of the Parent or any of its Subsidiaries other than any such income or gain from the Investment Portfolio) reduced by the amount of any expenses reasonably incurred by Parent and its Subsidiaries in the collection and payment of such amounts or as a result of the ownership of such Investment Portfolio or resulting from compensatory payments made pursuant to this Section 3.8(b), in each case, to the extent reasonably deductible for U.S. federal income tax purposes, multiplied by (ii) the highest combined corporate U.S. federal and state income tax rate applicable to such gain or income and in effect for the taxable year in which such income or gain is included in taxable income of Parent (such product, the "Net Earn-Out Tax") over (B) the aggregate Net Earn-Out Tax that reduced any prior Earn-Out Amount. The calculation of the Earn-Out Amount as made by Parent in good faith shall be final and binding for all purposes of this Agreement absent manifest error; provided, that Parent shall provide the CP V Investors and the HFCP VII Investors and their respective designated representatives with supporting documentation relating to such calculations prior to finalizing such calculations and shall incorporate any reasonable comments provided by such persons.

(c) Notwithstanding anything in Section 3.8(b) to the contrary: (i) if, at the time that an Earn-Out Amount is to be paid to the Pre-Closing Holders pursuant to Section 3.8(b), the Company determines that there is a Commitment Funding Shortfall, all or a portion of such Earn-Out Amount equal to the lesser of (x) the entire portion of such Earn-Out Amount and (y) the Commitment Funding Shortfall shall be set aside in a reserve account and not paid to the Pre-Closing Holders; (ii) after all Investment Portfolio commitments have been fully funded, Buyer shall promptly (and in any event within fifteen (15) Business Days) pay or cause to be paid to each Pre-Closing Holder an amount equal to the product of (x) the amount (if any) of the remaining Reserve Account at such time multiplied by (y) such holder's applicable Earn-Out Percentage determined at the time of such payment, less any applicable withholding tax and without interest; and (iii) no Pre-Closing Holder shall be entitled to receive any portion of any Earn-Out Amount that is set aside and not paid pursuant to clause (i) except to the extent provided in clause (ii). For the avoidance of doubt, any Earn-Out Amount that is set aside in a reserve account pursuant to this Section 3.8(c) shall apply on a pro rata basis to all Pre-Closing Holders based on their respective Earn-Out Percentages determined at the time that such amounts are set aside.

3.9 Company Tax Benefits.

(a) Subject to Sections 3.9(d) and 3.10, after the Closing, Parent shall pay or cause to be paid within fifteen (15) Business Days after (i) to the extent a Company Tax Benefit is realized by way of a reduction in cash income Taxes payable by Parent in accordance with this Section 3.9, the date of Parent's filing a Section 3.9 Return (as defined below) or (ii) to the extent a Company Tax Benefit is realized by way of a refund in accordance with this Section 3.9, receiving the applicable Tax refund relating to a Section 3.9 Return, to each Pre-Closing Holder (including each Rollover Seller) an amount, without interest, equal to (x) the product of (A) the amount of such Company Tax Benefit with respect to the taxable period covered by such Section 3.9 Return, multiplied by (B) such holder's Earn-Out Percentage, less (y) any applicable withholding Taxes. The determination and calculation of any Company Tax Benefit made by Parent in good faith shall be final and binding for all purposes of this Agreement absent manifest error; provided that, Parent shall provide the CP V Investors and the HFCP VII Investors and their respective designated representatives with supporting documentation relating to such calculations prior to finalizing such calculations and shall incorporate any reasonable comments provided by such persons. Notwithstanding the foregoing, payments under this Section 3.9(a) shall be reduced until the cumulative amount of such reduction in payments equals the Assumed Payroll Cost Amount.

(b) For purposes of this Agreement:

(i) "Adjusted Federal Tax Rate" for a taxable period means the sum of (A) the Applicable Federal Tax Rate for such period and (B) the product (expressed as a percentage) of (1) one minus the rate (expressed as a decimal) described in clause (A) and (2) the highest combined state income tax rate applicable to Parent; provided that, with respect to any Change of Control Payment, such highest combined state income tax rate shall mean such rate for the taxable year in which the Change of Control Transaction occurs.

(ii) "Applicable Federal Tax Rate" for a taxable period shall mean the marginal corporate U.S. federal income tax rate applicable to Parent for such period; provided that, with respect to any Change of Control Payment, such rate shall mean the marginal corporate U.S. federal income tax rate applicable to Parent for the taxable year in which the Change of Control Transaction occurs.

(iii) "Change of Control Transaction" means a "change of control" as defined in the definitive documentation for the Debt Financing.

(iv) "Change of Control Payment" shall mean an amount equal to the product of (i) all Excess Tax Deductions with respect to which a Company Tax Benefit payment has not previously been made to the Pre-Closing Holders pursuant to Section 3.9(a), whether or not the related Tax benefits have actually been realized by the Company or any of its Subsidiaries as of the date of the Change of Control Transaction and whether or not such Tax benefits are reasonably expected to be realized by the Company or any of its Subsidiaries by or after the date of the Change of Control Transaction, multiplied by (ii) the Adjusted Federal Tax Rate.

(v) "Company Tax Benefit" realized in respect of a taxable period covered by a Section 3.9 Return shall be an amount equal to the product of (A) the excess, if any, of

(1) Hypothetical Base Income for such taxable period over (2) the greater of (x) Hypothetical Reduced Income for such taxable period and (y) zero multiplied by (B) the Adjusted Federal Tax Rate; provided, however, that, notwithstanding anything to the contrary in this Agreement, for purposes of determining the amount of Company Tax Benefits for purposes of this Section 3.9, the cumulative excess of (1) over (2) in the clause (A) of this definition shall not exceed the Assumed Transaction Tax Deduction Amount. If more than one Section 3.9 Return is filed for the same taxable period (for example, if a Section 3.9 Return is filed to amend a previously filed Section 3.9 Return), the Company Tax Benefit for any such subsequent Section 3.9 Return shall be reduced (but not below zero) by the sum of all Company Tax Benefits previously calculated for the same taxable period in respect of all prior Section 3.9 Returns for such taxable period.

(vi) "Excess Tax Deductions" shall mean, for any taxable year, the excess of the Assumed Transaction Tax Deduction Amount over the cumulative Realized Tax Deductions for all prior taxable years beginning with the taxable year including the Closing.

(vii) "Hypothetical Base Income" shall mean, for any taxable year, the U.S. federal taxable income or loss of Parent and its Subsidiaries for such taxable year using the same methods, elections, conventions and similar practices used on the relevant Section 3.9 Return, but adjusted by excluding any deduction for state income taxes; provided, that, (i) for the taxable year that includes the Closing Date, the amount of Hypothetical Base Income shall be increased by an amount equal to the Assumed Transaction Tax Deduction Amount and (ii) for each subsequent taxable year, Hypothetical Base Income shall be calculated without taking into account any Excess Tax Deductions.

(viii) "Hypothetical Reduced Income" for a taxable year shall mean the amount equal to (A) the Hypothetical Base Income for such taxable year minus (B)(1) for the taxable year including the Closing Date, the Assumed Transaction Tax Deduction Amount and (2) for each subsequent taxable year, the Excess Tax Deductions.

(ix) "Realized Tax Deductions" means, with respect to any taxable year, the excess, if any, of (A) Hypothetical Base Income for such taxable year over (B) the greater of (1) Hypothetical Reduced Income for such taxable year or (2) zero.

(x) "Section 3.9 Return" shall mean a U.S. federal income Tax Return (other than an estimated Tax Return) that includes (or reflects items of income or other Tax attributes of) Parent (which, for the avoidance of doubt, after the Effective Time means the Surviving Corporation) or any of its Subsidiaries that is filed or amended after the Closing Date (including any amended Tax Return and any Internal Revenue Service Form 1139 or similar Tax Return that claims a refund), in each case, that reports Tax items relevant to the calculation of a Company Tax Benefit for any taxable period. For the avoidance of doubt, a Section 3.9 Return shall not include a Tax Return for a taxable period ending prior to the taxable year that includes the Closing Date.

(c) The parties agree that any payment made pursuant to this Section 3.9 shall be treated as an adjustment to the Merger Consideration or the consideration payable for Rollover

Shares, as applicable, for all Tax purposes, unless otherwise required by applicable Law. The parties further agree that Parent and its Subsidiaries shall claim a refund of Taxes and not a credit against future Taxes in connection with any Section 3.9 Return if claiming such a refund would accelerate the timing of payments made pursuant to this Section 3.9 and to the extent such a refund is reasonably available.

(d) No later than the date of the Change of Control Transaction, Parent shall pay or cause to be paid to each Pre-Closing Holder an amount equal to (x) the product of (A) the sum of the Change of Control Payment multiplied by (B) such holder's Earn-Out Percentage, less (y) any applicable withholding Taxes. No later than twenty (20) Business Days prior to a Change of Control Transaction, the Company shall deliver to the Pre-Closing Holders a notice of the Change of Control Transaction and a schedule showing in reasonable detail the estimated calculation of the Change of Control Payment. The determination and calculation of any Change of Control Payment made by the Company in good faith shall be final and binding for all purposes of this Agreement absent manifest error; provided that, the Company shall provide the CP V Investors and the HFCP VII Investors and their respective designated representatives with supporting documentation relating to such calculations prior to finalizing such calculations and shall incorporate any reasonable comments provided by such persons. Upon the payment of the Change of Control Payment, all payment obligations of the Buyer and its Affiliates under this Section 3.9 shall be terminated and settled in full.

3.10 Post-Closing Payments. Notwithstanding anything in this Agreement to the contrary (other than as may be set forth in Section 3.9), in the event that the Board of Directors of the Surviving Corporation determines in good faith that payment of any portion of the Earn-Out Amount pursuant to Section 3.8 or Company Tax Benefits pursuant to Section 3.9 or the distribution by Jaguar Holding Company II or its Subsidiaries to the Company, Holdings or the Surviving Corporation of the cash necessary to make such payment, in each case (a) would violate any banking agreement or loan or other financial covenant of any indebtedness (including those incurred in connection with the Debt Financing) of the Surviving Corporation or its Subsidiaries (including Jaguar Holding Company II), regardless of when such agreement, covenant or indebtedness was created, incurred or assumed (a "Debt Violation"), or (b) is reasonably likely to result in the Surviving Corporation and its Subsidiaries not retaining sufficient restricted payment capacity under the terms of any banking agreement or loan or other financial covenant of any indebtedness of the Surviving Corporation or its Subsidiaries to permit interest payments with respect to the Debt Financing to be paid entirely in cash (a "Restricted Payment Limitation"), then the timing of such payment shall be delayed (and no interest shall accrue on such unpaid amounts) until such time that the Board of Directors of the Surviving Corporation determines in good faith that making such payment would not cause a Debt Violation or a Restricted Payment Limitation; provided, that (i) Parent shall use, and shall cause its Subsidiaries to use, commercially reasonable efforts (which shall not require (x) additional contributions of capital to the Company and its Subsidiaries or (y) any amendment to the Existing Indenture or Existing Credit Agreement or any other indebtedness of the Surviving Corporation or its Subsidiaries) to prevent the timely payment of amounts pursuant to Section 3.8 or Section 3.9 being a violation of any banking agreement or loan or other financial covenant of any indebtedness (including those incurred in connection with the Debt Financing) of the

Surviving Corporation or its Subsidiaries (including Jaguar Holding Company II), (ii) without limiting clause (i), Parent shall not effect, or allow any of its Subsidiaries to effect, any dividend or distribution or other restricted payment (other than (x) by one or more Subsidiaries of the Company to one or more Subsidiaries of the Company or (y) by one or more Subsidiaries of the Company to the Company, Holdings or the Surviving Corporation of the cash necessary to make cash interest payments with respect to any indebtedness of the Surviving Corporation or its Subsidiaries) unless (A) the Board of Directors of the Surviving Corporation determines in good faith that such dividend or distribution is not expected to result in a delay of payments pursuant to this Section 3.10 and (B) no payments have been delayed (and not since made) pursuant to this Section 3.10, and (iii) any delay of payment pursuant to this Section 3.10 shall be proportionately applied to all Pre-Closing Holders (including Rollover Sellers) in accordance with such Person's Earn-Out Percentage of the applicable payment.

ARTICLE IV.
REPRESENTATIONS AND WARRANTIES OF THE COMPANY

Except as set forth in the schedules to this Agreement previously exchanged among the parties (the "Schedules") in accordance with Section 12.9, the Company represents and warrants to Buyer as follows:

4.1 Corporate Organization of the Company.

(a) The Company has been duly incorporated and is validly existing as a corporation in good standing under the Laws of the State of Delaware and has the corporate power and authority to own or lease its properties and to conduct its business as it is now being conducted.

(b) The copies of the certificate of incorporation and bylaws of the Company previously made available by the Company to Buyer or its representatives are true and complete. The Company is duly licensed or qualified to do business and (where applicable) is in good standing as a foreign corporation in each jurisdiction in which the ownership of its property or the character of its activities is such as to require it to be so licensed or qualified or in good standing, as applicable, except where the failure to be so licensed or qualified or in good standing would not reasonably be expected to have a Material Adverse Effect on the Company.

4.2 Subsidiaries. The Subsidiaries of the Company and their jurisdiction of incorporation or organization are set forth on Schedule 4.2. The Subsidiaries have been duly formed or organized and are validly existing and in good standing (with respect to jurisdictions that recognize the concept of good standing) under the laws of their respective jurisdictions of incorporation or organization and have the power and authority to own or lease their respective properties and to conduct their respective businesses as now being conducted, except where the failure to be so formed, organized or existing, or to have such power and authority, would not reasonably be expected to have a Material Adverse Effect on the Company. The Company has previously provided to Buyer or its representatives true and complete copies of the organizational documents of its Subsidiaries. Each Subsidiary of the Company is duly licensed or qualified to do business and (where applicable) in good standing as a foreign corporation (or other entity, if applicable) in each jurisdiction in which the ownership of its property or the character of its activities is such as to require it to be so licensed or qualified or in good standing, as applicable,

except where the failure to be so licensed or qualified or in good standing would not reasonably be expected to have a Material Adverse Effect on the Company.

4.3 Due Authorization. The Company has all requisite corporate power and authority to execute and deliver this Agreement and (subject to the consents, approvals, authorizations and other requirements described in Section 4.5) to consummate the transactions contemplated hereby. The execution and delivery of this Agreement by the Company and the consummation by the Company of the transactions contemplated hereby have been duly and validly authorized and approved by the Board of Directors of the Company, and no other corporate proceeding on the part of the Company is necessary to authorize this Agreement (other than the Merger Consent). This Agreement has been duly and validly executed and delivered by the Company and (assuming this Agreement constitutes a legal, valid and binding obligation of Parent, Holdings, Merger Sub and Buyer) constitutes a legal, valid and binding obligation of the Company, enforceable against the Company in accordance with its terms, subject to applicable bankruptcy, insolvency, fraudulent conveyance, reorganization, moratorium and similar Laws affecting creditors' rights generally and subject, as to enforceability, to general principles of equity (collectively, the "Remedies Exception").

4.4 No Conflict. Subject to the receipt of the consents, approvals, authorizations and other requirements set forth in Section 4.5 or on Schedule 4.5, and except as may result from any facts or circumstances relating solely to Buyer or any of its Affiliates, the execution and delivery of this Agreement by the Company and the consummation by the Company of the transactions contemplated hereby do not and will not, as of the Closing, (a) violate any provision of, or result in the breach of, any applicable Law to which the Company or any of its Subsidiaries is subject or by which any property or asset of the Company or any of its Subsidiaries is bound, (b) conflict with the certificate of incorporation, bylaws or other organizational documents of the Company or any of its Subsidiaries, (c) violate any provision of or result in a breach of, or require a consent under, any Contract listed on Schedule 4.12 (or any Contract required to be listed on Schedule 4.12), or terminate or result in the termination of any such Contract, or result in the creation of any Lien under any such Contract upon any of the properties or assets of the Company or any of its Subsidiaries, result in the acceleration of any payment, the addition of any fees or charges or the vesting or phasing out of any rights or interest under any such Contract, or constitute an event which, after notice or lapse of time or both, would result in any such violation, breach, termination or creation of a Lien, acceleration, addition, vesting or phasing out or (d) result in a violation or revocation of any required license, permit or approval from any Governmental Authority, except to the extent that the occurrence of any of the foregoing items set forth in clauses (a), (c) or (d) would not reasonably be expected to have (x) a material adverse effect on the ability of the Company to enter into and perform its obligations under this Agreement or (y) a Material Adverse Effect on the Company.

4.5 Governmental Consents. Assuming the truth and completeness of the representations and warranties of Buyer contained in this Agreement and except as may result from any facts or circumstances relating solely to Buyer or any of its Affiliates, no consent, approval or authorization of, or designation, declaration or filing with, any Governmental Authority is required on the part of the Company or any of its Subsidiaries with respect to the Company's

execution or delivery of this Agreement or the consummation by the Company of the transactions contemplated hereby, except for (a) applicable requirements of the HSR Act or any similar foreign Law, (b) any consents, approvals, authorizations, designations, declarations or filings, the absence of which would not reasonably be expected to have (x) a material adverse effect on the ability of the Company to enter into and perform its obligations under this Agreement or (y) a Material Adverse Effect on the Company, (c) compliance with any applicable requirements of the securities Laws, and (d) the filing of the Certificate of Merger in accordance with the DGCL.

4.6 Capitalization of the Company.

(a) The authorized capital stock of the Company consists of 250,000,000 shares of Common Stock, of which 173,573,054 shares (including Company Restricted Shares) are issued and outstanding as of the date of this Agreement. All of the issued and outstanding shares of Common Stock have been duly authorized and validly issued and are fully paid and nonassessable and have not been issued in violation of any preemptive or similar rights.

(b) Schedule 4.6 sets forth, as of the date hereof, a complete list of the Common Stock, Company Restricted Shares and the Company Options, including the name of each holder, the number of shares of Common Stock subject to each such award and, with respect to a Company Option, the exercise price of each such Company Option. All such shares of Company Restricted Shares and Company Options were issued under the Jaguar Holding Company I 2011 Equity Incentive Plan.

(c) The Company has not granted (i) any outstanding options, warrants, rights or other securities convertible into or exchangeable or exercisable for shares of Common Stock, (ii) any outstanding stock appreciation right, phantom stock or similar equity equivalent right in the Company or (iii) any outstanding bond, debenture or other indebtedness having the right to vote or convertible or exchangeable for securities of the Company having the right to vote or convertible or exchangeable for securities of the Company having the right to vote. The Company is not a party to any outstanding commitments or agreements providing for the issuance of additional shares, the sale of treasury shares, or for the repurchase or redemption of shares of Common Stock, and there are no agreements of any kind which may obligate the Company to issue, purchase, register for sale, redeem or otherwise acquire any of its capital stock or options, warrants, rights or other securities convertible into or exchangeable or exercisable for shares of capital stock. Except for this Agreement and the Stockholders Agreement, the Company is not party to any voting trust, proxy or other agreement or understanding with respect to the voting of the shares of Common Stock.

(d) Except as set forth on Schedule 4.6(d), there are no accrued and unpaid dividends with respect to any outstanding Common Stock and no amounts payable to holders of Company Options in respect of previous dividends paid to holders of Common Stock.

4.7 Capitalization of Subsidiaries. The outstanding shares of capital stock of (or other equity interests in) each of the Company's Subsidiaries have been duly authorized and validly issued and are fully paid and (if applicable) nonassessable and have not been issued in violation of any preemptive or similar rights. The Company or one or more of its wholly owned Subsidiaries own of record and beneficially all the issued and outstanding shares of capital stock of (or other equity interests in) such Subsidiaries free and clear of any Liens other than (a) such Liens as may be set forth in the certificate of formation, limited liability company agreement, limited

partnership agreement, certificate of incorporation or bylaws, or similar organizational documents of such Subsidiary, (b) for any restrictions on sales of securities under applicable securities Laws and (c) Permitted Liens. There are no outstanding options, warrants, rights, stock appreciation rights, phantom stock or similar equity equivalent rights or other securities convertible into or exercisable or exchangeable for any shares of capital stock of (or other equity interests in) such Subsidiaries, any other commitments or agreements providing for the issuance of additional shares (or other equity interests), the sale of treasury shares, or for the repurchase or redemption of such Subsidiaries' shares of capital stock (or other equity interests), or any agreements of any kind which may obligate any Subsidiary of the Company to issue, purchase, register for sale, redeem or otherwise acquire any of its shares of capital stock (or other equity interests). Except for the equity interests of the Subsidiaries set forth on Schedule 4.2, neither the Company nor any of its Subsidiaries owns any equity interest in any other Person.

4.8 Financial Statements. Attached as Schedule 4.8 are the audited consolidated balance sheets and statements of operation, comprehensive (loss) income, cash flow and stockholders' equity (deficit) and redeemable noncontrolling interests of the Company and its Subsidiaries as of and for the twelve-month periods ended December 31, 2016 and December 31, 2015, together with the auditor's reports thereon (the "Financial Statements"). The Financial Statements present fairly, in all material respects, the consolidated financial position and results of operations and cash flows of the Company and its Subsidiaries as of the dates and for the periods indicated in such Financial Statements in conformity with GAAP consistently applied throughout the periods covered thereby.

4.9 Undisclosed Liabilities. There is no liability, debt or obligation of the Company or any of its Subsidiaries of a type required to be reflected or reserved for on a balance sheet prepared in accordance with GAAP, except for liabilities and obligations (a) reflected or reserved for on the Financial Statements or disclosed in the notes thereto, (b) that have arisen since the date of the most recent balance sheet included in the Financial Statements in the ordinary course of the operation of business of the Company and its Subsidiaries, (c) incurred in connection with the transactions contemplated by this Agreement or (d) which would not reasonably be expected to have a Material Adverse Effect on the Company.

4.10 Litigation and Proceedings. Except for Actions under Environmental Law (as to which certain representations and warranties are made pursuant to Section 4.22), there are no pending or, to the knowledge of the Company, threatened, lawsuits, actions, suits, claims or other proceedings at law or in equity or, to the knowledge of the Company, investigations, in each case, before or by any Governmental Authority against the Company or any of its Subsidiaries that, in each case, if resolved adversely to the Company or any of its Subsidiaries, would (after taking into account applicable insurance) reasonably be expected to have a Material Adverse Effect on the Company. There is no unsatisfied or open Governmental Order binding upon the Company or any of its Subsidiaries which would reasonably be expected to have a Material Adverse Effect on the Company.

4.11 Legal Compliance. Except with respect to compliance with Environmental Laws (as to which certain representations and warranties are made pursuant to Section 4.22), compliance with Laws related to employment of labor (as to which certain representations and warranties are made pursuant to Section 4.14) and compliance with the Laws addressed in Section 4.26 (as to which certain representations and warranties are made pursuant to Section 4.26), the Company

and its Subsidiaries are, and in the prior two years have been, in compliance with all applicable Laws, except where the failure to be in compliance with such Laws would not reasonably be expected to have a Material Adverse Effect on the Company. Neither the Company nor any of its Subsidiaries has received any written notice from any Governmental Authority of a material violation of any applicable Law at any time during the past two (2) years that would reasonably be expected to have a Material Adverse Effect on the Company.

4.12 Contracts; No Defaults.

(a) Schedule 4.12 contains a listing of all Contracts described in clauses (i) through (x) below to which, as of the date of this Agreement, the Company or any of its Subsidiaries is a party (other than Company Benefit Plans, Contracts for labor and employment matters set forth on Schedule 4.13 and Contracts relating to insurance policies set forth on Schedule 4.17). True and complete copies of the Contracts listed on Schedule 4.12 have been delivered to or made available to Buyer (and the GIC Investors and Blue Spectrum Investors) or its representatives.

(i) Each Contract (other than Contracts of the type (without giving effect to dollar thresholds) described in other clauses of this Section 4.12(a)) that is a master agreement with a Top Customer or Top Supplier and which is not cancelable (without penalty, cost or other liability) by such Top Customer or Top Supplier upon giving notice of ninety (90) days or less;

(ii) Each note, debenture or other Contract (in each case, other than between or among members of the Company Group) evidencing money borrowed by the Company or any of its Subsidiaries, in each case, having an outstanding principal amount in excess of $2,500,000;

(iii) Each Contract for the acquisition of any Person or any business division thereof or the disposition of any material assets of the Company or any of its Subsidiaries (other than in the ordinary course of business), in each case, involving payments in excess of $5,000,000, other than Contracts in which the applicable acquisition or disposition has been consummated and there are no material obligations ongoing;

(iv) Each (A) lease, rental or occupancy agreement, real property license, or other Contract for, in each case, the lease of the Leased Real Property and (B) lease, rental agreement, installment and conditional sale agreement, or other Contract that, in each case in this clause (B), (x) provides for the ownership of, leasing of, title to, use of, or any leasehold or other interest in any personal property and (y) involves annual payments in excess of $2,000,000;

(v) Each joint venture Contract, partnership agreement or limited liability company agreement with a third party (in each case, other than (x) with respect to wholly owned Subsidiaries of the Company and (y) commercial Contracts with customers or suppliers that include “partnership agreement” in the title);

(vi) Each Contract requiring capital expenditures after the date of this Agreement in an amount in excess of $2,000,000;

(vii) Each Contract containing covenants expressly limiting in any material respect the freedom of the Company or any of its Subsidiaries to compete with any Person in a product line or line of business or to operate in any geographic area;

(viii) Each Contract providing for material indemnification by the Company or any of its Subsidiaries other than indemnification obligations provided in the ordinary course of business;

(ix) Each Contract that contains a put, call or similar right pursuant to which the Company or any of its Subsidiaries could be required to purchase or sell, as applicable, any equity interests of any Person or assets that have a fair market value or purchase price in excess of $2,000,000; and

(x) Each Contract pursuant to which the Company or any of its Subsidiaries licenses material Intellectual Property from a third party, other than click-wrap, shrink-wrap and off-the-shelf software licenses, and any other commercial software licenses that are available on standard terms to the public generally with license, maintenance, support and other fees less than $500,000 per year.

(b) As of the date of this Agreement, all of the Contracts set forth on Schedule 4.12(a) (or that are required to be set forth on such schedule) are (i) in full force and effect and (ii) represent the valid, binding and enforceable obligations of the Company or one of its Subsidiaries party thereto (subject to the Remedies Exceptions) and, to the knowledge of the Company, represent the valid, binding and enforceable obligations of the other parties thereto (subject to the Remedies Exceptions). Except, in each case, where the occurrence of such breach or default would not reasonably be expected to have a Material Adverse Effect on the Company, (x) neither the Company, any of its Subsidiaries nor, to the knowledge of the Company, any other party thereto is in breach of or default under any such Contract, (y) as of the date of this Agreement, neither the Company nor any of its Subsidiaries has received any claim or notice of material breach of or material default under any such Contract, and (z) to the knowledge of the Company, no event has occurred which, individually or together with other events, would reasonably be expected to result in a breach of or a default under any such Contract (in each case, with or without notice or lapse of time or both).

(c) Neither the Company nor any of its Subsidiaries nor, to the knowledge of the Company, any of their respective directors, officers or employees, is, or has been, suspended, debarred or proposed for debarment from participation in, or the award of, Contracts or subcontracts for or with a Governmental Authority, and to the knowledge of the Company, no suspension or debarment actions with respect to any such Contracts have been commenced or threatened against the Company or any of its Subsidiaries or any of their respective directors, officers or employees.

4.13 Company Benefit Plans.

(a) Schedule 4.13 sets forth a complete list of each material "employee benefit plan" as defined in Section 3(3) of the Employee Retirement Income Security Act of 1974, as amended ("ERISA"), and any other material plan, policy or program providing compensation or other benefits to any current or former director, officer or employee of the Company or any of its Subsidiaries, which is maintained, sponsored or contributed to by the Company or any of its Subsidiaries and under which the Company or any of its Subsidiaries has any obligation or liability, excluding any plan or program that is sponsored solely by a Governmental Authority (each a "Company Benefit Plan"). Notwithstanding the foregoing, Schedule 4.13 need not

identify an employment agreement if such employment agreement (i) relates to an employee whose base salary does not exceed $400,000 or (ii)(A) relates to an employee working outside the United States, (B) does not differ materially from a form that is identified on Schedule 4.13 and (C) does not provide any severance or notice period in excess of 90 days or such longer period as may be required by applicable Laws.

(b) With respect to each Company Benefit Plan, the Company has delivered or made available to Buyer or its representatives copies of (i) such Company Benefit Plan and any trust agreement relating to such plan, (ii) the most recent summary plan description for such Company Benefit Plan for which such summary plan description is required, (iii) the most recent annual report on Form 5500 and all attachments thereto filed with the Internal Revenue Service with respect to such Company Benefit Plan (if applicable) and (iv) the most recent determination or opinion letter, if any, issued by the Internal Revenue Service with respect to such Company Benefit Plan.

(c) Except as would not reasonably be expected to have a Material Adverse Effect on the Company: (i) each Company Benefit Plan has been administered in accordance with its terms and all applicable Laws, including ERISA and the Code; (ii) all contributions required to be made with respect to any Company Benefit Plan on or before the date hereof have been made; and (iii) each Company Benefit Plan which is intended to be qualified within the meaning of Section 401(a) of the Code (A) has received a favorable determination or opinion letter as to its qualification, (B) has been established under a standardized master and prototype or volume submitter plan for which a current favorable Internal Revenue Service advisory letter or opinion letter has been obtained by the plan sponsor and is valid as to the adopting employer, or (C) has time remaining under applicable Laws and related guidance to apply for a determination or opinion letter or to make any amendments necessary to obtain a favorable determination or opinion letter within the remedial amendment period.

(d) No Company Benefit Plan is a multiemployer pension plan (as defined in Section 3(37) of ERISA) (a "Multiemployer Plan") or other pension plan, in each case, that is subject to Title IV of ERISA and neither the Company nor any of its Subsidiaries has sponsored or contributed to or been required to contribute to a Multiemployer Plan or other pension plan subject to Title IV of ERISA at any time within the previous six (6) years.

(e) Except as would not reasonably be expected to have a Material Adverse Effect on the Company, with respect to the Company Benefit Plans, (i) as of the date hereof, no actions, suits or claims (other than routine claims for benefits in the ordinary course) are pending or, to the knowledge of the Company, threatened, and (ii) to the knowledge of the Company, no facts or circumstances exist that would reasonably be expected to give rise to any such actions, suits or claims.

(f) No Company Benefit Plan exists that, as a result of the execution of this Agreement, shareholder approval of this Agreement, or consummation of the transactions contemplated by this Agreement (whether alone or in connection with any subsequent event(s)) could reasonably be expected to, except as set forth in Sections 3.1(d) or 3.2(a): (i) entitle any employee, director, officer or independent contractor of the Company or any of its Subsidiaries to severance pay, unemployment compensation or any other payment or benefit, (ii) accelerate the time of payment or vesting, or increase the amount of compensation or benefit due to any

employee, director, officer or independent contractor, (iii) require the Company to transfer or set aside any assets to fund any benefits under any Company Benefit Plan, (iv) otherwise give rise to any material liability under any Company Benefit Plan, (v) limit or restrict the right to amend, terminate or transfer the assets of any Company Benefit Plan on or following the Closing Date or (vi) result in any payment or benefit that would constitute an "excess parachute payment" (as such term is defined in Section 280G(b)(1) of the Code) to any current or former employee, director, officer or independent contractor of the Company or any of its Subsidiaries.

4.14 Labor Relations.

(a) As of the date of this Agreement and except for agreements mandated by applicable Law, neither the Company nor any of its Subsidiaries is a party to any collective bargaining agreement or other labor union contract applicable to its employees, and, to the knowledge of the Company, there are no activities or proceedings of any labor union to organize any such employees. During the twelve (12)-month period prior to the date of this Agreement, there have not been any representation questions, arbitration proceedings, labor strikes, slowdowns or stoppages, material grievances or other material labor disputes pending or, to the knowledge of the Company, threatened, with respect to the employees of the Company or any of its Subsidiaries, except for any arbitration, grievances or other disputes with individual employees. Except as would not reasonably be expected to have a Material Adverse Effect on the Company, the Company and its Subsidiaries are, and have been during the twelve (12)-month period prior to the date of this Agreement, in compliance with all applicable laws relating to employment and employment practices, the classification of employees and independent contractors, wages, hours, collective bargaining, unlawful discrimination, civil rights, immigration, terms and conditions of employment and plant closing or mass layoffs. As of the date of this Agreement and except as would not reasonably be expected to have a Material Adverse Effect on the Company, there are no charges with respect to or relating to the Company or any of its Subsidiaries pending or, to the knowledge of the Company, threatened before the Equal Employment Opportunity Commission or any other Governmental Authority responsible for the prevention of unlawful employment practices.

4.15 Taxes.

(a) All Tax Returns required to be filed by or with respect to the Company or any of its Subsidiaries have been properly and timely, taking into account applicable extensions of time to file, prepared and filed, and all such Tax Returns are true and complete, except in each case for Tax Returns as to which the failure to so file or be true and complete would not reasonably be expected to have a Material Adverse Effect on the Company.

(b) The Company and its Subsidiaries have fully and timely paid all Taxes which are due and payable by the Company and its Subsidiaries in the manner prescribed by Law, except for Taxes as to which the failure to pay would not reasonably be expected to have a Material Adverse Effect on the Company.

(c) All Taxes required to be withheld or deducted by the Company and its Subsidiaries have been withheld, deducted and paid over to the appropriate Governmental Authority, and the Company and its Subsidiaries have complied with all associated reporting and recordkeeping requirements, except, in each case, as would not reasonably be expected to have a Material Adverse Effect on the Company.

(d) Except as would not reasonably be expected to have a Material Adverse Effect on the Company, no deficiency for any Taxes has been asserted or assessed by any Governmental Authority in writing against the Company or any of its Subsidiaries (or, to the knowledge of the Company, has been threatened or proposed), except for deficiencies that have been fully satisfied by payment, fully settled or fully withdrawn. Except as would not reasonably be expected to have a Material Adverse Effect on the Company, as of the date hereof, no audit or other proceeding by any Governmental Authority is pending or threatened in writing against the Company or any of its Subsidiaries with respect to any Taxes due from the Company or any of its Subsidiaries. Except as would not reasonably be expected to have a Material Adverse Effect on the Company, no written claim has ever been received by the Company or any of its Subsidiaries from a Governmental Authority in a jurisdiction where the Company or any of its Subsidiaries does not file Tax Returns that the Company or such Subsidiary is or may be subject to Tax in, or required to file Tax Returns in, that jurisdiction.

(e) Except as would not reasonably be expected to have a Material Adverse Effect on the Company, there are no Tax indemnification or Tax sharing agreements or arrangements under which the Company or any of its Subsidiaries are a party to, are bound by or would reasonably be expected to be liable after the Closing Date that provides for (i) the allocation, apportionment, sharing or assignment of any Tax liability or benefit, or (ii) the payment by the Company or any of its Subsidiaries of the Tax liability of any Person that is neither the Company nor one of its Subsidiaries, other than (x) customary agreements or arrangements with customers, vendors, lessors, lenders and the like or other agreements, in each case, entered into in the ordinary course of business and that do not relate primarily to Taxes, and (y) any such agreements pursuant to this Agreement.

(f) Neither the Company nor any of its Subsidiaries has constituted either a "distributing corporation" or a "controlled corporation" in a distribution of stock that was purported or intended to be governed by Section 355 or Section 361 of the Code in the two (2) years prior to the date of this Agreement.

(g) Neither the Company nor any of its Subsidiaries has entered into a "listed transaction" that has given rise to a disclosure obligation under Section 6011 of the Code and the Treasury Regulations promulgated thereunder and that has not been disclosed in the relevant Tax Return of the Company or the relevant Subsidiary.

(h) In the past three (3) years, neither the Company nor any of its Subsidiaries (i) is or ever has been a member of any "affiliated group" within the meaning of Section 1504(a) of the Code filing a consolidated federal income Tax Return or any other consolidated, combined, unitary or similar group other than a group the common parent of which is the Company or any of its Subsidiaries or (ii) has any liability for Taxes of any Person (other than the Company or any of its Subsidiaries) arising from the application of Treasury Regulation Section 1.1502-6 or any analogous provision of state, local or foreign Law, or as transferee or successor.

(i) There are no material Tax Liens upon any of the assets or properties of the Company or any of its Subsidiaries, other than Permitted Liens. There are no outstanding agreements extending or waiving the statutory period of limitation applicable to any claim for, or the period for the collection or assessment of, Taxes of the Company or any of its Subsidiaries that would reasonably be expected to have a Material Adverse Effect on the Company. Except as would not reasonably be expected to have a Material Adverse Effect on the Company, neither the Company nor any of its Subsidiaries has requested or been granted an extension of the time for filing any Tax Return to a date later than the Closing Date, other than an automatic extension to extend the time for filing any Tax Return in the ordinary course of business.

(j) None of the Company or any of its Subsidiaries or Parent or any of its Affiliates will be required to include any material item of income in, or exclude any material item of deduction from, taxable income, or will have any material liability for Taxes, for any taxable period (or portion thereof) ending after the Closing Date as a result of any: (A) change in method of accounting, or to the knowledge of the Company use of an improper method of accounting, for a taxable period ending on or prior to the Closing Date; (B) "closing agreement" as described in Code §7121 (or any corresponding or similar provision of state, local or foreign Tax law) executed on or prior to the Closing Date; (C) installment sale or open transaction disposition made on or prior to the Closing Date; (D) prepaid amount received or deferred revenue accrued on or prior to the Closing Date other than any such prepaid amounts received or deferred revenue accrued in the ordinary course of business; or (E) election by any of the Company or any of the Company's Subsidiaries under Code §108(i).

(k) The Company has not been a U.S. real property holding corporation within the meaning of Code Section 897(c)(2) during the five year period ending on the Closing Date.

4.16 Brokers' Fees. No broker, finder, investment banker or other Person is entitled to any brokerage fee, finders' fee or other similar commission, for which Buyer, Parent, the Company or any of their respective Subsidiaries would be liable in connection with the transactions contemplated by this Agreement based upon arrangements made by the Company, any of its Subsidiaries or any of their Affiliates.

4.17 Insurance. Schedule 4.17 contains a list of all material policies of property, fire and casualty, product liability, workers' compensation, and other forms of insurance held by, or for the benefit of, the Company or any of its Subsidiaries as of the date of this Agreement. True and complete copies of such insurance policies (or, to the extent such policies are not available, policy binders) have been made available to Buyer or its representatives. As of the date hereof, neither the Company nor any of its Subsidiaries has received any written notice from any insurer under any such insurance policies, canceling or materially adversely amending any such policy or denying renewal of coverage thereunder, and all premiums on such insurance policies due and payable as of the date hereof have been paid.

4.18 Licenses, Permits and Authorizations. Except with respect to licenses, approvals, consents, registrations and permits required under applicable Environmental Laws (as to which certain representations and warranties are made pursuant to Section 4.22), the Company and its Subsidiaries have obtained, and are and have been for the last three years, in material compliance

with, all of the material licenses, approvals, consents, registrations and permits necessary under applicable Laws to permit the Company and its Subsidiaries to own, operate, use and maintain their assets in the manner in which they are now operated, used and maintained and to conduct the business of the Company and its Subsidiaries as currently conducted, except where the absence of, or the failure to be in material compliance with, any such license, approval, consent, registration or permit would not reasonably be expected to have a Material Adverse Effect on the Company. There are no pending or, to the knowledge of the Company, threatened claims, actions, suits or other proceedings at law or in equity or, to the knowledge of the Company, investigations, in each case, before or by any Governmental Authority that would reasonably be expected to result in the revocation or termination of any such license, approval, consent, registration or permit that is material to the conduct of the business of the Company and its Subsidiaries as currently conducted, except for any such revocation or termination that would not reasonably be expected to have a Material Adverse Effect on the Company.

4.19 Machinery, Equipment and Other Tangible Personal Property. The Company or one of its Subsidiaries owns and has good title to all material machinery, equipment and other tangible personal property reflected on the books of the Company and its Subsidiaries as owned by the Company or one of its Subsidiaries, free and clear of all Liens other than Permitted Liens, except as would not reasonably be expected to have a Material Adverse Effect on the Company.

4.20 Real Property.

(a) Schedule 4.20 lists, as of the date of this Agreement, all Owned Real Property. Except as would not reasonably be expected to have a Material Adverse Effect on the Company, the Company or one of its Subsidiaries has good and valid fee simple title to all Owned Real Property, subject only to any Permitted Liens.

(b) Schedule 4.20 lists, as of the date of this Agreement, all Leased Real Property. Except as would not reasonably be expected to have a Material Adverse Effect on the Company, (i) the Company or one of its Subsidiaries has a valid and enforceable leasehold estate in, and enjoys peaceful and undisturbed possession of, all Leased Real Property, subject to the Remedies Exception and any Permitted Liens and (ii) as of the date hereof, neither the Company nor any of its Subsidiaries has received any written notice from any lessor of such Leased Real Property of, nor does the Company or any of its Subsidiaries have knowledge of the existence of, any default, event or circumstance that, with notice or lapse of time or both, would constitute a default by the party that is the lessee or lessor of such Leased Real Property.

