

PROSPECTUS SUPPLEMENT
(To Prospectus dated August 24, 2018)



Up to \$50,000,000

Common Stock

We have entered into an Open Market Sale Agreement SM, or the Sales Agreement, with Jefferies LLC, or Jefferies, relating to our common stock, par value \$0.001 per share, offered by this prospectus supplement. In accordance with the terms of the Sales Agreement, we may offer and sell shares of our common stock having an aggregate offering price of up to \$50,000,000 from time to time through Jefferies, acting as sales agent.

Our common stock is listed on the Nasdaq Capital Market under the symbol "PIRS." On November 8, 2019, the last reported sale price of our common stock on the Nasdaq Capital Market was \$3.90 per share.

Sales of shares of our common stock, if any, under this prospectus supplement may be made in sales deemed to be an "at the market offering" as defined in Rule 415(a)(4) promulgated under the Securities Act of 1933, as amended, or the Securities Act. Jefferies is not required to sell any specific number or dollar amount of securities, but will act as sales agent on a best efforts basis and use commercially reasonable efforts consistent with its normal trading and sales practices, on mutually agreed terms between us and Jefferies. There is no arrangement for funds to be received in any escrow, trust or similar arrangement.

Jefferies will be entitled to compensation at a commission rate of 3.0% of the gross sales price per share of common stock sold under the Sales Agreement. See "Plan of Distribution" beginning on page S-17 for additional information regarding the compensation to be paid to Jefferies. In connection with the sale of shares of our common stock on our behalf, Jefferies will be deemed to be an "underwriter" within the meaning of the Securities Act and the compensation of Jefferies will be deemed to be underwriting commissions or discounts. We have also agreed to provide indemnification and contribution to Jefferies with respect to certain liabilities, including liabilities under the Securities Act or the Securities Exchange Act of 1934, as amended, or the Exchange Act.

Investing in our common stock involves a high degree of risk. See the information contained under "[Risk Factors](#)" beginning on page S-8 of this prospectus supplement and the documents incorporated by reference herein.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus supplement is truthful or complete. Any representation to the contrary is a criminal offense.

Jefferies

November 12, 2019

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EXPLANATORY NOTE

The Registrant is filing this prospectus supplement pursuant to Rule 424 of the Securities Act of 1933, as amended, solely to include certain clinical update information that was not available at the time of the previous filing of this prospectus supplement on August 9, 2019 (the "Original Prospectus Supplement"), but which is now incorporated by reference into this prospectus supplement. See "Incorporation of Certain Documents by Reference" on page S-22. As of the date of this prospectus supplement, no sales of the Registrant's common stock, par value \$0.001 per share, have been made pursuant to the Open Market Sale AgreementSM by and between the Registrant and Jefferies LLC.

ABOUT THIS PROSPECTUS SUPPLEMENT

This prospectus supplement is part of a shelf registration statement on Form S-3 (File No. 333-226725) that we filed with the Securities and Exchange Commission, or the SEC under the Securities Act of 1933, as amended, or the Securities Act. Under the shelf registration process, we may offer shares of our common stock having an aggregate offering price of up to \$50,000,000 from time to time under this prospectus supplement at prices and on terms to be determined by market conditions at the time of the offering.

This document contains two parts. The first part consists of this prospectus supplement, which provides you with specific information about this offering. The second part, the accompanying prospectus, provides more general information, some of which may not apply to this offering. Generally, when we refer only to the "prospectus," we are referring to both parts combined. This prospectus supplement may add, update, or change information contained in the accompanying prospectus. To the extent that any statement we make in this prospectus supplement is inconsistent with statements made in the accompanying prospectus or any documents incorporated by reference herein or therein, the statements made in this prospectus supplement will be deemed to modify or supersede those made in the accompanying prospectus and such documents incorporated by reference herein and therein. You should read this prospectus supplement and the accompanying prospectus, including the information incorporated by reference herein and therein, and any related free writing prospectus that we have authorized for use in connection with this offering.

You should rely only on the information contained or incorporated by reference in this prospectus supplement. We have not, and the sales agent has not, authorized anyone to provide you with information that is in addition to or different from that contained or incorporated by reference in this prospectus supplement or contained in any permitted free writing prospectuses we have authorized for use in connection with this offering. We and the sales agent take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may provide.

The information contained in this prospectus supplement and the documents incorporated by reference herein is accurate only as of their respective dates, regardless of the time of delivery of any such document or the time of any sale of shares of our common stock. Our business, financial condition, results of operations and prospects may have changed since those dates. It is important for you to read and consider all information contained or incorporated by reference in this prospectus supplement in making your investment decision. You should read this prospectus supplement, as well as the documents incorporated by reference herein, the additional information described under the section titled "Where You Can Find More Information" and "Incorporation of Certain Documents by Reference" in this prospectus supplement and any free writing prospectus that we have authorized for use in connection with this offering, before investing in our common stock.

We further note that the representations, warranties and covenants made by us in any agreement that is filed as an exhibit to any document that is incorporated by reference in this prospectus supplement were made solely for the benefit of the parties to such agreement, including, in some cases, for the purpose of allocating risk among the parties to such agreements, and should not be deemed to be a representation, warranty or covenant to you. Moreover, such representations, warranties or covenants were accurate only as of the date when made. Accordingly, such representations, warranties and covenants should not be relied on as accurately representing the current state of our affairs.

We are offering to sell, and seeking offers to buy, shares of our common stock only in jurisdictions where such offers and sales are permitted. The distribution of this prospectus supplement and the offering of shares of our common stock in certain jurisdictions may be restricted by law. Persons outside the United States who come into possession of this prospectus supplement must inform themselves about, and observe any restrictions relating to, the offering of shares of our common stock and the distribution of this prospectus supplement outside the United States. This prospectus supplement does not constitute an offer to sell or the solicitation of an offer to buy any securities other than the common stock to which it relates, nor does this prospectus supplement constitute an offer to sell or the solicitation of an offer to buy securities in any jurisdiction to any person to whom it is unlawful to make such offer or solicitation in such jurisdiction.

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Unless otherwise indicated, information contained in or incorporated by reference into this prospectus supplement concerning our industry and the markets in which we operate, including market opportunity, market position and competitive landscape, is based on information from our management's estimates, as well as from industry publications, surveys and studies conducted by third parties. Management estimates are derived from publicly available information, our knowledge of our industry, and assumptions based on such information and knowledge, which we believe to be reasonable. In addition, while we believe that information contained in the industry publications, surveys and studies has been obtained from reliable sources, the accuracy and completeness of such information is not guaranteed, and we have not independently verified any of the data contained in these third-party sources.

This prospectus supplement, including the documents incorporated by reference herein, includes statements that are based on various assumptions and estimates that are subject to numerous known and unknown risks and uncertainties. Some of these risks and uncertainties are described in the section entitled "Risk Factors" beginning on page S-8 of this prospectus supplement and described in Part I, Item 1A (Risk Factors) of our most recent Annual Report on Form 10-K for the fiscal year ended December 31, 2018, or our Annual Report, as well as the other documents we file with the SEC. These and other important factors could cause our future results to be materially different from the results expected as a result of, or implied by, these assumptions and estimates. You should read the information contained in, or incorporated by reference into, this prospectus supplement completely and with the understanding that future results may be materially different from and worse than what we expect. See the information included under the heading "Special Note Regarding Forward-Looking Information."

As used in this prospectus supplement, unless the context indicates or otherwise requires, "our Company", "the Company", "Pieris", "we", "us", and "our" refer to Pieris Pharmaceuticals, Inc., a Nevada corporation, and its consolidated subsidiary, Pieris Pharmaceuticals GmbH (formerly known as Pieris AG), a company organized under the laws of Germany, Pieris Australia Pty Ltd., a company organized under the laws of Australia that is a consolidated subsidiary of Pieris Pharmaceuticals GmbH, and Pieris Securities Corporation, a Massachusetts securities corporation, a consolidated subsidiary of Pieris Pharmaceuticals, Inc.

We have registered trademarks for Pieris® and Anticalin®. All other trademarks, trade names and service marks included in this prospectus supplement are the property of their respective owners. Use or display by us of other parties' trademarks, trade dress or products is not intended to and does not imply a relationship with, or endorsements or sponsorship of, us by the trademark or trade dress owner.

PROSPECTUS SUPPLEMENT SUMMARY

The following is a summary of what we believe to be the most important aspects of our business and the offering of our securities under this prospectus supplement. We urge you to read this entire prospectus, including the more detailed consolidated financial statements, notes to the consolidated financial statements and other information incorporated by reference from our other filings with the SEC. Investing in our securities involves risks. Therefore, carefully consider the risk factors set forth in this prospectus supplement and in our most recent annual and quarterly filings with the SEC, as well as other information in this prospectus supplement and the documents incorporated by reference herein, before purchasing our securities. Each of the risk factors could adversely affect our business, operating results and financial condition, as well as adversely affect the value of an investment in our securities.

About Pieris Pharmaceuticals, Inc.

We are a clinical-stage biotechnology company that discovers and develops Anticalin-based drugs to target validated disease pathways in unique and transformative ways. Our clinical pipeline includes an inhaled IL-4Ra antagonist Anticalin protein to treat uncontrolled asthma, an immuno-oncology (IO) bispecific targeting HER2 and 4-1BB. Proprietary to us, Anticalin proteins are a novel class of therapeutics validated in the clinic and through partnerships with leading pharmaceutical companies.

Anticalin proteins are a class of low molecular-weight therapeutic proteins derived from lipocalins, which are naturally occurring proteins typically found in human blood plasma and other bodily fluids. Anticalin proteins function similarly to monoclonal antibodies by binding tightly and specifically to a diverse range of targets. An antibody is a large protein used by the immune system that recognizes a unique part of a target molecule, called an antigen. We believe Anticalin proteins possess numerous advantages over antibodies in certain applications. For example, Anticalin proteins are relatively small in size and monomeric, meaning they are comprised of a single polypeptide rather than a multi-polypeptide protein complex. Therefore, we believe Anticalin proteins are generally more stable biophysically than antibodies, which are composed of four polypeptide chains. The greater stability and small size of Anticalin proteins as compared to antibodies potentially enable unique routes of Anticalin protein drug administration such as inhaled delivery. Higher-molecular-weight entities, such as antibodies, are often too large to be delivered effectively through these methods. Our Anticalin technology is modular, which allows us to design multimeric Anticalin-based bi- and multi-specific proteins to bind with specificity to two or more disease targets at the same time. This multispecificity offers advantages in biological settings where binding to multiple targets can enhance the ability of a drug to achieve its desired effects, such as facilitating the killing of cancer cells. Moreover, unlike antibodies, the pharmacokinetic, or PK, profile of Anticalin proteins can be adjusted to potentially enable program-specific optimal drug exposure. Such differentiating characteristics suggest that Anticalin proteins have the potential, in certain cases, to become best-in-class drugs.

We have intellectual property rights directed to various aspects of our Anticalin technology platform, allowing for further development and advancement of both our platform and drug candidates. We believe that our ownership or exclusive license of intellectual property related to the Anticalin platform provides us with a strong intellectual property position, particularly in cases where we are seeking to address targets and diseases in a novel way and for which there is existing antibody intellectual property. We also believe that the drug-like properties of the Anticalin drug class have been demonstrated in various clinical trials with different Anticalin-based drug candidates, including PRS-060 and others.

Our core Anticalin technology and platform were developed in Germany, and we have collaborations with major multi-national pharmaceutical companies. We entered into a license and collaboration agreement, or the Servier Collaboration Agreement, with Les Laboratoires Servier and Institut de Recherches Internationales Servier, or Servier, in January 2017 in IO. In May 2017, we entered an alliance with AstraZeneca AB, or AstraZeneca, to treat respiratory diseases, and in February 2018, we entered into a license and collaboration agreement, or the Seattle Genetics Collaboration Agreement, with Seattle Genetics Inc., or Seattle Genetics, in IO.

In connection with our efforts to develop multispecific Anticalin-based proteins designed to engage immunomodulatory targets, we have gained non-exclusive access to antibody building blocks that can be utilized to develop multispecific antibody-Anticalin fusion proteins.

Corporate History and Information

Pieris Pharmaceuticals, Inc. was incorporated in the State of Nevada in May 2013 under the name “Marika Inc.” Pieris Pharmaceuticals, Inc. began operating the business of Pieris Pharmaceuticals GmbH, or Pieris GmbH, through a reverse acquisition on December 17, 2014. Pieris GmbH (formerly Pieris AG, a German company which was founded in 2001) continues as an operating subsidiary of Pieris Pharmaceuticals, Inc.; Pieris Pharmaceuticals, Inc. is the sole shareholder of Pieris GmbH.

Pieris Pharmaceuticals, Inc.’s corporate headquarters are located at 255 State Street, 9th Floor, Boston, Massachusetts 02109. The research facilities of Pieris GmbH are located in Freising, Germany. In late 2019, we anticipate that the research facilities of Pieris GmbH will be relocated to Hallbergmoos, Germany. Pieris Australia Pty Ltd., a wholly-owned subsidiary of Pieris GmbH, was formed on February 14, 2014 to conduct research and development activities in Australia. Pieris Pharmaceuticals Securities Corporation, a wholly-owned subsidiary of Pieris Pharmaceuticals, Inc. was formed on December 14, 2016 to buy, sell, deal in, or hold securities on its own behalf and not as a broker, and will engage in its activities exclusively for investment purposes.