4.21 Intellectual Property.

(a) Schedule 4.21 lists each patent, registered trademark, registered service mark and registered copyright owned by the Company or any of its Subsidiaries as of the date of this Agreement for which applications have been filed or registrations or patents have been obtained, whether in the United States or internationally as of the date of this Agreement. The Company or one of its Subsidiaries is the owner of all right, title and interest in and to the items scheduled on Schedule 4.21(a) free and clear of all Liens other than Permitted Liens. The Company or one of its Subsidiaries owns or has the right to use pursuant to license, sublicense, agreement or permission all other Intellectual Property used in or necessary for the operation of the business of

the Company and its Subsidiaries, as presently conducted, except where the failure to have such rights would not reasonably be expected to have a Material Adverse Effect on the Company.

(b) Except as would not reasonably be expected to have a Material Adverse Effect on the Company, (i) the Company and its Subsidiaries are not infringing upon, misappropriating or otherwise violating any Intellectual Property of any Person (and have not done so within the past twelve (12) months) and (ii) as of the date of this Agreement, the Company and its Subsidiaries have not received from any Person in the past twelve (12) months any written notice, charge, complaint, claim or other written assertion of any infringement or violation by, or misappropriation of, any Intellectual Property of any Person.

(c) No third party is infringing upon, misappropriating or otherwise violating any Intellectual Property owned by the Company or any of its Subsidiaries (and, to the knowledge of the Company, no party has so infringed, misappropriated or otherwise violated such Intellectual Property in the last three years), except as would not reasonably be expected to have a Material Adverse Effect on the Company. Within the past twelve (12) months, neither the Company nor any of its Subsidiaries has sent any written notice, charge, complaint, claim or other written assertion asserting or threatening to assert any Action against any Person involving or relating to any Intellectual Property of the Company or any of its Subsidiaries.

(d) The Company and its Subsidiaries take commercially reasonable actions and measures to protect and maintain the security, confidentiality and integrity of their computer systems and hardware and all data stored therein or transmitted thereby.

4.22 Environmental Matters. The Company and its Subsidiaries are in compliance with all Environmental Laws, except for any such instance of non-compliance that would not reasonably be expected to have a Material Adverse Effect on the Company and, to the knowledge of the Company, there have been no releases of Hazardous Material on or from any real property leased or operated by the Company or its Subsidiaries, except for any such release that would not reasonably be expected to have a Material Adverse Effect on the Company. The Company and its Subsidiaries hold, and are in material compliance with, all permits required under applicable Environmental Laws to permit the Company and its Subsidiaries to operate their assets in a manner in which they are now operated and maintained and to conduct the business of the Company and its Subsidiaries as currently conducted, except where the absence of, or the failure to be in material compliance with, any such permit would not reasonably be expected to have a Material Adverse Effect on the Company. As of the date of this Agreement, there are no lawsuits, actions, suits, claims or other proceedings at law or in equity or, to the knowledge of the Company, investigations, in each case, before or by any Governmental Authority, or written claims or notices of violation pending or, to the knowledge of the Company, threatened against the Company or any of its Subsidiaries alleging violations of or liability under any Environmental Law, except for any such claim or notice that would not reasonably be expected to have a Material Adverse Effect on the Company. This Section 4.22 provides the sole and exclusive representations and warranties of the Company in respect of environmental matters, including any and all matters arising under Environmental Laws or relating to Hazardous Materials.

4.23 Absence of Changes.

(a) From the date of the most recent audited balance sheet included in the Financial Statements, there has not been any change, effect, event, occurrence, state of facts or development that, individually or in the aggregate, has had, or would reasonably be expected to have, a Material Adverse Effect on the Company.

(b) From the date of the most recent audited balance sheet included in the Financial Statements through the date of this Agreement, the Company and its Subsidiaries (x) have, in all material respects, conducted their business and operated their properties in the ordinary course of business consistent with past practice and (y) have not taken or agreed to take any action which, if taken during the period from the date of this Agreement until the Closing Date, would require the consent of Buyer pursuant to Section 7.1(a)(ii), 7.1(a)(v), 7.1(a)(viii), 7.1(a)(xi), 7.1(a)(xii) or 7.1(a)(xiii) (but only, in the case of clause 7.1(a)(xiii), as it relates to actions prohibited by Sections 7.1(a)(ii), 7.1(a)(v), 7.1(a)(viii), 7.1(a)(xi) or 7.1(a)(xii)).

4.24 Affiliate Matters. Except (a) the Company Benefit Plans (b) Contracts relating to labor and employment matters set forth on Schedule 4.13, (c) Contracts solely between or among members of the Company Group and (d) Contracts entered into on an arm's length basis and in the ordinary course of business between the Company or any of its Subsidiaries, on the one hand, and the direct or indirect portfolio companies of investment funds advised or managed by Carlyle Investment Management L.L.C., Hellman & Friedman LLC or any of their respective Affiliates, on the other hand, neither the Company nor any of its Subsidiaries is party to any Contract with any (i) officer or director of the Company or officer or director of any of its Subsidiaries or (ii) Affiliate of the Company.

4.25 Customers and Suppliers. Schedule 4.25 sets forth a list of (a) the ten (10) largest customers ("Top Customers") of Company (on a consolidated basis, measured by backlog) as of December 31, 2016 and (b) the ten (10) largest suppliers ("Top Suppliers") of the Company (on a consolidated basis, measured by dollar-value of total payments made) for the twelve months ended December 31, 2016. As of the date of this Agreement, to the knowledge of the Company, in the last twelve (12) months neither the Company nor any of its Subsidiaries has received any written notice from any of such Top Customer or Top Supplier of its intention to terminate or materially reduce its business relationship with the Company or any of its Subsidiaries.

4.26 Regulatory Matters. Except as would not reasonably be expected to have a Material Adverse Effect on the Company:

(a) Each service provided by the Company or any of its Subsidiaries that is subject to the United States' Federal Food, Drug, and Cosmetic Act, as amended ("FDCA"), the Health Insurance Portability and Accountability Act of 1996, as amended, the Controlled Substances Act and all applicable rules and regulations of the Drug Enforcement Administration, or similar legal provisions in any foreign jurisdiction, including the EU Data Protection Directive 95/46/EC and national implementations thereof (each such service, a "Company Service") is, being provided in compliance with all applicable requirements of such statutes, and any regulations promulgated thereunder, and any similar applicable Laws.

(b) During the past two (2) years, (x) neither the Company nor any of its Subsidiaries has received any (i) written notice or communication or (ii) to the knowledge of the Company, oral notice or communication, in each case, from the United States Food and Drug Administration ("FDA") or any other Governmental Authority in any domestic or foreign jurisdiction alleging any violation by the Company or any of its Subsidiaries of any Law applicable to any Company Service, and (y) no Governmental Authority in any domestic or foreign jurisdiction having legal responsibility for the regulation of a Company Service has served any written or (to the knowledge of the Company) oral notice, warning letter, FDA Form 483, or consent decree on the Company or any of its Subsidiaries stating that any of their businesses were or are in violation of any Law or were or are the subject of any pending or threatened Governmental Authority investigation, proceeding, inquiry, disqualification proceeding, or threatening to revoke, suspend or refuse to renew any of the material licenses, approvals, consents, registrations and permits held by the Company or any of its Subsidiaries that are necessary to conduct its business as presently conducted.

(c) During the past two (2) years, all laboratory facilities owned, leased, or operated, by the Company or its Subsidiaries at which a Company Service is provided are, to the extent required by applicable Law, being operated in compliance with the FDA's current good laboratory practices regulations, FDA's current good manufacturing practices regulations, the Clinical Laboratory Improvement Amendments of 1988, as amended, and equivalent applicable requirements of any state or local law and equivalent applicable requirements in any foreign jurisdiction, in each case as in effect as of the date hereof.

(d) Each Company Service involving trials that involve human subjects is, to the extent required by applicable Law, being conducted in compliance with the FDA's current good clinical practices regulations, International Conference of Harmonization, Guideline for Good Clinical Practice (E6), the Department of Health and Human Services' "Common Rule" on Human Protection (45 C.F.R. Part 46), and equivalent applicable requirements in any foreign jurisdiction, in each case as in effect on the date hereof.

(e) To the knowledge of the Company, the Company does not employ or contract with any individuals or firms that are disbarred pursuant to Section 306 of the FDCA (21 U.S.C. § 335(a)), as amended, or that are disqualified pursuant to 21 C.F.R. 312.70.

4.27 Anti-corruption. During the past three (3) years, neither the Company nor any of its Subsidiaries, nor, to the knowledge of the Company, any of their respective directors, officers, employees or any other Person authorized to act, and acting, on behalf of the Company or its Subsidiaries, has violated any applicable anti-corruption Law (including the U.S. Foreign Corrupt Practices Act (as amended) and the U.K. Bribery Act (as amended)) or any applicable Law concerning trade or economic sanctions (including U.S. Export Administration Regulations; the U.S. International Traffic in Arms Regulations; the economic sanctions rules and regulations administered by the U.S. Treasury Department's Office of Foreign Assets Control; European Union Council Regulations on export controls, including Nos. 428/2009, 267/2012; other European Union Council sanctions regulations, as implemented in European Union Member States; and United Nations sanctions policies), except for violations that are not reasonably likely to have a Material Adverse Effect on the Company. As of the date of this Agreement, neither the Company nor any of its Subsidiaries nor, to the knowledge of the Company, any of their

respective directors, officers or employees, is currently or has been within the past three (3) years the target of any inquiry, investigation, settlement, plea agreement or enforcement action by a Governmental Authority involving an alleged or suspected violation of any applicable anti-corruption Law (including the U.S. Foreign Corrupt Practices Act (as amended) and the U.K. Bribery Act (as amended)) or any applicable Law concerning trade or economic sanctions (including U.S. Export Administration Regulations; the U.S. International Traffic in Arms Regulations; the economic sanctions rules and regulations administered by the U.S. Treasury Department's Office of Foreign Assets Control; European Union Council Regulations on export controls, including Nos. 428/2009, 267/2012; other European Union Council sanctions regulations, as implemented in European Union Member States; and United Nations sanctions policies) (and, to the knowledge of the Company, no investigation, review, audit, or inquiry by any Governmental Authority with respect such Laws is pending or threatened against the Company or any of its Subsidiaries), except for such inquiries, investigations, settlements, plea agreements or enforcement actions that are not reasonably likely to have a Material Adverse Effect on the Company.

4.28 Restricted Payment Capacity. As of the date hereof, the capacity under (x) Section 3.4 of the Existing Indenture to make Restricted Payments (as defined therein), and (y) Section 7.05 of the Existing Credit Agreement to make Restricted Payments (as defined therein) in each case with respect to amounts to be paid in connection with the transactions contemplated hereby is no less than One Hundred Forty Four Million Dollars ($144,000,000), after taking into account the exceptions in Section 3.4 of the Existing Indenture and Section 7.05 of the Existing Credit Agreement.

4.29 No Additional Representations or Warranties. Except as provided in this Article IV, neither the Company nor any of its Affiliates, nor any of their respective directors, officers, employees, stockholders, partners, members or representatives has made, or is making, any representation or warranty whatsoever to Parent, Holdings, Merger Sub, Buyer or their respective Affiliates, respective directors, officers, employees, stockholders, partners, members or representatives, and no such party shall be liable in respect of the accuracy or completeness of any information provided to Parent, Holdings, Merger Sub, Buyer or their respective Affiliates, directors, officers, employees, stockholders, partners, members or representatives.

ARTICLE V.
REPRESENTATIONS AND WARRANTIES OF BUYER

Except as set forth in the Schedules, Buyer represents and warrants to the Company as follows:

5.1 Corporate Organization. Buyer has been duly incorporated and is validly existing as a corporation in good standing under the Laws of the State of Delaware and has the corporate power and authority to own or lease its properties and to conduct its business as it is now being conducted. The copies of the certificate of incorporation of Buyer previously delivered by Buyer to the Company are true and complete. Buyer is duly licensed or qualified and (where applicable) in good standing as a foreign corporation in each jurisdiction in which the ownership of its property or the character of its activities is such as to require it to be so licensed or qualified or in good standing, as applicable, except where failure to be so licensed or qualified or in good standing would not reasonably be expected to have a Material Adverse Effect on Buyer.

5.2 Due Authorization. Buyer has all requisite corporate power and authority to execute and deliver this Agreement and (subject to the consents, approvals, authorizations and other requirements described in Section 5.5) to perform all obligations to be performed by it hereunder. The execution and delivery of this Agreement by Buyer and the consummation by it of the transactions contemplated hereby have been duly and validly authorized and approved by the Board of Directors of Buyer, and no other corporate proceeding on the part of Buyer is necessary to authorize this Agreement (other than the adoption of this Agreement by the stockholders of Buyer, which adoption will occur immediately following the execution of this Agreement). This Agreement has been duly and validly executed and delivered by Buyer and (assuming this Agreement constitutes a legal, valid and binding obligation of the Company, Parent, Holdings and Merger Sub) constitutes a legal, valid and binding obligation of Buyer, enforceable against Buyer in accordance with its terms, subject to the Remedies Exception.

5.3 No Conflict. Subject to the receipt of the consents, approvals, authorizations and other requirements set forth in Section 5.5 or on Schedule 5.5, and except as may result from any facts or circumstances relating solely to the Company and its Subsidiaries, the execution and delivery of this Agreement by Buyer and the consummation by it of the transactions contemplated hereby do not and will not, as of the Closing, (a) violate any provision of, or result in the breach of any applicable Law to which Buyer is subject or by which any property or asset of Buyer is bound, (b) conflict with the certificate of incorporation, bylaws or other organizational documents of Buyer, or (c) violate any provision of or result in a breach of, or require a consent under, any agreement, indenture or other instrument to which Buyer is a party or by which Buyer is bound, or terminate or result in the termination of any such agreement, indenture or instrument, or result in the creation of any Lien under any such agreement, indenture or instrument upon any of the properties or assets of Buyer or constitute an event which, after notice or lapse of time or both, would result in any such violation, breach, termination or creation of a Lien, except to the extent that the occurrence of the foregoing items set forth in clauses (a) or (c) would not reasonably be expected to have a Material Adverse Effect on Buyer.

5.4 Litigation and Proceedings. There are no lawsuits, actions, suits, claims or other proceedings at law or in equity, or, to the knowledge of Buyer, investigations, pending before or by any Governmental Authority or, to the knowledge of Buyer, threatened, against Buyer or any of its Affiliates or its representatives which, if determined adversely, would reasonably be expected to have a Material Adverse Effect on Buyer. There is no unsatisfied judgment or any open injunction binding upon Buyer which would reasonably be expected to have a Material Adverse Effect on Buyer.

5.5 Governmental Consents. Assuming the truth and completeness of the representations and warranties of the Company contained in this Agreement and except as may result from any facts or circumstances relating solely to the Company and its Subsidiaries, no consent, approval or authorization of, or designation, declaration or filing with, any Governmental Authority is required on the part of Buyer with respect to Buyer's execution or delivery of this Agreement or the consummation by Buyer of the transactions contemplated hereby, except for (a) applicable requirements of the HSR Act or any similar foreign Law, (b) compliance with any applicable securities Laws (c) any consents, approvals, authorizations, designations, declarations or filings, the absence of which would not reasonably be expected to have a Material Adverse Effect on Buyer and (d) the filing of the Certificate of Merger in accordance with the DGCL.

5.6 Financial Ability. As of the date of this Agreement, Buyer has received (i) an executed equity commitment letter, dated as of the date hereof (the "Equity Commitment Letter"), from each Equity Financing Source (other than the Sponsor Rollover Sellers) and an executed Sponsor Rollover Agreement from each Sponsor Rollover Seller (together with the Equity Commitment Letters, the "Commitment Letters"), pursuant to which each Equity Financing Source has committed to provide equity financing in an aggregate amount as set forth therein, subject to the terms and conditions set forth therein (the "Equity Financing" and together with the Debt Financing, the "Financing"), which Commitment Letters provide that the Company is a third-party beneficiary thereto, in each case, solely for the Financing Purposes. A true and complete copy of each Commitment Letter has been previously provided to the Company. Buyer has fully paid any and all commitment fees or other fees required by such Commitment Letters to be paid on or before the date hereof and will pay all additional fees as they become due. As of the date hereof, subject to the Remedies Exception, each Commitment Letter is a legal, valid and binding obligation of each party thereto and in full force and effect, has not been amended, modified, withdrawn, terminated or rescinded in any respect, and does not contain any material misrepresentation by Buyer and no event has occurred which (with or without notice, lapse of time or both) would reasonably be expected to constitute a breach thereunder on the part of Buyer or its Affiliates. No amendment or modification to, or withdrawal, termination or rescission of, any Commitment Letter is currently contemplated. The aggregate proceeds contemplated by the Commitment Letters, together with available cash of the Company and its Subsidiaries (assuming that the representations and warranties of the Company set forth in Section 4.28 are true and correct) and the Debt Financing, will be sufficient for Buyer to complete the Merger and to satisfy all of the payment obligations of Buyer and the Surviving Corporation under this Agreement, including (x) paying the Funding Amount at Closing and the Deferred Payment Amount on the Deferred Payment Date, and (y) paying all related fees and expenses (collectively, the "Financing Purposes"). Buyer has not incurred any obligation, commitment, restriction or liability of any kind, and neither of them is contemplating or aware of any obligation, commitment, restriction or liability of any kind, in either case which would reasonably be expected to impair or adversely affect such resources. As of the date hereof, there are no side letters or other agreements, contracts, arrangements or understandings related to the funding or investing, as applicable, of the Equity Financing other than as expressly set forth in the applicable Commitment Letters. Other than the Commitment Letters, no Contract between an Equity Financing Source, on the one hand, and Buyer or any of its Affiliates, on the other hand, contains any conditions precedent or other contingencies (x) related to the funding of the full amount of the Equity Financing or any provisions that could reduce the aggregate amount of the Equity Financing set forth in any Commitment Letter or the aggregate proceeds contemplated by any Commitment Letter or (y) that could otherwise adversely affect the conditionality, enforceability or availability of any Commitment Letter with respect to all or any portion of the Equity Financing. As of the date hereof and assuming the conditions to closing set forth in Article X are satisfied at Closing, Buyer has no reason to believe that any of the conditions to the Equity Financing would not reasonably be expected to be satisfied on a timely basis or that the Equity Financing would not reasonably be expected to be available to Buyer on the date on which the Closing should occur pursuant to Section 2.4.

5.7 Brokers' Fees. No broker, finder, investment banker or other Person is entitled to any brokerage fee, finders' fee or other similar commission in connection with the transactions

contemplated by this Agreement based upon arrangements made by Buyer or any of its Affiliates.

5.8 Solvency; Surviving Corporation After the Merger. Buyer is not entering into this Agreement or the transactions contemplated hereby with the actual intent to hinder, delay or defraud either present or future creditors. Assuming that the representations and warranties of the Company contained in this Agreement are true and correct in all material respects, and after giving effect to the Merger, at and immediately after the Effective Time, Buyer and the Surviving Corporation and its Subsidiaries (a) will be solvent (in that both the fair value of its assets will not be less than the sum of its debts and that the present fair saleable value of its assets will not be less than the amount required to pay its probable liability on its recourse debts as they mature or become due), (b) will have adequate capital and liquidity with which to engage in its business and (c) will not have incurred and does not plan to incur debts beyond its ability to pay as they mature or become due.

5.9 No Outside Reliance. Notwithstanding anything contained in this Article V or any other provision hereof, Buyer acknowledges and agrees that neither the Company nor any of its Affiliates, nor any of its or their respective directors, officers, employees, stockholders, partners, members, agents or representatives, has made, or is making, any representation or warranty whatsoever, express or implied (and Buyer has not relied on any representation, warranty or statement of any kind by the Company or any of its Affiliates or any of their respective directors, officers, employees, stockholders, partners, members, agents or representatives), beyond those expressly given in Article IV or in any certificate delivered pursuant to Section 10.2(c), including any implied warranty or representation as to condition, merchantability, suitability or fitness for a particular purpose or trade as to any of the assets of the Company or any of its Subsidiaries. Without limiting the generality of the foregoing, it is understood that any cost estimates, financial or other projections or other predictions that may be contained or referred to in the Schedules or elsewhere, as well as any information, documents or other materials (including any such materials contained in any "data room" or reviewed by Buyer or any of its Affiliates, agents or representatives) or management presentations that have been or shall hereafter be provided to Buyer or any of its Affiliates, agents or representatives are not and will not be deemed to be representations or warranties of the Company, and no representation or warranty is made as to the accuracy or completeness of any of the foregoing, except as may be expressly set forth in Article IV or in any certificate delivered pursuant to Section 10.2(c). Except as otherwise expressly set forth in this Agreement, Buyer understands and agrees that any inventory, equipment, vehicles, assets, properties and business of the Company and its Subsidiaries are furnished "as is", "where is" and, subject only to the representations and warranties contained in Article IV, with all faults and without any other representation or warranty of any nature whatsoever.

5.10 Acquisition of Interests for Investment. Buyer has such knowledge and experience in financial and business matters that it is capable of evaluating the merits and risks of its participation in the Merger. Buyer confirms that the Company has made available to Buyer and Buyer's agents and representatives the opportunity to ask questions of the officers and management employees of the Company and its Subsidiaries as well as access to the documents, information and records of the Company and its Subsidiaries and to acquire additional information about the business and financial condition of the Company and its Subsidiaries, and Buyer confirms that it has made an independent investigation, analysis and evaluation of the

Company and its Subsidiaries and their respective properties, assets, business, financial condition, documents, information and records. Buyer is acquiring the stock of Holdings, the Company and its Subsidiaries for investment and not with a view toward or for sale in connection with any distribution thereof, or with any present intention of distributing or selling the stock of Holdings, the Company or its Subsidiaries. Buyer understands and agrees that stock of Holdings, the Company and its Subsidiaries may not be sold, transferred, offered for sale, pledged, hypothecated or otherwise disposed of without registration under the Securities Act of 1933, as amended, except pursuant to an exemption from such registration available under such Act, and without compliance with state, local and foreign securities Laws, in each case, to the extent applicable.

5.11 No Additional Representations or Warranties. Except as provided in this Article V, none of Buyer, any of its Affiliates, or any of their respective directors, officers, employees, stockholders, partners, members or representatives has made, or is making, any representation or warranty whatsoever to Parent, Holdings, Merger Sub, the Company or their respective Affiliates, respective directors, officers, employees, stockholders, partners, members or representatives, and no such party shall be liable in respect of the accuracy or completeness of any information provided to Parent, Holdings, Merger Sub, the Company or their respective Affiliates, directors, officers, employees, stockholders, partners, members or representatives.

ARTICLE VI.
REPRESENTATIONS AND WARRANTIES OF PARENT

Except as set forth on the Schedules, Parent represents and warrants to the Company and Buyer as follows:

6.1 Corporate Organization. Each of Parent, Holdings and Merger Sub has been duly incorporated or formed (as applicable) and is validly existing as a corporation or limited liability company (as applicable) in good standing under the Laws of the State of Delaware and has the corporate or limited liability company (as applicable) power and authority to own or lease its properties and to conduct its business as it is now being conducted. The copies of the certificate of incorporation or formation (as applicable) of Parent, Holdings and Merger Sub previously delivered by Parent to the Company and Buyer are true and complete.

6.2 Due Authorization. Each of Parent, Holdings and Merger Sub has all requisite corporate or limited liability company (as applicable) power and authority to execute and deliver this Agreement and to perform all obligations to be performed by it hereunder. The execution and delivery of this Agreement by each of Parent, Holdings and Merger Sub and the consummation by it of the transactions contemplated hereby have been duly and validly authorized and approved by the Board of Directors (or equivalent governing body) of Parent, Holdings and Merger Sub, respectively, and no other corporate or limited liability company (as applicable) proceeding on the part of Parent, Holdings or Merger Sub is necessary to authorize this Agreement (other than the adoption of this Agreement by the stockholders of Parent and Merger Sub, which adoption will occur immediately following the execution of this Agreement). This Agreement has been duly and validly executed and delivered by each of Parent, Holdings and Merger Sub and (assuming this Agreement constitutes a legal, valid and binding obligation of the Company and Buyer) constitutes a legal, valid and binding obligation of each of Parent, Holdings and Merger Sub, enforceable against each of them in accordance with its terms, subject to the Remedies Exception.

6.3 No Conflict. The execution and delivery of this Agreement by each of Parent, Holdings and Merger Sub and the consummation by it of the transactions contemplated hereby, do not and will not, as of the Closing, (a) violate any provision of, or result in the breach of any applicable Law to which Parent, Holdings or Merger Sub is subject or by which any property or asset of Parent, Holdings or Merger Sub is bound, or (b) conflict with the certificate of incorporation, bylaws, certificate of formation, limited liability company agreement or other organizational documents of Parent, Holdings or Merger Sub or (c) violate any provision of or result in a breach of, or require a consent under, any agreement, indenture or other instrument to which Parent, Holdings or Merger Sub is a party or by which Parent, Holdings or Merger Sub is bound, or terminate or result in the termination of any such agreement, indenture or instrument, or result in the creation of any Lien under any such agreement, indenture or instrument upon any of the properties or assets of Parent, Holdings or Merger Sub or constitute an event which, after notice or lapse of time or both, would result in any such violation, breach, termination or creation of a Lien.

6.4 Litigation and Proceedings. There are no lawsuits, actions, suits, claims or other proceedings at law or in equity, or, to the knowledge of Parent, investigations, pending before or by any Governmental Authority or, to the knowledge of Parent, threatened, against Parent or any of its Affiliates or its representatives which, if determined adversely, would reasonably be expected to have a Material Adverse Effect on Parent. There is no unsatisfied judgment or any open injunction binding upon Parent which would reasonably be expected to have a Material Adverse Effect on Parent.

6.5 Governmental Consents. Assuming the truth and completeness of the representations and warranties of the Company contained in this Agreement and except as may result from any facts or circumstances relating solely to the Company and its Subsidiaries, no consent, approval or authorization of, or designation, declaration or filing with, any Governmental Authority is required on the part of Parent with respect to Parent's execution or delivery of this Agreement or the consummation by Parent of the transactions contemplated hereby, except for (a) applicable requirements of the HSR Act or any similar foreign Law, (b) compliance with any applicable securities Laws (c) any consents, approvals, authorizations, designations, declarations or filings, the absence of which would not reasonably be expected to have a Material Adverse Effect on Parent and (d) the filing of the Certificate of Reorganization Merger and Certificate of Conversion in accordance with the DGCL.

6.6 Brokers' Fees. No broker, finder, investment banker or other Person is entitled to any brokerage fee, finders' fee or other similar commission in connection with the transactions contemplated by this Agreement based upon arrangements made by Parent or any of its Affiliates.

6.7 Ownership; No Other Activities. Except, from and after the Reorganization Merger Effective Time, for equity interests issued in the Reorganization Merger, (a) all of the issued and outstanding equity interests of Merger Sub are owned by Holdings, (b) all of the issued and outstanding equity interests of Holdings are owned by Parent, and (c) all of the issued and outstanding equity interests of Parent are owned by the HFCP VII Investors and the CP V

Investors. Each of Parent, Holdings and Merger Sub has been formed solely for the purpose of engaging in the transactions contemplated hereby and has not engaged in any business activity and has no liabilities or obligations other than those taken or incurred with respect to the Debt Financing, but only to the extent requested or instructed by Buyer, this Agreement and the other Transaction Agreements.

6.8 No Additional Representations or Warranties. Except as provided in this Article VI, none of Parent, any of its Affiliates (including Holdings and Merger Sub), or any of its or their respective directors, officers, employees, stockholders, partners, members or representatives has made, or is making, any representation or warranty whatsoever to the Company, Buyer or their respective Affiliates, respective directors, officers, employees, stockholders, partners, members or representatives, and no such party shall be liable in respect of the accuracy or completeness of any information provided to the Company, Buyer or their respective Affiliates, directors, officers, employees, stockholders, partners, members or representatives.

ARTICLE VII.
COVENANTS OF THE COMPANY AND PARENT

7.1 Conduct of Business.

(a) From the date of this Agreement through the Closing, the Company shall, and shall cause its Subsidiaries to, except as would constitute a violation of applicable Law, as set forth on Schedule 7.1, as expressly contemplated by this Agreement or as consented to by Buyer in writing (which consent shall not be unreasonably conditioned, withheld, delayed or denied), (x) operate the business of the Company and its Subsidiaries in the ordinary course and substantially in accordance with past practice; (y) use commercially reasonable efforts to maintain and preserve in all material respects the present business organizations and material assets of the Company and its Subsidiaries, taken as a whole; and (z) use commercially reasonable efforts to maintain and preserve in all material respects the material relationships and good will with customers, suppliers and others having business dealings with the Company and its Subsidiaries. Without limiting the generality of the foregoing, except as would constitute a violation of applicable Law, as set forth on Schedule 7.1 or as consented to by Buyer in writing (which consent shall not be unreasonably conditioned, withheld, delayed or denied, except in the case of clauses (i)(B), (i)(C), (ii), (xii) or, as it may relate to any of the clauses enumerated in this parenthetical, (xiii)), the Company shall not, and the Company shall cause its Subsidiaries not to, except as otherwise expressly contemplated by this Agreement:

(i) (A) change or amend the certificate of incorporation, bylaws or other organizational documents of the Company or any of its Subsidiaries; (B) authorize for issuance, issue, grant, sell, deliver, dispose of, pledge or otherwise encumber any equity securities of the Company or any of its Subsidiaries, except for issuances of shares of Common Stock upon the exercise of existing options outstanding as of the date hereof to purchase shares of Common Stock or (C) grant any options, warrants or other rights to acquire, or any instrument convertible into or exchangeable or exercisable for, any capital stock or other equity interests in the Company or any of its Subsidiaries;

(ii) (A) make, declare, accrue or set aside any dividend or distribution on or in respect of the Company's capital stock or other securities (other than to a member of the Company Group), (B) reclassify, combine or split any of the equity interests of any member of the Company Group, (C) redeem, purchase or otherwise acquire any outstanding equity interests of any member of the Company Group, or any rights, warrants or Options to acquire any equity interests of the Company, from any Person other than the Company's employees, consultants or directors pursuant to the repurchase provisions set forth in Article X of the Stockholders Agreement or the Company's equity incentive plan (and such repurchased shares, "Repurchased Shares") or (D) adopt a plan or agreement of merger, consolidation, reorganization, complete or partial liquidation or dissolution of the Company or any of its Subsidiaries, file a petition in bankruptcy under any provisions of federal or state bankruptcy Law on behalf of the Company or any of its Subsidiaries or consent to the filing of any bankruptcy petition against any member of the Company Group under any similar Law;

(iii) except in the ordinary course of business, (A) materially adversely modify or terminate (excluding any expiration in accordance with its terms or exercise of any right by a counterparty) any Contract of a type required to be listed on Schedule 4.12 or any material insurance policy required to be listed on Schedule 4.17; or (B) enter into any Contract of a type that would be required to be listed on Schedule 4.12 if such Contract was in effect on the date hereof;

(iv) incur, assume or guarantee any indebtedness for borrowed money (other than (A) in the ordinary course of business or (B) pursuant to the Existing Credit Agreement) in an amount exceeding $5,000,000 or $15,000,000 in the aggregate;

(v) sell, assign, transfer, convey, lease or otherwise dispose of any material assets or properties, except in the ordinary course of business;

(vi) except in the ordinary course of business or as otherwise required by existing Company Benefit Plans or existing Contracts, (A) grant any material severance or material termination pay which will become due and payable after the Closing Date; (B) hire or terminate (other than terminations for cause) any executive officers of the Company; (C) adopt, enter into or materially amend any Company Benefit Plan or, other than in connection with an individual's promotion or new hires of non-executive officer employees, any material individual employment or consulting agreement in a manner that would materially increase Buyer's, the Company's or its Subsidiaries' liabilities with respect thereto; or (D) enter into any collective bargaining agreement;

(vii) purchase or acquire, directly or indirectly (including by merger or consolidation with, or acquisition of stock or assets of or any other business combination) any corporation, partnership, association, joint venture or other business organization or division thereof;

(viii) make any material loans or material advances of money to any Person (other than the Company and its Subsidiaries), except for loans made pursuant to Company Benefit Plans or advances to employees or officers of the Company or any of its Subsidiaries for expenses incurred in the ordinary course of business;

(ix) enter into a new line of business or abandon or discontinue any existing line of business;

(x) settle any Action (other than the Tax matters described on Schedule 4.15) where such settlement would (A) require the payment by the Company or any of its Subsidiaries of an amount in excess of $500,000 or impose any material restrictions or limitations upon the operations or business of the Company or any of its Subsidiaries, whether before or after the Closing;

(xi) (A) Except with respect to Tax matters described on Schedule 4.15 make, change, or rescind any material Tax election, change any annual Tax accounting period, adopt or change any material method of Tax accounting, amend any material Tax Return or file any material claim for a Tax refund, enter into any material closing agreement with a Governmental Authority with respect to Taxes, settle any material Tax claim, audit, or assessment, or surrender any right to claim a material Tax refund, or (B) except as required or permitted by GAAP, make any material change to any accounting principles, methods or practices;

(xii) enter into, modify or terminate any agreement or transaction between the Company and its Subsidiaries, on the one hand, and any of the HFCP VII Investors, the CP V Investors or their respective Affiliates (other than the Company and its Subsidiaries), on the other hand, other than agreements or transactions entered into in the ordinary course of business and negotiated on an arm's length basis with direct or indirect portfolio companies of investment funds advised or managed by Carlyle Investment Management L.L.C., Hellman & Friedman LLC or any of their respective Affiliates, or contemplated in this Agreement or any other Transaction Agreement (including entry into the logo agreement contemplated in Section 2.4.3 of the Interim Investors Agreement); or

(xiii) authorize or agree (by Contract or otherwise), or otherwise become obligated, to do any action prohibited in the foregoing clauses (i) through (xii).

(b) Nothing contained in this Agreement shall give Buyer, directly or indirectly, any right to control or direct the operations of the Company and its Subsidiaries prior to the Closing. Prior to the Closing, each of the Company and Buyer shall exercise, consistent with the other terms and conditions of this Agreement, complete control and supervision over their respective businesses.

7.2 Inspection. The Company shall, and shall cause its Subsidiaries to, afford to Buyer and its accountants, counsel and other representatives reasonable access, during normal business hours, in such manner as to not interfere with the normal operation of the Company and its Subsidiaries, to their respective properties, books, contracts, commitments, tax returns, records and appropriate officers and employees of the Company and its Subsidiaries, and shall furnish such representatives with financial and operating data and other information concerning the affairs of the Company and its Subsidiaries, in each case, as such representatives may reasonably request; provided, that (i) such investigation shall be conducted in accordance with all applicable competition Laws, shall only be upon reasonable advance notice and shall be at Buyer's sole cost and expense; and (ii) Buyer and its representatives shall not be permitted to perform any environmental sampling at any real property owned or leased by the Company or any of its

Subsidiaries, including sampling of soil, groundwater, surface water, building materials, or air or wastewater emissions. All information obtained by Buyer, Merger Sub and their respective representatives shall be subject to the Confidentiality Agreement. Notwithstanding anything to the contrary contained herein, neither the Company nor any of its Subsidiaries shall be required to provide access or disclose information where such access or disclosure would, in the Company's reasonable judgment, (1) jeopardize the attorney-client privilege or other legal privilege or (2) conflict with any (x) applicable Law or (y) other obligation of confidentiality; provided, however, that, in such instances, the Company shall inform Buyer of the general nature of the information being withheld and, upon Buyer's request and at Buyer's sole cost and expense, reasonably cooperate with Buyer to provide such information, in whole or in part, in a manner that would not result in any of the outcomes described in the foregoing clauses (1) and (2).

7.3 Governmental Approvals. In connection with the transactions contemplated by this Agreement, the Company and Parent shall (and, to the extent required, shall cause its Affiliates to) (a) comply promptly, but in no event later than five (5) days after the date hereof, with the notification and reporting requirements of the HSR Act and use its reasonable best efforts to obtain early termination of the waiting period under the HSR Act and (b) as soon as practicable, make such other filings or start any pre-notification proceedings with any Governmental Authorities as may be requested by a Governmental Authority and required or otherwise advisable under any other Law. The Company and Parent shall use its reasonable best efforts to substantially comply with any Information or Document Requests made of the Company, Parent or any of their respective Affiliates.

7.4 Termination of Certain Agreements. Prior to the Effective Time, the Company shall take all actions necessary to terminate, and shall cause to be terminated, each Contract listed on Schedule 7.4 to the extent such Contract will not (without any further action by the Company) terminate in accordance with its terms in connection with the transactions contemplated by this Agreement.

7.5 Cooperation with Financing. Prior to and at the Closing, the Company shall use reasonable best efforts to provide, and shall cause its Subsidiaries and its and their respective officers, directors, employees and representatives to use reasonable best efforts to provide, such cooperation with Holdings and Buyer as may be customary and reasonably requested by Holdings or Buyer in connection with the incurrence by Holdings of the Debt Financing (provided that such requested cooperation does not unreasonably interfere with the ongoing operations of the Company and its Subsidiaries), including using reasonable best efforts to (i) participate at reasonable times in a reasonable number of meetings, drafting sessions, presentations, conference calls, road shows, and rating agency and due diligence sessions, (ii) furnish Holdings and its debt financing sources with such pertinent information regarding the Company and its Subsidiaries reasonably requested by Holdings or Buyer to assist in the preparation of syndication, offering or other similar marketing materials related to the Debt Financing, including private placement of high-yield debt securities, (iii) facilitate its independent auditors to (A) provide, consistent with customary practice, customary "comfort" letters (including "negative assurance" and change period comfort) with respect to financial

information relating to the Company and its Subsidiaries as reasonably requested by Holdings or Buyer as necessary or customary for financings similar to the Debt Financing and (B) participate (either telephonically or in person, as determined by the Company's independent auditors) in accounting due diligence sessions and drafting sessions; (iv) assist Holdings and its debt financing sources in the preparation of (A) offering documents, private placement memoranda, prospectuses and similar documents for any portion of the Debt Financing (including, without limitation, assisting Holdings, and its debt financing sources in the preparation of pro forma financial statements to be included therein) and (B) materials for rating agency presentations (provided that the scope and nature of financial information to be provided by the Company is addressed exclusively in the foregoing clauses (ii) and (iii)), (v) cooperate with the marketing efforts of Holdings and its debt financing sources for any portion of the Debt Financing as reasonably requested by Holdings or Buyer, and (vi) cooperate with Holdings' legal counsel in connection with any legal opinions that such legal counsel may be required to deliver in connection with the Debt Financing as reasonably requested by Holdings or Buyer; provided, in each case, that (A) neither the Company nor any of its Subsidiaries shall be required to incur any liability that is not subject to reimbursement or indemnity from Holdings or Buyer in connection with the Financing prior to the Effective Time, (B) the pre-Closing Board of Directors of the Company and the directors, managers and general partners of the Company's Subsidiaries shall not be required to adopt resolutions approving the agreements, documents and instruments pursuant to which the Financing is obtained, (C) neither the Company nor any of its Subsidiaries shall be required to execute prior to the Effective Time any definitive financing documents, including any credit or other agreements, pledge or security documents, or other certificates, legal opinions or documents in connection with the Financing, and (D) except as expressly provided above, neither the Company nor any of its Subsidiaries shall be required to take any corporate actions prior to the Effective Time to permit the consummation of the Financing. Except for the representations and warranties of the Company set forth in Article IV of this Agreement, neither the Company nor any of its Subsidiaries shall have any liability to Parent, Holdings, Merger Sub or Buyer in respect of any financial statements, other financial information or data or other information provided pursuant to this Section 7.5. Notwithstanding anything to the contrary in this Agreement, the condition set forth in Section 10.2(b), as it applies to the Company's obligations under this Section 7.5, shall be deemed satisfied unless the Company has knowingly and willfully materially breached its obligations under this Section 7.5 and such breach has been the primary cause of the Debt Financing not being obtained. In the event that the Debt Financing is funded into escrow and this Agreement is terminated prior to the Effective Time, Buyer shall promptly upon the termination of this Agreement reimburse Parent, Holdings and the Company and their Subsidiaries for any accrued and unpaid interest incurred from the time of the closing of the Debt Financing until the date that the proceeds from the Debt Financing are released from the escrow account and returned to those Persons that have provided such Debt Financing and any other related breakage costs associated with such escrow.