Our corporate website address is www.pieris.com. The information on our website is not part of this prospectus supplement or incorporated by reference into this prospectus supplement, and you should not consider any information contained on, or that can be accessed through, our website in deciding whether to purchase shares of our common stock. Our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K and all amendments to such reports are made available free of charge through the “Investors—SEC Filings” section of our website as soon as reasonably practicable after they have been filed or furnished with the SEC.

THE OFFERING

Common stock offered by us:	Common stock having an aggregate offering price of up to \$50,000,000.
Common stock to be outstanding after this offering:	Up to 62,213,218 shares of common stock (as more fully described in the notes following this table), assuming sales of 12,820,512 shares of common stock in this offering at an offering price of \$3.90 per share, which was the last reported sale price of our common stock on the Nasdaq Capital Market on November 8, 2019. The actual number of shares issued will vary depending on the sales price under this offering.
Plan of Distribution:	“At the market offering” that may be made from time to time on the Nasdaq Capital Market or other existing trading market for our common stock through our sales agent, Jefferies LLC, or Jefferies. See “Plan of Distribution” on page S-17 of this prospectus supplement.
Use of Proceeds:	We intend to use the net proceeds from this offering for clinical trial costs and other research and development expenses; continued investment in our drug development platform; and working capital, capital expenditures and general and administrative expenses. See “Use of Proceeds.”
Risk Factors:	Investing in our common stock involves risks. See “Risk Factors” beginning on page S-8 of this prospectus supplement and under similar headings in the documents incorporated by reference herein for a discussion of the factors you should carefully consider before deciding to invest in our common stock.
Nasdaq Capital Market symbol:	“PIRS”

The number of shares of common stock to be outstanding after this offering is based on an aggregate of 49,392,706 shares of common stock outstanding as of September 30, 2019 and excludes:

- 2,907,000 shares of common stock issuable upon the conversion of shares of Series A Convertible Preferred Stock outstanding as of September 30, 2019;
- 5,000,000 shares of common stock issuable upon the conversion of shares of Series B Convertible Preferred Stock outstanding as of September 30, 2019;
- 3,522,000 shares of common stock issuable upon the conversion of shares of Series C Convertible Preferred Stock that were issued on November 6, 2019;
- 3,720,862 shares of common stock issuable upon the exercise of warrants outstanding as of September 30, 2019, at a weighted average exercise price of \$2.31 per share;
- 9,014,960 shares of common stock issuable upon the exercise of warrants issued on November 6, 2019, at an exercise price of \$7.10 per share;
- 3,009,999 shares of common stock issuable upon the exercise of outstanding stock options issued pursuant to our 2014 employee, director, and consultant equity incentive plan, or the 2014 Plan, at a weighted average exercise price of \$1.90 per share;
- 3,301,061 shares of common stock issuable upon the exercise of outstanding stock options issued pursuant to our 2016 employee, director, and consultant equity incentive plan, or the 2016 Plan, at a weighted average exercise price of \$5.37 per share;

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- 2,295,384 shares of common stock issuable upon the exercise of outstanding stock options issued pursuant to our 2018 employee, director, and consultant equity incentive plan, or the 2018 Plan, at a weighted average exercise price of \$3.23 per share;
- 51,800 shares of common stock issuable upon the exercise of outstanding stock options issued pursuant to our 2019 employee, director, and consultant equity incentive plan, or the 2019 Plan, at a weighted average exercise price of \$5.47 per share;
- 2,805,412 shares of common stock reserved for future issuance under the 2019 Plan and 442,127 shares available for sale under the 2018 Employee Stock Purchase Plan, or 2018 ESPP; and
- 1,425,000 shares of common stock issuable upon the exercise of outstanding stock options issued to certain employees as inducement awards upon their entering into employment with the company, at a weighted average exercise price of \$4.46 per share.

Unless otherwise indicated, all information in this prospectus supplement assumes no conversion of the Series A Convertible Preferred Stock, Series B Convertible Preferred Stock, or Series C Convertible Preferred Stock, no exercise of the outstanding warrants and options described above, and no issuance of shares of common stock pursuant to the 2018 ESPP.

RISK FACTORS

Investing in our common stock involves a high degree of risk. Before making an investment decision, you should carefully consider the risks described below and in our most recent Annual Report on Form 10-K and any subsequent Quarterly Reports on Form 10-Q or Current Reports on Form 8-K, as well as any amendments thereto reflected in subsequent filings with the SEC, each of which are incorporated by reference in this prospectus supplement, and all of the other information in this prospectus supplement, including our financial statements and related notes incorporated by reference herein. If any of these risks is realized, our business, financial condition, results of operations and prospects could be materially and adversely affected. In that event, the trading price of our common stock could decline and you could lose part or all of your investment. Additional risks and uncertainties that are not yet identified or that we currently believe to be immaterial may also materially harm our business, financial condition, results of operations and prospects and could result in a complete loss of your investment.

Risks Related to This Offering and Our Common Stock

If you purchase common stock in this offering, you will suffer immediate dilution of your investment.

The public offering price of our common stock is substantially higher than the net tangible book value per share of our common stock. Therefore, if you purchase our common stock in this offering, you will pay a price per share that substantially exceeds our net tangible book value per share after giving effect to this offering. If you purchase common stock in this offering, you will incur an immediate and substantial dilution in net tangible book value of \$2.79 per share. For a further description of the dilution that you will experience immediately after this offering, see the section titled "Dilution." In addition, in the past, we have issued options to acquire common stock at prices significantly below the offering price. To the extent these outstanding options are ultimately exercised, you will incur additional dilution.

Our management will have broad discretion over the use of the net proceeds from this offering, and you may not agree with how we use the proceeds and the proceeds may not be invested successfully.

Our management will have broad discretion as to the use of the net proceeds from this offering and could use them for purposes other than those contemplated at the time of this offering. Accordingly, you are relying on the judgment of our management with regard to the use of these net proceeds, and you will not have the opportunity, as part of your investment decision, to assess whether the proceeds will be used appropriately. It is possible that the proceeds will be invested in a way that does not yield a favorable, or any, return for Pieris.

Because we do not anticipate paying any cash dividends on our common stock in the foreseeable future, capital appreciation, if any, will be your sole source of gain.

We have never declared or paid cash dividends on our common stock. We anticipate that we will retain our earnings, if any, for future growth and therefore do not anticipate paying cash dividends in the future. As a result, only appreciation of the price of our common stock will provide a return to stockholders.

The market price of our common stock is likely to be highly volatile, and our stockholders may lose some or all of their investment.

The market price of our common stock is likely to be highly volatile, including in response to factors that are beyond our control. The stock market in general experiences extreme price and volume fluctuations. In particular, the market prices of securities of pharmaceutical and biotechnology companies are extremely volatile, and experience fluctuations that are often unrelated or disproportionate to the operating performance of these companies. These broad and sector-specific market fluctuations can result in extreme fluctuations in the price of our common stock, regardless of our operating performance, and can cause our stockholders to lose some or all of their investment in the Company.

We may incur significant costs from class action litigation due to share volatility.

Our share price may fluctuate for many reasons, including as a result of public announcements regarding the progress of our development efforts or the development efforts of our collaborators and/or competitors, the addition or departure of our key personnel, variations in our quarterly operating results and changes in market valuations of pharmaceutical and biotechnology companies. Holders of stock which has experienced significant price and trading volatility have occasionally brought securities class action litigation against the companies that issued the stock. If

any of our stockholders were to bring a lawsuit of this type against us, even if the lawsuit is without merit, we could incur substantial costs defending the lawsuit. The lawsuit could also divert the time and attention of our management, which could harm our business.

Sales of additional common stock could cause the price of our common stock to decline.

Sales of substantial amounts of our common stock in the public market, or the availability of such shares for sale, by us or others, including the issuance of common stock upon exercise of outstanding options, or the perception that such sales could occur, could adversely affect the price of our common stock.

If securities or industry analysts do not publish research or publish inaccurate or unfavorable research about our business, our share price and trading volume could decline.

The trading market for our common stock may depend in part on the research and reports that securities or industry analysts publish about us or our business. If too few securities or industry analysts cover our company, the trading price for our common stock would likely be negatively impacted. If one or more of the analysts who cover us downgrade our common stock or publish inaccurate or unfavorable research about our business, our share price would likely decline. If one or more of these analysts cease coverage of our company or fail to publish reports on us regularly, demand for our common stock could decrease, which might cause our share price and trading volume to decline.

We will need to obtain additional financing to fund our operations and, if we are unable to obtain such financing, we may be unable to complete the development and commercialization of our product candidates.

Our operations consume substantial amounts of cash. From January 1, 2017 to September 30, 2019, we had cumulative net cash flows provided by operating activities of approximately \$10.2 million. We will need to obtain additional financing to fund our future operations, including completing the development and commercialization of our drug candidates. We will need to obtain additional financing to conduct additional trials for the approval of our drug candidates if requested by regulatory authorities, and to complete the development of any additional drug candidates we might acquire.

Our future funding requirements will depend on many factors, including, but not limited to:

- Progress, timing, scope and costs of our clinical trials, including the ability to timely initiate clinical sites, enroll subjects;
- Time and cost necessary to obtain regulatory approvals that may be required by regulatory authorities to execute clinical trials or commercialize our products;
- Our ability to successfully commercialize our drug candidates, if approved;
- Our ability to have clinical and commercial product successfully manufactured consistent with FDA regulations;
- Amount of sales and other revenues from product candidates that we may commercialize, if any, including the selling prices for such potential products and the availability of adequate third-party coverage and reimbursement for patients;
- Sales and marketing costs associated with commercializing our products, if approved, including the cost and timing of building our marketing and sales capabilities;
- Terms and timing of our current and any potential future collaborations, licensing or other arrangements that we have established or may establish;
- Cash requirements of any future acquisitions or the development of other product candidates;
- Costs of operating as a public company;
- Time and cost necessary to respond to technological, regulatory, political and market developments;
- Costs of filing, prosecuting, defending and enforcing any patent claims and other intellectual property rights; and
- Costs associated with any potential business or product acquisitions, strategic collaborations, licensing agreements or other arrangements that we may establish.

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Until we can generate a sufficient amount of revenue, we may finance future cash needs through public or private equity offerings, license agreements, debt financings, collaborations, strategic alliances and marketing or distribution arrangements. Additional funds may not be available when we need them on terms that are acceptable to us, or at all. If adequate funds are not available, we may be required to delay or reduce the scope of or eliminate one or more of our research or development programs or our commercialization efforts. We may seek to access the public or private capital markets whenever conditions are favorable, even if we do not have an immediate need for additional capital at that time. In addition, if we raise additional funds through collaborations, strategic alliances or marketing, distribution or licensing arrangements with third parties, we may have to relinquish valuable rights to our technologies, future revenue streams or product candidates or to grant licenses on terms that may not be favorable to us.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus supplement, the prospectus and the documents we have filed with the SEC that are incorporated by reference contain “forward-looking statements” within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act that involve substantial risks and uncertainties. In some cases, forward-looking statements are identified by the words “anticipate,” “believe,” “continue,” “could,” “estimate,” “expect,” “future,” “goals,” “intend,” “likely,” “may,” “might,” “ongoing,” “objective,” “plan,” “potential,” “predict,” “project,” “seek,” “should,” “strategy,” “will” and “would” or the negative of these terms, or other comparable terminology intended to identify statements about the future. These statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, levels of activity, performance or achievements to be materially different from the information expressed or implied by these forward-looking statements.

Although we believe that we have a reasonable basis for each forward-looking statement contained in this prospectus supplement and the documents that we have filed with the SEC that are incorporated by reference, such statements are based on a combination of facts and factors currently known by us and our expectations of the future, about which we cannot be certain. Forward-looking statements include statements about:

- the results of our research and development activities, including uncertainties relating to the discovery of potential drug candidates and the preclinical and ongoing or planned clinical testing of our drug candidates;
- the early stage of our drug candidates presently under development;
- our ability to obtain and, if obtained, maintain regulatory approval of our current drug candidates and any of our other future drug candidates;
- our need for substantial additional funds in order to continue our operations and the uncertainty of whether we will be able to obtain the funding we need;
- our future financial performance; our ability to retain or hire key scientific or management personnel;
- our ability to protect our intellectual property rights that are valuable to our business, including patent and other intellectual property rights;
- our dependence on third-party manufacturers, suppliers, research organizations, testing laboratories and other potential collaborators;
- the success of our collaborations with third parties;
- our ability to meet milestones;
- our ability to successfully market and sell our drug candidates in the future as needed;
- the size and growth of the potential markets for any of our approved drug candidates, and the rate and degree of market acceptance of any of our approved drug candidates; competition in our industry;
- regulatory developments in the United States and foreign countries; and
- the expected impact of new accounting standards.

You should refer to the section titled “Risk Factors” of this prospectus supplement and in our other filings with the SEC for a discussion of important factors that may cause our actual results to differ materially from those expressed or implied by our forward-looking statements. As a result of these factors, we cannot assure that the forward-looking statements in this prospectus supplement or the documents we have filed with the SEC that are incorporated by reference will prove to be accurate. Furthermore, if our forward-looking statements prove to be inaccurate, the inaccuracy may be material. In light of the significant uncertainties in these forward-looking statements, these statements should not be regarded as representations or warranties by us or any other person that we will achieve our objectives and plans in any specified time frame, or at all. We undertake no obligation to publicly update any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.

In addition, statements that “we believe” and similar statements reflect our beliefs and opinions on the relevant subject. These statements are based upon information available to us as of the date of this prospectus supplement, and while we believe such information forms a reasonable basis for such statements, such information may be limited or incomplete, and our statements should not be read to indicate that we have conducted an exhaustive

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inquiry into, or review of, all potentially available relevant information. These statements are inherently uncertain and investors are cautioned not to unduly rely upon these statements as predictions of future events.

You should read this prospectus supplement, the underlying prospectus, the documents that we have incorporated by reference herein and the documents we have filed as exhibits to the registration statement, completely and with the understanding that our actual future results may be materially different from what we expect. We qualify all of our forward-looking statements by these cautionary statements.

USE OF PROCEEDS

We may issue and sell shares of our common stock having aggregate sales proceeds of up to \$50,000,000 from time to time. Because there is no minimum offering amount required as a condition to close this offering, the actual total public offering amount, commissions and proceeds to us, if any, are not determinable at this time. There can be no assurance that we will sell any shares under or fully utilize our sales agreement with Jefferies as a source of financing.

We intend to use the net proceeds from this offering for clinical trial costs and other research and development expenses; continued investment in our drug development platform; and working capital, capital expenditures and general and administrative expenses.

Our expected use of the net proceeds from this offering represents our current intentions based upon our present plans and business conditions. The amounts and timing of our actual use of net proceeds will vary depending on numerous factors, including the relative success and cost of our research, preclinical and clinical development programs, whether we are able to enter into future collaborations, and any unforeseen delays or cash needs. As a result, our management will have broad discretion in the application of the net proceeds, and investors will be relying on our judgment regarding the application of the net proceeds of this offering. In addition, we might decide to postpone or not pursue these planned trials and activities or other development activities if the net proceeds from this offering and the other sources of cash are less than, or do not last as long as, expected.

Pending their use, we plan to invest the net proceeds from this offering in short- and intermediate-term, interest-bearing obligations, investment-grade instruments, certificates of deposit or direct or guaranteed obligations of the U.S. government.

DIVIDEND POLICY

We have never declared or paid any dividends on our common stock. We currently anticipate that we will retain any future earnings for the operation and expansion of our business. Accordingly, we do not currently anticipate declaring or paying any cash dividends on our common stock for the foreseeable future. Any future determination relating to our dividend policy will be made at the discretion of our board of directors, subject to applicable law, and will depend on then existing conditions, including our financial condition, results of operations, contractual restrictions, capital requirements, business prospects and other factors our board of directors may deem relevant.

DILUTION

If you invest in our common stock in this offering, your ownership interest will be diluted to the extent of the difference between the public offering price per share in this offering and the as adjusted net tangible book value per share immediately after this offering. The net tangible book value of our common stock as of September 30, 2019 was approximately \$20.6 million, or approximately \$0.42 per share based upon 49,392,706 shares of common stock outstanding as of September 30, 2019. Net tangible book value per share is equal to our total tangible assets, less our total liabilities, divided by the total number of shares of common stock outstanding as of September 30, 2019.

Net tangible book value dilution per share to investors participating in this offering represents the difference between the amount per share paid by purchasers of common stock in this offering and the as adjusted net tangible book value per share immediately after this offering. After giving effect to the sale of 12,820,513 shares of common stock in this offering at an assumed public offering price of \$3.90 per share, the last reported sale price of our common stock on the Nasdaq Capital Market on November 8, and after deducting underwriting discounts and commissions and estimated aggregate offering expenses payable by us, our as adjusted net tangible book value as of September 30, 2019 would have been approximately \$68.9 million, or approximately \$1.11 per share. This represents an immediate increase in as adjusted net tangible book value of \$0.69 per share to our existing shareholders and an immediate dilution in net tangible book value of \$2.79 per share to investors participating in this offering at the public offering price.

Dilution per share to new investors is determined by subtracting as adjusted net tangible book value per share after this offering from the assumed public offering price per share paid by new investors. The following table illustrates this per share dilution to new investors:

Assumed public offering price per share		<u>\$3.90</u>
Historical net tangible book value per share as of September 30, 2019	\$0.42	
Increase in net tangible book value per share attributable to the offering	<u>\$0.69</u>	
As adjusted net tangible book value per share after giving effect to this offering		<u>\$1.11</u>
Dilution in net tangible book value per share to investors participating in this offering		<u>\$2.79</u>

The table above assumes for illustrative purposes that an aggregate of \$50.0 million in shares of common stock are sold at a price of \$3.90 per share, the last reported sale price of our common stock on the Nasdaq Capital Market on November 8, 2019. The shares sold in this offering, if any, will be sold from time to time at various prices. An increase of \$1.00 per share in the price at which the shares are sold from the assumed offering price of \$3.90 per share shown in the table above, assuming all of our common stock in the aggregate amount of \$50.0 million is sold at that price, would increase our as adjusted net tangible book value per share after the offering to \$1.16 per share and would increase the dilution in net tangible book value per share to investors participating in this offering to \$3.74 per share, after deducting underwriting discounts and commissions and estimated aggregate offering expenses payable by us. A decrease of \$1.00 per share in the price at which the shares are sold from the assumed offering price of \$3.90 per share shown in the table above, assuming all of our common stock in the aggregate amount of \$50.0 million is sold at that price, would decrease our as adjusted net tangible book value per share after the offering to \$1.03 per share and would decrease the dilution in net tangible book value per share to investors participating in this offering to \$1.87 per share, after deducting underwriting discounts and commissions and estimated aggregate offering expenses payable by us.

The information discussed above is illustrative only and will adjust based on the actual public offering price and other terms of this offering determined at pricing.

The table and discussion above does not include:

- 2,907,000 shares of common stock issuable upon the conversion of shares of Series A Convertible Preferred Stock outstanding as of September 30, 2019;

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- 5,000,000 shares of common stock issuable upon the conversion of shares of Series B Convertible Preferred Stock outstanding as of September 30, 2019;
- 3,522,000 shares of common stock issuable upon the conversion of shares of Series C Convertible Preferred Stock that were issued on November 6, 2019;
- 3,720,862 shares of common stock issuable upon the exercise of warrants outstanding as of September 30, 2019, at a weighted average exercise price of \$2.31 per share;
- 9,014,960 shares of common stock issuable upon the exercise of warrants issued on November 6, 2019, at an exercise price of \$7.10 per share;
- 3,009,999 shares of common stock issuable upon the exercise of outstanding stock options issued pursuant to our 2014 employee, director, and consultant equity incentive plan, or the 2014 Plan, at a weighted average exercise price of \$1.90 per share;
- 3,301,061 shares of common stock issuable upon the exercise of outstanding stock options issued pursuant to our 2016 employee, director, and consultant equity incentive plan, or the 2016 Plan, at a weighted average exercise price of \$5.37 per share;
- 2,295,384 shares of common stock issuable upon the exercise of outstanding stock options issued pursuant to our 2018 employee, director, and consultant equity incentive plan, or the 2018 Plan, at a weighted average exercise price of \$3.23 per share;
- 51,800 shares of common stock issuable upon the exercise of outstanding stock options issued pursuant to our 2019 employee, director, and consultant equity incentive plan, or the 2019 Plan, at a weighted average exercise price of \$5.47 per share;
- 2,805,412 shares of common stock reserved for future issuance under the 2019 Plan and 442,127 shares available for sale under the 2018 Employee Stock Purchase Plan, or 2018 ESPP; and
- 1,425,000 shares of common stock issuable upon the exercise of outstanding stock options issued to certain employees as inducement awards upon their entering into employment with the company, at a weighted average exercise price of \$4.46 per share.

Unless otherwise indicated, all information in this prospectus supplement assumes no conversion of the Series A Convertible Preferred Stock, Series B Convertible Preferred Stock, or Series C Convertible Preferred Stock, no exercise of the outstanding warrants and options described above, and no issuance of shares of common stock pursuant to the 2018 ESPP.

PLAN OF DISTRIBUTION

We have entered into a sales agreement with Jefferies, under which we may offer and sell up to \$50,000,000 of our shares of common stock from time to time through Jefferies acting as agent. Sales of our shares of common stock, if any, under this prospectus supplement and the accompanying prospectus will be made by any method that is deemed to be an "at the market offering" as defined in Rule 415(a)(4) under the Securities Act.

Each time we wish to issue and sell shares of common stock under the sales agreement, we will notify Jefferies of the number of shares to be issued, the dates on which such sales are anticipated to be made, any limitation on the number of shares to be sold in any one day and any minimum price below which sales may not be made. Once we have so instructed Jefferies, unless Jefferies declines to accept the terms of such notice, Jefferies has agreed to use its commercially reasonable efforts consistent with its normal trading and sales practices to sell such shares up to the amount specified on such terms. The obligations of Jefferies under the sales agreement to sell our shares of common stock are subject to a number of conditions that we must meet.

The settlement of sales of shares between us and Jefferies is generally anticipated to occur on the second trading day following the date on which the sale was made. Sales of our shares of common stock as contemplated in this prospectus supplement will be settled through the facilities of The Depository Trust Company or by such other means as we and Jefferies may agree upon. There is no arrangement for funds to be received in an escrow, trust or similar arrangement.

We will pay Jefferies a commission equal to 3.0% of the aggregate gross proceeds we receive from each sale of our shares of common stock. Because there is no minimum offering amount required as a condition to close this offering, the actual total public offering amount, commissions and proceeds to us, if any, are not determinable at this time. In addition, we have agreed to reimburse Jefferies for the fees and disbursements of its counsel, payable upon execution of the sales agreement, in an amount not to exceed \$50,000, in addition to certain ongoing disbursements of its legal counsel. We estimate that the total expenses for the offering, excluding any commissions or expense reimbursement payable to Jefferies under the terms of the sales agreement, will be approximately \$0.2 million. The remaining sale proceeds, after deducting any other transaction fees, will equal our net proceeds from the sale of such shares.

Jefferies will provide written confirmation to us before the open on The Nasdaq Capital Market on the day following each day on which shares of common stock are sold under the sales agreement. Each confirmation will include the number of shares sold on that day, the aggregate gross proceeds of such sales and the proceeds to us.

In connection with the sale of the shares of common stock on our behalf, Jefferies will be deemed to be an "underwriter" within the meaning of the Securities Act, and the compensation of Jefferies will be deemed to be underwriting commissions or discounts. We have agreed to indemnify Jefferies against certain civil liabilities, including liabilities under the Securities Act. We have also agreed to contribute to payments Jefferies may be required to make in respect of such liabilities.

The offering of our shares of common stock pursuant to the sales agreement will terminate upon the earlier of (i) the sale of all shares of common stock subject to the sales agreement and (ii) the termination of the sales agreement as permitted therein. We and Jefferies may each terminate the sales agreement at any time upon ten day's prior notice.

This summary of the material provisions of the sales agreement does not purport to be a complete statement of its terms and conditions. A copy of the sales agreement is filed as an exhibit to our quarterly report on Form 10-Q filed under the Securities Exchange Act of 1934, as amended, or the Exchange Act, and incorporated by reference in this prospectus supplement.

Jefferies and its affiliates have previously and may in the future provide various investment banking, commercial banking, financial advisory and other financial services for us and our affiliates, for which services they have and may in the future receive customary fees. In the course of its business, Jefferies may actively trade our securities for

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its own account or for the accounts of customers, and, accordingly, Jefferies may at any time hold long or short positions in such securities.

This prospectus supplement and the accompanying prospectus in electronic format may be made available on a website maintained by Jefferies, and Jefferies may distribute this prospectus supplement and the accompanying prospectus electronically.

LEGAL MATTERS

Certain legal matters will be passed upon for us by Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C., Boston, Massachusetts, and with respect to the validity of the shares of common stock by Brownstein Hyatt Farber Schreck, LLP, Las Vegas, Nevada. Jefferies LLC is being represented in this offering by Cooley LLP, New York, New York.

EXPERTS

The consolidated financial statements of Pieris Pharmaceuticals, Inc. appearing in Pieris Pharmaceuticals, Inc.'s Annual Report (Form 10-K) for the year ended December 31, 2018, have been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in their report thereon, included therein, and incorporated herein by reference. Such consolidated financial statements are incorporated herein by reference in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We are subject to the reporting requirements of the Exchange Act, and file annual, quarterly and current reports, proxy statements and other information with the SEC. The SEC maintains an internet website at www.sec.gov that contains periodic and current reports, proxy and information statements, and other information regarding registrants that are filed electronically with the SEC. You can request copies of these documents by writing to the SEC and paying a fee for the copying cost.