7.6 280G Matters. Prior to the Closing, the Company shall use its reasonable best efforts to take such actions that are intended to ensure that the payment of any amounts or benefits (whether or not accelerated) to a "disqualified individual" (as defined in Section 280G(c) of the Code) in connection with the transactions contemplated hereunder, would not, separately or in the aggregate, reasonably be expected to result in the disallowance of a deduction to the

Company or its Subsidiaries, as applicable, under Section 280G of the Code in connection with the transactions contemplated hereunder, including, as necessary, (a) soliciting the requisite approval of the Company's direct or indirect stockholders of all or a portion of any such payments or benefits, in a manner that meets the shareholder approval requirements of Section 280G(b)(5) of the Code and Treasury Regulation Section 1.280G-1, Q/A-7 (including providing such members adequate disclosure of all material facts concerning any such payments or benefit as provided in, and otherwise conducting such solicitation in conformity with, Section 280G(b)(5)(B) of the Code) and (b) to the extent necessary, attempting to obtain a waiver from each such "disqualified individual" entitled to receive any payments or benefits which would reasonably be expected, individually or when aggregated with other payments or benefits, to cause or trigger any "parachute payment" (as defined in Section 280G(b) of the Code) in connection with the transactions contemplated hereunder of such disqualified individual's right to receive the portion of such payments or benefits that would reasonably be expected to, individually or when aggregated with other payments or benefits, cause or trigger any "excess parachute payments" (within the meaning of Section 280G of the Code). The Company shall provide Buyer with drafts of all such solicitation materials and consents for review and comment prior to delivery to stockholders or disqualified individuals, as applicable. Prior to the Closing, the Company shall deliver to Buyer, reasonably satisfactory evidence that a vote of the Company's stockholders was solicited in accordance with the foregoing provisions of this Section 7.6 and whether or not the requisite number of stockholder votes consenting to such benefits and payments was obtained with respect to such benefits and payments.

7.7 No Alternative Transaction. From the date hereof until the Closing, the Company shall not, nor shall the Company authorize or permit any of its Affiliates or its or their officers, directors, employees, investment bankers, attorneys, accountants or consultants to, directly or indirectly, (a) solicit, initiate, seek, encourage or facilitate the submission of any Acquisition Proposal, (b) engage in any discussions or negotiations concerning or relating to an Acquisition Proposal with (other than to state that they currently are not permitted to have discussions), furnish any nonpublic information relating to the Company or any of its Subsidiaries in furtherance of any Acquisition Proposal to, or afford access to the properties, assets, books or records of the Company or any of its Subsidiaries in furtherance of any Acquisition Proposal to, otherwise cooperate in any way with, or knowingly assist, participate in, facilitate or encourage any effort by, any third Person that is known to be seeking to make, or has made, an Acquisition Proposal or a modification of a previously received Acquisition Proposal (other than Buyer and its Affiliates and its and their officers, directors, employees, investment bankers, attorneys, accountants or consultants in their capacities as such) or (c) enter into any agreement with respect to an Acquisition Proposal.

ARTICLE VIII.
COVENANTS OF BUYER, PARENT AND HOLDINGS

8.1 Governmental Approvals.

(a) In connection with the transactions contemplated by this Agreement, Buyer shall (and, to the extent required, shall cause its Affiliates to) (i) comply promptly, but in no event later than five (5) days after the date hereof, with the notification and reporting requirements of

the HSR Act and use its reasonable best efforts to obtain early termination of the waiting period under the HSR Act and (ii) as soon as practicable, make such other filings or start pre-notification proceedings with any Governmental Authorities as may be requested by a Governmental Authority and required or otherwise advisable under any other Law (such Laws addressed in this clause (ii), together with the HSR Act, collectively, "Approval Laws"). Buyer shall use its reasonable best efforts to substantially comply with any Information or Document Requests made of Buyer or any of its Affiliates.

(b) Buyer shall exercise its reasonable best efforts to (i) obtain termination or expiration of the waiting period under the HSR Act and to receive such other approvals, consents and clearances as may be necessary, proper or advisable under any Approval Laws, in each case, as soon as practicable (but in any event prior to the Termination Date), (ii) furnish to the Company all information required for any application or other filing to be made pursuant to any Law in connection with the transactions contemplated by this Agreement (including, to the extent permitted by Law, responding to any reasonable requests for copies of documents filed with Buyer's prior filings), and (iii) otherwise cooperate with the Company in connection with any filing and in connection with resolving any investigation or other inquiry of any Governmental Authority. In connection therewith, if any Action is instituted (or threatened to be instituted) challenging any transaction contemplated by this Agreement as in violation of any Approval Law, Buyer shall use its reasonable best efforts to contest and resist any such Action, including to prevent the entry in any Action brought by a Governmental Authority or any other Person of any Governmental Order which would prohibit, make unlawful or delay the consummation of the transactions contemplated by this Agreement. Buyer shall not, without the written consent of the Company, "pull-and-refile" pursuant to 16 C.F.R. 803.12 any filing made under the HSR Act, or take any similar action without prior written approval from the Company with respect to any filing made with any Governmental Authority.

(c) Notwithstanding anything to the contrary, nothing in this Section 8.1 shall require or otherwise obligate Buyer or any of its Affiliates to propose, negotiate, offer or agree to (i) sell, license, or otherwise dispose or hold separate or impose other limitations or restrictions on assets, categories of assets or lines of business of the Company or any of its Subsidiaries or of Buyer or any of its Affiliates, (ii) effect any disposition, licensing, holding separate of, or other limitations or restrictions on, assets or lines of business, (iii) terminate any existing relationships and contractual rights and obligations, (iv) enter into any passivity arrangements with respect to the Company or its Subsidiaries or any part thereof, or (v) otherwise limit freedom of action with respect to any of the assets or business of Buyer or any of its Affiliates or the Company or any of its Subsidiaries.

(d) Buyer shall promptly furnish to the Company copies of any notices or written communications received or given by Buyer or any of its Affiliates from or to any third party or any Governmental Authority with respect to the transactions contemplated by this Agreement, and Buyer shall permit counsel to the Company an opportunity to review in advance, and Buyer shall consider in good faith the views of such counsel in connection with, any proposed written communications by Buyer and its Affiliates to any third party or any Governmental Authority concerning the transactions contemplated by this Agreement. Buyer agrees to provide the Company and its counsel the opportunity, on reasonable advance notice, to participate in any

substantive meetings or discussions, either in person or by telephone, between Buyer and any of its Affiliates, agents or advisors, on the one hand, and any third party or any Governmental Authority, on the other hand, concerning or in connection with the transactions contemplated hereby.

(e) Buyer shall be solely responsible for and pay all fees payable to the Antitrust Authorities in connection with the transactions contemplated by this Agreement.

8.2 Employment Matters.

(a) For a period of one (1) year following the Closing Date, the Surviving Corporation shall, and shall cause its Subsidiaries to, maintain for employees who continue in the employ of the Surviving Corporation or any of its Subsidiaries following the Closing Date (the "Continuing Employees") (i) at least the same base salary or wage rate and annual cash incentive opportunities, if any, as those provided to the Continuing Employees immediately prior to the Closing and (ii) other compensation and benefits (excluding any equity compensation) that are substantially comparable in the aggregate to those provided to the Continuing Employees immediately prior to the Closing. This Section 8.2 shall not limit the obligation of the Surviving Corporation or any of its Subsidiaries to maintain any compensation arrangement or benefit plan that, pursuant to an existing contract or applicable Law, must be maintained for a period longer than one (1) year. No provision of this Agreement shall be construed as a guarantee of continued employment of any Continuing Employee and this Agreement shall not be construed so as to prohibit the Surviving Corporation or any of its Subsidiaries from having the right to terminate the employment of any Continuing Employee, provided that any such termination is effected in accordance with applicable Law.

(b) From and after the Closing, the Surviving Corporation shall give each Continuing Employee full credit for all purposes (including for purposes of eligibility to participate, level of benefits, early retirement eligibility and early retirement subsidies, vesting and benefit accrual) under any employee benefit plans, arrangements, collective agreements and employment-related entitlements (including under any applicable pension, 401(k), savings, medical, dental, life insurance, vacation, long-service leave or other leave entitlements, post-retirement health and life insurance, termination indemnity, severance or separation pay plans) provided, sponsored, maintained or contributed to by the Surviving Corporation or any of its Subsidiaries for such Continuing Employee's service with the Company or any of its Subsidiaries, and with any predecessor employer, to the same extent recognized by the Company or any of its Subsidiaries as of immediately prior to the Closing, except to the extent such credit would result in the duplication of benefits for the same period of service. Notwithstanding the foregoing, to the extent permitted under applicable Law, the Surviving Corporation shall not be required to provide credit for such service for benefit accrual purposes under any employee benefit plan of Buyer that is a defined benefit pension plan.

(c) The Surviving Corporation shall (i) waive, for each Continuing Employee and his or her dependents, any waiting period provision, payment requirement to avoid a waiting period, pre-existing condition limitation, actively-at-work requirement and any other restriction that would prevent immediate or full participation under the welfare plans of the Surviving Corporation or any of its Subsi5diaries applicable to such Continuing Employee to the extent

such waiting period, pre-existing condition limitation, actively-at-work requirement or other restriction would not have been applicable to such Continuing Employee under the terms of the welfare plans of the Company and its Subsidiaries, and (ii) give full credit under the welfare plans of Buyer and its Subsidiaries applicable to each Continuing Employee and his or her dependents for all co-payments and deductibles satisfied prior to the Closing in the same plan year as the Closing, and for any lifetime maximums, as if there had been a single continuous employer.

(d) Nothing in this Section 7.2 shall (i) be construed as an amendment or other modification of any Company Benefit Plan or other employee benefit plan, (ii) give any third party any right to enforce the provisions of this Agreement or (iii) limit the right of the Surviving Corporation or any of its Subsidiaries to amend, terminate or otherwise modify any Company Benefit Plan or other employee benefit plan.

8.3 Conduct of Business. Subject to the other terms of this Agreement, Buyer shall not, and shall not permit any of its Affiliates to, knowingly and intentionally take any action or knowingly and intentionally fail to take any action that could reasonably be expected to result in any of the conditions set forth in Article X not being satisfied or that would otherwise be reasonably expected to materially prevent or delay the consummation of the Merger.

8.4 Financing. Parent, Holdings and Buyer shall each use reasonable best efforts to take, or cause to be taken, all actions and do, or cause to be done, as promptly as possible, all things necessary, proper or advisable to arrange and obtain the Equity Financing on the terms and conditions described in the Commitment Letters and the Debt Financing, including using reasonable best efforts to, as promptly as possible, (i) satisfy, or cause to be satisfied, on a timely basis all conditions to Holdings and Buyer obtaining the Financing set forth therein, (ii) negotiate and enter into definitive agreements with respect to the Debt Financing on the terms and conditions that are acceptable to Buyer, (iii) timely prepare the necessary offering circulars, private placement memoranda, or other offering documents or marketing materials with respect to the Debt Financing, (iv) consummate the Financing at or prior to Closing (except for the Deferred Payment Amount, which will be paid on the Deferred Payment Date) and (v) take any action requested by Buyer in connection with obtaining the Debt Financing. Parent, Holdings and Buyer shall give each other and the Company prompt written notice (A) of any breach or default (or any event or circumstance that, with or without notice, lapse of time or both, would reasonably be expected to result in breach or default) by any party to any Commitment Letter of which Parent, Holdings or Buyer becomes aware, (B) if and when Parent, Holdings or Buyer becomes aware that any portion of the Financing contemplated by any Commitment Letter or the Debt Financing may not be available for the Financing Purposes, (C) of the receipt of any written notice or other written communication from any Person with respect to any (1) actual or potential breach, default, termination or repudiation by any party to any Commitment Letter or (2) material dispute or disagreement between or among any parties to any Commitment Letter (but excluding, for the avoidance of doubt, any ordinary course negotiations with respect to the terms of the Financing), and (D) of any expiration or termination of any Commitment Letter. Without limiting the foregoing, Parent, Holdings and Buyer shall keep each other and the Company informed on a reasonably current basis in reasonable detail of the status of their efforts to arrange the Financing and provide to each other and the Company executed copies of the

definitive documents related to the Financing (provided that any fee letters, engagement letters or other agreements that, in accordance with customary practice, are confidential by their terms, and that do not affect the conditionality or amount of the Financing, may be redacted so as not to disclose such terms that are so confidential) and copies of any of the written notices or communications described in the preceding sentence. Parent, Holdings and Buyer shall (1) comply in all material respects with each Commitment Letter and each definitive agreement with respect thereto, (2) enforce their rights under each Commitment Letter, and (3) not permit, without the prior written consent of the Company (and, with respect to the Debt Financing, the prior written consent of Buyer), any material amendment or modification to be made to, or any termination, rescission or withdrawal of, or any material waiver of any provision or remedy under, any Commitment Letter, if such amendment, modification or waiver (individually or in the aggregate with any other amendments, modifications or waivers) would reasonably be expected to (x) reduce the aggregate amount of the Financing thereunder, or (y) impose any new or additional condition, or otherwise amend, modify or expand any condition, to the receipt of any portion of the Financing in a manner that would reasonably be expected to (I) materially delay or prevent the Closing Date, (II) make the funding of any portion of the Financing (or satisfaction of any condition to obtaining any portion of the Financing) less likely to occur or (III) adversely impact the ability of Buyer to enforce its rights against any other party to any Commitment Letter, the ability of Parent, Holdings, Buyer or Merger Sub to consummate the transactions contemplated hereby or the likelihood of the consummation of the transactions contemplated hereby. Parent, Holdings and Buyer shall provide notice to each other and the Company promptly upon receiving the Financing. Parent, Holdings and Merger Sub shall not take any action with respect to the Debt Financing without the prior consent of Buyer.

ARTICLE IX.
JOINT COVENANTS

9.1 Support of Transaction. Without limiting any covenant contained in Article VII or Article VIII, Parent, Holdings, Merger Sub, Buyer and the Company shall each, and shall each cause their respective Subsidiaries to: (a) use reasonable best efforts to assemble, prepare and file any information (and, as needed, to supplement such information) as may be reasonably necessary to obtain as promptly as practicable all governmental and regulatory consents required to be obtained in connection with the transactions contemplated hereby, (b) use reasonable best efforts to obtain all material consents and approvals of third parties that any of Buyer, the Company or their respective Affiliates are required to obtain in order to consummate the Merger, and (c) take such other action as may reasonably be necessary or as another party may reasonably request to satisfy the conditions of Article X or otherwise to comply with this Agreement and to consummate the transactions contemplated hereby as soon as practicable (but in any event prior to the Termination Date). Notwithstanding the foregoing, in no event shall the Company or any of its Subsidiaries be obligated under this Section 9.1 to bear any expense or pay any fee (other than the payment of nominal administrative, processing or similar fees or charges) or grant any concession in connection with obtaining any consents, authorizations or approvals required in order to consummate the Merger pursuant to the terms of any Contract to which the Company or any of its Subsidiaries is a party. Nothing in this Section 9.1 shall obligate Parent, Holdings, Buyer or any of their respective Affiliates to amend this Agreement or

take any action in its capacity as a shareholder or director of the Company or any of its Subsidiaries.

9.2 Stockholder Approval.

(a) The Company. As soon as practicable (and within 24 hours) after the execution and delivery of this Agreement, the Company shall (x) take all action necessary in accordance with the DGCL and the Company's certificate of incorporation and bylaws to solicit and obtain the written consent of (A) holders of at least a majority of the shares of Common Stock to adopt this Agreement and approve the Reorganization Merger, the Conversion, the Merger and the other transactions contemplated hereby and (B) each HFCP VII Investor and each CP V Investor to receiving payment of the aggregate Cash Per Share Merger Consideration with respect to their respective Deferred Payment Shares on the Deferred Payment Date, without interest (clauses (A) and (B) collectively, the "Merger Consent") and (y) deliver to Buyer a copy of the Merger Consent.

(b) Merger Sub. Immediately (and within 24 hours) following the execution and delivery of this Agreement, Holdings, as the sole stockholder of Merger Sub, shall (x) adopt this Agreement and approve the Reorganization Merger and the Conversion and the related transactions contemplated hereby in accordance with the DGCL and Merger Sub's certificate of incorporation and bylaws (the "Merger Sub Consent") and (y) deliver to Buyer and the Company a copy of such approval.

(c) Parent. Immediately (and within 24 hours) following the execution and delivery of this Agreement, each stockholder of Parent shall (x) adopt this Agreement and approve the Reorganization Merger, the Conversion, the Merger and the related transactions contemplated hereby in accordance with the DGCL and Parent's certificate of incorporation and bylaws (the "Parent Consent") and (y) deliver to Buyer and the Company a copy of such approval.

(d) Buyer. Immediately (and within 24 hours) following the execution and delivery of this Agreement, each stockholder of Buyer shall (x) adopt this Agreement and approve the Reorganization Merger, the Conversion, the Merger and the related transactions contemplated hereby in accordance with the DGCL and Buyer's certificate of incorporation and bylaws (the "Buyer Consent") and (y) deliver to the Company a copy of such approval.

9.3 Further Assurances. Each party hereto agrees that, from time to time after the Closing Date, it will execute and deliver, or cause its Affiliates to execute and deliver, such further instruments, and take (or cause its Affiliates to take) such other action, as may be reasonably necessary to carry out the purposes and intents of this Agreement; provided, that nothing in this Section 8.4 shall obligating any Person to take action in his, her or its capacity as a shareholder or director of the Company or any of its Subsidiaries.

9.4 Tax Matters. At or prior to the Closing, the Company shall deliver to each of Buyer, the CP V Investors, the HFCP VII Investors, the GIC Investors and the Blue Spectrum Investors a certificate in accordance with the requirements of Treasury Regulation Sections 1.897-2(h) and 1.1445-2(c)(3) certifying that the Company is not a "United States real property holding corporation" within the meaning of Section 897(c)(2) of the Code. Parent, Buyer, the Company and the CP V Investors, the HFCP VII Investors and the HFCP VIII Investors agree to cooperate

in good faith and in advance of filing any relevant Tax Returns to determine the extent to which the transactions (or any portion thereof) contemplated by this Agreement with respect to the CP V Investors shall be treated as a sale or exchange of their Common Stock under Section 302(a) of the Code or a distribution with respect to their Common Stock to which Section 301 of the Code applies; provided, that the HFCP VII Investors and the HFCP VIII Investors shall not be required to disclose any confidential information, including identifying information with respect to direct or indirect equityholders of the HFCP VII Investors or the HFCP VIII Investors, except to the extent required to make such determination, and then only to an independent third party accounting or law firm reasonably acceptable to the HFCP VII Investors and the HFCP VIII Investors and pursuant to procedures designed to preserve confidentiality reasonably acceptable to the HFCP VII and the HFCP VIII Investors, the fees, costs and expenses of which shall be borne by Buyer or its Subsidiaries.

9.5 Rollover Cooperation. The Company, Parent, Holdings and Merger Sub shall reasonably cooperate with Buyer and its Affiliates to allow, immediately prior to the Closing, each Rollover Share to be contributed or otherwise transferred to Buyer by each Rollover Seller in accordance with the terms and conditions set forth in each applicable Rollover Agreement.

ARTICLE X.
CONDITIONS TO OBLIGATIONS

10.1 Conditions to the Obligations of Buyer and the Company. The obligations of Buyer and the Company to consummate, or cause to be consummated, the Reorganization Merger, the Conversion and the Merger are subject to the satisfaction of the following conditions, any one or more of which may be waived in writing by all of such parties:

(a) All waiting periods under the HSR Act applicable to the Merger shall have expired or been terminated.

(b) There shall not be in force any Governmental Order enjoining, suspending or prohibiting the consummation of the Merger and the other transactions contemplated by the Transaction Agreements.

(c) The Merger Consent, the Merger Sub Consent, the Parent Consent and the Buyer Consent shall have been validly obtained.

(d) [Reserved].

(e) The Equity Financing from each of the GIC Investors and the Blue Spectrum Investors shall have been funded in full on the terms and conditions set forth in their respective Commitment Letters.

10.2 Conditions to the Obligations of Buyer . The obligations of Buyer to consummate, or cause to be consummated, the Merger are subject to the satisfaction of the following additional conditions, any one or more of which may be waived in writing by Buyer:

(a) The representations and warranties of the Company (other than the Fundamental Company Representations and those set forth in Sections 4.23(a)) contained in Article IV, disregarding all qualifications contained herein relating to materiality or Material Adverse Effect,

shall be true and correct as of the Closing Date, as if made anew at and as of that date, except with respect to representations and warranties that speak as to an earlier date, which representations and warranties shall be true and correct at and as of such date, except for any inaccuracy or omission that individually or in the aggregate has not had and would not reasonably be expected to have a Material Adverse Effect on the Company. The Fundamental Company Representations (other than those set forth in Section 4.6(a), the first two sentences of Section 4.6(c), and Section 4.6(d)) shall be true and correct in all material respects as of the Closing Date, as if made anew at and as of that date, except with respect to the Fundamental Company Representations that speak as to an earlier date, which representations and warranties shall be true and correct in all material respects at and as of such date. The representations and warranties of the Company set forth in Section 4.6(a), the first two sentences of Section 4.6(c), and Section 4.6(d) shall be true and correct (except for de minimis failures) as of the Closing Date, as if made anew at and as of that date. The representations and warranties of the Company set forth in Section 4.23(a) shall be true and correct as of the Closing Date, as if made anew at and as of that date.

(b) Each of the covenants of the Company to be performed at or prior to the Closing shall have been performed in all material respects.

(c) The Company shall have delivered to Buyer a certificate signed by an officer of the Company, dated as of the Closing Date, certifying that, to the knowledge and belief of such officer, the conditions specified in Section 10.2(a) and Section 10.2(b) have been fulfilled.

(d) Holdings shall have received, or will receive contemporaneously with the Closing, the full amount of the Debt Financing proceeds.

(e) The representations and warranties of Parent, Holdings and Merger Sub contained in Article VI shall be true and correct in all material respects as of the Closing Date as if made anew at and as of that date; provided that the representations and warranties that speak as to an earlier date shall be true and correct in all material respects at and as of such earlier date.

(f) Each of the covenants of Parent, Holdings and Merger Sub to be performed at or prior to the Closing shall have been performed in all material respects.

(g) Parent shall have delivered to Buyer a certificate signed by an officer of Parent, dated as of the Closing Date, certifying that, to the knowledge and belief of such officer, the conditions specified in Section 10.2(e) and Section 10.2(f) have been fulfilled.

(h) Since the date of this Agreement, there has not been any change, effect, event, occurrence, state of facts or development that, individually or in the aggregate, has had, or would reasonably be expected to have, a Material Adverse Effect on the Company.

10.3 Conditions to the Obligations of the Company. The obligations of the Company to consummate, or cause to be consummated, the Reorganization Merger and the Conversion are subject to the satisfaction of the following additional conditions, any one or more of which may be waived in writing by the Company:

(a) The representations and warranties of Buyer contained in Article V, disregarding all qualifications contained herein relating to materiality or Material Adverse Effect, shall be true and correct as of the Closing Date, as if made anew at and as of that date, except with respect to

representations and warranties that speak as to an earlier date, which representations and warranties shall be true and correct at and as of such date, except for any inaccuracy or omission that individually or in the aggregate has not had and would not reasonably be expected to have a Material Adverse Effect on Buyer; provided, that the representations and warranties set forth in the first sentence of Section 5.1 and Section 5.2 shall be true and correct in all material respects as of the Closing Date, as if made anew at and as of that date, except with respect to such representations and warranties that speak as to an earlier date, which representations and warranties shall be true and correct in all material respects at and as of such date.

(b) Each of the covenants of Buyer to be performed at or prior to the Closing shall have been performed in all material respects.

(c) Buyer shall have delivered to the Company a certificate signed by an officer of Buyer, dated as of the Closing Date, certifying that, to the knowledge and belief of such officer, the conditions specified in Section 10.3(a) and Section 10.3(b) have been fulfilled.

10.4 Conditions to the Obligations of Parent, Holdings and Merger Sub. The obligations of Parent, Holdings and Merger Sub to consummate, or cause to be consummated, the Reorganization Merger, the Conversion and the Merger are subject to the satisfaction of all of the conditions set forth in Section 10.1, Section 10.2 and Section 10.3 (except for (i) the conditions set forth in Section 10.2(e), Section 10.2(f) and Section 10.2(g) and (ii) those conditions that by their nature are to be satisfied at the Closing (but subject to the satisfaction of such conditions at the Closing) or the waiver by the Company or Buyer (or by the Company and Buyer), as applicable, of such conditions.

10.5 Waiver of Conditions; Frustration of Conditions. All conditions to the Closing shall be deemed to have been satisfied or waived from and after the Effective Time.

ARTICLE XI.
TERMINATION/EFFECTIVENESS

11.1 Termination. This Agreement may be terminated and the transactions contemplated hereby abandoned at any time prior to the Closing:

(a) by written consent of the Company and Buyer;

(b) by written notice to the Company from Buyer if:

(i) there is any material breach of any representation, warranty, covenant or agreement on the part of the Company, Parent, Holdings or Merger Sub set forth in this Agreement, such that the conditions specified in Section 10.2(a), Section 10.2(b), Section 10.2(e) or Section 10.2(f) would not be satisfied at the Closing (a "Terminating Company Breach"), except that, if such Terminating Company Breach is curable by the Company through the exercise of its reasonable best efforts, then, for a period of up to thirty (30) days after receipt by the Company of notice from Buyer of such breach, but only as long as the Company continues to use its reasonable best efforts to cure such Terminating Company Breach (the "Company Cure Period"), such termination shall not be effective

until the end of the Company Cure Period, and such termination shall become effective only if the Terminating Company Breach is not cured within the Company Cure Period;

(ii) the Closing has not occurred on or before June 26, 2017 (the "Termination Date"), unless Buyer's willful breach is the primary reason for the Closing not occurring on or before such date;

(iii) the consummation of any of the transactions contemplated hereby is permanently enjoined, prohibited or otherwise restrained by the terms of a final Governmental Order; or

(iv) the Merger Consent, the Merger Sub Consent and the Parent Consent is not delivered to Buyer within twenty-four (24) hours of the execution and delivery of this Agreement;

(c) by written notice to Buyer from the Company if:

(i) there is any material breach of any representation, warranty, covenant or agreement on the part of Buyer set forth in this Agreement, such that the conditions specified in Section 10.3(a) or Section 10.3(b) would not be satisfied at the Closing (a "Terminating Buyer Breach"), except that, if any such Terminating Buyer Breach is curable by Buyer through the exercise of its reasonable best efforts, then, for a period of up to thirty (30) days after receipt by Buyer of notice from the Company of such breach, but only as long as Buyer continues to exercise such reasonable best efforts to cure such Terminating Buyer Breach (the "Buyer Cure Period"), such termination shall not be effective until the end of the Buyer Cure Period, and such termination shall become effective only if the Terminating Buyer Breach is not cured within the Buyer Cure Period;

(ii) the Closing has not occurred on or before the Termination Date, unless the Company's, Parent's, Holdings' or Merger Sub's willful breach is the primary reason for the Closing not occurring on or before such date;

(iii) the consummation of any of the transactions contemplated hereby is permanently enjoined, prohibited or otherwise restrained by the terms of a final Governmental Order; or

(iv) the Buyer Consent is not delivered to the Company within twenty-four (24) hours of the execution and delivery of this Agreement.

11.2 Effect of Termination.

(a) In the event of the termination of this Agreement pursuant to Section 11.1, this Agreement shall forthwith become void and have no effect, without any liability on the part of any party hereto or its respective Affiliates, officers, directors, employees or stockholders. The provisions of this Section 11.2, the last sentence of Section 7.5 and Article XII shall survive any termination of this Agreement.

(b) Notwithstanding anything to the contrary in this Agreement, if any party hereto fails to effect the Closing when required by Section 2.3 for any or no reason or otherwise breaches this Agreement prior to the Closing in any way (in any case, whether willfully,

intentionally, unintentionally or otherwise) or fails to perform any obligation hereunder that is required to be performed prior to the Closing (in any case, whether willfully, intentionally, unintentionally or otherwise), then, the sole and exclusive remedy available to any party hereto with respect to such breach or failure to perform shall be (i) to terminate this Agreement as and only to the extent expressly permitted by, and subject to, Section 11.1, or (ii) to seek an order of specific performance and/or an injunction as and only to the extent expressly permitted by, and subject to, Section 12.14. Each of the parties hereto expressly acknowledges and agrees that prior to the Closing, (A) the Company's right to terminate this Agreement pursuant to Section 11.1 and to seek specific performance and/or an injunction pursuant to Section 12.14 shall constitute the sole and exclusive remedy (whether pursuant to any Law, in equity, in Contract, in tort or otherwise) of the Company Related Parties against any Buyer Related Party and any Parent Related Party for all liabilities, losses, damages, costs and expenses in respect of or in connection with this Agreement, the other Transaction Agreements or the transactions contemplated hereby or thereby, (B) Buyer's right to terminate this Agreement pursuant to Section 11.1 and to seek specific performance and/or an injunction pursuant to Section 12.14 shall constitute the sole and exclusive remedy (whether pursuant to any Law, in equity, in Contract, in tort or otherwise) of the Buyer Related Parties against the Company Related Parties or any Parent Related Party for all liabilities, losses, damages, costs and expenses in respect of or in connection with this Agreement, the other Transaction Agreements or the transactions contemplated hereby or thereby, and (C) Parent's, Holdings' and Merger Sub's right to seek specific performance and/or an injunction pursuant to Section 12.14 shall constitute the sole and exclusive remedy (whether pursuant to any Law, in equity, in Contract, in tort or otherwise) of the Parent Related Parties against the Company Related Parties or any Buyer Related Party for all liabilities, losses, damages, costs and expenses in respect of or in connection with this Agreement, the other Transaction Agreements or the transactions contemplated hereby or thereby; provided, that nothing in this Section 11.2(b) shall restrict or in any way limit the ability of any party to a Commitment Letter (including the Company to the extent it is provided rights as a third party beneficiary), the Interim Investors Agreement or the Sponsor Support Letter to enforce its respective rights as provided therein. Except as otherwise expressly set forth in this Section 11.2(b): (x) no Buyer Related Party shall have any liability or obligation to any Company Related Party or any Parent Related Party relating to or arising out of this Agreement, the other Transaction Agreements or the transactions contemplated hereby or thereby, in respect of any oral representations made or alleged to be made in connection herewith or therewith, through a Buyer Related Party or otherwise, whether by or through attempted piercing of the corporate veil, by or through a claim by or on behalf of Buyer against any other Buyer Related Party, any enforcement of any assessment or by any legal or equitable proceeding, by virtue of any statute, regulation or other applicable law or otherwise, and unless the Closing occurs, no Buyer Related Party shall have any further liability to any Company Related Party or any Parent Related Party relating to or arising out of this Agreement, the other Transaction Agreements or the transactions contemplated hereby or thereby, (y) no Company Related Party shall have any liability or obligation to any Buyer Related Party or any Parent Related Party relating to or arising out of this Agreement, the other Transaction Agreements or the transactions contemplated hereby or thereby, in respect of any oral representations made or alleged to be made in connection herewith or therewith, through a Company Related Party or otherwise, whether by or through attempted piercing of the corporate veil, by or through a claim by or on behalf of the

Company against any other Company Related Party, any enforcement of any assessment or by any legal or equitable proceeding, by virtue of any statute, regulation or other applicable law or otherwise, and unless the Closing occurs, no Company Related Party shall have any liability to any Buyer Related Party or any Parent Related Party relating to or arising out of this Agreement, the other Transaction Agreements or the transactions contemplated hereby or thereby, and (z) no Parent Related Party shall have any liability or obligation to any Company Related Party or any Buyer Related Party relating to or arising out of this Agreement, the other Transaction Agreements or the transactions contemplated hereby or thereby, in respect of any oral representations made or alleged to be made in connection herewith or therewith, through a Parent Related Party or otherwise, whether by or through attempted piercing of the corporate veil, by or through a claim by or on behalf of Parent, Holdings or Merger Sub against any other Parent Related Party, any enforcement of any assessment or by any legal or equitable proceeding, by virtue of any statute, regulation or other applicable law or otherwise, and unless the Closing occurs, no Parent Related Party shall have any liability to any Buyer Related Party or any Company Related Party relating to or arising out of this Agreement, the other Transaction Agreements or the transactions contemplated hereby or thereby.

(c) The Company, Parent, Holdings, Merger Sub and Buyer acknowledge and agree that the agreements contained in this Section 11.2 are an integral part of the transactions contemplated by this Agreement, and that, without these agreements, none of Buyer, Parent, Holdings, Merger Sub or the Company would enter into this Agreement.

ARTICLE XII.
MISCELLANEOUS

12.1 Survival. None of the representations and warranties of any party contained in this Agreement (including any certificates to be delivered under Article X of this Agreement) shall survive the Closing. None of the covenants of any party required to be performed by such party before the Closing shall survive the Closing. The parties acknowledge and agree that if the Closing occurs, no party may bring a cause of action against another party based on or arising out of a breach of the representations and warranties or covenants to be performed prior to the Closing contained herein. Unless otherwise indicated, the covenants and agreements set forth in this Agreement which by their terms are required to be performed after the Closing shall survive the Closing until they have been performed or satisfied.

12.2 Waiver. Any party to this Agreement may, at any time prior to the Closing, by action taken by its Board of Directors, or officers thereunto duly authorized, waive any of the terms or conditions of this Agreement or (without limiting Section 12.11) agree to an amendment or modification to this Agreement by an agreement in writing executed in the same manner (but not necessarily by the same Persons) as this Agreement. No waiver by any of the parties hereto of any default, misrepresentation or breach of representation, warranty, covenant or other agreement hereunder, whether intentional or not, shall be deemed to extend to any prior or subsequent default, misrepresentation or breach or affect in any way any rights arising by virtue of any prior or subsequent such occurrence. No waiver by any of the parties of any of the provisions hereof shall be effective unless explicitly set forth in writing and executed by the party sought to be charged with such waiver.

12.3 Notices. All notices and other communications among the parties shall be in writing and shall be deemed to have been duly given (i) when delivered in person, (ii) when delivered after posting in the United States mail having been sent registered or certified mail return receipt requested, postage prepaid, (iii) when delivered by FedEx or other nationally recognized overnight delivery service, or (iv) when delivered by email (in each case in this clause (iv), solely if receipt is confirmed), addressed as follows:

(a) If to Parent, Holdings, Merger Sub, Buyer or, after the Closing, the Surviving Corporation, to:

Hellman & Friedman LLC
One Maritime Plaza, 12th Floor
San Francisco, CA 94111
Attention: Arrie R. Park
Email: apark@hf.com

with a copy (which shall not constitute notice) to:

Simpson Thacher & Bartlett LLP
2475 Hanover Street
Palo Alto, CA 94304
Attention: Rich Capelouto
Email: rcapelouto@stblaw.com

and

Carlyle Investment Management L.L.C.
c/o The Carlyle Group
520 Madison Avenue
New York, NY 10022
Attention: Stephen Wise
Email: steve.wise@carlyle.com

with a copy (which shall not constitute notice) to:

Latham & Watkins LLP
555 Eleventh Street, N.W., Suite 1000
Washington, D.C. 20004-1304
Attention: David I. Brown
Email: david.brown@lw.com

(b) If to the Company, prior to the Closing, to:

Jaguar Holding Company I
c/o Pharmaceutical Product Development, LLC
929 North Front Street
Wilmington, NC 28401

Attention: General Counsel
Email: judd.hartman@ppdi.com

with a copy (which shall not constitute notice) to:

Latham & Watkins LLP
555 Eleventh Street, N.W., Suite 1000
Washington, D.C. 20004-1304
Attention: David I. Brown
Email: david.brown@lw.com

or to such other address or addresses as the parties may from time to time designate in writing.

12.4 Assignment. No party hereto shall assign this Agreement or any part hereof without the prior written consent of the other parties; provided, that without the prior written consent of any of the other parties, all or any portion of this Agreement and/or its rights hereunder may be assigned by (i) Buyer to one or more of its respective Affiliates and (ii) Parent, Holdings and Merger Sub to any debt financing source as collateral in connection with the Debt Financing, but any such assignment pursuant to clause (i) or (ii) of this proviso shall not relieve Parent, Holdings, Merger Sub or Buyer from any obligation hereunder. Subject to the foregoing, this Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective successors and permitted assigns.

12.5 Rights of Third Parties. Nothing expressed or implied in this Agreement is intended or shall be construed to confer upon or give any Person, other than the parties hereto, any right or remedies under or by reason of this Agreement; provided, however, that, notwithstanding the foregoing (i) from and after the Effective Time, the Pre-Closing Holders (and each of their respective successors, heirs and representatives) shall be intended third-party beneficiaries of, and may enforce, their respective rights pursuant to and in accordance with Article III, (ii) the past, present and future directors, officers, employees, incorporators, members, partners, stockholders, Affiliates, agents, attorneys, advisors and representatives of the parties, and any Affiliate of any of the foregoing (and their successors, heirs and representatives) and the other Nonparty Affiliates are intended third-party beneficiaries of, and may enforce, Section 12.15, (iii) the Buyer Related Parties, the Parent Related Parties and Company Related Parties are intended third-party beneficiaries of, and may enforce, Section 11.2(b) and (iv) Prior Company Counsel and the Designated Persons shall be intended third-party beneficiaries of, and may enforce, Section 12.16.

12.6 Expenses. Each party hereto shall bear its own expenses incurred in connection with this Agreement and the transactions contemplated hereby whether or not such transactions shall be consummated, including all fees of its legal counsel, financial advisers and accountants; provided, however, that (i) Buyer shall pay or cause to be paid all fees payable to the Antitrust Authorities in connection with the transactions contemplated by this Agreement in accordance with Section 8.1(e), (ii) the Company shall pay or cause to be paid transfer, documentary, recording, sales, use, stamp, registration and other similar Taxes and fees arising in connection with the transactions contemplated by this Agreement, and (iii) Buyer shall pay or cause to be

paid all fees and out-of-pocket costs and expenses incurred by (A) Parent, Holdings or Merger Sub in the event that the transaction is terminated prior to the Reorganization Merger Effective Time and (B) Parent, Holdings, the Company and their Subsidiaries pursuant to and in accordance with the last sentence of Section 7.5. Upon the consummation of the Closing, the Surviving Corporation shall be obligated to reimburse or otherwise pay (or cause to reimburse or pay), at the request of Buyer, all fees, costs and expenses incurred by Buyer and its Affiliates (including Parent and Holdings) in connection with the negotiation, execution and delivery of this Agreement and the other Transaction Agreements and the consummation of the transactions contemplated hereby and thereby.

12.7 Governing Law. This Agreement, and all claims or causes of action based upon, arising out of, or related to this Agreement or the transactions contemplated hereby, shall be governed by, and construed in accordance with, the Laws of the State of Delaware, without giving effect to principles or rules of conflict of laws to the extent such principles or rules would require or permit the application of Laws of another jurisdiction.

12.8 Captions; Counterparts. The captions in this Agreement are for convenience only and shall not be considered a part of or affect the construction or interpretation of any provision of this Agreement. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

12.9 Schedules and Annexes. The Schedules and Annexes referenced herein are a part of this Agreement as if fully set forth herein. All references herein to Schedules and Annexes shall be deemed references to such parts of this Agreement, unless the context shall otherwise require. Any disclosure made by a party in the Schedules with reference to any Section or schedule of this Agreement shall be deemed to be a disclosure with respect to all other sections or schedules to which the relevance of such disclosure is reasonably apparent on the face of such disclosure. Certain information set forth in the Schedules is included solely for informational purposes and may not be required to be disclosed pursuant to this Agreement. The disclosure of any information shall not be deemed to constitute an acknowledgment that such information is required to be disclosed in connection with the representations and warranties made in this Agreement, nor shall such information be deemed to establish a standard of materiality.

12.10 Entire Agreement. This Agreement (together with the Schedules and Annexes to this Agreement), the Commitment Letters, the Sponsor Support Letter, the Rollover Agreements, and each other agreement contemplated hereby or thereby (together, the "Transaction Agreements") constitute the entire agreement among the parties relating to the transactions contemplated hereby and supersede any other agreements, whether written or oral, that may have been made or entered into by or among any of the parties hereto or any of their respective Subsidiaries relating to the transactions contemplated hereby. No representations, warranties, covenants, understandings or agreements, oral or otherwise, relating to the transactions contemplated by this Agreement exist between the parties, except as expressly set forth in this Agreement, and the other Transaction Agreements.

12.11 Amendments. This Agreement may be amended or modified in whole or in part, only by a duly authorized agreement in writing executed in the same manner as this Agreement by each of the parties hereto and which makes reference to this Agreement. The approval of this Agreement by the stockholders of the Company shall not restrict the ability of the Board of Directors of the Company to terminate this Agreement in accordance with Section 11.1 or to cause the Company to enter into an amendment to this Agreement pursuant to this Section 12.11 to the extent permitted under Section 251(d) of the DGCL.

12.12 Severability. If any provision of this Agreement is held invalid or unenforceable by any court of competent jurisdiction, the other provisions of this Agreement shall remain in full force and effect. The parties further agree that if any provision contained herein is, to any extent, held invalid or unenforceable in any respect under the Laws governing this Agreement, they shall take any actions necessary to render the remaining provisions of this Agreement valid and enforceable to the fullest extent permitted by Law and, to the extent necessary, shall amend or otherwise modify this Agreement to replace any provision contained herein that is held invalid or unenforceable with a valid and enforceable provision giving effect to the intent of the parties.

12.13 Jurisdiction; Waiver of Jury Trial.

(a) Any Action based upon, arising out of or related to this Agreement or the transactions contemplated hereby shall be brought in the Delaware Chancery Court (or, if the Delaware Chancery Court shall be unavailable, any other court of the State of Delaware or, in the case of claims to which the federal courts have exclusive subject matter jurisdiction, any federal court of the United States of America sitting in the State of Delaware), and, in each case, appellate courts therefrom, and each of the parties irrevocably submits to the exclusive jurisdiction of each such court in any such Action, waives any objection it may now or hereafter have to personal jurisdiction, venue or to convenience of forum, agrees that all claims in respect of such Action shall be heard and determined only in any such court, and agrees not to bring any Action arising out of or relating to this Agreement or the transactions contemplated hereby in any other court. Nothing herein contained shall be deemed to affect the right of any party to serve process in any manner permitted by Law or to commence legal proceedings or otherwise proceed against any other party in any other jurisdiction, in each case, to enforce judgments obtained in any Action brought pursuant to this Section 12.13(a).

(b) Each party hereto hereby waives, to the fullest extent permitted by applicable Law, any right it may have to a trial by jury in respect of any Action arising out of this Agreement or the transactions contemplated hereby. Each party hereto (i) certifies that no representative, agent or attorney of any other party has represented, expressly or otherwise, that such party would not, in the event of any Action, seek to enforce the foregoing waiver and (ii) acknowledges that it and the other parties hereto have been induced to enter into this Agreement by, among other things, the mutual waiver and certifications in this Section 12.13(b).

12.14 Enforcement. The parties hereto agree that irreparable damage would occur, and that the parties would not have any adequate remedy at law, in the event that any of the provisions of this Agreement were not performed in accordance with their specific terms or were otherwise breached. It is accordingly agreed that the parties shall be entitled to an injunction or injunctions

to prevent breaches of this Agreement and to specifically enforce the terms and provisions of this Agreement, without proof of actual damages or otherwise, in addition to any other remedy to which any party is entitled at law or in equity. Each party agrees to waive any requirement for the securing or posting of any bond in connection with such remedy. The parties further agree not to assert that a remedy of specific enforcement is unenforceable, invalid, contrary to law or inequitable for any reason, nor to assert that a remedy of monetary damages would provide an adequate remedy.

12.15 Non-Recourse. This Agreement may only be enforced against, and any claim or cause of action based upon, arising out of, or related to this Agreement or the transactions contemplated hereby may only be brought against, the entities that are expressly named as parties hereto (the "Contracting Parties") and then only with respect to the specific obligations set forth herein with respect to such party. Except to the extent a named party to this Agreement (and then only to the extent of the specific obligations undertaken by such named party in this Agreement and not otherwise), no past, present or future director, officer, employee, incorporator, member, partner, stockholder, Affiliate, agent, attorney, advisor or representative of any of the Contracting Parties, or any past, present or future Affiliate, director, officer, employee, incorporator, member, partner, stockholder, agent, attorney advisor or representative of any of the foregoing (the "Nonparty Affiliates") shall have any liability (whether in contract, tort, equity or otherwise) for any one or more of the representations, warranties, covenants, agreements or other obligations or liabilities of any one or more of the Company, Parent, Holdings, Merger Sub or Buyer under this Agreement (whether for indemnification or otherwise) or of or for any claim based on, arising out of, or related to this Agreement or the transactions contemplated hereby.

12.16 Waiver of Conflicts Regarding Representations; Non-Assertion of Attorney-Client Privilege.

(a) Conflicts of Interest. Buyer acknowledges that Latham & Watkins LLP and other legal counsel ("Prior Company Counsel") have, on or prior to the Closing Date, represented one or more Pre-Closing Holders, the Company, and its Subsidiaries and other Affiliates, and their respective officers, employees and directors (each such Person, other than the Company and its Subsidiaries, a "Designated Person") in one or more matters relating solely to this Agreement or any other agreements or transactions contemplated hereby (including any matter that may be related to a litigation, claim or dispute arising under or related to this Agreement or such other agreements or in connection with such transactions) (each, an "Existing Representation"), and that, in the event of any post-Closing matters (x) relating to this Agreement or any other agreements or transactions contemplated hereby (including any matter that may be related to a litigation, claim or dispute arising under or related to this Agreement or such other agreements or in connection with such transactions) and (y) in which the Surviving Corporation or any of its Affiliates (including the Company and its Subsidiaries), on the one hand, and one or more Designated Persons, on the other hand, are or may be adverse to each other (each, a "Post-Closing Matter"), the Designated Persons reasonably anticipate that Prior Company Counsel will represent them in connection with such matters. Accordingly, each of Buyer and the Company hereby (i) waives and shall not assert, and agrees after the Closing to cause its (in the Buyer's case, the Surviving Corporation's) Affiliates to waive and to not assert, any conflict of interest arising out of or relating to the representation by one or more Prior Company Counsel of one or

more Designated Persons in connection with one or more Post-Closing Matters (the "Post-Closing Representations"), and (ii) agrees that, in the event that a Post-Closing Matter arises, Prior Company Counsel may represent one or more Designated Persons in such Post-Closing Matter even though the interests of such Person(s) may be directly adverse to the Surviving Corporation or any of its Affiliates (including the Company and its Subsidiaries), and even though Prior Company Counsel may (i) have represented the Company or its Subsidiaries in a matter substantially related to such dispute or (ii) be currently representing the Surviving Corporation, the Company or any of their respective Affiliates on an unrelated matter.

(b) Attorney-Client Privilege. Each of Buyer and the Company (on behalf of itself and its Affiliates) waives and shall not assert, and agrees after the Closing to cause its (in the Buyer's case, the Surviving Corporation's) Affiliates to waive and to not assert, any attorney-client privilege, attorney work-product protection or expectation of client confidence with respect to any communication between any Prior Company Counsel, on the one hand, and any Designated Person or the Company or any of its Subsidiaries (collectively, the "Pre-Closing Designated Persons"), on the other hand, or any advice given to any Pre-Closing Designated Person by any Prior Company Counsel, to the extent occurring solely with respect to one or more Existing Representations (collectively, "Pre-Closing Privileges") in connection with any Post-Closing Representation that involves a dispute between any Designated Person and one or more of Buyer, the Company and their respective Affiliates, it being the intention of the parties hereto that all rights to such Pre-Closing Privileges, and all rights to waive or otherwise control such Pre-Closing Privilege, shall be retained by the applicable Designated Person, and shall not pass to or be claimed or used by the Surviving Corporation or the Company, except as provided in the last sentence of this Section 12.16(b). Furthermore, each of the Surviving Corporation and the Company (on behalf of itself and its Affiliates) acknowledges and agrees that any advice primarily given to or communication primarily with any of the Designated Persons with respect to an Existing Representation shall not be subject to any joint privilege (whether or not the Company or one more of its Subsidiaries also received such advice or communication) and shall be owned solely by such Designated Persons. Notwithstanding the foregoing, in the event that a dispute arises between the Surviving Corporation or the Company or any of its Subsidiaries, on the one hand, and a third party other than the applicable Designated Person that retained the Pre-Closing Privilege, on the other hand, the Company shall (and shall cause its Affiliates to) assert the Pre-Closing Privileges on behalf of the applicable Designated Persons to prevent disclosure of privileged materials to such third party; provided, however, that such privilege may be waived only with the prior written consent of the applicable Designated Person.

(c) Miscellaneous. Buyer hereby acknowledges that it has had the opportunity (including on behalf of its Affiliates and the Company) to discuss and obtain adequate information concerning the significance and material risks of, and reasonable available alternatives to, the waivers, permissions and other provisions of this Agreement, including the opportunity to consult with counsel other than Prior Company Counsel. This Section 12.16 shall be irrevocable, and no term of this Section 12.16 may be amended, waived or modified, without the prior written consent of the applicable Designated Person and Prior Company Counsel affected thereby.

[Remainder of page intentionally left blank]

IN WITNESS WHEREOF the parties have hereunto caused this Agreement to be duly executed as of the date first above written.

EAGLE BUYER, INC.

By:/s/ P. Hunter Philbrick
Name: P. Hunter Philbrick
Title :Vice President

IN WITNESS WHEREOF the parties have hereunto caused this Agreement to be duly executed as of the date first above written.

EAGLE HOLDING COMPANY I

By:/s/ P. Hunter Philbrick
Name: P. Hunter Philbrick
Title :Vice President

EAGLE REORGANIZATION MERGER SUB, INC.

By:/s/ P. Hunter Philbrick
Name: P. Hunter Philbrick
Title :Vice President

EAGLE HOLDING COMPANY II, LLC

By:/s/ P. Hunter Philbrick
Name: P. Hunter Philbrick
Title :Vice President

IN WITNESS WHEREOF the parties have hereunto caused this Agreement to be duly executed as of the date first above written.

JAGUAR HOLDING COMPANY I

By:/s/ B. Judd Hartman
Name: B. Judd Hartman
Title: General Counsel and Secretary

Execution Version

EAGLE HOLDING COMPANY I
929 FRONT STREET
WILMINGTON, NORTH CAROLINA 28401
May 11, 2017

David M. Johnston

Dear David:

Reference is made to (i) the Stockholders Agreement, dated as of May 11, 2017 (the "Stockholders Agreement"), by and among Eagle Holding Company I, a Delaware corporation (together with any successor, the "Company"), Carlyle Partners VI Holdings II, L.P., a Delaware limited partnership, Carlyle Partners VI, L.P., a Delaware limited partnership, CP VI Coinvestment A, L.P., a Delaware limited partnership, CP VI Coinvestment B, L.P., a Delaware limited partnership, Hellman & Friedman Capital Partners VII, L.P., a Cayman Islands limited partnership, Hellman & Friedman Capital Partners VII (Parallel), L.P., a Cayman Islands limited partnership, HFCP VII (Parallel-A), L.P., a Delaware limited partnership, and H&F Executives VII, L.P., a Cayman Islands limited partnership, Hellman & Friedman Capital Partners VIII, L.P., a Cayman Islands limited partnership, Hellman & Friedman Capital Partners VIII (Parallel), L.P., a Cayman Islands limited partnership, HFCP VIII (Parallel-A), L.P., a Delaware limited partnership, H&F Executives VIII, L.P., a Cayman Islands limited partnership, and H&F Associates VIII, L.P., a Cayman Islands limited partnership, Blue Spectrum ZA 2015 L.P., Clocktower Investment Pte Ltd., a Singaporean private limited company and any other Persons who become parties thereto from time to time, to which you have become a party, effective as of the date hereof, (ii) the Stock Option Agreement, dated as of the date hereof, between you and the Company (the "Stock Option Agreement"), (iii) the Eagle Holding Company I 2017 Equity Incentive Plan, dated as of the date hereof (the "Plan") and (iv) the Employment Agreement, dated as of May 22, 2013 (as amended effective as of December 1, 2016), by and among you, Jaguar Holding Company I and Pharmaceutical Product Development, LLC, as may be further amended from time to time in accordance therewith (the "Employment Agreement"). Capitalized terms used herein but not defined herein shall have the meanings ascribed to them in the Stockholders Agreement and if such capitalized term does not have a meaning ascribed to it in the Stockholders Agreement, such term shall have the meaning ascribed to it in the Stock Option Agreement or the Plan.

Notwithstanding anything to the contrary in the Stockholders Agreement, the undersigned acknowledge and agree as follows:

1. Transfer Restrictions. Except as may be required by applicable law, the restrictions and limitations set forth in Article IV of the Stockholders Agreement shall cease to apply to Transfers of Shares or Options held or Beneficially Owned by you upon the earliest to

occur of (i) the one year anniversary of an IPO (subject to the ability to dispose of Shares necessary to effect the cashless exercise of any vested Options expiring during such one year period), (ii) a Liquidity Event that occurs prior to an IPO, and (iii) a Change of Control Transaction provided that any securities you receive as consideration in such Change of Control Transaction are listed on a national stock exchange.

2. Tag-Along Rights. In the event that you become a Tag-Along Stockholder pursuant to Section 4.4 of the Stockholders Agreement, any Shares issuable in respect of vested Options held by you whether or not exercised (including any Options that would vest as a result of the consummation of the Transfer to the Proposed Transferee) shall, at your sole discretion, be Tag-Along Shares and shall constitute Shares Beneficially Owned by you for purposes of determining your Tag-Along Pro Rata Portion. Your rights set forth in Section 4.4 of the Stockholders Agreement shall terminate upon the earlier to occur of (i) the one year anniversary of an IPO and (ii) a Liquidity Event that occurs prior to an IPO. With respect to Transfers subject to Section 4.4 of the Stockholders Agreement, if the form of consideration is not solely cash payable in immediately available funds or cash equivalents, you, in your capacity as an Eligible Tag-Along Stockholder, may reasonably request financial and other information in order to reasonably evaluate the consideration proposed to be delivered. In the event that (x) the consideration payable for Shares to be sold pursuant to Section 4.4 of the Stockholders Agreement includes securities and (y) applicable law would require the provision to you, in your capacity as an Eligible Tag-Along Stockholder or Tag-Along Stockholder, of any specified information regarding the Company or any of its parents or subsidiaries, such securities or the issuer thereof that is not otherwise required to be provided for such Transfer pursuant to Section 4.4 of the Stockholders Agreement, then notwithstanding Section 4.4(c)(iv) of the Stockholders Agreement, you, in your capacity as a Tag-Along Stockholder, shall have the right to sell Shares in such proposed Transfer pursuant to Section 4.4 of the Stockholders Agreement; provided, that the Stockholder Sellers shall have the right, but not the obligation, to cause to be paid to you, in your capacity as a Tag-Along Stockholder, in lieu of such securities described in the preceding sentence, an amount in cash equal to the Fair Market Value of such Shares as of the date such securities otherwise would have been issued in exchange for such Shares. You will not be required to agree to a non-compete agreement as a condition to participating in a Transfer as a Tag-Along Stockholder or otherwise in connection with such Transfer (it being understood that any existing non-compete agreement then in effect between you and the Company or one of its parents or subsidiaries shall not terminate solely as a result of such Transfer). For the avoidance of doubt, you shall be deemed to be a Stockholder for purposes of the tag-along provisions of the Stockholders Agreement as long as you hold vested equity in the Company.

3. Drag-Along Right. In the event that you become a Participating Stockholder Seller pursuant to Section 4.5 of the Stockholders Agreement, all Shares issuable in respect of vested "in the money" Options held by you whether or not exercised (including any Options that would vest as a result of the consummation of the Change of Control Transaction described in Section 4.5 of the Stockholders Agreement) shall constitute Shares held by you for purposes of the calculation set forth in the first sentence of Section 4.5(a) of the Stockholders Agreement (provided, notwithstanding anything to the contrary in Section 4.5 of the Stockholders

Agreement, you shall be required to exercise only the applicable "in the money" Options with respect to such Shares in accordance therewith). In the event that (x) the consideration payable for Shares to be sold pursuant to Section 4.5 of the Stockholders Agreement includes securities and (y) applicable law would require the provision to you, in your capacity as a Participating Stockholder Seller or Drag-Along Seller, as applicable, of any specified information regarding the Company or any of its parents or subsidiaries, such securities or the issuer thereof that is not otherwise required to be provided for such Transfer pursuant to Section 4.5 of the Stockholders Agreement, then notwithstanding Section 4.5(f) of the Stockholders Agreement, you, in your capacity as a Participating Stockholder Seller or Drag-Along Seller, as applicable, shall have the right to sell Shares in such proposed Transfer pursuant to Section 4.5 of the Stockholders Agreement; provided, that the Sponsor Investor Sellers shall have the right, but not the obligation, to cause to be paid to you, in your capacity as a Drag-Along Seller, in lieu of such securities described in the preceding sentence, an amount in cash equal to the Fair Market Value of such Shares as of the date such securities otherwise would have been issued in exchange for such Shares. The Drag-Along Right of the Sponsors shall terminate upon the earlier to occur of (i) an IPO and (ii) a Liquidity Event. The Drag-Along Right of the Sponsors shall not include a right to require you to sign a non-compete agreement (it being understood that any existing non-compete agreement then in effect between you and the Company or one of its parents or subsidiaries shall not terminate solely as a result of such Transfer). Any unvested or "out-of-the money" vested Options shall be treated in accordance with the applicable award agreement.\

4. Participation Stockholder. With respect to each Post-Closing Issuance for which a Participation Notice is delivered pursuant to Section 6.1 of the Stockholders Agreement, in the event that a Sponsor Investor elects to become an Accepting Participation Stockholder with respect to such Post-Closing Issuance, you will be entitled to participate in such Post-Closing Issuance as a Participation Stockholder; provided, that if such Post-Closing Issuance is for shares of Voting Securities, the Company shall have the right to issue to you securities having the same economic terms and conditions as such Voting Securities but without any voting rights.

5. Put Right.

(a) In the event you incur a Termination of Service as a result of your death or a Termination of Service by the Company or one of its parents or subsidiaries due to your Disability (as defined in the Employment Agreement), you or your guardian, executor, administrator, or applicable trustee generally having control over your Shares (the "Trustee") shall have the right (the "Put Right") to require that the Company purchase all, or any portion of, the Shares held by you or, if applicable, the Trustee and, subject to the proviso in the immediately following sentence, Shares issuable in respect of vested Options held by you or, if applicable, the Trustee (whether or not exercised) on the terms described in this paragraph 5; provided, however, that the Company will not be obligated to purchase any Put Securities (as defined below) if (i) such purchase (or the direct or indirect distribution to the Company by subsidiaries of the Company of the cash necessary to make such purchase) (x) is prohibited by any applicable law or regulation, (y) would violate any financing agreement, indenture or similar document or (z) in the good faith determination of the Company's Board of Directors is

reasonably likely to result in the Company and its subsidiaries not retaining sufficient restricted payment capacity under the terms of any financing agreement, indenture or similar document to permit interest payments with respect to outstanding indebtedness of the Company or any of its subsidiaries to be paid entirely in cash (in which event the Put Notice may only be effected once the Company's and its' subsidiaries' restricted payment capacity is sufficient to enable the Put) or (ii) the Company determines in good faith that the Company's liquidity position is such that the repurchase of the Put Securities would have or reasonably be expected to result in a material negative impact on the operations or financial position of the Company and its parents and subsidiaries (in which event the Put Notice may only be effected once the Company's liquidity position is sufficient to enable the Put). The Put Right shall be exercised by written notice (the "Put Notice") to the Company given in accordance with Section 11. 7 of the Stockholders Agreement on or prior to the first anniversary of your death or Termination of Service due to your Disability, which Put Notice shall specify the number of Shares and Shares issuable in respect of vested Options that you or, if applicable, the Trustee is requesting that the Company purchase (the "Put Securities"), provided, however, that if the Company reasonably determines that the repurchase of the Put Securities would otherwise result in any Options (including any Options held by other Service Providers) being classified as a liability as contemplated by Financial Accounting Standards Board Accounting Standard Codification (ASC) Section 718, *Compensation -- Stock Compensation* (FASB ASC 718), including any amendments and interpretations thereto, the Put Right shall not apply to vested Options and any Shares that are to be purchased by the Company or its designee under paragraph 5 of this letter agreement may only be so purchased if and when such Shares have been held by you or the Trustee, as applicable, for at least six months. Any such Put Notice shall be irrevocable. The parties hereto acknowledge and agree that the Company may, at its sole discretion, designate any other Person to purchase all or part of the Put Securities in lieu of the Company in accordance with the time periods set forth in this paragraph 5. The purchase price payable by the Company or its designee (the "Put Purchase Price") for the Put Securities shall be the amount equal to the Fair Market Value of such Put Securities on the date of delivery of the Put Notice.

(b) Subject to the provisos to the first and second sentences of paragraph 5(a), the purchase of the Put Securities shall take place on the later of (i) the date specified by the Company, which shall in no event be later than thirty (30) days following the determination of the Fair Market Value of the Put Securities, and (ii) within ten (10) days following the receipt by the Company of all necessary governmental approvals. On such date, you or, if applicable, the Trustee shall transfer the Put Securities to the Company or its designee, free and clear of all liens and encumbrances, by delivering to the Company or its designee the certificates representing the Shares to be purchased, duly endorsed for transfer to the Company or its designee or accompanied by a stock power duly executed in blank, and the Company or its designee shall pay to you or, if applicable, the Trustee the Put Purchase Price.

(c) The Company shall be entitled to deduct and withhold from any amounts payable to you or, if applicable, the Trustee pursuant to this paragraph 5 such amounts as it is required to deduct and withhold under all applicable tax laws and such amounts so withheld shall

be treated for all purposes of this letter agreement as having been paid to you or the Trustee, as applicable.

(d) The Put Right shall terminate on the one year anniversary of an IPO.

6. Fair Market Value.

(a) Notwithstanding anything in the Plan, the Stockholders Agreement or this letter agreement to the contrary, in each case in which the term "Fair Market Value" is used in the Stockholders Agreement or this letter agreement, it shall have the following meaning to the extent used with respect to you or your Shares or Options, except in the event of a Termination of Service for Cause or in connection with a Restrictive Covenant Breach, (i) Fair Market Value shall be determined as of the last day of the most recently completed calendar quarter and without regard to any minority, illiquidity, lack of marketability or similar discounts and (ii) in no event shall Fair Market Value be less than the average of the values of the Company determined by the Principal Stockholders and reported to the limited partners of the Principal Stockholders as of the last day of the most recently completed calendar quarter.

(b) In the event the Repurchase Period would otherwise expire prior the 10th day after the last date any of the Principal Stockholders makes its determination of the value of the Company as of the most recently completed calendar quarter for purposes of reporting such value to its limited partners (such date of determination, the "Quarterly Valuation Date"), the Repurchase Period shall automatically be extended until the 10th day after the Quarterly Valuation Date.

(c) Notwithstanding anything in the Plan, the Stockholders Agreement or this letter agreement to the contrary, for purposes of Section 10.3(b)(ii) of the Stockholders Agreement, the purchase price paid for each Share received by you pursuant to the Merger Agreement shall be deemed to be $27.086 less any amounts paid to you by way of dividends and/or distributions of any kind (such price as proportionately adjusted for any stock split, reverse stock split or similar event with respect to the Shares occurring after the Closing).

(d) For purposes of the definition of "Restrictive Covenant Breach" under the Stockholders Agreement, the clause "or any similar restrictive covenant" shall be disregarded.

7. Definition of "Same Terms and Conditions". Notwithstanding clause (b) of the definition of "Same Terms and Conditions", in any transaction in which you are to receive consideration on the Same Terms and Conditions as the Sponsor Investors, the form of consideration paid to Sponsor Investors, on the one hand, and you, on the other hand, may (without your consent) differ only if payment of the same form of consideration (i) is not permitted by applicable law, (ii) would require additional information disclosure to you that is not provided to the Sponsor Investors or (iii) would require additional disclosure to, or approvals or consents of, regulatory authorities that would not be required in connection with the payment of such form of consideration to the Sponsor Investors; provided, that if such consideration is for shares of Voting Securities, you may receive securities having the same economic terms and conditions as such Voting Securities but without any voting rights.

8. SEC Filings. The Company shall file a Registration Statement on Form S-8 (or its successor form), if then available, and which Registration Statement contains a "reoffer prospectus" naming you as a reseller of control securities (as such terms are defined in Instruction C to the General Instructions to Form S-8) with the SEC no later than five (5) business days after the date of an IPO covering any Shares subject to the Option granted to you under the Stock Option Agreement that have vested or remain eligible to vest as of such date.

9. Amendments. No amendment or modification to the Stockholders Agreement that adversely affects the Manager Groups shall be effective against the Manager Groups unless the Managers who are officers of the Company or its subsidiaries with a title of, and more senior to, Senior Vice President (the "Senior Managers"), consent to such amendment or modification in writing ("Senior Manager Consent"), provided, that such consent will be effective at such time as the Senior Managers then holding a majority of Shares held by all Senior Managers provide such consent, provided, further, that all outstanding vested Options of the Senior Managers shall be included as Shares for the purposes of the foregoing calculation. Notwithstanding anything to the contrary in this letter agreement, any amendment of the Stockholders Agreement that (i) does not affect your rights and obligations under the Stockholders Agreement (and this letter agreement) in a manner that is materially more adverse than the effect on the Senior Managers, as a whole, and (ii) is approved in accordance with this paragraph 9, will (to the extent of any inconsistency between such amendment and this letter agreement) amend and supersede this letter agreement.

10. Termination. So long as you hold Shares or Options, no termination of the Stockholders Agreement prior to the consummation of a Change of Control Transaction will be effective against you without Senior Manager Consent, provided, however, that a termination of the Stockholders Agreement effective in connection with an IPO will be effective against you (whether or not such Senior Manager Consent is received) if (i) your rights under Article V survive such termination or (ii) you are otherwise granted registration rights with respect to your Registrable Securities that are not, in any material respect, less advantageous to you than your rights under Article V and provided, further, that in the event of an IPO that occurs after the termination of the Stockholders Agreement but during which the transfer restrictions set forth in Article IV of the Stockholders Agreement (as amended by paragraph 1 of this letter agreement) continue to apply, then the rights set forth in Section 4.4 of the Stockholders Agreement (as amended by paragraph 2 of this letter agreement) shall continue to apply until the earlier of (x) such transfer restrictions ceasing to apply and (y) the one year anniversary of such IPO. Nothing herein shall be deemed to waive your rights under paragraph 8 of this letter agreement which shall survive any termination of the Stockholders Agreement.

11. Certain Arbitration Matters. For the avoidance of doubt, notwithstanding paragraph 12 below, any dispute regarding the nature of your Termination of Service, including, without limitation, whether "Cause" existed, shall be resolved for all purposes by arbitration proceedings in Wilmington, North Carolina in accordance with the arbitration terms and conditions set forth in the Employment Agreement.

12. Miscellaneous; Incorporation by Reference. This letter agreement shall be deemed to amend the Stockholders Agreement solely with respect to the matters set forth herein, and (subject to paragraph 10 above) in the event of any conflicts between this letter agreement and the Stockholders Agreement, this letter agreement will control (notwithstanding the fact that you may execute the Stockholders Agreement after this letter agreement). Except as expressly amended herein, the Stockholders Agreement shall remain in full force and effect. Sections 11.2, 11.4, 11.5, 11.6, 11.7, 11.8 (subject to paragraph 11 hereof), 11.9, 11.10, 11.11, 11.12 (subject to paragraph 10 hereof), 11.13 (subject to the terms of this letter agreement with respect to such subsequent Shares or Options) and 11.14 of the Stockholders Agreement are incorporated by reference herein and shall apply to this letter agreement (and the Stockholders Agreement as amended hereby), *mutatis mutandis*.

13. Company Representations. The Company represents and warrants to you that (i) the execution, delivery and performance of this letter agreement has been fully and validly authorized by all necessary corporate actions, including any approvals required by the board of directors of the Company pursuant to the Stockholders Agreement, (ii) the officer signing this letter agreement on behalf of the Company is duly authorized to do so and (iii) upon execution and delivery of this letter agreement by you and the Company, it shall be a valid and binding obligation of the Company enforceable against it in accordance with its terms, except to the extent that enforceability may be limited by applicable bankruptcy, insolvency, or similar laws affecting the enforcement of creditors' rights generally.

[Remainder of page intentionally left blank]

Very truly yours,

EAGLE HOLDING COMPANY I

By: /s/ P. Hunter Philbrick
Name: P. Hunter Philbrick
Title: Vice President

[Signature Page to Side Letter to Stockholders Agreement]

Accepted and agreed:

/s/ David M. Johnston
David M. Johnston

HELLMAN & FRIEDMAN CAPITAL PARTNERS VIII, L.P.

By: Hellman & Friedman Investors VIII, L.P., its General Partner
By: H&F Corporate Investors VIII, Ltd., its General Partner

By: /s/ P. Hunter Philbrick
Name: P. Hunter Philbrick
Title: Vice President

HELLMAN & FRIEDMAN CAPITAL PARTNERS VII, L.P.

By: Hellman & Friedman Investors VII, L.P., its General Partner
By: H&F Corporate Investors VII, Ltd., its General Partner

By: /s/ P. Hunter Philbrick
Name: P. Hunter Philbrick
Title: Vice President

CARLYLE PARTNERS VI HOLDINGS II, L.P.

By: TC Group VI, L.P., its general partner

By: /s/ Stephen H. Wise
Name: Stephen H. Wise
Title: Authorized Person

[Signature Page to Side Letter to Stockholders Agreement]

Strictly Confidential ***Execution Version***

ASSIGNMENT AND ASSUMPTION AGREEMENT

THIS ASSIGNMENT AND ASSUMPTION AGREEMENT (this "Agreement"), dated as of May 11, 2017, is entered into by and among Jaguar Holding Company I, a Delaware corporation (the "Assignor"), Eagle Holding Company I, a Delaware corporation (the "Assignee"), Pharmaceutical Product Development, LLC, a Delaware limited liability company ("PPD") and David M. Johnston (the "Executive"). Capitalized or other terms used and not defined herein shall have the meanings ascribed to them in that certain Agreement and Plan of Merger, dated as of April 26, 2017 (as amended, restated, modified or supplemented from time to time, the "Merger Agreement"), by and among the Assignee, Eagle Holding Company II, LLC, a Delaware limited liability company and wholly owned subsidiary of the Assignee ("Holdings"), Eagle Reorganization Merger Sub, Inc., a Delaware corporation and wholly- owned subsidiary of Holdings, Eagle Buyer, Inc., a Delaware corporation and the Assignor.

In consideration of the mutual covenants and conditions as hereinafter set forth, each of the parties hereto hereby agree as follows:

1. **Assignment of Employment Agreement.**

a) Assignment. The Assignor hereby irrevocably and absolutely transfers and assigns to the Assignee, and the Assignee hereby accepts and assumes from the Assignor, the Assignor's rights and obligations under that certain Employment Agreement, dated as of May 22, 2013, as amended, by and among PPD, the Assignor and the Executive (the "Employment Agreement"), with effect from the Effective Time (the "Assignment"). The Assignee agrees with the Assignor to perform and satisfy when due all obligations of the Employment Agreement, and further agrees to be bound by the terms and provisions of the Employment Agreement applicable to the Assignor thereunder.

b) Consent of Executive. By executing this Agreement the Executive hereby provides written consent to the Assignment.

c) Parent. Each of the parties hereto agrees that, with effect from the Assignment, references to "Parent" in the Employment Agreement shall be deemed to be references to the Assignee.

2. **Governing Law**. This Agreement, and all claims or causes of action based upon, arising out of, or related to this Agreement or the transactions contemplated hereby, shall be governed by, and construed in accordance with, the laws of the State of North Carolina, without giving effect to principles or rules of conflict of laws to the extent such principles or rules would require or permit the application of laws of another jurisdiction.

3. **Jurisdiction**. Each of the parties hereto (i) consent to submit itself to the personal jurisdiction and venue of any Federal court located in the State of North Carolina or any North Carolina state court with respect to any suit relating to or arising out of this Agreement or any of the transactions contemplated hereby, (ii) agrees that it will not attempt to defeat or deny such personal jurisdiction or venue by motion or otherwise, (iii) agrees that it will not bring any such suit in any court other than a Federal or State court sitting in the State of North Carolina, (iv) irrevocably agrees that any such suit (whether at law, in equity, in contract, in tort or otherwise) shall be heard and determined exclusively in

such Federal or State court sitting in the State of North Carolina and (v) agrees to service of process in any such Action in any manner prescribed by the laws of the State of North Carolina. Nothing herein contained shall be deemed to affect the right of any party to serve process in any manner permitted by Law or to commence legal proceedings or otherwise proceed against any other party in any other jurisdiction, in each case, to enforce judgments obtained in any Action brought pursuant to this Section 3.

4. **Waiver of Jury Trial**. EACH PARTY ACKNOWLEDGES AND AGREES THAT ANY CONTROVERSY WHICH MAY ARISE UNDER THIS AGREEMENT IS LIKELY TO INVOLVE COMPLICATED AND DIFFICULT ISSUES, AND THEREFORE EACH SUCH PARTY HEREBY IRREVOCABLY AND UNCONDITIONALLY WAIVES ANY RIGHT SUCH PARTY MAY HAVE TO A TRIAL BY JURY IN RESPECT OF ANY LITIGATION DIRECTLY OR INDIRECTLY ARISING OUT OF OR RELATING TO THIS AGREEMENT OR THE TRANSACTIONS CONTEMPLATED BY THIS AGREEMENT.

5. **Further Assurances**. Each party hereto shall cooperate and shall take such further action and shall execute and deliver such further documents as may be reasonably requested by the other parties hereto in order to carry out the provisions and purposes of this Agreement.

6. **Successors and Assigns**. This Agreement and all the provisions hereof shall be binding upon and shall inure to the benefit of the parties hereto and their respective successors and permitted assigns. Nothing in this Agreement is intended to give any other Person any right, remedy or claim under this Agreement

7. **Counterparts**. This Agreement may be executed in any number of counterparts (which delivery may be via facsimile transmission or e-mail if in .pdf format), each of which shall be deemed an original, but all of which together shall constitute a single instrument.

[Remainder of page intentionally left blank]

IN WITNESS WHEREOF, the undersigned, intending to be legally bound hereby, have duly executed this Agreement as of the date first written above.

ASSIGNOR:

JAGUAR HOLDING COMPANY I

By: /s/ B. Judd Hartman
Name: B. Judd Hartman
Title: General Counsel and Secretary

ASSIGNEE:

EAGLE HOLDING COMPANY I

By: /s/ P. Hunter Philbrick Name: P. Hunter Philbrick
Title: Vice President

[Signature Page to Assignment and Assumption Agreement]

Accepted and acknowledged:

EXECUTIVE:

DAVID M. JOHNSTON

/s/ David M. Johnston _____

Accepted and acknowledged:

PPD:

PHARMACEUTICAL PRODUCT DEVELOPMENT, LLC

By: /s/ B. Judd Hartman
Name: B. Judd Hartman
Title: General Counsel and Secretary

[Signature Page to Assignment and Assumption Agreement]

Exhibit 10.25

EXECUTION COPY

EMPLOYMENT AGREEMENT

This Employment Agreement (this "Agreement"), dated as of the 22nd day of May, 2013 (the "Effective Date"), is made by and between Pharmaceutical Product Development, LLC, a Delaware limited liability company (together with any successor thereto, the "Company"), and David Johnston (the "Executive" and, together with the Company, the "Parties") and, solely with respect to Section 9(n), Jaguar Holding Company I, a Delaware corporation ("Parent").

RECITAL

WHEREAS, Executive and the Company mutually desire that Executive provide services to the Company on the terms herein provided.

AGREEMENT

NOW, THEREFORE, in consideration of the foregoing and of the respective covenants and agreements set forth below, the Parties hereto agree as follows:

1. Employment.

(a) General. The Company shall employ Executive and Executive shall enter the employ of the Company, for the period and in the position set forth in this Section 1, and upon and subject to the other terms and conditions herein provided.

(b) Employment Term. The term of employment under this Agreement (the "Term") shall be for the period beginning on the Effective Date and ending on the third anniversary of the Effective Date, subject to earlier termination as provided in Section 3. The Term shall automatically renew for additional one (1) year periods unless no later than sixty (60) days prior to the end of the otherwise applicable Term either Party gives written notice of non-extension of the Term to the other, in which case Executive's employment will terminate at the end of the then applicable Term or any other date set by the Company in accordance with Section 3, subject to earlier termination as provided in Section 3.

(c) Position and Duties. Executive shall initially serve as the Executive Vice President of Global Laboratory Services of the Company based in the Company's Morrisville, North Carolina office, with such customary responsibilities, duties and authority normally associated with such position and as may from time to time be assigned to Executive by the Chief Operating Officer of the Company or the Board (as defined below). Executive shall devote substantially all of Executive's working time and efforts to the business and affairs of the Company (which shall include service to its subsidiaries and affiliates) and shall not engage in outside business activities (including serving on outside boards or committees) without the consent of the Board, provided that Executive shall be permitted to (i) manage Executive's personal, financial and legal affairs, (ii) participate in trade associations and (iii) serve on the board of directors of not-for-profit or tax-exempt charitable organizations, in each case, subject to Section 5 and the Proprietary Information Agreement (as defined below) and provided that such activities do not interfere with Executive's performance of Executive's duties and responsibilities hereunder. The Executive agrees to observe and comply with the rules and policies of the Company and its affiliates as adopted from time to time, in each case as amended from time to time, as delivered or made available to Executive (each, a "Policy").

2. Compensation and Relate Matters.

(a) Annual Base Salary. During the Term, Executive shall receive a base salary at a rate of $320,000 per annum (the "Annual Base Salary"), which shall be paid in accordance with the customary payroll practices of the Company. Such Annual Base Salary shall be reviewed and may be adjusted from time to time by the board of directors of the Company or an authorized committee thereof, (in any case, the "Board"), provided that the Annual Base Salary may not be decreased without Executive's consent.

(b) Annual Bonus. Executive will be eligible to participate in an incentive program established by the Board. Executive's annual bonus compensation under such incentive program (the "Annual Bonus") shall be targeted at 40% of the Annual Base Salary (the "Target Bonus Amount"). The Annual Bonus shall initially be based 50% upon a Company-wide bonus pool to be determined by the Board based upon the achievement of Company performance metrics established by the Board in good faith and 50% upon achievement of individual qualitative factors as determined by the Board in its discretion. The payment of any Annual Bonus shall be subject to Executive's continued employment with the Company through the date of payment; provided however that if Executive's employment shall terminate (other than as a result of the Company's termination of the Executive's employment for Cause pursuant to Section 3(a)(iii) or as a result of the Executive's resignation without Good Reason pursuant to Section 3(a)(vi)) on or after January 1 of an applicable year, Executive shall be entitled to receive any earned but unpaid Annual Bonus for the prior year pursuant to this Section (b).

(c) Signing Bonus. The Company shall pay to Executive a one-time signing bonus of $60,000, less applicable withholdings, in accordance with a separate sign-on bonus agreement of even date herewith between Executive and the Company.

(d) Benefits. During the Term, Executive shall be eligible to participate in employee benefit plans, programs and arrangements of the Company to the same extent as other senior-level executives (excluding aircraft use, severance benefits or the right to receive equity-based compensation), consistent with the terms thereof and as such plans, programs and arrangements may be amended from time to time. In no event shall Executive be eligible to participate in any severance plan or program of the Company, except as set forth in Section 4 of this Agreement.

(e) Vacation. During the Term, Executive shall be entitled to paid personal leave in accordance with the Company's Policies. Any vacation shall be taken at the reasonable and mutual convenience of the Company and Executive.

(f) Expenses. During the Term, the Company shall reimburse Executive for all reasonable travel and other business expenses incurred by Executive in the performance of Executive's duties to the Company in accordance with the Company's expense reimbursement Policy.

(g) Key Person Insurance. At any time during the Term, the Company shall have the right to insure the life of Executive for the Company's sole benefit. The Company shall have the right to determine the amount of insurance and the type of policy. Executive shall reasonably cooperate with the Company in obtaining such insurance by submitting to physical examinations, by supplying all information reasonably required by any insurance carrier, and by executing all necessary documents reasonably required by any insurance carrier, provided that any information provided to an insurance company or broker shall not be provided to the Company without the prior written authorization of Executive. Executive shall incur no financial obligation by executing any required document, and shall have no interest in any such policy. Additionally, and notwithstanding the preceding to the contrary, in the event the amount of insurance adversely affects the amount of life insurance the Executive seeks and

is qualified to obtain at any time during the Term, then the Company agrees to reduce the amount of the insurance.

(h) Equity Compensation. As soon as reasonably practicable following the Effective Date, Executive will receive an award of an option (the "Option") to purchase 250,000 shares of common stock of Parent pursuant to a separate stock option agreement (the "Option Agreement"). The Option will have an exercise price per share equal to the fair market value of one share of Parent common stock on the date of grant and will be subject to the terms and conditions, including the vesting schedule, set forth in the Option Agreement and Parent's Amended and Restated 2011 Equity Incentive Plan, as may be amended from time to time.

3. Termination.

Executive's employment hereunder may be terminated by the Company or Executive, as applicable, without any breach of this Agreement under the following circumstances:

(a) Circumstances.

(i) *Death*. Executive's employment hereunder shall terminate upon Executive's death.

(ii) *Disability*. If Executive has incurred a Disability, as defined below, the Company may terminate Executive's employment.

(iii) *Termination for Cause*. The Company may terminate Executive's employment for Cause, as defined below.

(iv) *Termination without Cause*. The Company may terminate Executive's employment without Cause, which shall include a termination of Executive as a result of the Company not renewing the Term pursuant to Section 1.