This prospectus supplement is only part of a registration statement on Form S-3 that we have filed with the SEC under the Securities Act of 1933, as amended, and therefore omits certain information contained in the registration statement. We have also filed exhibits and schedules with the registration statement that are excluded from this prospectus supplement, and you should refer to the applicable exhibit or schedule for a complete description of any statement referring to any contract or other document. You may obtain a copy of the registration statement, including the exhibits and schedules, from the SEC's website.

We also maintain a website at <http://www.pieris.com>, through which you can access our SEC filings free of charge. The information set forth on our website is not part of this prospectus supplement.

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The SEC allows us to “incorporate by reference” information into this prospectus supplement, which means that we can disclose important information to you by referring you to another document filed separately with the SEC. The information incorporated by reference is deemed to be part of this prospectus supplement, and subsequent information that we file later with the SEC will automatically update and supersede this information. We filed a registration statement on Form S-3 under the Securities Act with the SEC with respect to the securities we may offer pursuant to this prospectus supplement. This prospectus supplement omits certain information contained in the registration statement, as permitted by the SEC. You should refer to the registration statement, including the exhibits, for further information about us and the securities we may offer pursuant to this prospectus supplement. Statements in this prospectus supplement regarding the provisions of certain documents filed with, or incorporated by reference in, the registration statement are not necessarily complete and each statement is qualified in all respects by that reference. Copies of all or any part of the registration statement, including the documents incorporated by reference or the exhibits, may be obtained from the SEC’s website at <http://www.sec.gov>. The documents we are incorporating by reference are:

- our Annual Report on Form 10-K for the year ended December 31, 2018 that we filed with the SEC on [March 18, 2019](#);
- our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2019, June 30, 2019 and September 30, 2019 that we filed with the SEC on [May 10, 2019](#), [August 9, 2019](#) and [November 12, 2019](#), respectively;
- our Current Reports on Form 8-K filed on [February 4, 2019](#), [July 31, 2019](#), [August 1, 2019](#), [September 3, 2019](#), [September 26, 2019](#), [November 4, 2019](#) and [November 12, 2019](#) (in each case, except for information contained therein which is furnished rather than filed);
- the description of our common stock contained in our Registration Statement on Form 8-A filed on [June 24, 2015](#), including any amendment or report filed for the purpose of updating such description; and
- all reports and other documents subsequently filed by us pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act after the date of this prospectus supplement and prior to the termination or completion of the offering of securities under this prospectus supplement shall be deemed to be incorporated by reference in this prospectus supplement and to be a part hereof from the date of filing such reports and other documents.

The SEC file number for each of the documents listed above is 001-37471.

Any statement contained in this prospectus supplement or in a document incorporated or deemed to be incorporated by reference into this prospectus supplement will be deemed to be modified or superseded for purposes of this prospectus supplement to the extent that a statement contained in this prospectus supplement or any other subsequently filed document that is deemed to be incorporated by reference into this prospectus supplement modifies or supersedes the statement. Any statement so modified or superseded will not be deemed, except as so modified or superseded, to constitute a part of this prospectus supplement.

You may request, orally or in writing, a copy of any or all of the documents incorporated herein by reference. These documents will be provided to you at no cost, by contacting:

Pieris Pharmaceuticals, Inc.
c/o 225 State Street, 9th Floor
Boston, MA 02109, USA
Attn: Investor Relations
Telephone: +1 (857) 246-8998

You may also access these documents on our website, <http://www.pieris.com>. The information contained on, or that can be accessed through, our website is not a part of this prospectus supplement. We have included our website address in this prospectus supplement solely as an inactive textual reference.

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You should rely only on information contained in, or incorporated by reference into, this prospectus supplement. We have not authorized anyone to provide you with information different from that contained in this prospectus supplement or incorporated by reference in this prospectus supplement. We are not making offers to sell the securities in any jurisdiction in which such an offer or solicitation is not authorized or in which the person making such offer or solicitation is not qualified to do so or to anyone to whom it is unlawful to make such offer or solicitation.

PROSPECTUS

PIERIS PHARMACEUTICALS, INC.

\$200,000,000 COMMON STOCK PREFERRED STOCK DEBT SECURITIES WARRANTS RIGHTS PURCHASE CONTRACTS UNITS

This prospectus will allow us to issue, from time to time at prices and on terms to be determined at or prior to the time of the offering, up to \$200,000,000 of any combination of the securities described in this prospectus, either individually or in units. We may also offer common stock or preferred stock upon conversion of or exchange for debt securities; common stock upon conversion of or exchange for the preferred stock; common stock, preferred stock or debt securities upon the exercise of warrants, rights or performance of purchase contracts; or any combination of these securities upon the performance of purchase contracts.

We may offer and sell these securities on a delayed or continuous basis to or through one or more underwriters, dealers or agents, or directly to investors, in amounts, at prices and on terms to be determined by market conditions and other factors at the time of the offering. For additional information on the methods of sale, you should refer to the section entitled "Plan of Distribution" in this prospectus and in the applicable prospectus supplement. If any underwriters or agents are involved in the sale of our securities with respect to which this prospectus is being delivered, the names of such underwriters or agents and any applicable fees, commissions or discounts and over-allotment options will be set forth in a prospectus supplement. The price to the public of such securities and the net proceeds that we expect to receive from such sale will also be set forth in a prospectus supplement. You should read this prospectus and any prospectus supplement, as well as any documents incorporated by reference into this prospectus or any prospectus supplement, carefully before you invest.

This prospectus describes only the general terms of these securities and the general manner in which we will offer the securities. The specific terms of any securities we offer will, if not included in this prospectus or information incorporated by reference herein, be included in a supplement to this prospectus. The prospectus supplement may describe the specific manner in which we will offer the securities and may also add, update or change information contained in this prospectus.

Our common stock is listed on the Nasdaq Capital Market under the symbol "PIRS". On August 8, 2018, the last reported sale price for our common stock was \$5.30 per share. We will provide information in the related prospectus supplement for the trading market, if any, for any other securities that may be offered. Prospective purchasers of our securities are urged to obtain current information as to the market prices of our securities, where applicable.

Investing in our securities involves a high degree of risk. Before making any investment in any of our securities, you should read and carefully consider the risks described in this prospectus under "[Risk Factors](#)" beginning on page 4 of this prospectus.

This prospectus may not be used to sell our securities unless accompanied by a prospectus supplement.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

This prospectus is dated August 24, 2018

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ABOUT THIS PROSPECTUS

You should rely only on the information that we have provided or incorporated by reference in this prospectus, any applicable prospectus supplement and any related free writing prospectus that we may authorize to be provided to you. We have not authorized anyone to provide you with different information. No dealer, salesperson or other person is authorized to give any information or to represent anything not contained in this prospectus, any applicable prospectus supplement or any related free writing prospectus that we may authorize to be provided to you. You must not rely on any unauthorized information or representation. This prospectus is an offer to sell only the securities offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so. You should assume that the information in this prospectus, any applicable prospectus supplement or any related free writing prospectus is accurate only as of the date on the front of the document and that any information we have incorporated by reference is accurate only as of the date of the document incorporated by reference, regardless of the time of delivery of this prospectus, any applicable prospectus supplement or any related free writing prospectus, or any sale of a security registered under the registration statement of which this prospectus is a part.

This prospectus does not contain all of the information included in the registration statement. For a more complete understanding of the offering of the securities, you should refer to the registration statement, including its exhibits. This prospectus contains summaries of certain provisions contained in some of the documents described herein, but reference is made to the actual documents for complete information. All of the summaries are qualified in their entirety by the actual documents. The prospectus supplement may also add, update or change information contained or incorporated by reference in this prospectus. However, no prospectus supplement will offer a security that is not registered and described in this prospectus at the time of its effectiveness. This prospectus, together with the applicable prospectus supplements and the documents incorporated by reference into this prospectus, includes all material information relating to the offering of securities under this prospectus. You should carefully read this prospectus, the applicable prospectus supplement, the information and documents incorporated herein by reference and the additional information under the heading "Where You Can Find More Information" before making an investment decision.

We further note that the representations, warranties and covenants made by us in any agreement that is filed as an exhibit to any document that is incorporated by reference in the accompanying prospectus were made solely for the benefit of the parties to such agreement, including, in some cases, for the purpose of allocating risk among the parties to such agreements, and should not be deemed to be a representation, warranty or covenant to you. Moreover, such representations, warranties or covenants were accurate only as of the date when made. Accordingly, such representations, warranties and covenants should not be relied on as accurately representing the current state of our affairs.

This prospectus may not be used to consummate sales of our securities, unless it is accompanied by a prospectus supplement. To the extent there are inconsistencies between any prospectus supplement, this prospectus and any documents incorporated by reference, the document with the most recent date will control.

As used in this prospectus, unless the context indicates or otherwise requires, "our Company", "the Company", "Pieris", "we", "us", and "our" refer to Pieris Pharmaceuticals, Inc., a Nevada corporation, and its consolidated subsidiary, Pieris Pharmaceuticals GmbH (formerly known as Pieris AG), a company organized under the laws of Germany, Pieris Australia Pty Ltd., a company organized under the laws of Australia that is a consolidated subsidiary of Pieris Pharmaceuticals GmbH, and Pieris Securities Corporation, a Massachusetts securities corporation, a consolidated subsidiary of Pieris Pharmaceuticals, Inc.

We have registered trademarks for Pieris® and Anticalin®. All other trademarks, trade names and service marks included in this prospectus are the property of their respective owners. Use or display by us of other parties' trademarks, trade dress or products is not intended to and does not imply a relationship with, or endorsements or sponsorship of, us by the trademark or trade dress owner.

PROSPECTUS SUMMARY

The following is a summary of what we believe to be the most important aspects of our business and the offering of our securities under this prospectus. We urge you to read this entire prospectus, including the more detailed consolidated financial statements, notes to the consolidated financial statements and other information incorporated by reference from our other filings with the SEC or included in any applicable prospectus supplement. Investing in our securities involves risks. Therefore, carefully consider the risk factors set forth in any prospectus supplements and in our most recent annual and quarterly filings with the SEC, as well as other information in this prospectus and any prospectus supplements and the documents incorporated by reference herein or therein, before purchasing our securities. Each of the risk factors could adversely affect our business, operating results and financial condition, as well as adversely affect the value of an investment in our securities.

Overview

We are a clinical-stage biotechnology company that discovers and develops Anticalin-based drugs to target validated disease pathways in unique and transformative ways. Our clinical pipeline includes an immuno-oncology bispecific targeting HER2 and 4-1BB, an inhaled IL-4 receptor alpha targeting Anticalin protein to treat asthma, and a half-life-optimized hepcidin targeting Anticalin protein to treat anemia. Our proprietary Anticalin proteins are a novel class of therapeutics validated in the clinic and by partnerships with leading pharmaceutical companies.

Anticalin proteins are low molecular-weight therapeutic proteins derived from lipocalins, naturally occurring proteins typically found in blood plasma and other bodily fluids. Anticalin proteins function similarly to monoclonal antibodies, or mAbs, by binding tightly and specifically to a diverse range of targets. An antibody is a large protein used by the immune system that recognizes a unique part of a foreign target molecule, called an antigen. We believe Anticalin proteins possess numerous advantages over antibodies in certain applications. For example, Anticalin proteins are small in size and are monomeric, meaning single polypeptide units rather than a multi-polypeptide complex. Therefore, we believe Anticalin proteins are generally more stable biophysically than tetrameric monoclonal antibodies, which are composed of four polypeptide subunits. The greater biophysical stability of Anticalin proteins potentially enables unique routes of drug administration, such as pulmonary delivery. Higher-molecular-weight entities, such as antibodies, are often too large to be delivered effectively through these methods. In addition, Anticalin proteins are monovalent in structure, which means they bind to a single cell surface receptor, which may avoid the risk of cross-linking of cell surface receptors where such receptors are a therapeutic target. While our basic Anticalin proteins have only a single binding site and are not subject to such cross-linking, the Anticalin technology is also modular, which allows us to design Anticalin protein constructs to bind with specificity to multiple targets at the same time. This multispecificity offers advantages in biological settings where binding to multiple targets can enhance the ability of a drug to achieve its desired effects, such as killing cancer cells. Moreover, unlike antibodies, the pharmacokinetic, or PK, profile of Anticalin proteins can be adjusted to potentially enable program-specific optimal drug exposure. Moreover, no immunogenicity has been observed to date with Anticalin proteins. Such differentiating characteristics suggest that Anticalin proteins have the potential, in certain cases, to become first-in-class drugs. We believe that the drug-like properties of the Anticalin drug class were demonstrated in various clinical trials with different Anticalin-based drug candidates, including PRS-080 and others.

We have collaboration arrangements with major multi-national pharmaceutical companies headquartered in the United States, Europe, and Japan. We have established a License and Collaboration Agreement with Les Laboratoires Servier and Institut de Recherches Internationales Servier, or Servier, in January 2017 in immuno-oncology and entered into an Exclusive Option Agreement with Aska in February 2017 for PRS-080 in Japan and other Asian territories. In May 2017, we entered into an alliance with AstraZeneca to treat respiratory diseases and in February 2018 we entered into a License and Collaboration Agreement with Seattle

Genetics, Inc., or Seattle Genetics, in immuno-oncology. We also have discovery and preclinical collaboration and service agreements with both academic institutions and private firms across the globe, though Pieris Pharmaceuticals, Inc. or its wholly-owned affiliates, Pieris Pharmaceuticals GmbH and Pieris Australia Pty Ltd.