(v) *Resignation from the Company for Good Reason*. Executive may resign Executive's employment with the Company for Good Reason, as defined below.

(vi) *Resignation from the Company without Good Reason*. Executive may resign Executive's employment with the Company for any reason other than Good Reason or for no reason, which shall include a termination of Executive as a result of Executive not renewing the Term pursuant to Section 1.

(b) Notice of Termination. Any termination of Executive's employment by the Company or by Executive under this Section 3 (other than termination pursuant to paragraph (a)(i)) shall be communicated by a written notice to the other party hereto (i) indicating the specific termination provision in this Agreement relied upon, (ii) setting forth in reasonable detail the facts and circumstances claimed to provide a basis for termination of Executive's employment under the provision so indicated, if applicable, and (iii) specifying a Date of Termination which, if submitted by Executive, shall, except in the event of Executive's resignation from the Company for Good Reason pursuant to Section 3(a)(v), be at least sixty (60) days following the date of such notice (a "Notice of Termination"); *provided*, *however*, that in the event that Executive delivers a Notice of Termination to the Company, the Company may, in its sole discretion, change the Date of Termination to any date that occurs following the date of Company's receipt of such Notice of Termination and is prior to the date specified in such Notice of Termination. A Notice of Termination submitted by the Company may provide for a Date of Termination on the date Executive receives the Notice of Termination, or any date thereafter elected by the Company

in its sole discretion. The failure by the Company to set forth in the Notice of Termination any fact or circumstance which contributes to a showing of Cause shall not waive any right of the Company hereunder or preclude the Company from asserting such fact or circumstance in enforcing the Company's rights hereunder.

(c) Company Obligations upon Termination. Upon termination of Executive's employment pursuant to any of the circumstances listed in Section 3(a), Executive (or Executive's estate) shall be entitled to receive the sum of: () the portion of Executive's Annual Base Salary earned through the Date of Termination but not yet paid to Executive; (ii) any expenses owed to Executive pursuant to Section 2(f); and (iii) any amount accrued and arising from Executive's participation in, or benefits accrued under any employee benefit plans, programs or arrangements, which amounts shall be payable in accordance with the term s and conditions of such employee benefit plans, programs or arrangements (collectively, the "Company Arrangements"). Except as otherwise expressly required by law (e.g., COBRA) or as specifically provided herein, all of Executive's rights to salary, severance, benefits, bonuses and other compensatory amounts hereunder (if any) shall cease upon the termination of Executive's employment hereunder. In the event that Executive's employment is terminated by the Company for any reason, Executive's sole and exclusive remedy shall be to receive the severance payments and benefits described in Section 2(b), this Section 3(c) or Section 4, as applicable.

(d) Deemed Resignation. Upon termination of Executive's employment for any reason, Executive shall be deemed to have resigned from all offices and directorships, if any, then held with the Company or any of its affiliates.

4. Severance Payments.

(a) Termination for Cause, Resignation from the Company Without Good Reason or Termination Upon Death or Disability. If Executive's employment shall terminate as a result of Executive's death pursuant to Section 3(a)(i) or Disability pursuant to Section 3(a)(ii), pursuant to Section 3(a)(iii) for Cause or pursuant to Section 3(a(vi) due to Executive's resignation from the Company without Good Reason, then Executive shall not be entitled to any severance payments or benefits, except as provided in either Section 2(b) and/or Section 3(c).

(b) Termination without Cause or Resignation from the Company for Good Reason.

(i) If Executive's employment shall terminate without Cause pursuant to Section 3(a)iv) or pursuant to Section 3(a)(v) due to Executive's resignation for Good Reason, then, subject to Executive signing on or after the date of Executive's Separation from Service (as defined below) and before the 21st day following Executive's Separation from Service, and not revoking, a release of claims substantially in the form attached as Exhibit A to this Agreement (the "Release"), and Executive's continued compliance with Section 5 and the Proprietary Information Agreement, Executive shall receive, in addition to payments and benefits set forth in Section 2(b) and Section 3(c) the following:

(A) an amount in cash equal to (x) 1.0 times the Annual Base Salary of Executive as of the Date of Termination, payable in the form of salary continuation in regular installments over the twelve-month period following the date of Executive's Separation from Service (the "Severance Period") in accordance with the Company's normal payroll practices and (y) a pro-rated amount of the Target Bonus Amount for the year of termination based on the number of days the Executive was employed during such year, payable in a lump sum within 30 days following the Date of Termination; and

(B) payment in an amount equal to the amount of the premiums Executive would be required to pay to continue Executive's and Executive's covered dependents' medical, dental and vision coverage in effect on the Date of Termination under the Company's group healthcare plans pursuant to the Consolidated Omnibus Budget Reconciliation Act of 1985, as amended ("COBRA"), which amount shall be based on the premium for the first month of COBRA coverage and shall be paid on the Company's first regular pay date of each calendar month during the period commencing on Executive's Separation from Service and ending upon the earliest of (Y) the last day of the Severance Period or (Z) the date Executive becomes eligible to receive healthcare coverage from a subsequent employer.

(ii) Executive shall not be obligated to seek other employment or take any other action by way of mitigation of the amounts payable to Executive under this Section 4(b), and such amounts shall not be reduced whether or not the Executive obtains other employment.

(c) Survival. Notwithstanding anything to the contrary in this Agreement, the provisions of Sections 2(b), 3(c), 4, 5 through 7, and 9 will survive the termination of Executive's employment and the expiration or termination of the Term.

5. Competition; Proprietary Information Agreement.

Executive acknowledges that the Company has provided and, during the Term, the Company from time to time will continue to provide Executive with access to its confidential information. Ancillary to the rights provided to Executive as set forth in this Agreement and the Company's provision of confidential information, and Executive's agreements regarding the use of same, in order to protect the value of any confidential information, the Company and Executive agree to the following provisions against unfair competition, which Executive acknowledges represent a fair balance of the Company's rights to protect its business and Executive's right to pursue employment:

(a) Executive shall not, at any time during the Restricted Period (as defined below), directly or indirectly engage in, have any equity interest in, interview for a potential employment or consulting relationship with or manage, provide services to or operate any person, firm, corporation, partnership or business (whether as director, officer, employee, agent, representative, partner, security holder, consultant or otherwise) that engages in any business which competes with any portion of the Business (as defined below) of the Company anywhere in the world. Nothing in this Section 5(a) shall prohibit Executive from working for a pharmaceutical, biotechnology or medical device organization that is not a clinical research organization or being a passive owner of not more than 2% of the outstanding voting securities of an entity that is publicly traded, so long as Executive has no active participation in the business of such entity.

(b) Executive shall not, at any time during the Restricted Period, directly or indirectly, recruit or otherwise solicit or induce any employee, customer, subscriber or supplier of the Company to (i) terminate its employment or arrangement with the Company, or (ii) to otherwise change its relationship with the Company. Executive shall not, at any time during the Restricted Period, directly or indirectly, either for Executive or for any other person or entity, (x) solicit any employee of the Company to terminate his or her employment with the Company, (y) employ any such individual during his or her employment with the Company and for a period of twelve months after such individual terminates his or her employment with the Company or (z) solicit any vendor or business affiliate of the Company to cease to do business with the Company.

(c) In the event the terms of this Section 5 shall be determined by any court of competent jurisdiction to be unenforceable by reason of its extending for too great a period of time or over too great a geographical area or by reason of its being too extensive in any other respect, it will be interpreted to extend only over the maximum period of time for which it may be enforceable, over the maximum geographical area as to which it may be enforceable, or to the maximum extent in all other respects as to which it may be enforceable, all as determined by such court in such action.

(d) As used in this Section 5, (i) the term "Company" shall include the Company and its direct and indirect parents and subsidiaries; (ii) the term "Business" shall mean the business of the Company and shall include providing drug discovery or development services to pharmaceutical, biotechnology, medical device, government and academic organizations, as such business may be conducted or contemplated during the Term and (iii) the term "Restricted Period" shall mean the period beginning on the Effective Date and ending on the date that is 12 months following the Date of Termination.

(e) Each of the Parties (which, in the case of the Company, shall mean its officers and the members of the Board) agrees, during the Term and following the Date of Termination, to refrain from Disparaging (as defined below) the other Party and its affiliates, including, in the case of the Company, any of its services, technologies or practices, or any of its directors, officers, agents, representatives or stockholders, either orally or in writing. Nothing in this paragraph shall preclude any Party from making truthful statements that are reasonably necessary to comply with applicable law, regulation or legal process, or to defend or enforce a Party's rights under this Agreement. For purposes of this Agreement, "Disparaging" means making remarks, comments or statements, whether written or oral, that impugn the character, integrity, reputation or abilities of the Person being disparaged.

(f) Executive represents that Executive's employment by the Company does not and will not breach any agreement with any former employer, including any non-compete agreement or any agreement to keep in confidence or refrain from using information acquired by Executive prior to Executive's employment by the Company. During Executive's employment by the Company, Executive agrees that Executive will not violate any non-solicitation agreements Executive entered into with any former employer or improperly make use of, or disclose, any information or trade secrets of any former employer or other third party, nor will Executive bring onto the premises of the Company or use any unpublished documents or any property belonging to any former employer or other third party, in violation of any lawful agreements with that former employer or third party.

(g) Executive acknowledges that Executive and the Company have entered into that certain Proprietary Information and Inventions Agreement, dated as of even date herewith, which is attached as Exhibit B to this Agreement, and is incorporated into, and made a part of, this Section 5 (as amended, supplemented or otherwise modified from time to time, the "Proprietary Information Agreement"). The severance and entitlements in Section 4(b)(i) shall be subject to forfeiture if Executive materially breaches this Section 5 or the Proprietary Information Agreement.

6. Injunctive Relief.

It is recognized and acknowledged by Executive that a breach of any covenant contained in Section 5 will cause irreparable damage to Company and its goodwill, the exact amount of which will be difficult or impossible to ascertain, and that the remedies at law for any such breach will be inadequate. Accordingly, Executive agrees that in the event of a breach of any covenant contained in Section 5, in

addition to any other remedy which may be available at law or in equity, the Company will be entitled to specific performance and injunctive relief.

7. Assignment and Successors.

The Company may assign its rights and obligations under this Agreement to any of its affiliates provided that the Company remains secondarily liable hereunder or to any successor to all or substantially all of the business or the assets of the Company (by merger or otherwise), and may assign or encumber this Agreement and its rights hereunder as security for indebtedness of the Company and its affiliates. This Agreement shall be binding upon and inure to the benefit of the Company, Executive and their respective successors, assigns, personnel and legal representatives, executors, administrators, heirs, distributees, devisees, and legatees, as applicable. None of Executive's rights or obligations may be assigned or transferred by Executive, other than Executive's rights to payments hereunder, which may be transferred only by will or operation of law. Notwithstanding the foregoing, Executive shall be entitled, to the extent permitted under applicable law and applicable Company Arrangements, to select and change a beneficiary or beneficiaries to receive compensation hereunder following Executive's death by giving written notice thereof to the Company.

8. Certain Definitions.

(a) Cause. The Company shall have "Cause" to terminate Executive's employment hereunder upon:

(i) Executive's willful failure or refusal to substantially perform Executive's duties with the Company (other than any such failure resulting from Executive's Disability) or comply with, in any material respect, any of the Company's material Policies;

(ii) Executive's material breach of this Agreement, including the Proprietary Information Agreement, or any other material written agreement between Executive and the Company or any of its affiliates;

(iii) Executive's conviction, plea of no contest, plea of *nolo contendere*, or imposition of unadjudicated probation (A) for any felony or (B) for any crime (other than a traffic violation) involving moral turpitude that is materially harmful to the business or reputation of the Company or any of its affiliates;

(iv) Executive's unlawful use (including being under the influence) or possession of illegal drugs on the Company's (or any of its affiliate's) premises or while performing Executive's duties and responsibilities under this Agreement; or

(v) Executive's commission of an act of fraud, embezzlement, misappropriation or willful misconduct against the Company or any of its affiliates.

Prior to Executive's termination for Cause, the Company must provide written notice to Executive describing the act or omission that constitutes Cause and, in respect of circumstances capable of cure, such circumstances must remain uncured for thirty (30) days following the date of such written notice.

(b) Date of Termination. "Date of Termination" shall mean (i) if Executive's employment is terminated by Executive's death, the date of Executive's death; or (ii) if Executive's employment is terminated pursuant to Section 3(a(ii)-(vi) the earlier of the date indicated in the Notice of Termination or the date specified by the Company pursuant to Section 3(b).

(c) Disability. "Disability" shall mean Executive's inability to perform, with or without reasonable accommodation, the essential functions of Executive's position hereunder for a total of 90 days during any 12 month period as a result of incapacity due to mental or physical illness as determined in good faith by the Board or the Chief Operating Officer of the Company.

(d) Good Reason. "Good Reason" means the occurrence of any of the following without

Executive's consent:

(i) a reduction in Executive's then-current Annual Base Salary or Target Bonus Amount,

(ii) the relocation of Executive's primary work location to a location that is more than twenty-five (25) miles from Executive's then-current primary work location,

(iii) a material adverse reduction in Executive's duties or responsibilities as in effect on the date hereof, or

(iv) a material breach by the Company or any of its affiliates of any material written agreements to which Executive is a party.

Notwithstanding the foregoing, no Good Reason will have occurred unless (A) Executive shall have delivered to the Company written notice of Executive's objection to any event set forth in clause (i (iv) of this Section 8(d) within ninety (90) days following Executive becoming aware of such event, (B) such event is not corrected, in all material respects, by the Company within thirty (30) days following the Company's receipt of such notice and (C) Executive resigns Executive's employment with the Company not more than thirty (30) days following the expiration of the 30-day correction period described in the foregoing clause (B).

(e) Person. "Person" shall mean any individual, firm, corporation, partnership, limited liability company, incorporated or unincorporated association, joint venture, joint stock company, trust governmental authority or other entity of any kind.

9. Miscellaneous Provisions.

(a) Governing Law. This Agreement shall be governed, construed, interpreted and enforced in accordance with its express terms, and otherwise in accordance with the substantive laws of the State of North Carolina without reference to the principles of conflicts of law of the State of North Carolina or any other jurisdiction, and where applicable, the laws of the United States.

(b) Validity. The invalidity or unenforceability of any provision or provisions of this Agreement shall not affect the validity or enforceability of any other provision of this Agreement, which shall remain in full force and effect.

(c) Notices. Any notice, request, claim, demand, document and other communication hereunder to any Party shall be effective upon receipt (or refusal of receipt) and shall be in writing and delivered personally or sent by facsimile or certified or registered mail, postage prepaid, as follows:

(i) If to the Company:

Pharmaceutical Product Development, Inc.
929 North Front Street
Wilmington, NC 28401

Attention: General Counsel
Facsimile: (910) 558-6951
and copies to:

Latham & Watkins LLP
555 11" St., NW, Suite 1000
Washington, D.C. 20004
Attention: David T. Della Rocca
Facsimile: (202) 637-2201

(ii) If to Executive, at the last address that the Company has in its personnel records for Executive, or

(iii) At any other address as any Party shall have specified by notice in writing to the other Party.

(d) Counterparts. This Agreement may be executed in several counterparts, each of which shall be deemed to be an original, but all of which together will constitute one and the same Agreement. Signatures delivered by facsimile shall be deemed effective for all purposes.

(e) Entire Agreement. The terms of this Agreement, including the Proprietary Information Agreement, are intended by the Parties to be the final expression of their agreement with respect to the employment of Executive by the Company and supersede all prior understandings and agreements, whether written or oral. The Parties further intend that this Agreement, including the Proprietary Information Agreement, shall constitute the complete and exclusive statement of its terms and that no extrinsic evidence whatsoever may be introduced in any judicial, administrative, or other legal proceeding to vary the terms of this Agreement.

(f) Amendments; Waivers. This Agreement may not be modified, amended, or terminated except by an instrument in writing, signed by Executive and a duly authorized officer of Company. By an instrument in writing similarly executed, Executive or a duly authorized officer of the Company may waive compliance by the other Party with any specifically identified provision of this Agreement that such other Party was or is obligated to comply with or perform; *provided*, *however*, that such waiver shall not operate as a waiver of, or estoppel with respect to, any other or subsequent failure. No failure to exercise and no delay in exercising any right, remedy, or power hereunder shall preclude any other or further exercise of any other right, remedy, or power provided herein or by law or in equity.

(g) No Inconsistent Actions. The Parties hereto shall not voluntarily undertake or fail to undertake any action or course of action inconsistent with the provisions or essential intent of this Agreement. Furthermore, it is the intent of the Parties hereto to act in a fair and reasonable manner with respect to the interpretation and application of the provisions of this Agreement.

(h) Construction. This Agreement shall be deemed drafted equally by both the Parties. Its language shall be construed as a whole and according to its fair meaning. Any presumption or principle that the language is to be construed against any Party shall not apply. The headings in this Agreement are only for convenience and are not intended to affect construction or interpretation. Any references to paragraphs, subparagraphs, sections or subsections are to those parts of this Agreement, unless the context clearly indicates to the contrary. Also, unless the context clearly indicates to the contrary, (a) the plural includes the singular and the singular includes the plural; (b) "and" and "or" are each used both

conjunctively and disjunctively; (c) "any," "all," "each," or "every" means "any and all," and "each and every"; (d) "includes" and "including" are each "without limitation"; (e) "herein," "hereof," "hereunder" and other similar compounds of the word "here" refer to the entire Agreement and not to any particular paragraph, subparagraph, section or subsection; and (f) all pronouns and any variations thereof shall be deemed to refer to the masculine, feminine, neuter, singular or plural as the identity of the entities or persons referred to may require.

(i) Arbitration. Any controversy, claim or dispute arising out of or relating to this Agreement, shall be settled solely and exclusively by a binding arbitration process administered by the American Arbitration Association (the "AAA") in Wilmington, North Carolina. Such arbitration shall be conducted in accordance with the then-existing rules of Practice and Procedure, with the following exceptions if in conflict: (a) one arbitrator who is a retired judge shall be chosen by AAA; (b) each Party to the arbitration will pay one-half of the expenses and fees of the arbitrator, together with other expenses of the arbitration incurred or approved by the arbitrator, except that the Company shall pay all of such fees and expenses if Executive is the prevailing party in the arbitration; and (c) arbitration may proceed in the absence of any Party if written notice (pursuant to the AAA rules and regulations) of the proceedings has been given to such Party. Each Party shall bear its own attorneys' fees and expenses; provided that the arbitrator may assess the prevailing Party's fees and costs against the non-prevailing Party as part of the arbitrator's award. The Parties agree to abide by all decisions and awards rendered in such proceedings. Such decisions and awards rendered by the arbitrator shall be final and conclusive. All such controversies, claims or disputes shall be settled in this manner in lieu of any action at law or equity; *provided, however*, that nothing in this subsection shall be construed as precluding the bringing an action for injunctive relief or specific performance as provided in this Agreement. This dispute resolution process and any arbitration hereunder shall be confidential and neither any Party nor the neutral arbitrator shall disclose the existence, contents or results of such process without the prior written consent of all Parties, except where necessary or compelled in a Court to enforce this arbitration provision or an Award from such arbitration or otherwise in a legal proceeding. Notwithstanding the foregoing, Executive and the Company each have the right to resolve any issue or dispute over intellectual property rights by Court action instead of arbitration.

(j) Enforcement. If any provision of this Agreement is held to be illegal, invalid or unenforceable under present or future laws effective during the term of this Agreement, such provision shall be fully severable; this Agreement shall be construed and enforced as if such illegal, invalid or unenforceable provision had never comprised a portion of this Agreement; and the remaining provisions of this Agreement shall remain in full force and effect and shall not be affected by the illegal, invalid or unenforceable provision or by its severance from this Agreement. Furthermore, in lieu of such illegal, invalid or unenforceable provision there shall be added automatically as part of this Agreement a provision as similar in terms to such illegal, invalid or unenforceable provision as may be possible and be legal, valid and enforceable.

(k) Withholding. The Company shall be entitled to withhold from any amounts payable under this Agreement any federal, state, local or foreign withholding or other taxes or charges which the Company is required to withhold. The Company shall be entitled to rely on an opinion of counsel if any questions as to the amount or requirement of withholding shall arise.

(l) Section 409A.

(i) *General*. The intent of the Parties is that the payments and benefits under this Agreement comply with or be exempt from Section 409A of the Internal Revenue Code of 1986,

as amended, and the regulations and guidance promulgated thereunder (collectively, "Section 409A") and, accordingly, to the maximum extent permitted, this Agreement shall be interpreted to be in compliance therewith.

(ii) *Separation from Service*. Notwithstanding anything in this Agreement to the contrary, any compensation or benefits payable under this Agreement that is designated under this Agreement as payable upon Executive's termination of employment shall be payable only upon Executive's "separation from service" with the Company within the meaning of Section 409A (a "Separation from Service") and, except as provided below, any such compensation or benefits shall not be paid, or, in the case of installments, shall not commence payment, until the thirtieth (30th) day following Executive's Separation from Service. Any installment payments that would have been made to Executive during the thirty (30) day period immediately following Executive's Separation from Service but for the preceding sentence shall be paid to Executive on the thirtieth (30th) day following Executive's Separation from Service and the remaining payments shall be made as provided in this Agreement.

(iii) *Specified Employee*. Notwithstanding anything in this Agreement to the contrary, if Executive is deemed by the Company at the time of Executive's Separation from Service to be a "specified employee" for purposes of Section 409A, to the extent delayed commencement of any portion of the benefits to which Executive is entitled under this Agreement is required in order to avoid a prohibited distribution under Section 409A, such portion of Executive's benefits shall not be provided to Executive prior to the earlier of (i) the expiration of the six-month period measured from the date of Executive's Separation from Service with the Company or (ii) the date of Executive's death. Upon the first business day following the expiration of the applicable Section 409A period, all payments deferred pursuant to the preceding sentence shall be paid in a lump sum to Executive (or Executive's estate or beneficiaries), and any remaining payments due to Executive under this Agreement shall be paid as otherwise provided herein.

(iv) *Expense Reimbursements*. To the extent that any reimbursements under this Agreement are subject to Section 409A, any such reimbursements payable to Executive shall be paid to Executive no later than December 31 of the year following the year in which the expense was incurred; provided that Executive submits Executive's reimbursement request promptly following the date the expense is incurred, the amount of expenses reimbursed in one year shall not affect the amount eligible for reimbursement in any subsequent year, other than medical expenses referred to in Section 105(b) of the Code, and Executive's right to reimbursement under this Agreement will not be subject to liquidation or exchange for another benefit.

(v) *Installments*. Executive's right to receive any installment payments under this Agreement, including without limitation any continuation salary payments that are payable on Company payroll dates, shall be treated as a right to receive a series of separate payments and, accordingly, each such installment payment shall at all times be considered a separate and distinct payment as permitted under Section 409A. Except as otherwise permitted under Section 409A, no payment hereunder shall be accelerated or deferred unless such acceleration or deferral would not result in additional tax or interest pursuant to Section 409A.

(m) Indemnification: Insurance. During the term of this Agreement and thereafter, the Company shall indemnify and hold Executive (including Executive's heirs, personal representatives, executors and administrators) harmless, to the maximum extent permitted by law, against any and all damages, costs, liabilities, and losses as a result of any third party (excluding the Company and any of its

affiliates) claim or proceeding, or any threatened third-party (excluding the Company and any of its affiliates) claim or proceeding, against Executive that arises out of or relates to Executive by reason of Executive having been or having provided service as an officer, director or employee, as the case may be, of the Company, or Executive's service in any such capacity or similar capacity with an affiliate of the Company or other entity at the request of the Company (in all cases, subject to limitations on bad acts and any other limitations under applicable law which preclude such indemnification and excluding any and all dam ages, costs, liabilities and losses related to Executive's remuneration). The Company shall maintain or cause to be maintained for the Executive Directors' and Officers' insurance to the same extent provided to active officers of the Company in respect of those liabilities which Executive may incur as a director or officer of the Company or any of its affiliates for which such insurance is normally available.

(n) Parent Guarantee. In the event that the Company shall fail to satisfy any matured payment obligation to Executive under this Agreement, Parent agrees to satisfy such payment obligation, subject to all of the terms and conditions of this Agreement and applicable law.

10. Employee Acknowledgement.

Executive acknowledges that Executive has read and understands this Agreement, is fully aware of its legal effect, has not acted in reliance upon any representations or promises made by the Company other than those contained in writing herein, and has entered into this Agreement freely based on Executive's own judgment.

[Signature Page Follows]

IN WITNESS WHEREOF, the Parties have executed this Agreement on the date and year first above written.

COMPANY

By: /s/ B. Judd Hartman
Name: B. Judd Hartman
Title: General Counsel

EXECUTIVE

By: /s/ David Johnston
David Johnston

Solely with respect to Section 9(n):

PARENT

By: /s/ B. Judd Hartman
Name: B. Judd Hartman
Title: General Counsel

EXHIBIT A

Separation Agreement and Release

This Separation Agreement and Release ("Agreement") is made by and between David Johnston ("Employee") and Pharmaceutical Product Development, LLC, a Delaware limited liability company (the "Company") (collectively, referred to as the "Parties" or individually referred to as a "Party"). Capitalized terms used but not defined in this Agreement shall have the meanings set forth in the Employment Agreement (as defined below).

WHEREAS, the Parties have previously entered into that certain Employment Agreement, dated as of [_____], 2013 (the "Employment Agreement"); and

WHEREAS, in connection with the Employee's termination of employment with the Company or a subsidiary or affiliate of the Company effective _____, 20__, the Parties wish to resolve any and all disputes, claims, complaints, grievances, charges, actions, petitions, and demands that the Employee may have against the Company and any of the Releasees (as defined below), including, but not limited to, any and all claims arising out of or in any way related to Employee's employment with or separation from the Company or its subsidiaries or affiliates but, for the avoidance of doubt, nothing herein will be deemed to release any rights or remedies in connection with Employee's ownership of vested equity securities of the Company (including any equity securities of the Company that vest in connection with Employee's termination of employment), Employee's right to indemnification by the Company or any of its affiliates pursuant to contract or applicable law or Directors' and Officers' insurance, or claims for breach of Sections 2Cb), 3(c), 4(b), 4(c) or 5(e) of the Employment Agreement (collectively, the "Retained Claims").

NOW, THEREFORE, in consideration of the severance payments described in Section 4(b) of the Employment Agreement, which, pursuant to the Employment Agreement, are conditioned on the Employee's execution and non-revocation of this Agreement, and in consideration of the mutual promises made herein, the Company and Employee hereby agree as follows:

1. Severance Payments; Salary and Benefits. The Company agrees to provide Employee with the severance payments and benefits described in Section 4(b) of the Employment Agreement, payable at the times set forth in, and subject to the terms and conditions of, the Employment Agreement. In addition, to the extent not already paid, and subject to the terms and conditions of the Employment Agreement, the Company shall pay or provide to the Employee all other payments or benefits described in Section 3(c) of the Employment Agreement, subject to and in accordance with the terms thereof.

2. Release of Claims. Employee agrees that, other than with respect to the Retained Claims, the foregoing consideration represents settlement in full of all outstanding obligations owed to Employee by the Company (as defined in the Employment Agreement), any of their direct or indirect subsidiaries and affiliates, and any of their current and former officers, directors, equity holders, managers, employees, agents, investors, attorneys, shareholders, administrators, affiliates, benefit plans, plan administrators, insurers, trustees, divisions, and subsidiaries and predecessor and successor corporations and assigns (collectively, the "Releasees"). Employee, on his own behalf and on behalf of any of Employee's affiliated companies or entities and any of their respective heirs, family members, executors, agents, and assigns, other than with respect to the Retained Claims, hereby and forever releases the Releasees from, and agrees not to sue concerning, or in any manner to institute, prosecute, or pursue, any claim, complaint, charge, duty, obligation, or cause of action relating to any matters of any kind, whether presently known or unknown, suspected or unsuspected, that Employee may possess against any of the

Releasees arising from any omissions, acts, facts, or dam ages that have occurred up until and including the Effective Date of this Agreement (as defined in Section 7 below), including, without limitation:

(a) any and all claims relating to or arising from Employee's employment or service relationship with the Company or any of its direct or indirect subsidiaries or affiliates and the termination of that relationship;

(b) any and all claims relating to, or arising from, Employee's right to purchase, or actual purchase of any shares of stock or other equity interests of the Company or any of its affiliates, including, without limitation, any claims for fraud, misrepresentation, breach of fiduciary duty, breach of duty under applicable state corporate law, and securities fraud under any state or federal law;

(c) any and all claims for wrongful discharge of employment; termination in violation of public policy; discrimination; harassment; retaliation; breach of contract, both express and implied; breach of covenant of good faith and fair dealing, both express and implied; promissory estoppel; negligent or intentional infliction of emotional distress; fraud; negligent or intentional misrepresentation; negligent or intentional interference with contract or prospective economic advantage; unfair business practices; defamation; libel; slander; negligence; personal injury ; assault; battery; invasion of privacy; false imprisonment; conversion; and disability benefits;

(d) any and all claims for violation of any federal, state, or municipal statute, including, but not limited to, Title VII of the Civil Rights Act of 1964; the Civil Rights Act of 1991; the Rehabilitation Act of 1973; the Americans with Disabilities Act of 1990; the Equal Pay Act; the Fair Credit Reporting Act; the Age Discrimination in Employment Act of 1967; the Older Workers Benefit Protection Act; the Employee Retirement Income Security Act of 1974; the Worker Adjustment and Retraining Notification Act; the Family and Medical Leave Act; the Sarbanes-Oxley Act of 2002; and the North Carolina Equal Employment Practices Act;

(e) any and all claims for violation of the federal or any state constitution;

(f) any and all claims arising out of any other laws and regulations relating to employment or employment discrimination;

(g) any claim for any loss, cost, damage, or expense arising out of any dispute over the non-withholding or other tax treatment of any of the proceeds received by Employee as a result of this Agreement; and

(h) any and all claims for attorneys' fees and costs.

Employee agrees that the release set forth in this section shall be and remain in effect in all respects as a complete general release as to the matters released. This release does not release claims that cannot be released as a matter of law, including, but not limited to, Employee's right to file a charge with or participate in a charge by the Equal Employment Opportunity Commission, or any other local, state, or federal administrative body or government agency that is authorized to enforce or administer laws related to employment, against the Company (with the understanding that Employee's release of claims herein bars Employee from recovering such monetary relief from the Company or any Releasee), claims for unemployment compensation or any state disability insurance benefits pursuant to the terms of applicable state law, claims to continued participation in certain of the Company's group benefit plans pursuant to the terms and conditions of COBRA, claims to any benefit entitlements vested as the date of separation of Employee's employment, pursuant to written terms of any employee benefit plan of the Company or its affiliates and Employee's right under applicable law and any Retained Claims.

3. Acknowledgment of Waiver of Claims under ADEA. Employee understands and acknowledges that Employee is waiving and releasing any rights Employee may have under the Age Discrimination in Employment Act of 1967 ("ADEA"), and that this waiver and release is knowing and voluntary. Employee understands and agrees that this waiver and release does not apply to any rights or claims that may arise under the AD EA after the Effective Date of this Agreement. Employee understands and acknowledges that the consideration given for this waiver and release is in addition to anything of value to which Employee was already entitled. Employee further understands and acknowledges that Employee has been advised by this writing that: (a) Employee should consult with an attorney prior to executing this Agreement; (b) Employee has 21 days within which to consider this Agreement; (c) Employee has 7 days following Employee's execution of this Agreement to revoke this Agreement pursuant to written notice to the Secretary of the Company; (d) this Agreement shall not be effective until after the revocation period has expired; and (e) nothing in this Agreement prevents or precludes Employee from challenging or seeking a determination in good faith of the validity of this waiver under the ADEA, nor does it impose any condition precedent, penalties, or costs for doing so, unless specifically authorized by federal law. In the event Employee signs this Agreement and return s it to the Company in less than the 21 day period identified above, Employee hereby acknowledges that Employee has freely and voluntarily chosen to waive the time period allotted for considering this Agreement.

4. Severability. In the event that any provision or any portion of any provision hereof or any surviving agreement made a part hereof becomes or is declared by a court of competent jurisdiction or arbitrator to be illegal, unenforceable, or void, this Agreement shall continue in full force and effect without said provision or portion of provision.

5. No Oral Modification. This Agreement may only be amended in a writing signed by Employee and a duly authorized officer of the Company.

6. Governing Law; Dispute Resolution. This Agreement shall be subject to the provisions of Sections 9(a), (c) and (i) of the Employment Agreement.

7. Effective Date. If the Employee has attained or is over the age of 40 as of the date of Employee's termination of employment, then each Party has seven days after that Party signs this Agreement to revoke it and this Agreement will become effective on the eighth day after Employee signed this Agreement, so long as it has been signed by the Parties and has not been revoked by either Party before that date (the "Effective Date"). If the Employee has not attained the age of 40 as of the date of Employee's termination of employment, then the "Effective Date" shall be the date on which Employee signs this Agreement.

8. Voluntary Execution of Agreement. Employee understands and agrees that Employee executed this Agreement voluntarily, without any duress or undue influence on the part or behalf of the Company or any third party, with the full intent of releasing all of Employee's claims against the Company and any of the other Releasees. Employee acknowledges that: (a) Employee has read this Agreement; (b) Employee has not relied upon any representations or statements made by the Company that are not specifically set forth in this Agreement; (c) Employee has been represented in the preparation, negotiation, and execution of this Agreement by legal counsel of Employee's own choice or has elected not to retain legal counsel; (d) Employee understands the terms and consequences of this Agreement and of the releases it contains; and (e) Employee is fully aware of the legal and binding effect of this Agreement.

[Signature Page Follows]

IN WITNESS WHEREOF, the Parties have executed this Agreement on the respective dates set forth below.

EMPLOYEE

Dated: _____ _____

Name:

COMPANY

Dated: _____ _____

Name:
Title:

EXHIBIT B

PROPRIETARY INFORMATION
AND INVENTIONS AGREEMENT

In consideration and as a condition of my employment by Pharmaceutical Product Development, LLC, a Delaware limited liability company (the "Company", which term includes the Company's successors, assigns, affiliates, subsidiaries, and their successors and assigns), I hereby agree as follows:

1. "Proprietary Information" is information that was or is developed by, became or becomes known by, or was or is assigned or otherwise conveyed to the Company, and which has commercial value in the Company's business. Proprietary Information includes, without limitation, trade secrets, financial information, product plans, customer lists, marketing plans and strategies, systems, manuals, forecasts and other business information, improvements, inventions, business strategies, formulas, product ideas, biological material and techniques for their handling and use, chemical and/or information analysis and related products and data, computer programs and software, software designs and documentation, source codes, algorithms, techniques, schematics, know-how and data, and any other confidential or proprietary information of the Company or its customers or clients which I have been, or may be exposed to, or have learned or may learn of from time to time in connection with or as a result of my capacity as an employee of or consultant to the Company, including during the term of this Agreement. Proprietary Information shall not include information that is, through no improper action or inaction by me, generally available to the public. I understand that my employment creates a relationship of confidence and trust between me and the Company with respect to Proprietary Information of the Company or its customers which may be learned by me during the period of my employment.

2. In consideration of my employment by the Company and the compensation received by me from the Company from time to time, I hereby agree as follows:

(a) All Proprietary Information and all patents, copyrights, trade secret rights and other rights (including throughout, without limitation, any extensions, renewals, continuations or divisions of any of the foregoing) in connection therewith shall be the sole property of the Company. I hereby assign to the Company any rights I may have or acquire in such Proprietary Information. At all times, both during my employment by the Company and after its termination, I will keep in confidence and trust and will not use or disclose any Proprietary Information or anything relating to it without the written consent of the Company, except as may be necessary in the ordinary course of performing my duties to the Company.

(b) In the event of the termination of my employment by me or by the Company for any reason, I shall return all documents, records, apparatus, equipment and other physical property, or any reproduction of such property, whether or not pertaining to Proprietary Information, furnished to me by the Company or produced by myself or others in connection with my employment, to the Company immediately as and when requested by the Company.

(c) I will promptly disclose to the Company, or any persons designated by it, all "Inventions", which includes all improvements, inventions, formulas, ideas, works of authorship, processes, computer programs and software, software designs and documentation, algorithms, techniques, schematics, know-how data, whether or not patentable, made or conceived or reduced to practice or developed by me, either alone or jointly with others, during the term of my employment and for six (6) months thereafter. To the extent the Company does not have rights therein hereunder, such disclosure shall be received by the Company in confidence and does not extend the assignment made in Section (d) below.

(d) I agree that all Inventions which I make, conceive, reduce to practice or develop (in whole or in part, either alone or jointly with others) during my employment shall be the sole property of the Company to the maximum extent permitted by law, and, to the extent permitted by law, shall be "works made for hire". The Company shall be the sole owner of all patents, copyrights, trade secret rights, and other intellectual property or other rights in connection therewith. I hereby assign to the Company any rights I may have or acquire in such Inventions. I agree to perform, during and after my employment, all acts deemed necessary or desirable by the Company to permit and assist it, at the Company's expense, in obtaining and enforcing patents, copyrights, trade secret rights or other rights on such Inventions and/or any other Inventions I have or may at any time assign to the Company in any and all countries. Such acts may include, but are not limited to, execution or documents and assistance or cooperation in legal proceedings. With respect to any and all matters arising out of or relating to my employment or consultancy with the Company, I hereby irrevocably designate and appoint the Company and its duly authorized officers and agents, as my agents and attorneys-in-fact to act for and in my behalf and instead of me, to execute and file any applications or related filings and do all other lawfully permitted acts to further the prosecution and issuance of patents, copyrights, trade secret rights or other rights thereon with the same legal force and effect as if executed by me.

(e) I attach hereto a complete list of all Inventions or improvements to which I claim ownership and/or that I desire to remove from the operation of this Agreement, and I covenant that such list is complete. If no such list is attached to this Agreement I represent that I have no such Inventions and improvements at the time of signing this Agreement. I understand that any such list shall not contain information that breaches an obligation of confidentiality with a former employer.

(f) I represent that my performance of all the terms of this Agreement will not breach any agreement or obligation to keep in confidence proprietary information acquired by me in confidence or in trust prior to my employment by the Company. I have not entered into, and I agree I will not enter into, any agreement either written or oral in conflict herewith or in conflict with my employment with the Company.

3. The Company agrees that it will not request as part of my employment that I divulge or make use of proprietary information of any of my former employers that has commercial value to the former employer who developed such information.

4. I acknowledge that in the event of my breach or threatened breach of the terms of this Agreement, the Company shall not have an adequate remedy at law and shall, in addition to any other available rights and remedies, have the right to obtain injunctive relief, including without limitation specific performance.

5. This Agreement shall be effective as of the first day of my employment by the Company, and shall be binding upon me, my heirs, executors, assigns, and administrators, and shall inure to the benefit of the Company, it affiliates, subsidiaries, successors and assigns. This Agreement supersedes any agreement which may have been previously made or executed by me relating to this matter. This Agreement shall be governed by the laws of the State of North Carolina (exclusive of conflicts of law provisions), which shall be the venue for resolution of any dispute related to this Agreement. This Agreement or any part thereof shall not be modified, amended, or waived except by the written consent of the Company's Chief Executive Officer or Chief Operating Officer.

[Signature page follows]

Dated: _____, 2013

_____
Name: David Johnston

Accepted and Agreed to:

Company

By: _____
Name:
Title:

AMENDMENT NO. 1 TO EMPLOYMENT AGREEMENT

THIS AMENDMENT NO. 1 TO EMPLOYMENT AGREEMENT (the "Amendment No. 1"), made and entered into this 15th day of December, 2016, effective as of the 1st day of December, 2016 (the "Effective Date"), by and between Pharmaceutical Product Development, LLC, a Delaware limited liability company (the "Company"), and David Johnston (the "Executive").

WHEREAS, the Company and Executive are parties to that certain Employment Agreement dated May 22, 2013 (the "Employment Agreement"); and

WHEREAS, the parties desire to amend the Employment Agreement as set forth herein.

NOW, THEREFORE, that for and in consideration of the foregoing recitals, the mutual promises, covenants and conditions contained herein, and other good and valid consideration, the receipt and sufficiency of which is hereby acknowledged, the parties agree as follows:

1. Section 1 (c) of the Employment Agreement is hereby deleted in its entirety and replaced in full with the following:

"(c). Position and Duties. Executive shall serve as the Executive Vice President of Global Clinical Development of the Company based in the Company's Morrisville, North Carolina office, with such customary responsibilities, duties and authority normally associated with such position and as may from time to time be assigned to Executive by the Chief Operating Officer or the Board (as defined below). Executive shall devote substantially all of Executive's working time and efforts to the business and affairs of the Company (which shall include service to its subsidiaries and affiliates) and shall not engage in outside business activities (including serving on outside boards or committees) without the consent of the Board, provided that Executive shall be permitted to (i) manage Executive's personal, financial and legal affairs, (ii) participate in trade associations and (iii) serve on the board of directors of not-for-profit or tax-exempt charitable organizations, in each case, subject to Section 5 and the Proprietary Information Agreement (as defined below) and provided that such activities do not interfere with Executive's performance of Executive's duties and responsibilities hereunder. The Executive agrees to observe and comply with the rules and policies of the Company and its affiliates as adopted from time to time, in each case as amended from time to time, as delivered or made available to Executive (each, a "Policy")."