Additional Information

For more information regarding our business, see the disclosure under the headings “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and “Business” included elsewhere in this prospectus. For a description of certain risks related to our business, see the disclosure under the heading “Risk Factors” beginning on page 6 of this prospectus.

Corporate History

Pieris Pharmaceuticals, Inc. was incorporated under the laws of the State of Nevada on May 24, 2013 with the name “Marika Inc.” and we changed our name to Pieris Pharmaceuticals, Inc. on December 16, 2014. Pieris Pharmaceuticals, Inc. began operating the business of Pieris Pharmaceuticals GmbH, or Pieris GmbH, through a reverse acquisition on December 17, 2014. Pieris GmbH (formerly Pieris AG, a German company which was founded in 2001) continues as an operating subsidiary of the Company. Pieris Pharmaceuticals, Inc. is the sole stockholder of Pieris GmbH with its corporate headquarters located at 255 State Street, 9th Floor, Boston, Massachusetts 02109. The research facilities of Pieris GmbH are located in Freising, Germany. Pieris Australia Pty Ltd., a wholly owned subsidiary of Pieris GmbH, was formed on February 14, 2014 to conduct research and development in Australia. Pieris Pharmaceuticals Securities Corporation, a wholly owned subsidiary of Pieris Pharmaceuticals, Inc. was formed on December 14, 2016 to buy, sell, deal in, or hold securities on its own behalf and not as a broker, and will engage in its activities exclusively for investment purposes.

Implications of Being an Emerging Growth Company

As a company with less than \$1.0 billion in revenue during our last fiscal year, we qualify as an “emerging growth company” as defined in the Jumpstart Our Business Startups Act, or JOBS Act, enacted in April 2012. An emerging growth company may take advantage of reduced reporting requirements that are otherwise applicable to public companies. These provisions include, but are not limited to:

- being required to provide only two years of audited financial statements in addition to any required unaudited interim financial statements, with correspondingly reduced disclosure in the “Management’s Discussion and Analysis of Financial Condition and Results of Operations” section of our periodic reports and registration statements;
- not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2002, or Sarbanes-Oxley Act;
- reduced disclosure obligations regarding executive compensation in our periodic reports, proxy statements and registration statements; and
- exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved.

We expect we will no longer qualify as an emerging growth company on December 31, 2019 as this is the the last day of the fiscal year following the fifth anniversary of the date of the first sale of our common stock pursuant to an effective registration statement under the Securities Act.

We may choose to take advantage of some but not all of these reduced burdens. We have taken advantage of certain of the reduced disclosure obligations, which include providing only two years of audited financial statements and correspondingly reduced financial disclosures and reduced executive compensation disclosure in our periodic reports, proxy statements and registration statements, and may elect to take advantage of other reduced burdens in future filings. As a result, the information that we provide to our stockholders may be different than you might receive from other public reporting companies in which you hold equity interests.

Under the JOBS Act, emerging growth companies can delay adopting new or revised accounting standards until such time as those standards apply to private companies. We have irrevocably elected to avail ourselves of this extended transition period for complying with new or revised accounting standards.

Offerings Under This Prospectus

Under this prospectus, we may offer shares of our common stock and preferred stock, various series of debt securities and/or warrants, rights or purchase contracts to purchase any of such securities, either individually or in units, with a total value of up to \$200,000,000, from time to time at prices and on terms to be determined by market conditions at the time of the offering. This prospectus provides you with a general description of the securities we may offer. Each time we offer a type or series of securities under this prospectus, we will provide a prospectus supplement that will describe the specific amounts, prices and other important terms of the securities, including, to the extent applicable:

- designation or classification;
- aggregate principal amount or aggregate offering price;
- maturity, if applicable;
- rates and times of payment of interest or dividends, if any;
- redemption, conversion or sinking fund terms, if any;
- voting or other rights, if any; and
- conversion or exercise prices, if any.

The prospectus supplement also may add, update or change information contained in this prospectus or in documents we have incorporated by reference into this prospectus. However, no prospectus supplement will fundamentally change the terms that are set forth in this prospectus or offer a security that is not registered and described in this prospectus at the time of its effectiveness.

We may sell the securities directly to investors or to or through agents, underwriters or dealers. We, and our agents or underwriters, reserve the right to accept or reject all or part of any proposed purchase of securities. If we offer securities through agents or underwriters, we will include in the applicable prospectus supplement:

- the names of those agents or underwriters;
- applicable fees, discounts and commissions to be paid to them;
- details regarding over-allotment options, if any; and
- the net proceeds to us.

This prospectus may not be used to consummate a sale of any securities unless it is accompanied by a prospectus supplement.

RISK FACTORS

Investing in our securities involves significant risk. The prospectus supplement applicable to each offering of our securities may contain a discussion of the risks applicable to an investment in Pieris. Prior to making a decision about investing in our securities, you should carefully consider the specific factors discussed under the heading "Risk Factors" in the applicable prospectus supplement, together with all of the other information contained or incorporated by reference in the prospectus supplement or appearing or incorporated by reference in this prospectus. You should also consider the risks, uncertainties and assumptions discussed under the heading "Risk Factors" included in our most recent annual report on Form 10-K, as revised or supplemented by our subsequent quarterly reports on Form 10-Q or our current reports on Form 8-K on file with the SEC, all of which are incorporated herein by reference, and which may be amended, supplemented or superseded from time to time by other reports we file with the SEC in the future. The risks and uncertainties we have described are not the only ones we face. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also affect our operations. The occurrence of any of these risks might cause you to lose all or part of your investment in the offered securities.

RATIO OF EARNINGS TO FIXED CHARGES

Any time debt securities are offered pursuant to this prospectus, we will provide a table setting forth our ratio of earnings to fixed charges on a historical basis in the applicable prospectus supplement, if required.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and the documents incorporated by reference in this prospectus include forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, that relate to future events or to our future operating or financial performance. Any forward-looking statement involves known and unknown risks, uncertainties and other factors that may cause our actual results, levels of activity, performance or achievements to differ materially from any future results, levels of activity, performance or achievements expressed or implied by such forward-looking statement. Forward-looking statements include statements, other than statements of historical fact, about, among other things:

- the accuracy of our estimates regarding expenses, future revenues, uses of cash, capital requirements and the need for additional financing;
- the initiation, cost, timing, progress and results of our clinical trials, preclinical studies and development activities;
- the timing of and our ability to obtain and maintain regulatory approval of our existing product candidates, any product candidates that we may develop, and any related restrictions, limitations, and/or warnings in the label of any approved product candidates;
- our plans to research, develop and commercialize our current and future product candidates;
- our collaborators' election to pursue research, development and commercialization activities;
- our ability to obtain future reimbursement and/or milestone payments from our collaborators;
- our ability to attract collaborators with development, regulatory and commercialization expertise;
- our ability to obtain and maintain intellectual property protection for our product candidates;
- the size and growth of the markets for our product candidates and our ability to serve those markets;
- the rate and degree of market acceptance of any future products;
- the success of competing drugs that are or become available;
- regulatory developments in the United States and other countries;
- the performance of our third-party suppliers and manufacturers and our ability to obtain alternative sources of raw materials;
- our ability to obtain additional financing;
- our use of the proceeds from our securities offerings;
- any restrictions on our ability to use our net operating loss carryforwards; and
- our ability to attract and retain key personnel.

Words such as, but not limited to, "believe," "expect," "anticipate," "estimate," "forecast," "intend," "may," "plan," "potential," "predict," "project," "targets," "likely," "will," "would," "could," "should," "continue," "scheduled" and similar expressions or phrases, or the negative of those expressions or phrases, are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. Although we believe that we have a reasonable basis for each forward-looking statement contained in this prospectus, we caution you that these statements are based on our projections of the future that are subject to known and unknown risks and uncertainties and other important factors that may cause our actual results, level of activity, performance or achievements expressed or implied by any forward-looking statement to differ. These risks, uncertainties and other factors are described in greater detail under the caption "Risk Factors" in this prospectus, as updated and supplemented by the discussion of risks and uncertainties under "Risk Factors" contained in any supplements to this prospectus and in our most recent annual report on Form 10-K, as revised or supplemented by our subsequent quarterly reports on Form 10-Q or our current reports on Form 8-K, as well as any amendments thereto, as filed with the SEC and which are incorporated herein by reference. Also, these forward-looking statements represent our estimates and assumptions only as of the date of the document containing the applicable statement. As a result of the risks and uncertainties, the results or events indicated by the forward-looking statements may not occur. We caution you not to place undue reliance on any forward-looking statement.

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You should read this prospectus and the documents we have filed with the SEC that are incorporated by reference completely and with the understanding that our actual future results may be materially different from what we expect. We qualify all of the forward-looking statements in the foregoing documents by these cautionary statements. Unless required by law, we undertake no obligation to update or revise any forward-looking statements to reflect new information or future events or developments. Thus, you should not assume that our silence over time means that actual events are bearing out as expressed or implied in such forward- looking statements.

USE OF PROCEEDS

Unless otherwise indicated in the applicable prospectus supplement, we intend to use any net proceeds from the sale of securities under this prospectus for our operations and advancing the development of Pieris' programs and product candidates, including the advancement of clinical development of PRS-343, accelerating and expanding our pre-clinical pipeline in our key therapeutic areas of immuno-oncology and respiratory diseases, expanding our discovery operations and other general corporate purposes, including, but not limited to, working capital, intellectual property protection and enforcement, capital expenditures, repayment of any existing indebtedness, investments, acquisitions and collaborations. We have not determined the amounts we plan to spend on any of the areas listed above or the timing of these expenditures. As a result, our management will have broad discretion to allocate the net proceeds, if any, we receive in connection with securities offered pursuant to this prospectus for any purpose. Pending application of the net proceeds as described above, we may initially invest the net proceeds in short-term, investment-grade, interest-bearing securities or apply them to the reduction of short-term indebtedness.

PLAN OF DISTRIBUTION

The securities covered by this prospectus may be sold from time to time, at market prices prevailing at the time of sale, at prices related to market prices, at a fixed price or prices subject to change or at negotiated prices, by a variety of methods including the following:

- in the over-the-counter market;
- in privately negotiated transactions;
- through broker-dealers, who may act as agents or principals;
- through one or more underwriters on a firm commitment or best-efforts basis;
- in a block trade in which a broker-dealer will attempt to sell a block of securities as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- directly to one or more purchasers;
- through agents;
- in “at the market offerings” to or through a market maker or into an existing trading market, or a securities exchange or otherwise; or
- in any combination of the above.

In effecting sales, brokers or dealers engaged by the selling stockholders may arrange for other brokers or dealers to participate. Broker-dealer transactions may include:

- purchases of the securities by a broker-dealer as principal and resales of the securities by the broker-dealer for its account pursuant to this prospectus;
- ordinary brokerage transactions; or
- transactions in which the broker-dealer solicits purchasers on a best efforts basis.

We may change the price of the securities offered from time to time.

Offers to purchase securities may be solicited directly by us and the sale thereof may be made by us directly to institutional investors or others. In this case, no underwriters or agents would be involved. We may use electronic media, including the Internet, to sell offered securities directly.

We, or agents designated by us, may directly solicit, from time to time, offers to purchase the securities. Any such agent may be deemed to be an underwriter as that term is defined in the Securities Act. We will name any agents involved in the offer or sale of the securities and describe any commissions payable by us to these agents in the prospectus supplement. Unless otherwise indicated in the prospectus supplement, these agents will be acting on a best efforts basis for the period of their appointment. The agents may be entitled under agreements which may be entered into with us to indemnification by us against specific civil liabilities, including liabilities under the Securities Act. The agents may also be our customers or may engage in transactions with or perform services for us in the ordinary course of business.

If we utilize any underwriters in the sale of the securities in respect of which this prospectus is delivered, we will enter into an underwriting agreement with those underwriters at the time of sale to them. We will set forth the names of these underwriters and the terms of the transaction in the prospectus supplement, which will be used by the underwriters to make resales of the securities in respect of which this prospectus is delivered to the public. We may indemnify the underwriters under the relevant underwriting agreement against specific liabilities, including liabilities under the Securities Act. The underwriters or their affiliates may be customers of, may engage in transactions with and may perform services for us or our affiliates in the ordinary course of business.

If we utilize a dealer in the sale of the securities in respect of which this prospectus is delivered, we will sell those securities to the dealer, as principal. The dealer may then resell those securities to the public at varying prices to be determined by the dealer at the time of resale. We may indemnify the dealers against specific liabilities, including liabilities under the Securities Act. The dealers or their affiliates may also be our customers or may engage in transactions with, or perform services for us in the ordinary course of business.

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We may offer the common stock covered by this prospectus into an existing trading market on the terms described in the prospectus supplement relating thereto. Underwriters, dealers and agents who participate in any at-the-market offerings will be described in the prospectus supplement relating thereto.

A prospectus and accompanying prospectus supplement in electronic form may be made available on the web sites maintained by the underwriters. The underwriters may agree to allocate a number of securities for sale to their online brokerage account holders. Such allocations of securities for internet distributions will be made on the same basis as other allocations. In addition, securities may be sold by the underwriters to securities dealers who resell securities to online brokerage account holders.

The aggregate maximum compensation the underwriters will receive in connection with the sale of any securities under this prospectus and the registration statement of which it forms a part will not exceed 8% of the gross proceeds from the sale.

To the extent required, this prospectus may be amended or supplemented from time to time to describe a specific plan of distribution. The place and time of delivery for the securities in respect of which this prospectus is delivered will be set forth in the accompanying prospectus supplement.

In connection with offerings of securities under the registration statement of which this prospectus forms a part and in compliance with applicable law, underwriters, brokers or dealers may engage in transactions that stabilize or maintain the market price of the securities at levels above those that might otherwise prevail in the open market. Specifically, underwriters, brokers or dealers may over-allot in connection with offerings, creating a short position in the securities for their own accounts. For the purpose of covering a syndicate short position or stabilizing the price of the securities, the underwriters, brokers or dealers may place bids for the securities or effect purchases of the securities in the open market. Finally, the underwriters may impose a penalty whereby selling concessions allowed to syndicate members or other brokers or dealers for distribution of the securities in offerings may be reclaimed by the syndicate if the syndicate repurchases previously distributed securities in transactions to cover short positions, in stabilization transactions or otherwise. These activities may stabilize, maintain or otherwise affect the market price of the securities, which may be higher than the price that might otherwise prevail in the open market, and, if commenced, may be discontinued at any time.

DESCRIPTION OF COMMON STOCK

We are authorized to issue 300,000,000 shares of common stock, par value \$0.001 per share. On August 8, 2018, we had 54,034,689 shares of common stock outstanding and approximately 77 common stockholders of record.

The following summary of certain provisions of our common stock does not purport to be complete. This description is summarized from, and is qualified in its entirety by reference to, our amended and restated articles of incorporation and our amended and restated bylaws, to which you should refer and both of which are included as exhibits to the registration statement of which this prospectus is a part. The summary below is also qualified by provisions of applicable law, including Chapters 78 and 92A of the Nevada Revised Statutes, or NRS, as applicable to corporations.

General

The holders of our common stock are entitled to one vote per share on matters on which our stockholders vote. There are no cumulative voting rights. An election of directors by our stockholders shall be determined by a plurality of the votes cast by the stockholders entitled to vote on the election. Subject to any preferential dividend rights of any outstanding shares of preferred stock, holders of our common stock are entitled to receive dividends, if declared by our Board of Directors, out of funds that we may legally use to pay dividends. All of the issued and outstanding shares of our common stock are duly authorized, validly issued, fully paid and non-assessable.

If we liquidate or dissolve, holders of our common stock are entitled to share ratably in our assets once our debts and any liquidation preference owed to any then-outstanding preferred stockholders are paid. Our amended and restated articles of incorporation do not provide our common stock with any redemption, conversion or preemptive rights. The rights, preferences and privileges of holders of common stock are subject to and may be adversely affected by the rights of the holders of shares of any series of then-outstanding preferred stock.

Registration Rights

Private Placement Registration Rights

On December 17, 2014, we entered into a purchase agreement with multiple investors relating to the issuance and sale of shares of our common stock in a private placement (the "2014 Private Placement"). The 2014 Private Placement held closings on December 17, December 18, and December 23, 2014, through which we sold an aggregate of 6,779,510 shares of our common stock at \$2.00 per share for aggregate proceeds of approximately \$13.6 million.

We also issued warrants to acquire up to 542,360 shares of our common stock at an exercise price of \$2.00 per share to placement agents or their designees (the "Placement Agent Warrants").

In connection with the 2014 Private Placement, we entered into a registration rights agreement and agreed to file a registration statement covering the resale of the shares sold in the 2014 Private Placement, the shares underlying the Placement Agent Warrants, and the 20,000,000 shares of our common stock issued to former stockholders of Pieris GmbH in connection with the share exchange transaction on December 17, 2014. We filed a registration statement on Form S-1 which was declared effective by the SEC on May 11, 2015. We have agreed to keep such registration statement effective until the later of December 17, 2016 and such time as all of the securities to be registered thereunder have been sold under the registration statement or may be sold without restriction pursuant to Rule 144.

On June 2, 2016, we entered into a securities purchase agreement with multiple investors relating to the issuance and sale of units consisting of: (i) one share of our common stock or non-voting series A convertible preferred stock convertible into one share of common stock, and (ii) a warrant to purchase 0.40 shares of our common stock with an exercise price of \$2.00 per share and (iii) a warrant to purchase 0.20 shares of our common stock with an exercise price of \$3.00 per share (the "2016 Private Placement"). The 2016 Private Placement closed on June 8, 2016 and we sold 8,188,804 units for gross proceeds of approximately \$16.5 million.

In connection with the 2016 Private Placement, we entered into a registration rights agreement with the investors and agreed to register the resale of the common stock, the common stock underlying the preferred stock, and the

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warrants. We filed a registration statement on Form S-3 which was declared effective by the SEC on August 3, 2016. We have agreed to use our commercially reasonable efforts to keep such registration statement effective until the earliest to occur of: (i) such time as all of the securities to be registered thereunder have been sold under the registration statement, (ii) such time as all of the securities to be registered thereunder may be sold without restriction pursuant to Rule 144, or (iii) June 8, 2018.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is Computershare Trust Company, N.A. Its address is P.O. Box 505000, Louisville, KY, 40233-5000. Their telephone number is (877) 373-6374 from the United States, Canada and Puerto Rico and (781) 575-3100 from all other locations.

Stock Exchange Listing

Our common stock is listed for quotation on the Nasdaq Capital Market, under the symbol "PIRS."

DESCRIPTION OF PREFERRED STOCK

We are authorized to issue 10,000,000 shares of preferred stock, par value \$0.001 per share. As of August 8, 2018, 2,907 shares of preferred stock were issued and outstanding. The following summary of certain provisions of our preferred stock does not purport to be complete. This description is summarized from, and is qualified in its entirety by reference to, our amended and restated articles of incorporation and our amended and restated bylaws, to which you should refer and both of which are included as exhibits to the registration statement of which this prospectus is a part. The summary below is also qualified by provisions of applicable law, including Chapters 78 and 92A of the NRS as applicable to corporations.

General

Our Board of Directors has the authority, without further stockholder authorization, to issue from time to time up to 10,000,000 shares of preferred stock in one or more series and to fix the voting powers, designations, preferences, limitations, restrictions, and relative rights of each series. If we issue preferred stock in the future, such preferred stock may have priority over common stock with respect to dividends and other distributions, including the distribution of assets upon liquidation. Although we have no present plans to issue any shares of preferred stock, the issuance of shares of preferred stock, or the issuance of rights to purchase such shares, could decrease the amount of earnings and assets available for distribution to the holders of common stock, could adversely affect the rights and powers, including voting rights, of the common stock, and could have the effect of delaying, deterring or preventing a change of control of us or an unsolicited acquisition proposal.

If we offer a specific series of preferred stock under this prospectus, we will describe the terms of the preferred stock in the prospectus supplement for such offering and will file a copy of the certificate of designation establishing the terms of the preferred stock with the Nevada Secretary of State and the SEC. To the extent required, this description will include:

- the designation and stated value, if any;
- the number of shares offered, the liquidation preference, if any, per share and the purchase price per share;
- the dividend rate(s), period(s) and/or payment date(s), or method(s) of calculation for such dividends;
- whether dividends will be cumulative or non-cumulative and, if cumulative, the date from which dividends will accumulate;
- the procedures for any auction and remarketing, if any;
- the provisions for a sinking fund, if any;
- the provisions for redemption, if applicable;
- any listing of the preferred stock on any securities exchange or market;
- whether the preferred stock will be convertible into our common stock, and, if applicable, the conversion price (or how it will be calculated) and conversion period;
- whether the preferred stock will be exchangeable into debt securities, and, if applicable, the exchange price (or how it will be calculated) and exchange period;
- voting rights, if any, of the preferred stock;
- a discussion of any material and/or special U.S. federal income tax considerations applicable to the preferred stock;
- the relative ranking and preferences of the preferred stock as to dividend rights and rights upon liquidation, dissolution or winding up of the affairs of the Company; and
- any material limitations on issuance of any class or series of preferred stock ranking pari passu with or senior to the series of preferred stock as to dividend rights and rights upon liquidation, dissolution or winding up of the Company.

Transfer Agent and Registrar

The transfer agent and registrar for our preferred stock will be set forth in the applicable prospectus supplement.

DESCRIPTION OF DEBT SECURITIES

The following description, together with the additional information we include in any applicable prospectus supplements, summarizes the material terms and provisions of the debt securities that we may offer under this prospectus. While the terms we have summarized below will apply generally to any future debt securities we may offer pursuant to this prospectus, we will describe the particular terms of any debt securities that we may offer in more detail in the applicable prospectus supplement. If we so indicate in a prospectus supplement, the terms of any debt securities offered under such prospectus supplement may differ from the terms we describe below, and to the extent the terms set forth in a prospectus supplement differ from the terms described below, the terms set forth in the prospectus supplement shall control.

The "Debt Securities" will be either senior debt securities, or Senior Debt Securities, or subordinated debt securities, or Subordinated Debt Securities. The Senior Debt Securities and the Subordinated Debt Securities will be issued under separate indentures among us, the subsidiary guarantors of such Debt Securities, if any, each a Subsidiary Guarantor, if applicable, and a trustee to be determined, the Trustee. Senior Debt Securities will be issued under a "Senior Indenture" and Subordinated Debt Securities will be issued under a "Subordinated Indenture." Together, the Senior Indenture and the Subordinated Indenture are called "Indentures." The form of each Indenture has been filed with the SEC as an exhibit to the registration statement of which this prospectus is a part, and you should read the Indentures for provisions that may be important to you.

The Indentures will be qualified under the Trust Indenture Act of 1939, as in effect on the date of the indenture. We use the term "debenture trustee" to refer to either the trustee under the senior indenture or the trustee under the subordinated indenture, as applicable. The following summaries of material provisions of the Debt Securities are subject to, and qualified in their entirety by reference to, all the provisions of the indenture applicable to a particular series of debt securities.

General

The Debt Securities may be issued from time to time in one or more series and may be denominated and payable in foreign currencies or units based on or relating to foreign currencies. Neither Indenture limits the amount of Debt Securities that may be issued thereunder, and each Indenture provides that the specific terms of the Debt Securities shall be set forth in, or determined pursuant to, an authorizing resolution and/or a supplemental indenture, if any, relating to such series.

- the title of the Debt Securities;
- the aggregate principal amount and any limit on the aggregate principal amount of the Debt Securities;
- the currency or units based on or relating to currencies in which Debt Securities are denominated and the currency or units in which principal or interest or both will or may be payable;
- whether we will issue the series of Debt Securities in global form, the terms of any global securities and who the depositary will be;
- whether or not the Debt Securities will be secured or unsecured, and the terms of any secured debt;
- our right, if any, to defer payment of interest and the maximum length of any such deferral period;
- whether the Indenture will restrict our ability to pay dividends, or will require us to maintain any asset ratios or reserves;
- whether we will be restricted from incurring any additional indebtedness;
- a discussion on any material or special U.S. federal income tax considerations applicable to Debt Securities;
- the denominations in which we will issue Debt Securities, if other than denominations of \$1,000 and any integral multiple thereof;
- whether the Debt Securities are Senior Debt Securities or Subordinated Debt Securities and, if Subordinated Debt Securities, the related subordination terms;
- whether any Subsidiary Guarantor will provide a Subsidiary Guarantee of the Debt Securities;
- each date on which the principal of the Debt Securities will be payable;

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- the interest rate, which may be fixed or variable, or the method for determining the rate and date interest will begin to accrue, that the Debt Securities will bear and the interest payment dates for the Debt Securities;
- each place where payments on the Debt Securities will be payable;
- any terms upon which the Debt Securities may be redeemed, in whole or in part, at our option;
- any sinking fund or other provisions that would obligate us to redeem or otherwise repurchase the Debt Securities;
- the portion of the principal amount, if less than all, of the Debt Securities that will be payable upon declaration of acceleration of the Maturity of the Debt Securities;
- whether the Debt Securities are defeasible;
- any addition to or change in the events of default;
- whether the Debt Securities are convertible into our common stock and, if so, the terms and conditions upon which conversion will be effected, including the initial conversion price or conversion rate and any adjustments thereto and the conversion period;
- any addition to or change in the covenants in the Indenture applicable to the Debt Securities;
- any other specific terms, preferences, rights or limitations of, or restrictions on, the Debt Securities; and
- any other terms of the Debt Securities not inconsistent with the provisions of the Indenture.

Debt Securities, including any Debt Securities that provide for an amount less than the principal amount thereof to be due and payable upon a declaration of acceleration of the maturity thereof, or Original Issue Discount Securities, may be sold at a substantial discount below their principal amount. Special United States federal income tax considerations applicable to Original Issue Discount Securities may be described in the applicable prospectus supplement. In addition, special United States federal income tax or other considerations applicable to any Debt Securities that are denominated in a currency or currency unit other than United States dollars may be described in the applicable prospectus supplement.