2. Section 2(a) of the Employment Agreement is hereby deleted in its entirety and replaced in full with the following:

"(a). Annual Base Salary. During the Term, Executive shall receive a base salary at a rate of $400,000 per annum (the "Annual Base Salary"), which shall be paid in accordance with the customary payroll practices of the Company. Such Annual Base Salary shall be reviewed and may be adjusted from time to time by the board of directors of the Company or an authorized committee thereof (in any case, the "Board"), provided that the Annual Base Salary may not be decreased without Executive's consent."

3. Section 2(b) of the Employment Agreement is hereby deleted in its entirety and replaced in full with the following:

"(b) Annual Bonus. Executive will be eligible to participate in an incentive program established by the Board. Executive's annual bonus compensation under such incentive program (the "Annual Bonus") shall be targeted at 50% of the Annual Base Salary paid to Executive during the applicable year (the "Target Bonus Amount"). The Annual Bonus shall be based 50% upon a Company-wide bonus pool to be determined by the Board based upon the achievement of Company performance metrics established by the Board in good faith and 50% upon achievement of individual qualitative factors as determined by the Board in its discretion. The payment of any Annual Bonus shall be subject to Executive's continued employment with the Company through the date of payment; provided however that if Executive's employment shall terminate (other than as a result of the Company's termination of the Executive's employment for Cause pursuant to Section 3(a)(iii) or as a result of the Executive's

resignation without Good Reason pursuant to Section 3(a(vi)) on or after January 1 of an applicable year, Executive shall be entitled to receive any earned but unpaid Annual Bonus for the prior year pursuant to this Section 2(b)."

4. Miscellaneous. Capitalized terms used in this Amendment No. 1 and not defined herein shall have the meaning given to them in the Employment Agreement. This Amendment No. 1 constitutes the entire agreement of the parties with respect to the subject matter hereof and supersedes all prior or contemporaneous agreements or understandings, whether written or oral, relating to the same. The Employment Agreement, as herein amended, shall continue in full force and effect.

IN WITNESS WHEREOF, the parties have executed this Amendment No. 1 as of the date first above written.

COMPANY

PHARMACEUTICAL PRODUCT DEVELOPMENT, LLC

By: /s/ William J. Sharbaugh

Name: William J. Sharbaugh
Title: Chief Operating Officer

EXECUTIVE

/s/ David Johnston David Johnston

Consented and agreed to by Parent:

JAGUAR HOLDING COMPANY I

By: /s/ B. Judd Hartman

Name: B. Judd Hartman

Title: General Counsel

Exhibit 10.27

EXECUTION VERSION

AMENDMENT NO. 2 TO EMPLOYMENT AGREEMENT

THIS AMENDMENT NO. 2 TO EMPLOYMENT AGREEMENT (the "Amendment No. 2"), made and entered into this 1st day of April, 2018 (the "Effective Date") by and between Pharmaceutical Product Development, LLC, a Delaware limited liability company and successor to Pharmaceutical Product Development, Inc. (the "Company"), and David M. Johnston (the "Executive").

WHEREAS, the Company and Executive are parties to that certain Employment Agreement dated as of May 22, 2013 as amended by that certain Amendment No. 1 to the Employment Agreement effective as of December 1, 2016 (the "Employment Agreement"); and

WHEREAS, the parties desire to further amend the Employment Agreement as set forth herein.

NOW, THEREFORE, that for and in consideration of the foregoing recitals, the mutual promises, covenants and conditions contained herein, and other good and valid consideration, the receipt and sufficiency of which is hereby acknowledged, the parties agree as follows:

1. Capitalized Terms. Capitalized terms used in this Amendment No. 2 and not defined herein shall have the meaning given to them in the Employment Agreement.

2. Amendment. The third sentence of Section 2(b) of the Employment Agreement be and hereby is deleted in its entirety and replaced in full by the following sentence:

"The Annual Bonus shall be based on the achievement of applicable Company and individual performance metrics set forth in or established under the Company's Senior Executive Incentive Compensation Plan, as it may be amended from time to time."

3. Entire Agreement. This Amendment No. 2 constitutes the entire agreement of the parties with respect to the subject matter hereof and supersedes all prior or contemporaneous agreements or understandings, whether written or oral, relating to the same.

4. Binding Effect. The Employment Agreement, as herein amended, shall continue in full force and effect.

IN WITNESS WHEREOF, the parties have executed this Amendment No. 2 as of the date first above written.

PHARMACEUTICAL PRODUCT DEVELOPMENT, LLC

By: /s/ B. Judd Hartman

Name: B. Judd Hartman

Title: Chief Administration Officer and General Counsel

/s/ David M. Johnston
David M. Johnston

Consented and agreed to by Parent:

EAGLE HOLDING COMPANY I

By: /s/ B. Judd Hartman

Name: B. Judd Hartman

Title: General Counsel

PERFORMANCE STOCK UNIT GRANT NOTICE
UNDER THE
PPD, INC.
2020 OMNIBUS INCENTIVE PLAN
(Performance-Based Vesting Award)

PPD, Inc. (the "Company"), pursuant to its 2020 Omnibus Incentive Plan, as it may be amended and restated from time to time (the "Plan"), hereby grants to the Participant set forth below a number of performance-based Restricted Stock Units ("Performance Stock Units") equal to the "Maximum Number of Performance Stock Units" set forth below. The Performance Stock Units are subject to all of the terms and conditions as set forth herein, in the Performance Stock Unit Agreement (attached hereto or previously provided to the Participant in connection with a prior grant), in Appendix A attached hereto, and in the Plan, all of which are incorporated herein in their entirety. Capitalized terms not otherwise defined herein shall have the meaning set forth in the Plan.

Participant: [*First Name*] [*Last Name*]

Date of Grant: [●]

Performance Period: January 1, 2021 to December 31, 2023

Target Number of
Performance Stock Units: [Target Number of Performance Stock Units Granted]

Maximum Number of
Performance Stock Units: [Maximum Number of Performance Stock Units Granted]

Vesting Schedule: The Performance Stock Units shall vest in accordance with Appendix A.

Dividend Equivalents: The Performance Stock Units shall be credited with dividend equivalent payments, as provided in Section 13(c)(iii) of the Plan.

* * *

THE UNDERSIGNED PARTICIPANT ACKNOWLEDGES RECEIPT OF THIS PERFORMANCE STOCK UNIT GRANT NOTICE, THE PERFORMANCE STOCK UNIT AGREEMENT AND THE PLAN, AND, AS AN EXPRESS CONDITION TO THE GRANT OF PERFORMANCE STOCK UNITS HEREUNDER, AGREES TO BE BOUND BY THE TERMS OF THIS PERFORMANCE STOCK UNIT GRANT NOTICE, THE PERFORMANCE STOCK UNIT AGREEMENT AND THE PLAN.

Participant[1]

_____
PPD, INC.

_____
By:
Title:

[1] To the extent that the Company has established, either itself or through a third-party plan administrator, the ability to accept this award electronically, such acceptance shall constitute the Participant's signature hereto.

PERFORMANCE STOCK UNIT AGREEMENT
UNDER THE
PPD, INC.
2020 OMNIBUS INCENTIVE PLAN

Pursuant to the Performance Stock Unit Grant Notice (the "Grant Notice") delivered to the Participant (as defined in the Grant Notice), and subject to the terms of this Performance Stock Unit Agreement (this "Performance Stock Unit Agreement") and the PPD, Inc. 2020 Omnibus Incentive Plan, as it may be amended and restated from time to time (the "Plan"), PPD, Inc. (the "Company") and the Participant agree as follows. Capitalized terms not otherwise defined herein shall have the same meaning as set forth in the Plan.

1. **Grant of Performance Stock Units**. Subject to the terms and conditions set forth herein and in the Plan, the Company hereby grants to the Participant the number of performance-based Restricted Stock Units (the "Performance Stock Units") equal to the "Maximum Number of Performance Stock Units" provided in the Grant Notice (with each Performance Stock Unit representing an unfunded, unsecured right to receive one share of Common Stock). The Company may make one or more additional grants of Performance Stock Units to the Participant under this Performance Stock Unit Agreement by providing the Participant with a new grant notice, which may also include any terms and conditions differing from this Performance Stock Unit Agreement to the extent provided therein. The Company reserves all rights with respect to the granting of additional Performance Stock Units hereunder and makes no implied promise to grant additional Performance Stock Units.

2. **Vesting**. Subject to the conditions contained herein and in the Plan, the Performance Stock Units shall vest as provided in the Grant Notice and Appendix A, attached hereto.

3. **Settlement of Performance Stock Units**. Subject to any election by the Committee pursuant to Section 8(d)(ii) of the Plan, the Company will deliver to the Participant, without charge, as soon as reasonably practicable (and, in any event, within two and one-half months) following the applicable vesting date, one share of Common Stock for each Performance Stock Unit (as adjusted under the Plan, as applicable) which becomes vested hereunder and such vested Performance Stock Unit shall be cancelled upon such delivery. The Company shall either (a) cause such shares of Common Stock to be credited to the Participant's account at the third party plan administrator or (b) deliver, or cause to be delivered, to the Participant a certificate or certificates therefor, registered in the Participant's name. Notwithstanding anything in this Performance Stock Unit Agreement to the contrary, the Company shall have no obligation to issue or transfer any shares of Common Stock as contemplated by this Performance Stock Unit Agreement unless and until such issuance or transfer complies with all relevant provisions of law and the requirements of any stock exchange on which the Company's shares of Common Stock are listed for trading.

4. **Treatment of Performance Stock Units Upon Termination**. The provisions of Section 8(c)(ii) of the Plan are incorporated herein by reference and made a part hereof.

5. **Company; Participant**.

(a) The term "Company" as used in this Performance Stock Unit Agreement with reference to employment shall include the Company and its Subsidiaries.

(b) Whenever the word "Participant" is used in any provision of this Performance Stock Unit Agreement under circumstances where the provision should logically be construed to apply to the executors, the administrators, or the person or persons to whom the Performance Stock Units may be transferred in accordance with Section 13(b) of the Plan, the word "Participant" shall be deemed to include such person or persons.

6. **Non-Transferability**. The Performance Stock Units are not transferable by the Participant provided, however, to the extent permitted by the Committee in accordance with Section 13(b) of the Plan,

Performance Stock Units may be transferred to Permitted Transferees. Except as otherwise provided herein, no assignment or transfer of the Performance Stock Units, or of the rights represented thereby, whether voluntary or involuntary, by operation of law or otherwise, shall vest in the assignee or transferee any interest or right herein whatsoever, but immediately upon such assignment or transfer the Performance Stock Units shall terminate and become of no further effect.

7. **Rights as Shareholder**. Subject to any dividend equivalent payments to be provided to the Participant in accordance with the Grant Notice and Section 13(c)(iii) of the Plan, the Participant or a Permitted Transferee of the Performance Stock Units shall have no rights as a shareholder with respect to any share of Common Stock underlying a Performance Stock Unit unless and until the Participant shall have become the holder of record or the beneficial owner of such share of Common Stock, and no adjustment shall be made for dividends or distributions or other rights in respect of such share of Common Stock for which the record date is prior to the date upon which the Participant shall become the holder of record or the beneficial owner thereof.

8. **Tax Withholding**. The provisions of Section 13(d) of the Plan are incorporated herein by reference and made a part hereof.

9. **Notice**. Every notice or other communication relating to this Performance Stock Unit Agreement between the Company and the Participant shall be in writing, which may include by electronic mail, and shall be mailed to or delivered to the party for whom it is intended at such address as may from time to time be designated by such party in a notice mailed or delivered to the other party as herein provided; provided that, unless and until some other address be so designated, all notices or communications by the Participant to the Company shall be mailed or delivered to the Company at its principal executive office, to the attention of the Company's General Counsel or its designee, and all notices or communications by the Company to the Participant may be given to the Participant personally or may be mailed to the Participant at the Participant's last known address, as reflected in the Company's records. Notwithstanding the above, all notices and communications between the Participant and any third-party plan administrator shall be mailed, delivered, transmitted or sent in accordance with the procedures established by such third-party plan administrator and communicated to the Participant from time to time.

10. **No Right to Continued Service**. This Performance Stock Unit Agreement does not confer upon the Participant any right to continue as an employee or service provider to the Company.

11. **Binding Effect**. This Performance Stock Unit Agreement shall be binding upon the heirs, executors, administrators and successors of the parties hereto.

12. **Waiver and Amendments**. Except as otherwise set forth in Section 12 of the Plan, any waiver, alteration, amendment or modification of any of the terms of this Performance Stock Unit Agreement shall be valid only if made in writing and signed by the parties hereto; provided, however, that any such waiver, alteration, amendment or modification is consented to on the Company's behalf by the Committee. No waiver by either of the parties hereto of their rights hereunder shall be deemed to constitute a waiver with respect to any subsequent occurrences or transactions hereunder unless such waiver specifically states that it is to be construed as a continuing waiver.

13. **Clawback/Forfeiture**. Notwithstanding anything to the contrary contained herein or in the Plan, if the Participant has engaged in or engages in any Detrimental Activity, then the Committee may, in its sole discretion, take actions permitted under the Plan, including: (a) canceling the Performance Stock Units, or (b) requiring that the Participant forfeit any gain realized on the disposition of any shares of Common Stock received upon the settlement of any Performance Stock Units, and repay such gain to the Company. In addition, if the Participant receives any amount in excess of what the Participant should have received under the terms of this Performance Stock Unit Agreement for any reason (including without limitation by reason of a financial restatement, mistake in calculations or other administrative error), then the Participant shall be required to repay any such excess amount to the Company. Without limiting the foregoing, all Performance Stock Units shall be subject to reduction, cancellation, forfeiture or recoupment to the extent necessary to comply with applicable law.

14. **Governing Law**. This Performance Stock Unit Agreement shall be construed and interpreted in accordance with the laws of the State of Delaware, without regard to the principles of conflicts of law thereof. Notwithstanding anything contained in this Performance Stock Unit Agreement, the Grant Notice or the Plan to the contrary, if any suit or claim is instituted by the Participant or the Company relating to this Performance Stock Unit Agreement, the Grant Notice or the Plan, the Participant hereby submits to the exclusive jurisdiction of and venue in the courts of Delaware.

15. **Plan**. The terms and provisions of the Plan are incorporated herein by reference. In the event of a conflict or inconsistency between the terms and provisions of the Plan and the provisions of this Performance Stock Unit Agreement (including the Grant Notice), the Plan shall govern and control.

16. **Section 409A**. It is intended that the Performance Stock Units granted hereunder shall be exempt from Section 409A of the Code pursuant to the "short-term deferral" rule applicable to such section, as set forth in the regulations or other guidance published by the Internal Revenue Service thereunder.

17. **Imposition of Other Requirements**. The Company reserves the right to impose other requirements on the Participant's participation in the Plan, on the Performance Stock Units and on any shares of Common Stock acquired under the Plan, to the extent the Company determines it is necessary or advisable for legal or administrative reasons, and to require the Participant to sign any additional agreements or undertakings that may be necessary to accomplish the foregoing.

18. **Electronic Delivery and Acceptance**. The Company may, in its sole discretion, decide to deliver any documents related to current or future participation in the Plan by electronic means. The Participant hereby consents to receive such documents by electronic delivery and agrees to participate in the Plan through an on-line or electronic system established and maintained by the Company or a third party designated by the Company.

19. **Entire Agreement**. This Performance Stock Unit Agreement, the Grant Notice, Appendix A and the Plan constitute the entire agreement of the parties hereto in respect of the subject matter contained herein and supersede all prior agreements and understandings of the parties, oral and written, with respect to such subject matter.

Appendix A

Provided that the Participant has not undergone a Termination as of the date the Committee certifies in writing the extent to which the Performance Condition set forth below has been met, the Performance Stock Units will become vested based on achievement of the Performance Condition with respect to the Performance Period as set forth below.

1. *Performance Condition*: The number of Performance Stock Units that vest shall be based on the achievement of the Performance Condition set forth below

Performance Condition	Threshold Level of Achievement	Target Level of Achievement	Maximum Level of Achievement
Adjusted EBITDA CAGR	5.0%	9.0%	13.0%

2. *Calculation of Number of Vested Performance Stock Units*: As soon as practicable following the completion of the Performance Period, the Committee shall determine, in its sole discretion, the achievement with respect to the Performance Condition and calculate the "Percentage of Target Award Earned" based on the percentages specified below.

The Performance Condition shall not be achieved and the Performance Stock Units shall not become vested until the Committee certifies in writing the extent to which the Performance Condition has been met. All determinations with respect to whether and the extent to which the Performance Condition has been achieved shall be made by the Committee in its sole discretion. In the event that actual performance does not meet the "Threshold"

level of achievement with respect to the Performance Condition as set forth in the table above, the "Percentage of Target Award Earned" shall be 0%. In the event that actual performance exceeds the "Maximum" level of achievement with respect to the Performance Condition as set forth in the table above, the "Percentage of Target Award Earned" shall be 200%.

If the actual performance with respect to the Performance Condition determined by the Committee is between (i) the "Threshold" and "Target" levels of achievement or (ii) the "Target" and "Maximum" levels of achievement, then the "Percentage of Target Award Earned" shall be determined by linear interpolation (and rounded to the nearest tenth of a whole percent). For example, (i) if the Committee determines that the Adjusted EBITDA CAGR for the Performance Period was 6.6%, then the "Percentage of Target Award Earned" would be equal to 70% (50% + ((6.6% – 5.0%)/ 0.4%) * 5%) and (ii) if the Committee determines that the Adjusted EBITDA CAGR for the Performance Period was 11.0%, then the "Percentage of Target Award Earned" would be equal to 150% (100% + ((11.0% – 9.0%) / 0.4%) * 10%).

Level of Achievement	Percentage of Target Award Earned
Below Threshold	0%
Threshold	50%
Target	100%
Maximum	200%
Above Maximum	200%

Any Performance Stock Units which do not become vested based on actual performance during the Performance Period shall be forfeited for no consideration therefor as of the date that the Committee certifies in writing the achievement with respect to the Performance Condition.

3. *Definitions*:

"Adjusted EBITDA" shall mean the Adjusted EBITDA which is publicly disclosed in (or otherwise calculated in a manner consistent with) the Company's earnings release for the applicable fiscal year financial results or as otherwise determined by the Audit Committee of the Board.

"Adjusted EBITDA CAGR" shall mean compounded annual growth rate with respect to Adjusted EBITDA, and shall be expressed as a percentage (rounded to the nearest tenth of a percent) and shall be calculated for a performance period using the following formula:

$$Adjusted\ EBITDA\ CAGR = \left(\frac{Ending\ Adjusted\ EBITDA}{Beginning\ Adjusted\ EBITDA}\right)^{1/3} - 1.0$$

"Beginning Adjusted EBITDA" shall mean Adjusted EBITDA with respect to the Company's fiscal year ended December 31, 2020.

"Ending Adjusted EBITDA" shall mean Adjusted EBITDA with respect to the Company's fiscal year ended December 31, 2023.

"Performance Period" shall mean the "Performance Period" specified on the Grant Notice.

AMENDMENT NO. 3 TO EMPLOYMENT AGREEMENT

THIS AMENDMENT NO. 3 TO EMPLOYMENT AGREEMENT (the "Amendment No. 3"), made and entered into this 23 day of February, 2021 and shall be effective as of February 1, 2021 (the "Effective Date"), by and between Pharmaceutical Product Development, LLC, a Delaware limited liability company (the "Company"), and David M. Johnston (the "Executive").

WHEREAS, the Company, Executive and Parent (solely for purposes of certain sections thereof as set forth therein) are parties to that certain Employment Agreement dated as of May 22, 2013, as amended pursuant to Amendment No. 1 to the Employment Agreement dated as of December 15, 2016, Amendment No. 2 dated as of April 1, 2018, and as assigned to and assumed by Parent pursuant to the Assignment and Assumption Agreement, dated as of May 11, 2017, by and among Jaguar Holding Company I, Parent, the Company and Executive (such employment agreement, as amended, assigned and assumed, the "Employment Agreement"); and

WHEREAS, the parties desire to further amend the Employment Agreement as set forth herein.

NOW, THEREFORE, that for and in consideration of the foregoing recitals, the mutual promises, covenants and conditions contained herein, and other good and valid consideration, the receipt and sufficiency of which is hereby acknowledged, the parties agree as follows:

1. Capitalized Terms. Capitalized terms used in this Amendment No. 3 and not defined herein shall have the meaning given to them in the Employment Agreement.

2. Amendment. Effective as of the Effective Date,

a. Section 1(c) of the Employment Agreement is deleted in its entirety and replaced in full by the following:

(c) Position and Duties. Executive shall serve as the Executive Vice President, Clinical Development of the Company based in the Company's Morrisville, North Carolina office, with such customary responsibilities, duties and authority normally associated with such position and as may from time to time be assigned to Executive by the Chief Operating Officer of the Company or the Board (as defined below). For clarity, Executive shall be responsible for the Company's operational delivery and financial performance of the following organizations: (1) global clinical development; (2) accelerated enrollment solutions and (3) early development services. Executive shall devote substantially all of Executive's working time and efforts to the business and affairs of the Company (which shall include service to its subsidiaries and affiliates) and shall not engage in outside business activities (including serving on outside boards or committees) without the consent of the Board, provided that Executive shall be permitted to (i) manage Executive's personal, financial and legal affairs, (ii) participate in trade associations and (iii) serve on the board of directors of not-for-profit or tax-exempt charitable organizations, in each case, subject to Section 5 and the Proprietary Information Agreement (as defined below) and provided that such activities do not interfere with Executive's performance of Executive's

duties and responsibilities hereunder. The Executive agrees to observe and comply with the rules and policies of the Company and its affiliates as adopted from time to time, in each case as amended from time to time, as delivered or made available to Executive (each, a "Policy").

b. Section 2(a) is deleted in its entirety and replaced in full by the following:

(a) Annual Base Salary. During the Term, Executive shall receive a base salary at a rate of $475,000 per annum (the "Annual Base Salary"), which shall be paid in accordance with the customary payroll practices of the Company. Such Annual Base Salary shall be reviewed and may be adjusted from time to time by the board of directors of the Company or an authorized committee thereof (in any case, the "Board"), provided that the Annual Base Salary may not be decreased without Executive's consent.

c. Section 2(b) of the Employment Agreement is deleted in its entirety and replaced in full by the following:

(b) Bonus. During the Term, Executive will be eligible to participate in the Company's Senior Executive Incentive Compensation Plan, as amended from time to time (the "SEICP"), or any successor plan. Executive's annual bonus compensation under the SEICP shall be targeted at 75% of the Annual Base Salary (the "Target Bonus Amount") and the annual bonus shall be based on the achievement of applicable Company and individual performance metrics set forth in or established under the SEICP. The payment of any bonus under this Section 2(b) (a "Bonus") shall be subject to Executive's continued employment with the Company through the date of payment; provided however that if Executive's employment shall terminate (other than as a result of the Company's termination of Executive's employment for Cause pursuant to Section 3(a)(iii) or as a result of Executive's resignation without Good Reason pursuant to Section 3(a)(vi) on or after January 1 of an applicable year, Executive shall be entitled to receive any earned but unpaid Bonus for the prior year pursuant to this Section 2(b).

3. Entire Agreement. This Amendment No. 3 constitutes the entire agreement of the parties with respect to the subject matter hereof and supersedes all prior or contemporaneous agreements or understandings, whether written or oral, relating to the same.

4. Binding Effect. The Employment Agreement, as herein amended, shall continue in full force and effect.

[Signature Page Follows]

IN WITNESS WHEREOF, the parties have executed this Amendment No. 3 as of the date first above written.

PHARMACEUTICAL PRODUCT DEVELOPMENT, LLC

By: /s/ David Simmons

Name: David Simmons

Title: Chief Executive Officer

/s/ David M. Johnston
David M. Johnston

Consented and agreed to by Parent:

PPD, INC. formerly known as EAGLE HOLDING COMPANY I

By: /s/ David Simmons

Name: David Simmons

Title: Chairman and Chief Executive Officer

AMENDMENT NO. 1 TO AMENDED AND RESTATED EMPLOYMENT AGREEMENT

THIS AMENDMENT NO. 1 TO AMENDED AND RESTATED EMPLOYMENT AGREEMENT (the "Amendment No. 1"), made and entered into this 23 day of February, 2021 and shall be effective as of February 1, 2021 (the "Effective Date"), by and between Pharmaceutical Product Development, LLC, a Delaware limited liability company (the "Company"), and Anshul Thakral (the "Executive").

WHEREAS, the Company, Executive and Parent (solely for purposes of certain sections thereof as set forth therein) are parties to that certain Amended and Restated Employment Agreement dated as of November 26, 2019 and effective as of November 1, 2019 (the "Employment Agreement"); and

WHEREAS, the parties desire to further amend the Employment Agreement as set forth herein.

NOW, THEREFORE, that for and in consideration of the foregoing recitals, the mutual promises, covenants and conditions contained herein, and other good and valid consideration, the receipt and sufficiency of which is hereby acknowledged, the parties agree as follows:

1. Capitalized Terms. Capitalized terms used in this Amendment No. 1 and not defined herein shall have the meaning given to them in the Employment Agreement.

2. Amendments. Effective as of the Effective Date,

a. Section 1(c) of the Employment Agreement is deleted in its entirety and replaced in full by the following:

(c) Position and Duties. During the Term, Executive shall serve as the Chief Commercial Officer and Executive Vice President, Peri/Post-Approval of the Company. Executive will be based in Armonk, New York, and shall report to the Chief Executive Officer of the Company. Executive shall be responsible for the following matters with respect to the Company's existing and potential global clinical development customers: (i) refining and operationalizing the commercial model; (ii) increasing the competitive decision volume and win rate; (iii) growing annual gross and net authorizations; (iv) ensuring operational delivery and customer satisfaction; (v) improving the gross margin of the backlog and the gross margin of completed projects and services; and (vi) undertaking such other responsibilities, duties and authority normally associated with such position and as may from time to time be assigned to Executive by the Chief Executive Officer of the Company or the Board (as defined below). For clarity, Executive acknowledges and agrees that as President of Evidera, Executive shall serve as the leader of (A) the consulting businesses of Evidera, Inc., a Delaware corporation and the Company's wholly-owned subsidiary, and (B) the Company's Peri- and Post-Approval business unit ("PPA") which includes, without limitation, (i) responsibility for achieving the annual authorizations target(s) for all interventional and non-interventional PPA trials and (ii) management and oversight of the project management function for such interventional and non-interventional PPA trials. Finally, Executive shall be responsible for overseeing the Company's

medical communications business. Executive shall devote substantially all of Executive's working time and efforts to the business and affairs of the Company (which shall include service to its parents, subsidiaries and affiliates) and shall not engage in outside business activities (including serving on outside boards or committees) without the consent of the Board, provided that Executive shall be permitted to (i) manage Executive's personal, financial and legal affairs, (ii) participate in trade associations and (iii) serve on the board of directors of not-for-profit or tax-exempt charitable organizations, in each case, subject to Section 5 and the Proprietary Information Agreement (as defined below) and provided that such activities do not interfere with Executive's performance of Executive's duties and responsibilities hereunder. The Executive agrees to observe and comply with the rules and policies of the Company and its affiliates as adopted from time to time, in each case as amended from time to time, as delivered or made available to Executive (each, a "Policy").

b. Section 2 (a) of the Employment Agreement deleted in its entirety and replaced in full by the following:

(a) Annual Base Salary. During the Term, Executive shall receive a base salary at a rate of $475,000 per annum (the "Annual Base Salary"), which shall be paid in accordance with the customary payroll practices of the Company. Such Annual Base Salary shall be reviewed and may be adjusted from time to time by the board of directors of the Company or an authorized committee thereof, (in any case, the "Board"), provided that the Annual Base Salary may not be decreased without Executive's consent.

3. Entire Agreement. This Amendment No. 1 constitutes the entire agreement of the parties with respect to the subject matter hereof and supersedes all prior or contemporaneous agreements or understandings, whether written or oral, relating to the same.

4. Binding Effect. The Employment Agreement, as herein amended, shall continue in full force and effect.

[Signature Page Follows]

IN WITNESS WHEREOF, the parties have executed this Amendment No. 1 as of the date first above written.

PHARMACEUTICAL PRODUCT DEVELOPMENT, LLC

By: /s/ David Simmons

Name: David Simmons

Title: Chief Executive Officer

/s/ Anshul Thakral
Anshul Thakral

Consented and agreed to by Parent:

PPD, INC. formerly known as EAGLE HOLDING COMPANY I

By: /s/ David Simmons

Name: David Simmons

Title: Chairman and Chief Executive Officer

Exhibit 21.1

Subsidiaries of Registrant

Name of Subsidiary	Jurisdiction of Incorporation or Organization
0972792 B.C. LTD	Canada
AbC.R.O., Inc.	Virginia
Access to Patients, LLC	Pennsylvania
Acurian, Inc.	Delaware
APBI Finance Corporation	Delaware
Applied Bioscience International, LLC	Delaware
ATP, LLC	North Carolina
CCBR (Beijing) Company Limited	China
CCBR Asia Ltd.	Hong Kong
CENTER FOR CLINICAL AND BASIC RESEARCH (BEIJING) LIMITED SHANGHAI BRANCH	China
Center for Clinical and Basic Research A/S	Denmark
Center for Clinical and Basic Research AS	Estonia
Center for Health and Medical Research -CCBR Hong Kong Limited	Hong Kong
Chelmsford Clinical Trials Unit Limited	United Kingdom
Clinical Technology Centre (International) Limited	United Kingdom
Clinical Technology Centre (Ireland) Limited	Ireland
Compass NeuroHealth, LLC	Florida
Compass Research North, LLC	Florida
Compass Research Phase 1, LLC	Florida
Compass Research, LLC	Florida
DDF Properties Estonia OU	Estonia
Eagle Holding Company II, LLC	Delaware
Evidera Access Consulting Ltd	United Kingdom
Evidera Holdings Ltd	United Kingdom
Evidera Ltd	United Kingdom
Evidera, Inc.	Delaware
Evidera, Inc. (UK)	United Kingdom
Evidera, LLC	Delaware
Excel PharmaStudies Inc.	Cayman Islands
Greenbird Limited	Cyprus
Jaguar (Barbados) Finance SRL	Barbados
Jaguar Holding Company I, LLC	Delaware
Jaguar Holding Company II	Delaware
Leicester Clinical Research Centre Limited	United Kingdom
Limited Liability Company Contract Research Organisation Innopharm	Ukraine
Limited Liability Company PPD Development (Smolensk)	Russia
Medical Centre Synexus Sofia EOOD	Bulgaria
Medici Global Ltd.	United Kingdom
MediciGroup, Inc.	Pennsylvania
Medimix Latam Pesquisa de Mercado Ltda	Brazil
NeuroHealth, Inc.	Florida
Optimal Research, LLC	Maryland
Panoply Health Limited	United Kingdom
Pharmaceutical Product Development South Africa (Proprietary) Limited - Uganda Branch	Uganda
Pharmaceutical Product Development South Africa (Proprietary) Ltd	South Africa

Pharmaceutical Product Development Spain SL	Spain
Pharmaceutical Product Development, LLC	Delaware
Pharmaco Investments, Inc.	Delaware
PPD (Netherlands) B.V.	Netherlands
PPD Aeronautics, LLC	North Carolina
PPD Argentina S.A.	Argentina
PPD Australia Pty Limited	Australia
PPD Bulgaria EOOD	Bulgaria
PPD Canada	Canada
PPD Colombia S.A.S	Colombia
PPD Corporate Foundation	Delaware
PPD CT Investments LLP	United Kingdom
PPD Czech Republic S.R.O.	Czech Republic
PPD Denmark, Filial af PPD Scandinavia AB, Sverige	Denmark
PPD Development (HK) Limited - Taiwan Branch	Taiwan
PPD Development (HK) Limited.	Hong Kong
PPD Development (S) Pte. Ltd - Indonesia	Indonesia
PPD Development (S) Pte. Ltd. (Philippines Branch)	Philippines
PPD Development (S) Pte. Ltd. - Malaysia branch	Malaysia
PPD Development (S) Pte. Ltd. - Singapore	Singapore
PPD Development (S) Pte. Ltd. Korea Branch	South Korea
PPD Development (Thailand) Co., Ltd.	Thailand
PPD Development Ireland Limited	Ireland
PPD Development, L.P.	Delaware
PPD do Brasil- Suporte a Pesquisa Clinica Ltd	Brazil
PPD France SAS	France
PPD Germany GmbH	Germany
PPD Germany GmbH & Co. KG	Germany
PPD Global Central Labs (S) Pte. Ltd. - Singapore	Singapore
PPD Global Central Labs BV	Belgium
PPD Global Central Labs, LLC	Kentucky
PPD Global Limited - Ghana Branch	Ghana
PPD Global Limited - Israel Branch	Israel
PPD Global Limited - Kenya Branch	Kenya
PPD Global Limited - New Zealand Branch	New Zealand
PPD Global Limited Merkezi İngiltere Türkiye İstanbul Şubesi	Turkey
PPD Global Limited Sucursal em Portugal	Portugal
PPD Global Ltd - Austria Branch	Austria
PPD Global Ltd - Greece Branch	Greece
PPD Global Ltd.	United Kingdom
PPD GP, LLC	Delaware
PPD Guatemala, S.A.	Guatemala
PPD Holdings, LLC	Delaware
PPD Hrvatska d.o.o.	Croatia
PPD Hungary Research and Development Ltd.	Hungary
PPD International Holdings (UK) Ltd	United Kingdom
PPD International Holdings GmbH	Germany
PPD International Holdings, Inc. y Compania Limitada	Chile
PPD International Holdings, LLC	Delaware
PPD International Holdings, LLC - Belgium Branch	Belgium
PPD International Investments Limited	United Kingdom
PPD Investigator Services, LLC	Delaware
PPD Italy S.r.l	Italy

PPD Laboratories (Suzhou) Co., Ltd.	China
PPD Latvia SIA	Latvia
PPD Mexico S.A. de C.V.	Mexico
PPD Peru S.A.C.	Peru
PPD Pharmaceutical Development (Beijing) Co., Ltd.	China
PPD Pharmaceutical Development (Beijing) Co., Ltd. Guangzhou Branch	China
PPD Pharmaceutical Development (Beijing) Co., Ltd. Shanghai Branch	China
PPD Pharmaceutical Development (Beijing) Co., Ltd. Shenyang Branch	China
PPD Pharmaceutical Development India Private Limited	India
PPD Pharmaceutical Development Japan K.K.	Japan
PPD Pharmaceutical Development Philippines Corp.	Philippines
PPD Pharmaceutical Development Vietnam Company Limited	Vietnam
PPD Poland Sp.Z o.o.	Poland
PPD Romania SRL	Romania
PPD Scandinavia AB	Sweden
PPD Serbia D.O.O. Beograd	Serbia
PPD Services, Inc.	North Carolina
PPD Slovak Republic s.r.o.	Slovak Republic
PPD Switzerland GmbH	Switzerland
PPD UK Holdings Limited	United Kingdom
PPD Vaccines and Biologics, LLC	Pennsylvania
PPD, Inc.	Delaware
PPD-SNBL K.K.	Japan
River Ventures, LLC	North Carolina
Shorecloud Corporation	Philippines
Synarc Inc.	Delaware
Synexus (Trustees) Limited	United Kingdom
Synexus Bulgaria EOOD	Bulgaria
Synexus Clinical Research Acquisitions Limited	United Kingdom
Synexus Clinical Research Finance Limited	United Kingdom
Synexus Clinical Research GmbH	Germany
Synexus Clinical Research Limited	United Kingdom
Synexus Clinical Research Midco No1 Limited	United Kingdom
Synexus Clinical Research Midco No2 Limited	United Kingdom
Synexus Clinical Research Midco No3 Limited	United Kingdom
Synexus Clinical Research Midco No4 Limited	United Kingdom
Synexus Clinical Research South Africa (Pty) Limited	South Africa
Synexus Clinical Research Topco Limited	United Kingdom
Synexus Clinical Research US, Inc.	Arizona
Synexus Czech s.r.o.	Czech Republic
Synexus Holding, LLC	Delaware
Synexus Limited	United Kingdom
Synexus Magyarorszg Egszsggyi Szolgltat Korltolt Felelssg Trsasg	Hungary
Synexus Polska Sp. Z o.o	Poland
Synexus Ukraine Limited Liability Company	Ukraine
The Compass Clinic, LLC	Florida
The Resident Representative Office of PPD Development (S) Pte. Ltd. in Ho Chi Minh City	Vietnam
UAB Center for Clinical and Basic Research	Lithuania
UAB DDF Properties LT	Lithuania
Wildcat Acquisition Holdings (UK) Limited	United Kingdom

Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in Registration Statement No. 333-236286 on Form S-8 of our report dated February 26, 2021, relating to the financial statements of PPD, Inc. appearing in this Annual Report on Form 10-K for the year ended December 31, 2020.

/s/ Deloitte & Touche LLP

Raleigh, North Carolina
February 26, 2021

Exhibit 23.2

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The General Partner
venBio Global Strategic Fund, L.P.:

We consent to the incorporation by reference in the registration statement (No. 333-236286) on Form S-8 of PPD, Inc., of our report dated February 24, 2021 with respect to the consolidated financial statements of venBio Global Strategic Fund, L.P. as of December 31, 2020, the related consolidated statements of operations, changes in partners' capital, and cash flows for the year then ended, and the related notes, which report appears in Exhibit 99.1 in the December 31, 2020 annual report on Form 10-K of PPD, Inc.

/s/ KPMG LLP

San Francisco, California
February 24, 2021

Exhibit 31.1

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER

PURSUANT TO SECTION 302 OF
THE SARBANES-OXLEY ACT OF 2002

I, David Simmons, certify that:

1. I have reviewed this Annual Report on Form 10-K of PPD, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

    a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

    b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

    c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

    d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant’s other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant’s auditors and the audit committee of the registrant’s board of directors (or persons performing the equivalent functions):

    a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant’s ability to record, process, summarize and report financial information; and

b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 26, 2021

By: /s/ David Simmons

David Simmons
Chief Executive Officer and Chairman
(Principal Executive Officer)

Exhibit 31.2

CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER

PURSUANT TO SECTION 302 OF
THE SARBANES-OXLEY ACT OF 2002

I, Christopher G. Scully, certify that:

1. I have reviewed this Annual Report on Form 10-K of PPD, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

    a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

    b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

    c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

    d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant’s other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant’s auditors and the audit committee of the registrant’s board of directors (or persons performing the equivalent functions):

    a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant’s ability to record, process, summarize and report financial information; and

b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 26, 2021

By: /s/ Christopher G. Scully

Christopher G. Scully
Executive Vice President and Chief Financial Officer
(Principal Financial Officer)

Exhibit 32.1

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of PPD, Inc. (the "Company") on Form 10-K for the period ended December 31, 2020 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, David Simmons, certify pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: February 26, 2021

By: /s/ David Simmons
David Simmons
Chief Executive Officer and Chairman
(Principal Executive Officer)

Exhibit 32.2

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of PPD, Inc. (the "Company") on Form 10-K for the period ended December 31, 2020 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Christopher G. Scully, certify pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: February 26, 2021

By: /s/ Christopher G. Scully
Christopher G. Scully
Executive Vice President and Chief Financial Officer
(Principal Financial Officer)

Exhibit 99.1

AUDITED CONSOLIDATED FINANCIAL STATEMENTS

venBio Global Strategic Fund, L.P.
December 31, 2020
With Independent Auditors' Report

venBio Global Strategic Fund, L.P.

Audited Consolidated Financial Statements

Year Ended December 31, 2020

Contents

Independent Auditors' Report

The Partners
venBio Global Strategic Fund, L.P.:

We have audited the accompanying consolidated financial statements of venBio Global Strategic Fund, L.P., which comprise the consolidated statement of assets, liabilities, and partners' capital, including the consolidated schedule of investments, as of December 31, 2020, and the related consolidated statements of operations, changes in partners' capital, and cash flows for the year then ended, and the related notes to the consolidated financial statements.

Management's Responsibility for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with U.S. generally accepted accounting principles; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of venBio Global Strategic Fund, L.P. as of December 31, 2020, and the results of its operations, changes in its partners' capital, and its cash flows for the year then ended in accordance with U.S. generally accepted accounting principles.

/s/ KPMG LLP

San Francisco, California
February 24, 2021

venBio Global Strategic Fund, L.P.