Conversion or Exchange Rights

We will set forth in the prospectus supplement the terms, if any, on which Debt Securities may be convertible into or exchangeable for our common stock or our other securities. We will include provisions as to whether conversion or exchange is mandatory, at the option of the holder or at our option. We may include provisions pursuant to which the number of shares of our common stock or our other securities that the holders of the series of Debt Securities receive would be subject to adjustment.

Consolidation, Merger or Sale; No Protection in Event of a Change of Control or Highly Leveraged Transaction

The Indentures do not contain any covenant that restricts our ability to merge or consolidate, or sell, convey, transfer or otherwise dispose of all or substantially all of our assets. However, any successor to or acquirer of such assets must assume all of our obligations under the Indentures or the Debt Securities, as appropriate, satisfactory in form to the debenture trustee.

Unless we state otherwise in the applicable prospectus supplement, the Debt Securities will not contain any provisions that may afford holders of the Debt Securities protection in the event we have a change of control or in the event of a highly leveraged transaction (whether or not such transaction results in a change of control), which could adversely affect holders of Debt Securities.

Events of Default Under the Indenture

The following are events of default under the Indentures with respect to any series of Debt Securities that we may issue:

- if we fail to pay interest when due and our failure continues for 90 days and the time for payment has not been extended or deferred;
- if we fail to pay the principal, or premium, if any, when due and the time for payment has not been extended or delayed;

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- if we fail to observe or perform any other covenant set forth in the Debt Securities of such series or the applicable Indentures, other than a covenant specifically relating to and for the benefit of holders of another series of Debt Securities, and our failure continues for 90 days after we receive written notice from the debenture trustee or holders of not less than a majority in aggregate principal amount of the outstanding Debt Securities of the applicable series; and
- if specified events of bankruptcy, insolvency or reorganization occur as to us.

No event of default with respect to a particular series of Debt Securities (except as to certain events of bankruptcy, insolvency or reorganization) necessarily constitutes an event of default with respect to any other series of Debt Securities. The occurrence of an event of default may constitute an event of default under any bank credit agreements we may have in existence from time to time. In addition, the occurrence of certain events of default or acceleration under any applicable Indenture may constitute an event of default under certain of our other indebtedness outstanding from time to time.

If an event of default with respect to Debt Securities of any series at the time outstanding occurs and is continuing, then the trustee or the holders of not less than a majority in principal amount of the outstanding Debt Securities of that series may, by a notice in writing to us (and to the debenture trustee if given by the holders), declare to be due and payable immediately the principal (or, if the Debt Securities of that series are discount securities, that portion of the principal amount as may be specified in the terms of that series) of and premium and accrued and unpaid interest, if any, on all Debt Securities of that series. Before a judgment or decree for payment of the money due has been obtained with respect to Debt Securities of any series, the holders of a majority in principal amount of the outstanding Debt Securities of that series (or, at a meeting of holders of such series at which a quorum is present, the holders of a majority in principal amount of the Debt Securities) default, other than the non-payment of accelerated principal, premium, if any, and interest, if any, with respect to Debt Securities of that series, have been cured or waived as provided in the applicable Indenture (including payments or deposits in respect of principal, premium or interest that had become due other than as a result of such acceleration). We refer you to the prospectus supplement relating to any series of Debt Securities that are discount securities for the particular provisions relating to acceleration of a portion of the principal amount of such discount securities upon the occurrence of an event of default.

Subject to the terms of the Indentures, if an event of default under an Indenture shall occur and be continuing, the debenture trustee will be under no obligation to exercise any of its rights or powers under such Indenture at the request or direction of any of the holders of the applicable series of debt securities, unless such holders have offered the debenture trustee reasonable indemnity. The holders of a majority in principal amount of the outstanding Debt Securities of any series will have the right to direct the time, method and place of conducting any proceeding for any remedy available to the debenture trustee, or exercising any trust or power conferred on the debenture trustee, with respect to the Debt Securities of that series, provided that:

- the direction so given by the holder is not in conflict with any law or the applicable Indenture; and
- subject to its duties under the Trust Indenture Act, the debenture trustee need not take any action that might involve it in personal liability or might be unduly prejudicial to the holders not involved in the proceeding.

A holder of the Debt Securities of any series will only have the right to institute a proceeding under the Indentures or to appoint a receiver or trustee, or to seek other remedies if:

- the holder previously has given written notice to the debenture trustee of a continuing event of default with respect to that series;
- the holders of at least a majority in aggregate principal amount of the outstanding Debt Securities of that series have made written request, and such holders have offered reasonable indemnity to the debenture trustee to institute the proceeding as trustee; and
- the debenture trustee does not institute the proceeding, and does not receive from the holders of a majority in aggregate principal amount of the outstanding Debt Securities of that series (or at a meeting of holders of such series at which a quorum is present, the holders of a majority in principal amount of the Debt

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Securities of such series represented at such meeting) other conflicting directions within 60 days after the notice, request and offer.

These limitations do not apply to a suit instituted by a holder of Debt Securities if we default in the payment of the principal, premium, if any, or interest on, the Debt Securities. We will periodically file statements with the applicable debenture trustee regarding our compliance with specified covenants in the applicable Indenture.

Modification of Indenture; Waiver

The debenture trustee and we may change the applicable Indenture without the consent of any holders with respect to specific matters, including:

- to fix any ambiguity, defect or inconsistency in the Indenture; and
- to change anything that does not materially adversely affect the interests of any holder of Debt Securities of any series issued pursuant to such Indenture.

In addition, under the Indentures, the rights of holders of a series of Debt Securities may be changed by us and the debenture trustee with the written consent of the holders of at least a majority in aggregate principal amount of the outstanding Debt Securities of each series (or, at a meeting of holders of such series at which a quorum is present, the holders of a majority in principal amount of the Debt Securities of such series represented at such meeting) that is affected. However, the debenture trustee and we may make the following changes only with the consent of each holder of any outstanding Debt Securities affected:

- extending the fixed maturity of the series of debt securities;
- reducing the principal amount, reducing the rate of or extending the time of payment of interest, or any premium payable upon the redemption of any debt securities;
- reducing the principal amount of discount securities payable upon acceleration of maturity;
- making the principal of or premium or interest on any debt security payable in currency other than that stated in the debt security; or
- reducing the percentage of debt securities, the holders of which are required to consent to any amendment or waiver.

Except for certain specified provisions, the holders of at least a majority in principal amount of the outstanding Debt Securities of any series (or, at a meeting of holders of such series at which a quorum is present, the holders of a majority in principal amount of the Debt Securities of such series represented at such meeting) may on behalf of the holders of all Debt Securities of that series waive our compliance with provisions of the Indenture. The holders of a majority in principal amount of the outstanding Debt Securities of any series may on behalf of the holders of all the Debt Securities of such series waive any past default under the Indenture with respect to that series and its consequences, except a default in the payment of the principal of, premium or any interest on any debt security of that series or in respect of a covenant or provision, which cannot be modified or amended without the consent of the holder of each outstanding debt security of the series affected; provided, however, that the holders of a majority in principal amount of the outstanding Debt Securities of any series may rescind an acceleration and its consequences, including any related payment default that resulted from the acceleration.

Discharge

Each Indenture provides that we can elect to be discharged from our obligations with respect to one or more series of debt securities, except for obligations to:

- register the transfer or exchange of Debt Securities of the series;
- replace stolen, lost or mutilated Debt Securities of the series;
- maintain paying agencies;
- hold monies for payment in trust;
- compensate and indemnify the trustee; and
- appoint any successor trustee.

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In order to exercise our rights to be discharged with respect to a series, we must deposit with the trustee money or government obligations sufficient to pay all the principal of, the premium, if any, and interest on, the Debt Securities of the series on the dates payments are due.

Form, Exchange, and Transfer

We will issue the Debt Securities of each series only in fully registered form without coupons and, unless we otherwise specify in the applicable prospectus supplement, in denominations of \$1,000 and any integral multiple thereof. The Indentures provide that we may issue Debt Securities of a series in temporary or permanent global form and as book-entry securities that will be deposited with, or on behalf of, The Depository Trust Company or another depository named by us and identified in a prospectus supplement with respect to that series.

At the option of the holder, subject to the terms of the Indentures and the limitations applicable to global securities described in the applicable prospectus supplement, the holder of the Debt Securities of any series can exchange the Debt Securities for other Debt Securities of the same series, in any authorized denomination and of like tenor and aggregate principal amount.

Subject to the terms of the Indentures and the limitations applicable to global securities set forth in the applicable prospectus supplement, holders of the Debt Securities may present the Debt Securities for exchange or for registration of transfer, duly endorsed or with the form of transfer endorsed thereon duly executed if so required by us or the security registrar, at the office of the security registrar or at the office of any transfer agent designated by us for this purpose. Unless otherwise provided in the Debt Securities that the holder presents for transfer or exchange or in the applicable Indenture, we will make no service charge for any registration of transfer or exchange, but we may require payment of any taxes or other governmental charges.

We will name in the applicable prospectus supplement the security registrar, and any transfer agent in addition to the security registrar, that we initially designate for any debt securities. We may at any time designate additional transfer agents or rescind the designation of any transfer agent or approve a change in the office through which any transfer agent acts, except that we will be required to maintain a transfer agent in each place of payment for the Debt Securities of each series.

If we elect to redeem the Debt Securities of any series, we will not be required to:

- issue, register the transfer of, or exchange any Debt Securities of that series during a period beginning at the opening of business 15 days before the day of mailing of a notice of redemption of any Debt Securities that may be selected for redemption and ending at the close of business on the day of the mailing; or
- register the transfer of or exchange any Debt Securities so selected for redemption, in whole or in part, except the unredeemed portion of any Debt Securities we are redeeming in part.

Information Concerning the Debenture Trustee

The debenture trustee, other than during the occurrence and continuance of an event of default under the applicable Indenture, undertakes to perform only those duties as are specifically set forth in the applicable Indenture. Upon an event of default under an Indenture, the debenture trustee under such Indenture must use the same degree of care as a prudent person would exercise or use in the conduct of his or her own affairs. Subject to this provision, the debenture trustee is under no obligation to exercise any of the powers given it by the Indentures at the request of any holder of Debt Securities unless it is offered reasonable security and indemnity against the costs, expenses and liabilities that it might incur.

Payment and Paying Agents

Unless we otherwise indicate in the applicable prospectus supplement, we will make payment of the interest on any Debt Securities on any interest payment date to the person in whose name the debt securities, or one or more predecessor securities, are registered at the close of business on the regular record date for the interest.

We will pay principal of and any premium and interest on the Debt Securities of a particular series at the office of the paying agents designated by us, except that unless we otherwise indicate in the applicable prospectus

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supplement, will we make interest payments by check which we will mail to the holder. Unless we otherwise indicate in a prospectus supplement, we will designate the corporate trust office of the debenture trustee in the City of New York as our sole paying agent for payments with respect to Debt Securities of each series. We will name in the applicable prospectus supplement any other paying agents that we initially designate for the Debt Securities of a particular series. We will maintain a paying agent in each place of payment for the Debt Securities of a particular series.

All money we pay to a paying agent or the debenture trustee for the payment of the principal of or any premium or interest on any Debt Securities which remains unclaimed at the end of two years after such principal, premium or interest has become due and payable will be repaid to us, and the holder of the security thereafter may look only to us for payment thereof.

Governing Law

The Indentures and the Debt Securities will be governed by and construed in accordance with the laws of the State of New York, except to the extent that the Trust Indenture Act is applicable.

Subordination of Subordinated Debt Securities

Our obligations pursuant to any subordinated Debt Securities will be unsecured and will be subordinate and junior in priority of payment to certain of our other indebtedness to the extent described in a prospectus supplement. The Indentures do not limit the amount of indebtedness we may incur. The Indentures also do not limit us from issuing any other secured or unsecured debt.

DESCRIPTION OF WARRANTS

General

We may issue warrants to purchase shares of our common stock, preferred stock and/or debt securities in one or more series together with other securities or separately, as described in the applicable prospectus supplement. Below is a description of certain general terms and provisions of the warrants that we may offer. Particular terms of the warrants will be described in the warrant agreements and the prospectus supplement relating to the warrants.