Consolidated Statement of Assets, Liabilities, and Partners' Capital

December 31, 2020

(Stated in United States Dollars)

Assets	
Investments, at fair value (cost of $43,732,697)	$ 399,838,172
Cash	29,661
Liquidation proceeds receivable	18,657
Due from affiliate	3,216
Total assets	$ 399,889,706
Partners' capital	
General Partner	$ 79,791,655
Limited Partners	320,098,051
Total partners' capital	$ 399,889,706

See accompanying notes.

venBio Global Strategic Fund, L.P.

Consolidated Schedule of Investments

December 31, 2020

(Stated in United States Dollars)

	Number of Shares	Cost	Fair Value
Investments (100.0% of partners' capital)			
Biotechnology (100.0%)			
Ireland (93.1%)			
ALX Oncology Holdings Inc.			
(fka ALX Oncology Limited) (93.1%) [1][4]			
Common Stock	4,431,600	$ 20,415,196	$ 372,453,822
Total Ireland		20,415,196	372,453,822
United States (6.9%)			
Aragon Pharmaceuticals (0.5%) [4]			
Milestone Earnouts		38,265	2,026,448
Metacrine, Inc. (5.6%) [2][4]			
Common Stock	3,059,123	20,162,688	22,241,354
Tallac Therapeutics, Inc. (fka Tollnine, Inc.) (0.8%) [3][4]			
Series Seed Preferred Stock	2,600,000	2,600,000	2,600,000
Series A Preferred Stock	645,684	516,548	516,548
		3,116,548	3,116,548
Total United States		23,317,501	27,384,350
Total investments, at fair value		$ 43,732,697	$ 399,838,172

Investment by type, at fair value	**Percentage of partners' capital**	**Cost**	**Fair value**
Total common stock	98.7%	$ 40,577,884	$ 394,695,176
Total preferred stock	0.8%	3,116,548	3,116,548
Total milestone earnouts	0.5%	38,265	2,026,448
Total investments, at fair value	100.0%	$ 43,732,697	$ 399,838,172

[1] Restricted public security, subject to Discount for Lack of Marketability. Acquisition date for ALX Oncology Holdings Inc. (fka ALX Oncology Limited) was March 2015.

[2] Restricted public security, subject to Discount for Lack of Marketability. Acquisition date for Metacrine, Inc. was January 2015.

[3] Acquisition date for Tallac Therapeutics, Inc. (fka Tollnine, Inc.) was May 2018.

[4] Security is non income producing insomuch as it has not paid interest or dividends in the last year.

See accompanying notes.

venBio Global Strategic Fund, L.P.

Consolidated Statement of Operations

Year Ended December 31, 2020

(Stated in United States Dollars)

Investment income		
Interest income	$	16,833
Expenses		
Management fees, net		603,239
Professional fees		279,200
Other expenses		12,802
Deal expenses		1,100
Total expenses		896,341
Net investment loss		(879,508)
Net realized gain on investments		3,854,849
Change in net unrealized gain on investments		317,203,451
Net gain on investments		321,058,300
Net income	$	320,178,792

See accompanying notes.

venBio Global Strategic Fund, L.P.

Consolidated Statement of Changes in Partners' Capital

Year Ended December 31, 2020

(Stated in United States Dollars)

	General Partner	Limited Partners	Total
Partners' capital, January 1, 2020	$ 22,847,923	$ 92,087,563	$ 114,935,486
Contributions	6,580	4,119,432	4,126,012
Distributions	(6,379,978)	(32,970,606)	(39,350,584)
Net income	3,234,138	316,944,654	320,178,792
Allocation of carried interest	60,082,992	(60,082,992)	-
Partners' capital, December 31, 2020	$ 79,791,655	$ 320,098,051	$ 399,889,706

See accompanying notes.

venBio Global Strategic Fund, L.P.

Consolidated Statement of Cash Flows

Year Ended December 31, 2020

(Stated in United States Dollars)

Operating activities		
Net income	$	320,178,792
Adjustments to reconcile net income to net cash provided by operating activities:		
Purchase of investment securities		(3,506,548)
Proceeds from sales of investments, net of liquidation proceeds receivable		31,042,807
Net realized gain on investments		(3,854,849)
Change in net unrealized gain on investments		(317,203,451)
Changes in operating assets and liabilities:		
Decrease in escrow receivable		4,053,407
Increase in due from affiliate		(3,216)
Decrease in due to affiliate		(29,078)
Net cash provided by operating activities		30,677,864
Financing activities		
Proceeds from capital contributions		4,126,012
Disbursements for capital distributions		(39,350,584)
Net cash used in financing activities		(35,224,572)
Net decrease in cash		(4,546,708)
Cash at beginning of year		4,576,369
Cash at end of year	$	29,661
Supplemental schedule of non-cash operating activities:		
Conversion of interest receivable into equity securities	$	16,548

See accompanying notes.

venBio Global Strategic Fund, L.P.

Notes to Consolidated Financial Statements

December 31, 2020
(*Stated in United States Dollars)*

1. The Partnership

venBio Global Strategic Fund, L.P. (the Partnership) was formed as a Cayman Islands exempted limited partnership dated March 25, 2010 and is regulated with the Cayman Islands Monetary Authority under the Private Funds Act, 2020. The general partner of the Partnership is venBio Global Strategic GP, L.P. (the General Partner). The primary investment objective of the Partnership is to make strategic equity and equity-related investments principally in entities operating in the life sciences industry and/or assets relating thereto and to achieve significant returns from its investments. The initial term of the Partnership shall continue until September 19, 2021, at which time the Partnership will commence winding up, unless its term is extended in accordance with the Partnership's limited partnership agreement (the Agreement). Refer to the Agreement for more information.

2. Summary of Significant Accounting Policies

Basis of Consolidated Presentation

The accompanying consolidated financial statements are presented in accordance with accounting principles generally accepted in the United States (U.S. GAAP) and are stated in U.S. dollars.

The consolidated financial statements include the accounts of venBio SPV (Cayman), Ltd. and venBio SPV, LLC. The Partnership owns 100% of venBio SPV (Cayman), Ltd. at December 31, 2020, and venBio SPV (Cayman), Ltd. owns 100% of venBio SPV, LLC at December 31, 2020. All significant intercompany balances and transactions have been eliminated in consolidation.

venBio SPV (Cayman), Ltd., a Cayman Islands exempted limited partnership, was established on November 9, 2012, to invest specifically in venBio SPV, LLC, a Delaware limited liability company. As of December 31, 2020, venBio SPV, LLC holds common stock in ALX Oncology Holdings Inc.

The Partnership and the consolidated entities each are an investment company and applies specialized accounting guidance as outlined in Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC) Topic 946 – *Investment Companies*. The General Partner has evaluated this guidance and has determined that each entity continues to meet the criteria to be classified as an investment company.

2. Summary of Significant Accounting Policies (continued)

Use of Estimates

The preparation of consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, including the fair value of investments, and disclosures of contingent assets and liabilities at the date of the financial statements and the reported amounts of income and expenses during the reporting period. Actual results could differ from those estimates.

Investments – Fair Value and Investment Transactions

The Partnership's investments are reflected on the consolidated statements of assets, liabilities, and partners' capital at fair value, with unrealized gains and losses resulting from changes in fair value reflected in the change in net unrealized gain on investments on the consolidated statement of operations. Foreign investments are valued and reported in U.S. dollar amounts at the valuation date. Fair value is the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date (i.e., the exit price). The fair values of the Partnership's investments are based on observable market prices when available. The Partnership values its investments, in the absence of observable market prices, using the valuation methodologies described below applied on a consistent basis. For some investments, little market activity may exist; management's determination of fair value is then based on the best information available in the circumstances and may incorporate management's own assumptions and involves a significant degree of management's judgment.

Investments in private operating companies consist of direct private preferred stock ("equity") investments. The transaction price, excluding transaction costs, is typically the Partnership's best estimate of fair value at inception. When evidence supports a change to the carrying value from the transaction price, adjustments are made to reflect expected exit values in the investment's principal market under current market conditions. Ongoing reviews by the Partnership's management are based on an assessment of trends in the performance of each underlying investment from the inception date through the most recent valuation date.

The valuation methodologies used to value private investments may include reference to valuations of comparable companies in the relevant asset class and/or reference to public market or private transactions where such transactions exist. Generally, these valuations are derived by multiplying a key performance metric of the investee company (e.g., revenue, sales) by the relevant valuation multiple observed for comparable companies or transactions. The valuation multiple is often adjusted for differences between the investment and the referenced comparables.

2. Summary of Significant Accounting Policies (continued)

Investments – Fair Value and Investment Transactions (continued)

Private investments may also be valued at cost, or the most recent financing price, for a period of time after an acquisition as the best indicator of fair value. The most recent financing may also be utilized in a back-solve option pricing model. The option pricing model treats a portfolio company's common stock and preferred stock as call options on the enterprise or equity value of the portfolio company, with exercise or strike prices based on the characteristics of each series or class of equity in the portfolio company's capital structure (e.g. liquidation preference of a given series of preferred stock). This method is sensitive to certain key assumptions, such as volatility and time to exit, that are not observable.

Restricted securities of public companies cannot be offered for sale to the public until the issuer complies with certain statutory or contractual requirements. The Partnership generally values restricted securities of public companies at a discount to similar publicly traded companies to the extent the restriction is specific to the security. The Partnership considers the type and duration of the restriction, but in no event does the valuation exceed the listed price on any major securities exchange.

Milestone earnouts are valued based on the risk-adjusted probability of receipt/completion of the milestone (also can be referred to as PTRS – Probability of Technical and Regulatory Success) and then Net Present Value (NPV) adjusted based on the future projected cash flows. These valuation methodologies involve a significant degree of management judgment and because of the inherent uncertainty of valuation, these estimated values may differ from the values that would have been used had a ready market for the securities existed, and the differences could be material.

U.S. GAAP establishes a hierarchal disclosure framework that prioritizes and ranks the level of market price observability used in measuring investments at fair value. Market price observability is affected by a number of factors, including the type of investment, the characteristics specific to the investment and the state of the market place, including the existence and transparency of transactions between market participants. Investments with readily available active quoted prices or for which fair value can be measured from actively quoted prices in an orderly market will generally have a higher degree of market price observability and a lesser degree of judgment used in measuring fair value. Investments measured and reported at fair value are classified and disclosed in one of the following categories:

> Level I – Quoted prices are available in active markets for identical investments as of the reporting date. The type of investments in Level I include listed equities and listed derivatives. The Partnership does not adjust the quoted price for these investments, even in situations where the Partnership holds a large position and a sale could reasonably affect the quoted price.

(Stated in United States Dollars)

2. Summary of Significant Accounting Policies (continued)

Investments – Fair Value and Investment Transactions (continued)

Level II – Pricing inputs are other than quoted prices in active markets, which are either directly or indirectly observable as of the reporting date, and fair value is determined through the use of models or other valuation methodologies. Investments that are generally included in this category include corporate bonds and loans, less liquid and restricted equity securities, and certain over-the-counter derivatives.

Level III – Pricing inputs are unobservable for the investment and include situations where there is little, if any, market activity for the investment. The inputs into the determination of fair value require significant management judgment or estimation. Investments that are included in this category generally include private investments of equity and/or debt, milestone earnouts, and general and limited partnership interests in corporate private equity.

In certain cases, the inputs used to measure fair value may fall into different levels of the fair value hierarchy. In such cases, an investment's level within the fair value hierarchy is based on the lowest level of input that is significant to the fair value measurement. The Partnership's assessment of the significance of a particular input to the fair value measurement in its entirety requires judgment, and it considers factors specific to the investment.

Fair Value Hierarchy

The following table summarizes the valuation of the Partnership's investments by the fair value hierarchy levels as of December 31, 2020:

	Fair Value			
Investments, at fair value	**Level I**	**Level II**	**Level III**	**Total**
Common stock	$ -	$ 394,695,176	$ -	$ 394,695,176
Preferred stock	-	-	3,116,548	3,116,548
Milestone earnouts	-	-	2,026,448	2,026,448
Total investments, at fair value	$ -	$ 394,695,176	$ 5,142,996	$ 399,838,172

(Stated in United States Dollars)

2. Summary of Significant Accounting Policies (continued)

Investments – Fair Value and Investment Transactions (continued)

Changes in Level III Measurements

The following table presents changes in assets classified in Level III of the fair value hierarchy during the year ended December 31, 2020 attributable to the following:

	Common stock	Preferred stock	Convertible Promissory Note
Purchases	$ -	$ 16,548	$ 500,000
Issues	$ -	$ -	$ -
Transfers into Level III	$ -	$ -	$ -
Transfers out of Level III	$ (15,196)	$ (42,755,180)	$ -

All transfers are recognized by the Partnership at the end of each reporting period. Transfers between Levels III and I or II relate to when an investment becomes quoted in an active market, which the Partnership has the ability to access.

Restricted Securities

On July 21, 2020, all of the ALX Oncology Holdings, Inc. preferred and private common stock held immediately prior to the IPO converted into public common stock. The shares commenced trading on the NASDAQ Global Select Market under the ticker symbol "ALXO" on July 17, 2020. The amount of this investment transferred out of Level III into Level II during the year ended December 31, 2020 totaled $20,415,196.

On September 18, 2020, all of the Metacrine, Inc. preferred stock held immediately prior to the IPO converted into common stock. The shares commenced trading on the NASDAQ Global Select Market under the ticker symbol "MTCR" on September 16, 2020. The amount of this investment transferred out of Level III into Level II during the year ended December 31, 2020 totaled $22,355,180.

As of December 31, 2020, total aggregate value of the Restricted Securities held on the Consolidated Schedule of Investments is $394,695,176. This represents 98.7% of Partners' Capital.

2. Summary of Significant Accounting Policies (continued)

Investments – Fair Value and Investment Transactions (continued)

Quantitative Information About Level III Fair Value Measurements

The Partnership's Level III investments, totaling $5,142,996, have been valued using unadjusted third-party transaction and quotations or unadjusted historical third party financial information. As a result, there were no unobservable inputs that have been internally developed by the Partnership in determining the fair value of investments as of December 31, 2020.

Investment transactions & related investment income

Security transactions are recorded on a trade-date basis, with the resulting unrealized gains and losses recorded in the consolidated statement of operations. For purposes of determining gains or losses on sales of investments, the cost of investments sold is determined on the specific-identification basis. Interest is recognized on an accrual basis and interest receivable is written off when deemed uncollectible.

Foreign Securities

The Partnership invests in the securities of foreign companies which involves special risks and considerations not typically associated with investing in U.S. companies. These risks include devaluation of currencies, less reliable information about issuers, different securities transaction clearance and settlement practices, and future adverse political and economic developments.

Moreover, securities of many foreign companies and the markets may be less liquid and their prices more volatile than those of securities of comparable U.S. companies.

Cash

Cash represents amounts held in accounts with financial institutions and is subject to credit risk to the extent those balances exceed applicable Federal Deposit Insurance Corporation and Securities Investor Protection Corporation limitations. The Partnership continuously monitors the credit standing of the institutions with which it conducts business.

2. Summary of Significant Accounting Policies (continued)

Foreign Currency Translation

Assets and liabilities denominated in foreign currencies are translated into U.S. dollar amounts at the date of valuation. Transactions denominated in foreign currencies, including purchases and sales of investments, and income and expenses, are translated into U.S. dollar amounts on the date of those transactions. Adjustments arising from foreign currency transactions are reflected in the statement of operations.

Market and Other Risk Factors

At December 31, 2020, the Partnership's portfolio of investments includes non-publicly and publicly traded securities. The non-publicly traded securities trade, if at all, in an illiquid marketplace. The portfolio is concentrated in the life sciences industry.

Risks affecting this industry include, but are not limited to, increased competition, rapid changes in technology, government actions, and changes in economic conditions. These risk factors could have a material effect on the ultimate realized value of the Partnership's investments.

Certain impacts from the COVID-19 outbreak may have a significant negative impact on the Partnership's operations and performance. These circumstances may continue for an extended period of time and may have an adverse impact on economic and market conditions. The ultimate economic fallout from the pandemic, and the long-term impact on economies, markets, industries and individual companies, are not known. The extent of the impact to the financial performance and the operations of the Partnership will depend on future developments, which are highly uncertain and cannot be predicted.

Professional Fees and Other Expenses

Professional fees and other expenses represent annual audit and tax fees, as well as legal and other miscellaneous expenses.

2. Summary of Significant Accounting Policies (continued)

Milestone Earnouts

Milestone earnouts refers to additional amounts from liquidated investments that management believes may be realized at future dates and/or as future events occur. The value of estimated milestone earnouts may vary based on the input assumptions, estimates and other items that require significant judgment or estimation by the General Partner. On a periodic basis, the General Partner will review and adjust, if necessary, the assumptions and estimates for the milestone earnout proceeds. While the milestone earnouts amounts reflect a concentration of risk, the General Partner considers counterparty performance risk in its determination of projected earnout amounts.

All counterparties to current earnout arrangements are deemed to represent reputable financially secure companies. The projected earnout amounts are included in investments on the accompanying consolidated statement of assets, liabilities, and partners' capital.

Aragon Pharmaceuticals, Inc. ("Aragon") entered into a merger agreement and was effectively acquired by Johnson & Johnson. Consideration for this agreement provided to the Aragon shareholders consisted of upfront cash proceeds, newly formed company Seragon Pharmaceuticals, Inc.'s common stock, escrow holdback and projected earnouts based on milestone achievements. Projected earnout payments are contingent upon completion of milestone achievements, with the final milestone having been achieved on December 4, 2020 and the remaining payment expected in January 2021. The Partnership's share of the remaining earnout milestone payment is valued at $2,026,448 at December 31, 2020.

Liquidation Proceeds Receivable

In December 2020, the liquidation of Solstice Biologics Limited, which the Partnership had previously written down in value, was completed. The Partnership's share of liquidation proceeds is expected to be received in early 2021 in euros and has been valued at $18,657 as of December 31, 2020.

2. Summary of Significant Accounting Policies (continued)

Income Taxes

No provision for U.S. federal, U.S. state, or local income taxes has been made in the accompanying consolidated financial statements, as partners are individually liable for their own tax payments. The Partnership performs an evaluation of tax positions taken or expected to be taken in the course of preparing the Partnership tax returns to determine whether the tax positions are "more-likely-than-not" of being sustained by the applicable tax authority. Tax positions not deemed to meet the more-likely-than-not threshold would be recorded as a tax expense. The Partnership has recorded no expense or liability related to any uncertain tax positions as of December 31, 2020. The Partnership does not expect that its assessment related to unrecognized tax benefits will materially change over the next 12 months. However, the Partnership's conclusions may be subject to review and adjustment at a later date based on factors including, but not limited to, the nexus of income among various tax jurisdictions; compliance with U.S. federal, U.S. state, and foreign tax laws; and changes in the administrative practices and precedents of the relevant taxing authorities. Generally, the Partnership is subject to income tax examinations by major taxing authorities for the last three years preceding the date of these consolidated financial statements. The Partnership recognizes interest and penalties, if any, as income tax expense in the consolidated statement of operations. During the year ended December 31, 2020, the Partnership did not accrue any interest and penalties.

3. Related-Party Transactions

The Partnership pays venBio Partners LLC (the Management Company) (or its designee) an annual management fee equal to the sum of all limited partner fee amounts for such annual period. The limited partner fee amount shall mean with respect to each annual period and each limited partner with a subscription: (i) less than $75 million, an amount equal to 2.2% of such limited partner's subscription; (ii) equal to or greater than $75 million, but less than $100 million, 2.0% of such limited partner's subscription; (iii) equal to or greater than $100 million but less than $125 million, 1.8% of such limited partner's subscription; and (iv) equal to or greater than $125 million, 1.5% of such limited partner's subscription.

(Stated in United States Dollars)

3. Related-Party Transactions (continued)

Beginning September 19, 2016, the first day following the expiration of the investment period, the percentage used in calculating each limited partner's management fees was reduced by 0.2% per annual period, with a minimum percentage threshold of 1.25%. Furthermore, if the limited partner's aggregate invested capital (as defined in the Agreement) is less than 50% of the limited partner's aggregate subscriptions, the management fee will be based on the aggregate invested capital as of the first day of each period for which the management fee is being paid rather than subscriptions. The percentage was reduced again in 2020, and all limited partners are now subject to the minimum percentage of 1.25%. For the year ended December 31, 2020, the management fee base is the aggregate limited partner's invested capital.

The gross management fee has been reduced each quarter by the deemed contributions made by the General Partner and receipt of any board compensation from portfolio companies, as follows:

	Year Ended December 31, 2020
Gross management fee	$ 629,559
Deemed contributions by General Partner	(26,320)
Net management fee	$ 603,239

The Partnership shall bear and be responsible for all expenses of the Partnership other than Ordinary Operating Expenses, defined below, which shall be borne by the Management Company. Ordinary Operating Expenses are defined as ordinary overhead and operating administrative expenses of the General Partner and the Management Company incurred in connection with maintaining and operating the General Partner's and the Management Company's office, including wages, salaries, rent, utilities and routine office equipment expense.

The Partnership considers the General Partner, their principal owners, members of management, as well as entities under common control, to be related parties to the Partnership.

The Partnership has amounts due from an affiliate for advances in the normal course of business. These amounts are noninterest bearing and due on demand.

Certain members of the General Partner serve on the Board of Directors of various portfolio companies in which the Partnership invests. Additionally, the Partnership may coinvest with other entities with the same General Partner as the Partnership. At December 31, 2020, the Partnership held investments with a fair value of $375,570,370 that were coinvested with an affiliated partnership.

4. Partners' Capital

The total committed capital of the Partnership is $178,787,879. The General Partner's capital commitment is $1,787,879. The General Partner's subscription shall be at all times equal to at least 1.0% of the aggregate subscriptions of the limited partners. In addition, limited partners have a $177,000,000 capital commitment in aggregate.

From time to time, each partner shall contribute its pro rata share to the Partnership, as shall be specified by the General Partner, to fund current or future portfolio investments or meet the expenses of the Partnership (including for the payment of any management fee expense, organizational expenses or indemnification obligations and a reserve for the Partnership's operating expenses).

Partnership contributions made by the partners and deemed contributions by the General Partner reduce the partners' unpaid capital obligation. $174,503,307 or 97.60% of capital commitments have been called by the Partnership and $1,240,700 have been deemed contributions by the General Partner since inception. As of December 31, 2020, the unfunded commitment balance is $3,043,872.

For all capital contributions made by the General Partner for the year ended December 31, 2020, only 20% of each contribution was required to be made in cash. The remaining portion of each installment of the General Partner's capital contributions was deemed to have been made in installments at the same time and in the same proportions as the capital contributions of the limited partners. The General Partner's deemed contributions were treated as capital contributions and reduce its unfunded subscription, but did not increase the General Partner's capital account balance. The limited partners' management fee was appropriately reduced by the amount of deemed contributions made by the General Partner.

For the year ended December 31, 2020, the limited partners' management fee was reduced by $26,320. The total deemed contributions for the year were $26,320.

Allocation of Profits and Losses

Generally, net gain and loss in respect of a portfolio investment initially shall be apportioned among the partners by their subscription divided by the aggregate subscriptions of all partners in respect of such portfolio investment.

4. Partners' Capital (continued)

Allocation of Profits and Losses (continued)

Net gain apportioned to the General Partner and each affiliated limited partner shall be allocated to the capital account of each partner, and net gain apportioned to each other limited partner shall be allocated as follows:

(a) First, 100% to the limited partner in an amount equal to the sum of (1) the net loss (if any) previously allocated to the limited partner and (2) the management fee expense previously allocated to the limited partner, in each case to the extent not offset by prior allocations of net gain made; and

(b) Thereafter, the limited partner's Carried Interest (as defined below) percentage to the General Partner and the remainder to the limited partner.

Net loss apportioned to the General Partner and each affiliated limited partner shall be allocated to the capital account of each partner, and net loss apportioned to each other limited partner shall be allocated as follows:

(a) First, to the limited partner and the General Partner, in proportion to their respective amounts of net gain (if any) previously allocated to the limited partner and the General Partner in respect of the limited partner and not offset by prior allocations of net loss, an amount of net loss equal to the aggregate amount of such net gain (if any); and

(b) Thereafter, to the limited partner.

The management fee shall be allocated to the limited partners in proportion to their respective limited partner fee amounts.

After the application of the above, the General Partner shall be entitled to receive a priority allocation of net gain that otherwise would have been allocated to the limited partners in the same proportions as allocations were made to the limited partners, in an amount equal to the amount of net gain that otherwise would have been allocated to the General Partner, provided that allocations of net gain will be made only if, and to the extent that, the available net gain as of such time is at least equal to such allocations.

4. Partners' Capital (continued)

Allocation of Profits and Losses (continued)

Limited partners with a subscription below $75 million are subject to a carried interest percentage of 20% and limited partners with a subscription of $75 million or greater are subject to a carried interest percentage of 17.5% (individually or in the aggregate "Carried Interest"). The General Partner's Carried Interest is determined after taking into account all net gains and net losses allocated to the General Partner on a cumulative basis since the inception of the Partnership. The amount of accrued Carried Interest, calculated from both realized and unrealized gains, allocated from the limited partners to the General Partner, is $60,082,992 for the year ended December 31, 2020 and $120,232,578 since inception. The Carried Interest to the General Partner will remain provisional until final liquidation of the Partnership.

Distributions

Distributable proceeds attributable to any portfolio investment initially shall be apportioned among the partners in proportion to their respective sharing percentages in respect of such portfolio investment. Distributable proceeds apportioned to the General Partner shall be distributed to the General Partner, and distributable proceeds apportioned to each other limited partner shall be distributed as follows:

(a) First, 100% to the limited partner until the cumulative amount distributed to the limited partner is equal to such limited partner's capital contributions; and

(b) Thereafter, the limited partner's Carried Interest percentage to the General Partner and the remainder to the limited partner.

As a result of the General Partner's Carried Interest, the Partnership shall distribute to the General Partner in cash, with respect to each fiscal year, either during the year or within 90 days thereafter, an amount (a "Tax Distribution") equal to the aggregate federal, state and local tax liability the partner would have incurred. During the year ended December 31, 2020, the Partnership made no Tax Distributions and made discretionary distributions of $39,350,584, resulting in total cumulative distributions of $413,092,738 as of December 31, 2020.

(Stated in United States Dollars)

5. Indemnification

Generally, no partner is individually liable for any debts or obligations of the Partnership in excess of its unpaid capital commitments. As described in the Agreement, the limited partners have indemnified the General Partner in connection with its activities on behalf of the Partnership. The Partnership has not had any claims or losses pursuant to these indemnifications and expects the risk of loss to be remote.

6. Financial Highlights

Financial highlights are calculated for limited partners taken as a whole. An individual investor's results may vary from these results based on different fee arrangements and the timing of capital transactions.

The internal rate of return of the limited partners since inception is net of Carried Interest allocations, if any, to the General Partner and was computed based on the actual dates of the capital contributions and distributions, and the aggregate limited partners' capital at the end of each measurement period.

The net investment loss ratio does not reflect any effect of Carried Interest to the General Partner.

Financial highlights for the year ended December 31, 2020, are as follows:

Internal rate of return, since inception:	
Beginning of year	74.39 %
End of year	76.87 %
Ratios to average limited partners' capital:	
Expenses before Carried Interest allocation	0.63 %
Allocation of Carried Interest	42.31 %
Expenses after Carried Interest allocation	42.94 %
Net investment loss	(0.62)%

7. Subsequent Events

These financial statements were approved by management and available for issuance on February 24, 2021. Subsequent events have been evaluated through this date. The Partnership received $2,066,978 for its share of the final Aragon milestone payment on January 22, 2021.

Exhibit 99.2

UNAUDITED CONSOLIDATED FINANCIAL STATEMENTS

venBio Global Strategic Fund, L.P.
December 31, 2019

venBio Global Strategic Fund, L.P.

Unaudited Consolidated Financial Statements

Year Ended December 31, 2019

Contents

venBio Global Strategic Fund, L.P.

Unaudited Consolidated Statement of Assets, Liabilities, and Partners' Capital

December 31, 2019

(Stated in United States Dollars)

Assets	
Investments, at fair value (cost of $67,432,764)	$ 106,334,788
Cash	4,576,369
Escrow receivable	4,053,407
Total assets	$ 114,964,564
Liabilities and partners' capital	
Liabilities:	
Due to affiliate	$ 29,078
Total liabilities	29,078
Partners' capital:	
General Partner	22,847,923
Limited Partners	92,087,563
Total partners' capital	114,935,486
Total liabilities and partners' capital	$ 114,964,564

See accompanying notes.

venBio Global Strategic Fund, L.P.

Unaudited Consolidated Schedule of Investments

December 31, 2019

(Stated in United States Dollars)

	Number of Shares	Cost	Fair Value
Investments (92.5% of partners' capital)			
Biotechnology (92.5%)			
Ireland (17.8%)			
ALX Oncology Limited (17.8%) [1][6]			
Series A Preferred Stock	20,400,000	$ 20,400,000	$ 20,400,000
Common Shares	3,040,000	15,196	15,196
		20,415,196	20,415,196
Solstice Biologics Limited (0.0%) [2][6]			
Series A-1 Preferred Stock	5,454,545	3,000,000	-
Series A-2 Preferred Stock	4,666,667	3,500,000	-
Series A-3 Preferred Stock	4,666,667	3,500,000	-
Series A-4 Preferred Stock	3,098,413	2,323,810	-
Series A-5 Preferred Stock	3,098,413	2,323,810	-
Common Units	900,000	900	-
Promissory Note		2,633,333	-
Warrants	3,511,111	6	-
		17,281,859	-
Total Ireland		37,697,055	20,415,196
United States (74.7%)			
Aragon Pharmaceuticals (1.5%) [6]			
Milestone Earnouts		38,265	1,721,604
Metacrine, Inc. (19.5%) [3][6]			
Series A Preferred Stock	10,000,000	10,000,000	14,000,000
Series B Preferred Stock	2,408,478	2,890,174	3,709,056
Series C Preferred Stock	2,020,054	4,282,514	4,646,124
		17,172,688	22,355,180

venBio Global Strategic Fund, L.P.

Unaudited Consolidated Schedule of Investments (continued)

December 31, 2019

(Stated in United States Dollars)

	Number of Shares	Cost	Fair Value
Investments (continued) (92.5% of partners' capital)			
Biotechnology (continued) (92.5%)			
United States (continued) (74.7%)			
Precision Biosciences, Inc. (51.4%) [4][6]			
Common Stock	4,265,141	$ 9,924,756	$ 59,242,808
Tollnine, Inc. (2.3%) [5][6]			
Series Seed Preferred Stock	2,600,000	2,600,000	2,600,000
Total United States		29,735,709	85,919,592
Total investments, at fair value		$ 67,432,764	$ 106,334,788

Investment by type, at fair value	Percentage of partners' capital	Cost	Fair value
Total common stock	51.5%	$ 9,940,852	$ 59,258,004
Total preferred stock	39.5%	54,820,308	45,355,180
Total milestone earnouts	1.5%	38,265	1,721,604
Total promissory notes	0.0%	2,633,333	-
Total warrants	0.0%	6	-
Total investments, at fair value	92.5%	$ 67,432,764	$ 106,334,788

[1] Acquisition date for ALX Oncology Limited was March 2015.

[2] Acquisition date for Solstice Biologics Limited was November 2012.

[3] Acquisition date for Metacrine, Inc. was January 2015.

[4] Marketable public security. Acquisition date for Precision Biosciences, Inc. was April 2015.

[5] Acquisition date for Tollnine, Inc. was May 2018.

[6] Security is non income producing insomuch as it has not paid interest or dividends in the last year.

See accompanying notes.

venBio Global Strategic Fund, L.P.

Unaudited Consolidated Statement of Operations

Year Ended December 31, 2019

(Stated in United States Dollars)

Expenses		
Management fees, net	$	703,010
Professional fees		245,522
Other expenses		85,175
Deal expenses		33,953
Total expenses		1,067,660
Net investment loss		(1,067,660)
Net realized gain on investments		7,714,053
Change in net unrealized gain on investments		2,129,303
Net gain on investments		9,843,356
Net income	$	8,775,696

See accompanying notes.

venBio Global Strategic Fund, L.P.

Unaudited Consolidated Statement of Changes in Partners' Capital

Year Ended December 31, 2019

(Stated in United States Dollars)

	General Partner	Limited Partners	Total
Partners' capital, January 1, 2019	$ 21,016,709	$ 81,910,869	$ 102,927,578
Contributions	5,750	3,226,462	3,232,212
Net income	94,786	8,680,910	8,775,696
Allocation of carried interest	1,730,678	(1,730,678)	-
Partners' capital, December 31, 2019	$ 22,847,923	$ 92,087,563	$ 114,935,486

See accompanying notes.

venBio Global Strategic Fund, L.P.

Unaudited Consolidated Statement of Cash Flows

Year Ended December 31, 2019

(Stated in United States Dollars)

Operating activities		
Net income	$	8,775,696
Adjustments to reconcile net income resulting from operations to net cash provided by operating activities:		
Purchases of investment securities		(2,400,000)
Proceeds from sale of investments		8,794,036
Net realized gain on investments		(7,714,053)
Change in net unrealized gain on investments		(2,129,303)
Changes in operating assets and liabilities:		
Increase in escrow receivable		(4,053,407)
Decrease in other assets		2,784
Increase in due to affiliate		26,784
Net cash provided by operating activities		1,302,537
Financing activities		
Proceeds from capital contributions		3,232,212
Net cash provided by financing activities		3,232,212
Net increase in cash		4,534,749
Cash at beginning of year		41,620
Cash at end of year	$	4,576,369

See accompanying notes.

venBio Global Strategic Fund, L.P.

Notes to Unaudited Consolidated Financial Statements

December 31, 2019
(Stated in United States Dollars)

1. The Partnership

venBio Global Strategic Fund, L.P. (the Partnership) was formed as a Cayman Islands exempted limited partnership dated March 25, 2010. The general partner of the Partnership is venBio Global Strategic GP, L.P. (the General Partner). The primary investment objective of the Partnership is to make strategic equity and equity-related investments principally in entities operating in the life sciences industry and/or assets relating thereto and to achieve significant returns from its investments. The initial term of the Partnership shall continue until September 19, 2021, at which time the Partnership will commence winding up, unless its term is extended in accordance with the Partnership's limited partnership agreement (the Agreement). Refer to the Agreement for more information.

2. Summary of Significant Accounting Policies

Basis of Consolidated Presentation

The accompanying consolidated financial statements are presented in accordance with accounting principles generally accepted in the United States (U.S. GAAP) and are stated in U.S. dollars.

The consolidated financial statements include the accounts of venBio SPV (Cayman), Ltd. and venBio SPV, LLC. The Partnership owns 100% of venBio SPV (Cayman), Ltd. at December 31, 2019, and venBio SPV (Cayman), Ltd. owns 100% of venBio SPV, LLC at December 31, 2019. All significant intercompany balances and transactions have been eliminated in consolidation.

venBio SPV (Cayman), Ltd., a Cayman Islands exempted limited partnership, was established on November 9, 2012, to invest specifically in venBio SPV, LLC, a Delaware limited liability company. As of December 31, 2019, venBio SPV, LLC holds common shares in ALX Oncology Limited and Solstice Biologics Limited.

The Partnership and the consolidated entities each are an investment company and applies specialized accounting guidance as outlined in Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC) Topic 946 – Investment Companies. The General Partner has evaluated this guidance and has determined that each entity continues to meet the criteria to be classified as an investment company.

2. Summary of Significant Accounting Policies (continued)

Use of Estimates

The preparation of consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, including the fair value of investments, and disclosures of contingent assets and liabilities at the date of the financial statements and the reported amounts of income and expenses during the reporting period. Actual results could differ from those estimates.

Investments – Fair Value and Investment Transactions

The Partnership's investments are reflected on the consolidated statements of assets, liabilities, and partners' capital at fair value, with unrealized gains and losses resulting from changes in fair value reflected in the change in net unrealized gain on investments on the consolidated statement of operations. Foreign investments are valued and reported in U.S. dollar amounts at the valuation date. Fair value is the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date (i.e., the exit price). The fair values of the Partnership's investments are based on observable market prices when available. The Partnership values its investments, in the absence of observable market prices, using the valuation methodologies described below applied on a consistent basis. For some investments, little market activity may exist; management's determination of fair value is then based on the best information available in the circumstances and may incorporate management's own assumptions and involves a significant degree of management's judgment.

Investments in private operating companies consist of direct private common and preferred stock (together or individually "equity") investments. The transaction price, excluding transaction costs, is typically the Partnership's best estimate of fair value at inception. When evidence supports a change to the carrying value from the transaction price, adjustments are made to reflect expected exit values in the investment's principal market under current market conditions. Ongoing reviews by the Partnership's management are based on an assessment of trends in the performance of each underlying investment from the inception date through the most recent valuation date.

The valuation methodologies used to value private investments may include reference to valuations of comparable companies in the relevant asset class and/or reference to public market or private transactions where such transactions exist. Generally, these valuations are derived by multiplying a key performance metric of the investee company (e.g., revenue, sales) by the relevant valuation multiple observed for comparable companies or transactions. The valuation multiple is often adjusted for differences between the investment and the referenced comparables.

2. Summary of Significant Accounting Policies (continued)

Investments – Fair Value and Investment Transactions (continued)

Private investments may also be valued at cost, or the most recent financing price, for a period of time after an acquisition as the best indicator of fair value. The most recent financing may also be utilized in a back-solve option pricing model. The option pricing model treats a portfolio company's common stock and preferred stock as call options on the enterprise or equity value of the portfolio company, with exercise or strike prices based on the characteristics of each series or class of equity in the portfolio company's capital structure (e.g. liquidation preference of a given series of preferred stock). This method is sensitive to certain key assumptions, such as volatility and time to exit, that are not observable.

Milestone earnouts are valued based on the risk-adjusted probability of receipt/completion of the milestone (also can be referred to as PTRS – Probability of Technical and Regulatory Success) and then Net Present Value (NPV) adjusted based on the future projected cash flows. These valuation methodologies involve a significant degree of management judgment and because of the inherent uncertainty of valuation, these estimated values may differ from the values that would have been used had a ready market for the securities existed, and the differences could be material.

U.S. GAAP establishes a hierarchal disclosure framework that prioritizes and ranks the level of market price observability used in measuring investments at fair value. Market price observability is affected by a number of factors, including the type of investment, the characteristics specific to the investment and the state of the market place, including the existence and transparency of transactions between market participants. Investments with readily available active quoted prices or for which fair value can be measured from actively quoted prices in an orderly market will generally have a higher degree of market price observability and a lesser degree of judgment used in measuring fair value. Investments measured and reported at fair value are classified and disclosed in one of the following categories:

Level I – Quoted prices are available in active markets for identical investments as of the reporting date. The type of investments in Level I include listed equities and listed derivatives. The Partnership does not adjust the quoted price for these investments, even in situations where the Partnership holds a large position and a sale could reasonably affect the quoted price.

Level II – Pricing inputs are other than quoted prices in active markets, which are either directly or indirectly observable as of the reporting date, and fair value is determined through the use of models or other valuation methodologies. Investments that are generally included in this category include corporate bonds and loans, less liquid and restricted equity securities and certain over-the-counter derivatives.

(Stated in United States Dollars)

2. Summary of Significant Accounting Policies (continued)

Investments – Fair Value and Investment Transactions (continued)

> Level III – Pricing inputs are unobservable for the investment and include situations where there is little, if any, market activity for the investment. The inputs into the determination of fair value require significant management judgment or estimation. Investments that are included in this category generally include private investments of equity and/or debt, milestone earnouts, general and limited partnership interests in corporate private equity.

In certain cases, the inputs used to measure fair value may fall into different levels of the fair value hierarchy. In such cases, an investment's level within the fair value hierarchy is based on the lowest level of input that is significant to the fair value measurement. The Partnership's assessment of the significance of a particular input to the fair value measurement in its entirety requires judgment, and it considers factors specific to the investment.

Fair Value Hierarchy

The following table summarizes the valuation of the Partnership's investments by the fair value hierarchy levels as of December 31, 2019:

	Fair Value			
Investments, at fair value	**Level I**	**Level II**	**Level III**	**Total**
Common stock	$ 59,242,808	$ -	$ 15,196	$ 59,258,004
Preferred stock	-	-	45,355,180	45,355,180
Milestone earnouts	-	-	1,721,604	1,721,604
Total investments, at fair value	$ 59,242,808	$ -	$ 47,091,980	$ 106,334,788

(Stated in United States Dollars)

2. Summary of Significant Accounting Policies (continued)

Investments – Fair Value and Investment Transactions (continued)

Changes in Level III Measurements

The following table presents changes in assets classified in Level III of the fair value hierarchy during the year ended December 31, 2019 attributable to the following:

	Common stock	Preferred stock	Milestone earnouts
Purchases	$ -	$ 1,600,000	$ -
Issues	$ -	$ -	$ -
Transfers into Level III	$ -	$ -	$ -
Transfers out of Level III	$ -	$ (45,080,000)	$ -

All transfers are recognized by the Partnership at the end of each reporting period. Transfers between Levels III and I or II relate to when an investment becomes quoted in an active market, which the Partnership has the ability to access. On April 1, 2019, all of the Precision Biosciences, Inc. preferred stock held immediately prior to the IPO converted into common stock. The shares commenced trading on the NASDAQ Global Select Market under the ticker symbol "DTIL" on March 28, 2019. As of December 31, 2019, these shares are not subject to any restrictions. The amount of investments transferred out of Level III into Level I during the year ended December 31, 2019 totaled $45,080,000.

Investment transactions & related investment income

Security transactions are recorded on a trade-date basis, with the resulting unrealized gains and losses recorded in the consolidated statement of operations. For purposes of determining gains or losses on sales of investments, the cost of investments sold is determined on the specific-identification basis.

(Stated in United States Dollars)

2. Summary of Significant Accounting Policies (continued)

Investments – Fair Value and Investment Transactions (continued)

Quantitative Information About Level III Fair Value Measurements

Information about significant inputs used in fair value measurements categorized within Level III instruments is shown below.

Type of Security	Fair Value at December 31, 2019	Valuation Technique(s)	Unobservable Input(s)	Range
Milestone earnouts	$ 1,721,604	PTRS/Discounted cash flow	Discount rate	8.00%
			Probability	90.0%
			Payout period	0.75 year
Equity securities	$ 22,355,180	Option pricing model	Risk free rate	1.62%
			Industry volatility	70.0%
			Estimated time to exit	3 years
			Market equity adjustment	7.0%

The remaining Level III securities, including preferred shares and common stock, totaling $23,015,196 are valued using either recent private market transactions without adjustment or other relevant data points. Quantitative unobservable inputs for such valuations were not developed or adjusted by the Partnership.

Foreign Securities

The Partnership invests in the securities of foreign companies which involves special risks and considerations not typically associated with investing in U.S. companies. These risks include devaluation of currencies, less reliable information about issuers, different securities transaction clearance and settlement practices, and future adverse political and economic developments.

Moreover, securities of many foreign companies and the markets may be less liquid and their prices more volatile than those of securities of comparable U.S. companies.

Cash

Cash represents amounts held in accounts with financial institutions and is subject to credit risk to the extent those balances exceed applicable Federal Deposit Insurance Corporation and Securities Investor Protection Corporation limitations. The Partnership continuously monitors the credit standing of the institutions with which it conducts business.

2. Summary of Significant Accounting Policies (continued)

Market and Other Risk Factors

At December 31, 2019, the Partnership's portfolio of investments includes non-publicly traded securities. The non-publicly traded securities trade, if at all, in an illiquid marketplace. The portfolio is concentrated in the life sciences industry. Risks affecting this industry include, but are not limited to, increased competition, rapid changes in technology, government actions, and changes in economic conditions. These risk factors could have a material effect on the ultimate realized value of the Partnership's investments.

Professional Fees and Other Expenses

Professional fees and other expenses represent annual audit and tax fees, as well as legal and other miscellaneous expenses.

Milestone Earnouts

Milestone earnouts refers to additional amounts from liquidated investments that management believes may be realized at future dates and/or as future events occur. The value of estimated milestone earnouts may vary based on the input assumptions, estimates and other items that require significant judgment or estimation by the General Partner. On a periodic basis, the General Partner will review and adjust, if necessary, the assumptions and estimates for the milestone earnout proceeds. While the milestone earnouts amounts reflect a concentration of risk, the General Partner considers counterparty performance risk in its determination of projected earnout amounts.

All counterparties to current earnout arrangements are deemed to represent reputable financially secure companies. The projected earnout amounts are included in investments on the accompanying consolidated statement of assets, liabilities, and partners' capital.

Aragon Pharmaceuticals, Inc. ("Aragon") entered into a merger agreement and was effectively acquired by Johnson & Johnson. Consideration for this agreement provided to the Aragon shareholders consisted of upfront cash proceeds, newly formed company Seragon Pharmaceuticals, Inc.'s common stock, escrow holdback and projected earnouts based on milestone achievements. Projected earnout payments are contingent upon completion of milestone achievements with one remaining payment expected in 2020. The Partnership's share of the maximum gross remaining earnout milestone payment is approximately $2,000,000 and is valued at $1,721,604 at December 31, 2019.

2. Summary of Significant Accounting Policies (continued)

Escrow Receivable

During 2019, Aragon completed a milestone achievement related to EU First Approval. As of December 31, 2019, the entire proceeds of $4,053,407, related to the milestone achievement is in escrow.

Income Taxes

No provision for U.S. federal, U.S. state, or local income taxes has been made in the accompanying consolidated financial statements, as partners are individually liable for their own tax payments. The Partnership performs an evaluation of tax positions taken or expected to be taken in the course of preparing the Partnership tax returns to determine whether the tax positions are "more-likely-than-not" of being sustained by the applicable tax authority. Tax positions not deemed to meet the more-likely-than-not threshold would be recorded as a tax expense. The Partnership has recorded no expense or liability related to any uncertain tax positions as of December 31, 2019. The Partnership does not expect that its assessment related to unrecognized tax benefits will materially change over the next 12 months. However, the Partnership's conclusions may be subject to review and adjustment at a later date based on factors including, but not limited to, the nexus of income among various tax jurisdictions; compliance with U.S. federal, U.S. state, and foreign tax laws; and changes in the administrative practices and precedents of the relevant taxing authorities. Generally, the Partnership is subject to income tax examinations by major taxing authorities for the last three years preceding the date of these consolidated financial statements. The Partnership recognizes interest and penalties, if any, as income tax expense in the consolidated statement of operations. During the year ended December 31, 2019, the Partnership did not accrue any interest and penalties.

3. Related-Party Transactions

The Partnership pays venBio Partners LLC (the Management Company) (or its designee) an annual management fee equal to the sum of all limited partner fee amounts for such annual period. The limited partner fee amount shall mean with respect to each annual period and each limited partner with a subscription: (i) less than $75 million, an amount equal to 2.2% of such limited partner's subscription; (ii) equal to or greater than $75 million, but less than $100 million, 2.0% of such limited partner's subscription; (iii) equal to or greater than $100 million but less than $125 million, 1.8% of such limited partner's subscription; and (iv) equal to or greater than $125 million, 1.5% of such limited partner's subscription.

(Stated in United States Dollars)

3. Related-Party Transactions (continued)

Beginning September 19, 2016, the first day following the expiration of the investment period, the percentage used in calculating each limited partner's management fees was reduced by 0.2% per annual period, with a minimum percentage threshold of 1.25%. Furthermore, if the limited partner's aggregate invested capital (as defined in the Agreement) is less than 50% of the limited partner's aggregate subscriptions, the management fee will be based on the aggregate invested capital as of the first day of each period for which the management fee is being paid rather than subscriptions. The percentage was reduced by an additional 0.2% in 2019, subject to the minimum percentage threshold above. For the year ended December 31, 2019, the management fee base is the aggregate limited partner's invested capital.

The gross management fee has been reduced each quarter by the deemed contributions made by the General Partner and receipt of any board compensation from portfolio companies, as follows:

	Year Ended December 31, 2019
Gross management fee	$ 726,010
Deemed contributions by General Partner	(23,000)
Net management fee	$ 703,010

The Partnership shall bear and be responsible for all expenses of the Partnership other than Ordinary Operating Expenses, defined below, which shall be borne by the Management Company. Ordinary Operating Expenses are defined as ordinary overhead and operating administrative expenses of the General Partner and the Management Company incurred in connection with maintaining and operating the General Partner's and the Management Company's office, including wages, salaries, rent, utilities and routine office equipment expense.

Certain members of the General Partner serve on the Board of Directors of various portfolio companies in which the Partnership invests. Additionally, the Partnership may coinvest with other entities with the same General Partner as the Partnership. At December 31, 2019, the Partnership held an investment with a fair value of $20,415,196 that was coinvested with an affiliated Partnership.

4. Capital Accounts

The total committed capital of the Partnership is $178,787,879. The General Partner's capital commitment is $1,787,879. The General Partner's subscription shall be at all times equal to at least 1.0% of the aggregate subscriptions of the limited partners. In addition, limited partners have a $177,000,000 capital commitment in aggregate.

From time to time, each partner shall contribute its pro rata share to the Partnership, as shall be specified by the General Partner, to fund current or future portfolio investments or meet the expenses of the Partnership (including for the payment of any management fee expense, organizational expenses or indemnification obligations and a reserve for the Partnership's operating expenses).

Partnership contributions made by the partners and deemed contributions by the General Partner reduce the partners' unpaid capital obligation. $170,377,295 or 95.30% of capital commitments have been called by the Partnership and $1,214,380 have been deemed contributions by the General Partner since inception. As of December 31, 2019, the unfunded commitment balance is $7,196,204.

For all capital contributions made by the General Partner for the year ended December 31, 2019, only 20% of each contribution was required to be made in cash. The remaining portion of each installment of the General Partner's capital contributions was deemed to have been made in installments at the same time and in the same proportions as the capital contributions of the limited partners. The General Partner's deemed contributions were treated as capital contributions and reduce its unfunded subscription, but did not increase the General Partner's capital account balance. The limited partners' management fee was appropriately reduced by the amount of deemed contributions made by the General Partner.

For the year ended December 31, 2019, the limited partners' management fee was reduced by $23,000. The total deemed contributions for the year were $23,000.

Allocation of Profits and Losses

Generally, net gain and loss in respect of a portfolio investment initially shall be apportioned among the partners by their subscription divided by the aggregate subscriptions of all partners in respect of such portfolio investment.

Net gain apportioned to the General Partner and each affiliated limited partner shall be allocated to the capital account of each partner, and net gain apportioned to each other limited partner shall be allocated as follows:

4. Capital Accounts (continued)

Allocation of Profits and Losses (continued)

(a) First, 100% to the limited partner in an amount equal to the sum of (1) the net loss (if any) previously allocated to the limited partner and (2) the management fee expense previously allocated to the limited partner, in each case to the extent not offset by prior allocations of net gain made; and

(b) Thereafter, the limited partner's Carried Interest (as defined below) percentage to the General Partner and the remainder to the limited partner.

Net loss apportioned to the General Partner and each affiliated limited partner shall be allocated to the capital account of each partner, and net loss apportioned to each other limited partner shall be allocated as follows:

(a) First, to the limited partner and the General Partner, in proportion to their respective amounts of net gain (if any) previously allocated to the limited partner and the General Partner in respect of the limited partner and not offset by prior allocations of net loss, an amount of net loss equal to the aggregate amount of such net gain (if any); and

(b) Thereafter, to the limited partner.

The management fee shall be allocated to the limited partners in proportion to their respective limited partner fee amounts.

After the application of the above, the General Partner shall be entitled to receive a priority allocation of net gain that otherwise would have been allocated to the limited partners in the same proportions as allocations were made to the limited partners, in an amount equal to the amount of net gain that otherwise would have been allocated to the General Partner, provided that allocations of net gain will be made only if, and to the extent that, the available net gain as of such time is at least equal to such allocations.

4. Capital Accounts (continued)

Allocation of Profits and Losses (continued)

Limited partners with a subscription below $75 million are subject to a carried interest percentage of 20% and limited partners with a subscription of $75 million or greater are subject to a carried interest percentage of 17.5% (individually or in the aggregate "Carried Interest"). The General Partner's Carried Interest is determined after taking into account all net gains and net losses allocated to the General Partner on a cumulative basis since the inception of the Partnership. The amount of accrued Carried Interest, calculated from both realized and unrealized gains, allocated from the limited partners to the General Partner, is $1,730,678 for the year ended December 31, 2019 and $60,149,586 since inception. The Carried Interest to the General Partner will remain provisional until final liquidation of the Partnership.

Distributions

Distributable proceeds attributable to any portfolio investment initially shall be apportioned among the partners in proportion to their respective sharing percentages in respect of such portfolio investment. Distributable proceeds apportioned to the General Partner shall be distributed to the General Partner, and distributable proceeds apportioned to each other limited partner shall be distributed as follows:

(a) First, 100% to the limited partner until the cumulative amount distributed to the limited partner is equal to such limited partner's capital contributions; and

(b) Thereafter, the limited partner's Carried Interest percentage to the General Partner and the remainder to the limited partner.

As a result of the General Partner's Carried Interest, the Partnership shall distribute to the General Partner in cash, with respect to each fiscal year, either during the year or within 90 days thereafter, an amount (a "Tax Distribution") equal to the aggregate federal, state and local tax liability the partner would have incurred. During the year ended December 31, 2019, the Partnership neither made Tax Distributions nor discretionary distributions. Total cumulative distributions of the Partnership are $373,742,154 as of December 31, 2019.

5. Indemnification

Generally, no partner is individually liable for any debts or obligations of the Partnership in excess of its unpaid capital commitments. As described in the Agreement, the limited partners have indemnified the General Partner in connection with its activities on behalf of the Partnership. The Partnership has not had any claims or losses pursuant to these indemnifications and expects the risk of loss to be remote.

6. Financial Highlights

Financial highlights are calculated for limited partners taken as a whole. An individual investor's results may vary from these results based on different fee arrangements and the timing of capital transactions.

The internal rate of return of the limited partners since inception is net of Carried Interest allocations, if any, to the General Partner and was computed based on the actual dates of the capital contributions and distributions, and the aggregate limited partners' capital at the end of each measurement period.

The net investment loss ratio does not reflect any effect of Carried Interest to the General Partner.

Financial highlights for the year ended December 31, 2019, are as follows:

Internal rate of return, since inception:	
Beginning of year	75.75 %
End of year	74.39 %
Ratios to average limited partners' capital:	
Expenses before Carried Interest allocation	1.21 %
Allocation of Carried Interest	1.97 %
Expenses after Carried Interest allocation	3.18 %
Net investment loss	(1.21)%

UNAUDITED CONSOLIDATED FINANCIAL STATEMENTS

venBio Global Strategic Fund, L.P.
Year Ended December 31, 2018

venBio Global Strategic Fund, L.P.

Unaudited Consolidated Financial Statements

Year Ended December 31, 2018

Contents

venBio Global Strategic Fund, L.P.

Unaudited Consolidated Statement of Assets, Liabilities, and Partners' Capital

December 31, 2018

(Stated in United States Dollars)

Assets	
Investments, at fair value (cost of $66,112,747)	$ 102,885,468
Cash	41,620
Other assets	2,784
Total assets	$ 102,929,872
Liabilities and partners' capital	
Liabilities:	
Due to affiliates	$ 2,294
Total liabilities	2,294
Partners' capital	
General Partner	21,016,709
Limited Partners	81,910,869
Total partners' capital	102,927,578
Total liabilities and partners' capital	$ 102,929,872

See accompanying notes.

venBio Global Strategic Fund, L.P.

Unaudited Consolidated Schedule of Investments

December 31, 2018

(Stated in United States Dollars)

	Number of Shares	Cost	Fair Value
Investments (100.0% of partners' capital)			
Biotechnology (100.0%)			
Ireland (27.0%)			
ALX Oncology Limited			
(formerly Alexo Therapeutics, Ltd.) (27.0%) [1][6]			
Series A Preferred	20,400,000	$ 20,400,000	$ 27,805,200
Common Shares	3,040,000	15,196	15,196
		20,415,196	27,820,396
Solstice Biologics Limited (0.0%) [2][6]			
Series A-1 Preferred	5,454,545	3,000,000	-
Series A-2 Preferred	4,666,667	3,500,000	-
Series A-3 Preferred	4,666,667	3,500,000	-
Series A-4 Preferred	3,098,413	2,323,810	-
Series A-5 Preferred	3,098,413	2,323,810	-
Common Units	900,000	900	-
Promissory Note		2,633,333	-
Warrants	3,511,111	6	-
		17,281,859	-
Total Ireland		37,697,055	27,820,396
United States (73.0%)			
Aragon Pharmaceuticals (6.0%) [6]			
Milestone Earnouts		1,118,248	6,125,131
Metacrine, Inc. (22.2%) [3][6]			
Series A Preferred	10,000,000	10,000,000	14,800,000
Series B Preferred	2,408,478	2,890,174	3,757,226
Series C Preferred	2,020,054	4,282,514	4,302,715
		17,172,688	22,859,941

venBio Global Strategic Fund, L.P.

Unaudited Consolidated Schedule of Investments (continued)

December 31, 2018

(Stated in United States Dollars)

	Number of Shares	Cost	Fair Value
Investments (continued) (100.0% of partners' capital)			
Biotechnology (continued) (100.0%)			
United States (continued) (73.0%)			
Precision Biosciences, Inc. (43.8%) [4][6]			
Series A Preferred	8,000,000	$ 4,124,756	$ 40,080,000
Series B Preferred	998,004	5,000,000	5,000,000
		9,124,756	45,080,000
Tollnine, Inc. (1.0%) [5][6]			
Series Seed Preferred	1,000,000	1,000,000	1,000,000
Total United States		28,415,692	75,065,072
Total investments, at fair value		$ 66,112,747	$ 102,885,468

Investment by type, at fair value	Percentage of partners' capital	Cost	Fair value
Total preferred stock	94.0%	$ 62,345,064	$ 96,745,141
Total milestone earnouts	6.0%	1,118,248	6,125,131
Total common stock	0.0%	16,096	15,196
Total promissory notes	0.0%	2,633,333	-
Total warrants	0.0%	6	-
Total investments, at fair value	100.0%	$ 66,112,747	$ 102,885,468

[1] Acquisition date for ALX Oncology Limited (formerly Alexo Therapeutics, Ltd.) was March 2015.

[2] Acquisition date for Solstice Biologics Limited was November 2012.

[3] Acquisition date for Metacrine, Inc. was January 2015.

[4] Acquisition date for Precision Biosciences, Inc. was April 2015.

[5] Acquisition date for Tollnine, Inc. was May 2018.

[6] Security is non income producing insomuch as it has not paid interest or dividends in the last year.

See accompanying notes.

venBio Global Strategic Fund, L.P.

Unaudited Consolidated Statement of Operations

Year Ended December 31, 2018

(Stated in United States Dollars)

Investment income		
Interest income	$	10
Expenses		
Management fees		598,222
Professional fees		232,308
Other expenses		65,975
Deal expenses		3,489
Total expenses		899,994
Net investment loss		(899,984)
Net realized gain on investments		46,703,682
Change in net unrealized gain on investments		14,269,635
Net gain on investments		60,973,317
Net income	$	60,073,333

See accompanying notes.

venBio Global Strategic Fund, L.P.

Unaudited Consolidated Statement of Changes in Partners' Capital

Year Ended December 31, 2018

(Stated in United States Dollars)

	General Partner	Limited Partners	Total
Partners' capital, January 1, 2018	$ 16,494,117	$ 66,205,992	$ 82,700,109
Contributions	20,700	10,625,749	10,646,449
Distributions	(7,281,415)	(43,210,898)	(50,492,313)
Net income	606,716	59,466,617	60,073,333
Allocation of carried interest	11,176,591	(11,176,591)	-
Partners' capital, December 31, 2018	$ 21,016,709	$ 81,910,869	$ 102,927,578

See accompanying notes.

venBio Global Strategic Fund, L.P.

Unaudited Consolidated Statement of Cash Flows

Year Ended December 31, 2018

(Stated in United States Dollars)

Operating activities		
Net income	$	60,073,333
Adjustments to reconcile net income resulting from operations to net cash provided by operating activities:		
Purchases of investment securities		(10,283,729)
Proceeds from sale of investments		51,018,137
Net realized gain on investments		(46,703,682)
Change in net unrealized gain on investments		(14,269,635)
Changes in operating assets and liabilities:		
Increase in other assets		(1,215)
Increase in due to affiliates		2,294
Net cash provided by operating activities		39,835,503
Financing activities		
Proceeds from capital contributions		10,646,449
Disbursements for capital distributions		(50,492,313)
Net cash flows used in financing activities		(39,845,864)
Net decrease in cash		(10,361)
Cash at beginning of year		51,981
Cash at end of year	$	41,620

See accompanying notes.

1. The Partnership

venBio Global Strategic Fund, L.P. (the Partnership) was formed as a Cayman Islands exempted limited partnership dated March 25, 2010. The general partner of the Partnership is venBio Global Strategic GP, L.P. (the General Partner). The primary investment objective of the Partnership is to make strategic equity and equity-related investments principally in entities operating in the life sciences industry and/or assets relating thereto and to achieve significant returns from its investments. The initial term of the Partnership shall continue until September 19, 2021, at which time the Partnership will commence winding up, unless its term is extended in accordance with the Partnership's limited partnership agreement (the Agreement). Refer to the Agreement for more information.

2. Summary of Significant Accounting Policies

Basis of Consolidated Presentation

The accompanying consolidated financial statements are presented in accordance with accounting principles generally accepted in the United States (U.S. GAAP) and are stated in U.S. dollars.

The consolidated financial statements include the accounts of venBio SPV (Cayman), Ltd. and venBio SPV, LLC. The Partnership owns 100% of venBio SPV (Cayman), Ltd. at December 31, 2018, and venBio SPV (Cayman), Ltd. owns 100% of venBio SPV, LLC at December 31, 2018. All significant intercompany balances and transactions have been eliminated in consolidation.

venBio SPV (Cayman), Ltd., a Cayman Islands exempted limited partnership, was established on November 9, 2012, to invest specifically in venBio SPV, LLC, a Delaware limited liability company. As of December 31, 2018, venBio SPV, LLC holds common shares in Solstice Biologics Limited and ALX Oncology Limited (formerly Alexo Therapeutics, Ltd.).

The Partnership and the consolidated entities each are an investment company and applies specialized accounting guidance as outlined in Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC) Topic 946 – *Investment Companies*. The General Partner has evaluated this guidance and has determined that each entity continues to meet the criteria to be classified as an investment company.

2. Summary of Significant Accounting Policies (continued)

Use of Estimates

The preparation of consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, including the fair value of investments, and disclosures of contingent assets and liabilities at the date of the financial statements and the reported amounts of income and expenses during the reporting period. Actual results could differ from those estimates.

Investments – Fair Value and Investment Transactions

The Partnership's investments are reflected on the consolidated statements of assets, liabilities, and partners' capital at fair value, with unrealized gains and losses resulting from changes in fair value reflected in the change in net unrealized gain on investments on the consolidated statements of operations. Fair value is the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date (i.e., the exit price). The fair values of the Partnership's investments are based on observable market prices when available. The Partnership values its investments, in the absence of observable market prices, using the valuation methodologies described below applied on a consistent basis. For some investments, little market activity may exist; management's determination of fair value is then based on the best information available in the circumstances, and may incorporate management's own assumptions and involves a significant degree of management's judgment.

Investments in private operating companies consist of direct private common and preferred stock (together or individually "equity") investments. The transaction price, excluding transaction costs, is typically the Partnership's best estimate of fair value at inception. When evidence supports a change to the carrying value from the transaction price, adjustments are made to reflect expected exit values in the investment's principal market under current market conditions. Ongoing reviews by the Partnership's management are based on an assessment of trends in the performance of each underlying investment from the inception date through the most recent valuation date.

The valuation methodologies used to value private investments may include reference to valuations of comparable companies in the relevant asset class and/or reference to public market or private transactions where such transactions exist. Generally, these valuations are derived by multiplying a key performance metric of the investee company (e.g., revenue, sales) by the relevant valuation multiple observed for comparable companies or transactions. The valuation multiple is often adjusted for differences between the investment and the referenced comparables.

2. Summary of Significant Accounting Policies (continued)

Investments – Fair Value and Investment Transactions (continued)

Private investments may also be valued at cost, or the most recent financing price, for a period of time after an acquisition as the best indicator of fair value. The most recent financing may also be utilized in a back-solve option pricing model. The option pricing model treats a portfolio company's common stock and preferred stock as call options on the enterprise or equity value of the portfolio company, with exercise or strike prices based on the characteristics of each series or class of equity in the portfolio company's capital structure (e.g. liquidation preference of a given series of preferred stock). This method is sensitive to certain key assumptions, such as volatility and time to exit, that are not observable.

Foreign investments are valued and reported in U.S. dollar amounts at the valuation date. Milestone earnouts are valued based on the risk-adjusted probability of receipt/completion of the milestone (also can be referred to as PTRS – Probability of Technical and Regulatory Success) and then Net Present Value (NPV) adjusted based on the future projected cashflows. These valuation methodologies involve a significant degree of management judgment and because of the inherent uncertainty of valuation, these estimated values may differ from the values that would have been used had a ready market for the securities existed, and the differences could be material.

U.S. GAAP establishes a hierarchal disclosure framework that prioritizes and ranks the level of market price observability used in measuring investments at fair value. Market price observability is affected by a number of factors, including the type of investment, the characteristics specific to the investment and the state of the market place, including the existence and transparency of transactions between market participants. Investments with readily available active quoted prices or for which fair value can be measured from actively quoted prices in an orderly market will generally have a higher degree of market price observability and a lesser degree of judgment used in measuring fair value. Investments measured and reported at fair value are classified and disclosed in one of the following categories:

> Level I – Quoted prices are available in active markets for identical investments as of the reporting date. The type of investments in Level I include listed equities and listed derivatives. The Partnership does not adjust the quoted price for these investments, even in situations where the Partnership holds a large position and a sale could reasonably affect the quoted price.

2. Summary of Significant Accounting Policies (continued)

Investments – Fair Value and Investment Transactions (continued)

Level II – Pricing inputs are other than quoted prices in active markets, which are either directly or indirectly observable as of the reporting date, and fair value is determined through the use of models or other valuation methodologies. Investments that are generally included in this category include corporate bonds and loans, less liquid and restricted equity securities and certain over-the-counter derivatives.

Level III – Pricing inputs are unobservable for the investment and include situations where there is little, if any, market activity for the investment. The inputs into the determination of fair value require significant management judgment or estimation. Investments that are included in this category generally include private investments of equity and/or debt, milestone earnouts, general and limited partnership interests in corporate private equity, and real estate funds, funds of hedge funds, distressed debt, and non-investment-grade residual interests in securitizations and collateralized debt obligations.

In certain cases, the inputs used to measure fair value may fall into different levels of the fair value hierarchy. In such cases, an investment's level within the fair value hierarchy is based on the lowest level of input that is significant to the fair value measurement. The Partnership's assessment of the significance of a particular input to the fair value measurement in its entirety requires judgment, and it considers factors specific to the investment.

Recently Adopted Accounting Standards

In August 2018, the FASB issued Accounting Standards Update (ASU) 2018-13, *Disclosure Frameworks – Changes to the Disclosure Requirements for Fair Value Measurements*, which modifies the disclosure requirements for fair value measurements. The Partnership adopted ASU 2018-13 on a retrospective basis as of January 1, 2018. The adoption of this accounting guidance resulted in the removal or modification of certain fair value measurement disclosures presented in the Partnership's financial statements.

(Stated in United States Dollars)

2. Summary of Significant Accounting Policies (continued)

Investments – Fair Value and Investment Transactions (continued)

Fair Value Hierarchy

The following table summarizes the valuation of the Partnership's investments by the fair value hierarchy levels as of December 31, 2018:

	Fair Value			
Investments, at fair value	**Level I**	**Level II**	**Level III**	**Total**
Common stock	$ -	$ -	$ 15,196	$ 15,196
Preferred stock	-	-	96,745,141	96,745,141
Milestone earnouts	-	-	6,125,131	6,125,131
Promissory notes	-	-	-	-
Warrants	-	-	-	-
Total investments, at fair value	$ -	$ -	$ 102,885,468	$ 102,885,468

Changes in Level 3 Measurements

The following table presents changes in assets classified in Level 3 of the fair value hierarchy during the year ended December 31, 2018 attributable to the following:

	Common stock	**Preferred stock**	**Milestone earnouts**
Purchases	$ 1,215	$ 10,282,514	$ -
Issues	$ -	$ -	$ -

There were no transfers into or out of Level III for the year ended December 31, 2018.

Investment transactions & related investment income

Security transactions are recorded on a trade-date basis, with the resulting unrealized gains and losses recorded in the consolidated statement of operations. For purposes of determining gains or losses on sales of investments, the cost of investments sold is determined on the specific-identification basis.

(Stated in United States Dollars)

2. Summary of Significant Accounting Policies (continued)

Investments – Fair Value and Investment Transactions (continued)

Quantitative Information About Level III Fair Value Measurements

Information about significant inputs used in fair value measurements categorized within Level III instruments is shown below.

Type of Security	Fair Value at December 31, 2018	Valuation Technique(s)	Unobservable Input(s)	Range
Milestone earnouts	$ 6,125,131	Discounted cash flow	Discount rate	6.00%
			Probability	35%-95%
			Payout period	0.3-1.55 years
Equity securities	$ 50,665,141	Option pricing model	Risk free rate	2.49% - 2.78%
			Industry volatility	106.5% - 107.7%
			Estimated time to exit	3 - 4 years

The remaining Level III securities, including preferred shares and common stock, totaling $46,095,196 are valued using either recent private market transactions without adjustment or other relevant data points. Quantitative unobservable inputs for such valuations were not developed or adjusted by the Partnership.

Foreign Securities

The Partnership invests in the securities of foreign companies which involves special risks and considerations not typically associated with investing in U.S. companies. These risks include devaluation of currencies, less reliable information about issuers, different securities transaction clearance and settlement practices, and future adverse political and economic developments.

Moreover, securities of many foreign companies and the markets may be less liquid and their prices more volatile than those of securities of comparable U.S. companies.

Cash

Cash represents amounts held in accounts with financial institutions and is subject to credit risk to the extent those balances exceed applicable Federal Deposit Insurance Corporation and Securities Investor Protection Corporation limitations. The Partnership continuously monitors the credit standing of the institutions with which it conducts business.

2. Summary of Significant Accounting Policies (continued)

Interest Income

Interest income represents interest earned from bank interest. Interest income is recognized on the accrual basis as earned.

Market and Other Risk Factors

At December 31, 2018, the Partnership's portfolio of investments includes non-publicly traded securities. The non-publicly traded securities trade, if at all, in an illiquid marketplace. The portfolio is concentrated in the life sciences industry. Risks affecting this industry include, but are not limited to, increased competition, rapid changes in technology, government actions, and changes in economic conditions. These risk factors could have a material effect on the ultimate realized value of the Partnership's investments.

Professional Fees and Other Expenses

Professional fees and other expenses represent annual audit and tax fees, as well as legal and other miscellaneous expenses.

Milestone Earnouts

Milestone earnouts refers to additional amounts from liquidated investments that management believes may be realized at future dates and/or as future events occur. The value of estimated milestone earnouts may vary based on the input assumptions, estimates and other items that require significant judgment or estimation by the General Partner. On a periodic basis, the General Partner will review and adjust, if necessary, the assumptions and estimates for the milestone earnout proceeds. While the milestone earnouts amounts reflect a concentration of risk, the General Partner considers counterparty performance risk in its determination of projected earnout amounts.

All counterparties to current earnout arrangements are deemed to represent reputable financially secure companies. The projected earnout amounts are included in investments on the accompanying consolidated statement of assets, liabilities, and partners' capital.

2. Summary of Significant Accounting Policies (continued)

Milestone Earnouts (continued)

Aragon Pharmaceuticals, Inc. ("Aragon") entered into a merger agreement and was effectively acquired by Johnson & Johnson. Consideration for this agreement provided to the Aragon shareholders consisted of upfront cash proceeds, newly formed company Seragon Pharmaceuticals, Inc.'s common stock, escrow holdback and projected earnouts based on milestone achievements. Projected earnout payments are contingent upon completion of milestone achievements with three remaining payments expected through 2020. The Partnership's share of the maximum gross remaining earnout milestone payments is approximately $11,000,000 and are valued at $6,125,131 at December 31, 2018.

Labrys Biologics, Inc. merged with Teva Pharmaceuticals USA, Inc. during 2014. As a result of the merger, the Partnership received consideration consisting of upfront cash proceeds, as well as anticipated earnout and escrow payments. In 2018, the Partnership received $41,418,804 in remaining earnout payments and escrow proceeds. The Partnership has no remaining or expected proceeds held in escrow at December 31, 2018.

Income Taxes

No provision for U.S. federal, U.S. state, or local income taxes has been made in the accompanying consolidated financial statements, as partners are individually liable for their own tax payments. The Partnership performs an evaluation of tax positions taken or expected to be taken in the course of preparing the Partnership tax returns to determine whether the tax positions are "more-likely-than-not" of being sustained by the applicable tax authority. Tax positions not deemed to meet the more-likely-than-not threshold would be recorded as a tax expense. The Partnership has recorded no expense or liability related to any uncertain tax positions as of December 31, 2018. Generally, the Partnership subject to income tax examinations by major taxing authorities for the last three years preceding the date of these consolidated financial statements. The Partnership recognizes interest and penalties, if any, as income tax expense in the consolidated statement of operations. During the year ended December 31, 2018, the Partnership did not accrue any interest and penalties.

(Stated in United States Dollars)

3. Related-Party Transactions

The Partnership pays venBio Partners LLC (the Management Company) (or its designee) an annual management fee equal to the sum of all limited partner fee amounts for such annual period. The limited partner fee amount shall mean with respect to each annual period and each limited partner with a subscription: (i) less than $75 million, an amount equal to 2.2% of such limited partner's subscription; (ii) equal to or greater than $75 million, but less than $100 million, 2.0% of such limited partner's subscription; (iii) equal to or greater than $100 million but less than $125 million, 1.8% of such limited partner's subscription; and (iv) equal to or greater than $125 million, 1.5% of such limited partner's subscription.

Beginning September 19, 2016, the first day following the expiration of the investment period, the percentage used in calculating each limited partner's management fees was reduced by 0.2% per annual period, with a minimum percentage threshold of 1.25%. Furthermore, if the limited partner's aggregate invested capital (as defined in the Agreement) is less than 50% of the limited partner's aggregate subscriptions, the management fee should be based on the aggregate invested capital as of the first day of each period for which the management fee is being paid rather than subscriptions. The percentage was reduced by an additional 0.2% in 2018. As of December 31, 2018, the management fee base is the aggregate limited partner's invested capital.

The gross management fee has been reduced each quarter by the deemed contributions made by the General Partner and receipt of any board compensation from portfolio companies, as follows:

	Year Ended December 31, 2018
Gross management fee	$ 704,942
Deemed contributions by General Partner	(106,720)
Net management fee	$ 598,222

The Partnership shall bear and be responsible for all expenses of the Partnership other than Ordinary Operating Expenses, defined below, which shall be borne by the Management Company. Ordinary Operating Expenses are defined as ordinary overhead and operating administrative expenses of the General Partner and the Management Company incurred in connection with maintaining and operating the General Partner's and the Management Company's office, including wages, salaries, rent, utilities and routine office equipment expense.

3. Related-Party Transactions (continued)

Certain members of the General Partner serve on the Board of Directors of various portfolio companies in which the Partnership invests. Additionally, the Partnership may coinvest with other entities with the same General Partner as the Partnership. At December 31, 2018, the Partnership held an investment with a fair value of $27,820,396 that was coinvested with an affiliated Partnership.

4. Capital Accounts

The total committed capital of the Partnership is $178,787,879. The General Partner's capital commitment is $1,787,879. The General Partner's subscription shall be at all times equal to at least 1.0% of the aggregate subscriptions of the limited partners. In addition, limited partners have a $177,000,000 capital commitment in aggregate.

From time to time, each partner shall contribute its pro rata share to the Partnership, as shall be specified by the General Partner, to fund current or future portfolio investments or meet the expenses of the Partnership (including for the payment of any management fee expense, organizational expenses or indemnification obligations and a reserve for the Partnership's operating expenses).

Partnership contributions made by the partners and deemed contributions by the General Partner reduce the partners' unpaid capital obligation. $167,145,083 or 93.49% of capital commitments have been called by the Partnership and $1,191,380 have been deemed contributions by the General Partner since inception. As of December 31, 2018, the unfunded commitment balance is $10,451,416.

For all capital contributions made by the General Partner for the year ended December 31, 2018, only 20% of each contribution was required to be made in cash. The remaining portion of each installment of the General Partner's capital contributions was deemed to have been made in installments at the same time and in the same proportions as the capital contributions of the limited partners. The General Partner's deemed contributions were treated as capital contributions and reduce its unfunded subscription, but did not increase the General Partner's capital account balance. The limited partners' management fee was appropriately reduced by the amount of deemed contributions made by the General Partner.

For the year ended December 31, 2018, the limited partners' management fee was reduced by $106,720. The total deemed contributions for the year were $82,800. In addition to the $23,920 of deemed contributions brought forward from prior year, there was $82,800 used in additional reduction of management fees during the year.

4. Capital Accounts (continued)

Allocation of Profits and Losses

Generally, net gain and loss in respect of a portfolio investment initially shall be apportioned among the partners by their subscription divided by the aggregate subscriptions of all partners in respect of such portfolio investment.

Net gain apportioned to the General Partner and each affiliated limited partner shall be allocated to the capital account of each partner, and net gain apportioned to each other limited partner shall be allocated as follows:

(a) First, 100% to the limited partner in an amount equal to the sum of (1) the net loss (if any) previously allocated to the limited partner and (2) the management fee expense previously allocated to the limited partner, in each case to the extent not offset by prior allocations of net gain made; and

(b) Thereafter, the limited partner's Carried Interest (as defined below) percentage to the General Partner and the remainder to the limited partner.

Net loss apportioned to the General Partner and each affiliated limited partner shall be allocated to the capital account of each partner, and net loss apportioned to each other limited partner shall be allocated as follows:

(a) First, to the limited partner and the General Partner, in proportion to their respective amounts of net gain (if any) previously allocated to the limited partner and the General Partner in respect of the limited partner and not offset by prior allocations of net loss, an amount of net loss equal to the aggregate amount of such net gain (if any);and

(b) Thereafter, to the limited partner.

The management fee shall be allocated to the limited partners in proportion to their respective limited partner fee amounts.

After the application of the above, the General Partner shall be entitled to receive a priority allocation of net gain that otherwise would have been allocated to the limited partners in the same proportions as allocations were made to the limited partners, in an amount equal to the amount of net gain that otherwise would have been allocated to the General Partner, provided that allocations of net gain will be made only if, and to the extent that, the available net gain as of such time is at least equal to such allocations.

4. Capital Accounts (continued)

Allocation of Profits and Losses (continued)

Limited partners with a subscription below $75 million are subject to a carried interest percentage of 20% and limited partners with a subscription of $75 million or greater are subject to a carried interest percentage of 17.5% (individually or in the aggregate "Carried Interest"). The General Partner's Carried Interest is determined after taking into account all net gains and net losses allocated to the General Partner on a cumulative basis since the inception of the Partnership. The amount of accrued Carried Interest, calculated from both realized and unrealized gains, reallocated from the limited partners to the General Partner, for the year ended December 31, 2018, was $11,176,591.

Distributions

Distributable proceeds attributable to any portfolio investment initially shall be apportioned among the partners in proportion to their respective sharing percentages in respect of such portfolio investment. Distributable proceeds apportioned to the General Partner shall be distributed to the General Partner, and distributable proceeds apportioned to each other limited partner shall be distributed as follows:

(a) First, 100% to the limited partner until the cumulative amount distributed to the limited partner is equal to such limited partner's capital contributions; and

(b) Thereafter, the limited partner's Carried Interest percentage to the General Partner and the remainder to the limited partner.

As a result of the General Partner's Carried Interest, the Partnership shall distribute to the General Partner in cash, with respect to each fiscal year, either during the year or within 90 days thereafter, an amount (a "Tax Distribution") equal to the aggregate federal, state and local tax liability the partner would have incurred. During the year ended December 31, 2018, the Partnership made no Tax Distributions and made discretionary distributions of $50,492,313, resulting in total cumulative distributions of $373,742,154 as of December 31, 2018.

5. Indemnification

Generally, no partner is individually liable for any debts or obligations of the Partnership in excess of its unpaid capital commitments. As described in the Agreement, the limited partners have indemnified the General Partner in connection with its activities on behalf of the Partnership. The Partnership has not had any claims or losses pursuant to these indemnifications and expects the risk of loss to be remote.

6. Financial Highlights

Financial highlights are calculated for limited partners taken as a whole. An individual investor's results may vary from these results based on different fee arrangements and the timing of capital transactions.

The internal rate of return of the limited partners since inception is net of Carried Interest allocations, if any, to the General Partner and was computed based on the actual dates of the capital contributions and distributions, and the aggregate limited partners' capital at the end of each measurement period.

The net investment loss ratio does not reflect any effect of Carried Interest to the General Partner.

Financial highlights for the year ended December 31, 2018, are as follows:

Internal rate of return, since inception:	
Beginning of year	75.77 %
End of year	75.75 %
Ratios to average limited partners' capital:	
Expenses before Carried Interest allocation	1.05 %
Allocation of Carried Interest	13.07 %
Expenses after Carried Interest allocation	14.12 %
Net investment loss	(1.05)%