The applicable prospectus supplement will contain, where applicable, the following terms of and other information relating to the warrants:

- the specific designation and aggregate number of, and the price at which we will issue, the warrants;
- the currency or currency units in which the offering price, if any, and the exercise price are payable;
- the designation, amount and terms of the securities purchasable upon exercise of the warrants;
- if applicable, the exercise price for shares of our common stock and the number of shares of common stock to be received upon exercise of the warrants;
- if applicable, the exercise price for shares of our preferred stock, the number of shares of preferred stock to be received upon exercise, and a description of that series of our preferred stock;
- if applicable, the exercise price for our debt securities, the amount of debt securities to be received upon exercise, and a description of that series of debt securities;
- the date on which the right to exercise the warrants will begin and the date on which that right will expire or, if you may not continuously exercise the warrants throughout that period, the specific date or dates on which you may exercise the warrants;
- whether the warrants will be issued in fully registered form or bearer form, in definitive or global form or in any combination of these forms, although, in any case, the form of a warrant included in a unit will correspond to the form of the unit and of any security included in that unit;
- any applicable material U.S. federal income tax consequences;
- the identity of the warrant agent for the warrants and of any other depositaries, execution or paying agents, transfer agents, registrars or other agents;
- the proposed listing, if any, of the warrants or any securities purchasable upon exercise of the warrants on any securities exchange;
- if applicable, the date from and after which the warrants and the common stock, preferred stock and/or debt securities will be separately transferable;
- if applicable, the minimum or maximum amount of the warrants that may be exercised at any one time;
- information with respect to book-entry procedures, if any;
- the anti-dilution provisions of the warrants, if any;
- any redemption or call provisions;
- whether the warrants may be sold separately or with other securities as parts of units; and
- any additional terms of the warrants, including terms, procedures and limitations relating to the exchange and exercise of the warrants.

Outstanding Warrants

As of August 8, 2018, we had outstanding warrants to purchase 2,614,018 shares of our common stock at an exercise price of \$2.00 per share and outstanding warrants to purchase 1,240,737 shares of our common stock at an exercise price of \$3.00.

Transfer Agent and Registrar

The transfer agent and registrar for any warrants will be set forth in the applicable prospectus supplement.

DESCRIPTION OF RIGHTS

General

We may issue rights to our stockholders to purchase shares of our common stock, shares of our preferred stock or any of the other securities described in this prospectus. We may offer rights separately or together with one or more additional rights, debt securities, preferred stock, common stock, warrants or purchase contracts, or any combination of those securities in the form of units, as described in the applicable prospectus supplement. Each series of rights will be issued under a separate rights agreement to be entered into between us and a bank or trust company, as rights agent. The rights agent will act solely as our agent in connection with the certificates relating to the rights of the series of certificates and will not assume any obligation or relationship of agency or trust for or with any holders of rights certificates or beneficial owners of rights. The following description sets forth certain general terms and provisions of the rights to which any prospectus supplement may relate. The particular terms of the rights to which any prospectus supplement may relate and the extent, if any, to which the general provisions may apply to the rights so offered will be described in the applicable prospectus supplement. To the extent that any particular terms of the rights, rights agreement or rights certificates described in a prospectus supplement differ from any of the terms described below, then the terms described below will be deemed to have been superseded by that prospectus supplement. We encourage you to read the applicable rights agreement and rights certificate for additional information before you decide whether to purchase any of our rights.

We will provide in a prospectus supplement the following terms of the rights being issued:

- the date of determining the stockholders entitled to the rights distribution;
- the aggregate number of shares of common stock, preferred stock or other securities purchasable upon exercise of the rights;
- the exercise price;
- the aggregate number of rights issued;
- whether the rights are transferrable and the date, if any, on and after which the rights may be separately transferred;
- the date on which the right to exercise the rights will commence, and the date on which the right to exercise the rights will expire;
- the method by which holders of rights will be entitled to exercise;
- the conditions to the completion of the offering, if any;
- the withdrawal, termination and cancellation rights, if any;
- whether there are any backstop or standby purchaser or purchasers and the terms of their commitment, if any;
- whether stockholders are entitled to oversubscription rights, if any;
- any applicable material U.S. federal income tax considerations; and
- any other terms of the rights, including terms, procedures and limitations relating to the distribution, exchange and exercise of the rights, as applicable.

Each right will entitle the holder of rights to purchase for cash the principal amount of shares of common stock, preferred stock or other securities at the exercise price provided in the applicable prospectus supplement. Rights may be exercised at any time up to the close of business on the expiration date for the rights provided in the applicable prospectus supplement.

Holders may exercise rights as described in the applicable prospectus supplement. Upon receipt of payment and the rights certificate properly completed and duly executed at the corporate trust office of the rights agent or any other office indicated in the prospectus supplement, we will, as soon as practicable, forward the shares of common stock, preferred stock or other securities, as applicable, purchasable upon exercise of the rights. If less than all of the rights issued in any rights offering are exercised, we may offer any unsubscribed securities directly to persons other

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than stockholders, to or through agents, underwriters or dealers or through a combination of such methods, including pursuant to standby arrangements, as described in the applicable prospectus supplement.

Rights Agent

The rights agent for any rights we offer will be set forth in the applicable prospectus supplement.

DESCRIPTION OF PURCHASE CONTRACTS

We may issue purchase contracts, including contracts obligating holders to purchase from us, and for us to sell to holders, a specific or variable number of our debt securities, shares of common stock, shares of our preferred stock, warrants or rights, or securities of an entity unaffiliated with us, or any combination of the above, at a future date or dates. Alternatively, the purchase contracts may obligate us to purchase from holders, and obligate holders to sell to us, a specific or variable number of our debt securities, shares of common stock, preferred stock, warrants, rights or other property, or any combination of the above. The price of the securities or other property subject to the purchase contracts may be fixed at the time the purchase contracts are issued or may be determined by reference to a specific formula described in the purchase contracts. We may issue purchase contracts separately or as a part of units each consisting of a purchase contract and one or more of our other securities described in this prospectus or securities of third parties, including U.S. Treasury securities, securing the holder's obligations under the purchase contract. The purchase contracts may require us to make periodic payments to holders or vice versa and the payments may be unsecured or pre-funded on some basis. The purchase contracts may require holders to secure the holder's obligations in a manner specified in the applicable prospectus supplement.

The applicable prospectus supplement will describe the terms of any purchase contracts in respect of which this prospectus is being delivered, including, to the extent applicable, the following:

- whether the purchase contracts obligate the holder or us to purchase or sell, or both purchase and sell, the securities subject to purchase under the purchase contract, and the nature and amount of each of those securities, or the method of determining those amounts;
- whether the purchase contracts are to be prepaid;
- whether the purchase contracts are to be settled by delivery, or by reference or linkage to the value, performance or level of the securities subject to purchase under the purchase contract;
- any acceleration, cancellation, termination or other provisions relating to the settlement of the purchase contracts;
- any applicable material U.S. federal income tax considerations; and
- whether the purchase contracts will be issued in fully registered or global form.

The preceding description sets forth certain general terms and provisions of the purchase contracts to which any prospectus supplement may relate. The particular terms of the purchase contracts to which any prospectus supplement may relate and the extent, if any, to which the general provisions may apply to the purchase contracts so offered will be described in the applicable prospectus supplement. To the extent that any particular terms of the purchase contracts described in a prospectus supplement differ from any of the terms described above, then the terms described above will be deemed to have been superseded by that prospectus supplement. We encourage you to read the applicable purchase contract for additional information before you decide whether to purchase any of our purchase contracts.

DESCRIPTION OF UNITS

The following description, together with the additional information that we include in any applicable prospectus supplements summarizes the material terms and provisions of the units that we may offer under this prospectus. While the terms we have summarized below will apply generally to any units that we may offer under this prospectus, we will describe the particular terms of any series of units in more detail in the applicable prospectus supplement. The terms of any units offered under a prospectus supplement may differ from the terms described below.

We will incorporate by reference from reports that we file with the SEC, the form of unit agreement that describes the terms of the series of units we are offering, and any supplemental agreements, before the issuance of the related series of units. The following summaries of material terms and provisions of the units are subject to, and qualified in their entirety by reference to, all the provisions of the unit agreement and any supplemental agreements applicable to a particular series of units. We urge you to read the applicable prospectus supplements related to the particular series of units that we may offer under this prospectus, as well as any related free writing prospectuses and the complete unit agreement and any supplemental agreements that contain the terms of the units.

General

We may issue units consisting of shares of our common stock, shares of our preferred stock, one or more debt securities, warrants, rights or purchase contracts for the purchase of common stock, preferred stock and/or debt securities in one or more series, in any combination. Each unit will be issued so that the holder of the unit is also the holder of each security included in the unit. Thus, the holder of a unit will have the rights and obligations of a holder of each security included in the unit. The unit agreement under which a unit is issued may provide that the securities included in the unit may not be held or transferred separately, at any time or at any time before a specified date.

We will describe in the applicable prospectus supplement the terms of the series of units being offered, including:

- the designation and terms of the units and of the securities comprising the units, including whether and under what circumstances those securities may be held or transferred separately;
- any provisions of the governing unit agreement that differ from those described below; and
- any provisions for the issuance, payment, settlement, transfer or exchange of the units or of the securities comprising the units.

The provisions described in this section, as well as those set forth in any prospectus supplement or as described under "Description of Common Stock," "Description of Preferred Stock," "Description of Debt Securities," "Description of Warrants," "Description of Rights" and "Description of Purchase Contracts" will apply to each unit, as applicable, and to any common stock, preferred stock, debt security, warrant, right or purchase contract included in each unit, as applicable.

Unit Agent

The name and address of the unit agent for any units we offer will be set forth in the applicable prospectus supplement.

Issuance in Series

We may issue units in such amounts and in such numerous distinct series as we determine.

Enforceability of Rights by Holders of Units

Each unit agent will act solely as our agent under the applicable unit agreement and will not assume any obligation or relationship of agency or trust with any holder of any unit. A single bank or trust company may act as unit agent for more than one series of units. A unit agent will have no duty or responsibility in case of any default by us under the applicable unit agreement or unit, including any duty or responsibility to initiate any proceedings at law or otherwise, or to make any demand upon us. Any holder of a unit may, without the consent of the related unit agent or the holder of any other unit, enforce by appropriate legal action its rights as holder under any security included in the unit.

CERTAIN PROVISIONS OF NEVADA LAW AND OF THE COMPANY'S ARTICLES OF INCORPORATION AND BYLAWS

Anti-Takeover Effects of Our amended and restated articles of incorporation and Amended and restated bylaws and Certain Provisions of Nevada Law

Our amended and restated articles of incorporation, amended and restated bylaws and the NRS contain provisions that may have the effect of maintaining continuity and stability in the composition of our Board of Directors. These provisions may help us avoid costly takeover battles, reduce our vulnerability to a hostile change of control and enhance the ability of our Board of Directors to effectively evaluate and negotiate in connection with any unsolicited offer to acquire us. However, these provisions may have an anti-takeover effect and may delay, deter or prevent a merger or acquisition of our company by means of a tender offer, a proxy contest or other takeover attempt that a stockholder might consider to be in its best interest, including attempts that might result in a premium over the prevailing market price for the shares of common stock held by stockholders.

Business Combinations and Acquisition of Control Shares

Nevada's "combinations with interested stockholders" statutes (NRS 78.411 through 78.444, inclusive) prohibit specified types of business "combinations" between certain Nevada corporations and any person deemed to be an "interested stockholder" for two years after such person first becomes an "interested stockholder" unless the corporation's board of directors approves the combination (or the transaction by which such person becomes an "interested stockholder") in advance, or unless the combination is approved by the board of directors and sixty percent of the corporation's voting power not beneficially owned by the interested stockholder, its affiliates and associates. Furthermore, in the absence of prior approval, certain restrictions may apply even after such two-year period. However, these statutes do not apply to any combination of a corporation and an interested stockholder after the expiration of four years after the person first became an interested stockholder. For purposes of these statutes, an "interested stockholder" is any person who is (1) the beneficial owner, directly or indirectly, of ten percent or more of the voting power of the outstanding voting shares of the corporation, or (2) an affiliate or associate of the corporation and at any time within the two previous years was the beneficial owner, directly or indirectly, of ten percent or more of the voting power of the then-outstanding shares of the corporation. The definition of the term "combination" is sufficiently broad to cover most significant transactions between a corporation and an "interested stockholder." These laws generally apply to Nevada corporations with 200 or more stockholders of record, but a Nevada corporation may elect in its articles of incorporation not to be governed by these particular laws. We have not made such an election in our amended and restated articles of incorporation.

Nevada's "acquisition of controlling interest" statutes (NRS 78.378 through 78.3793, inclusive) contain provisions governing the acquisition of a controlling interest in certain Nevada corporations. These "control share" laws provide generally that any person that acquires a "controlling interest" in certain Nevada corporations may be denied voting rights, unless a majority of the disinterested stockholders of the corporation elects to restore such voting rights. Our amended and restated articles of incorporation include our election to provide that these statutory provisions shall not apply to us or to any acquisition of our common stock. If our amended and restated articles of incorporation are amended to remove such elective provision, and absent a similar provision included in an amendment to our amended and restated bylaws, these laws would then apply to us if we were to have 200 or more stockholders of record (at least 100 of whom have addresses in Nevada appearing on our stock ledger) and do business in the State of Nevada directly or through an affiliated corporation, unless our articles of incorporation or bylaws in effect on the tenth day after the acquisition of a controlling interest provide otherwise. These laws provide that a person acquires a "controlling interest" whenever a person acquires shares of a subject corporation that, but for the application of these provisions of the NRS, would enable that person to exercise (i) one-fifth or more, but less than one-third, (ii) one-third or more, but less than a majority or (iii) a majority or more, of all of the voting power of the corporation in the election of directors. Once an acquirer crosses one of these thresholds, shares which it acquired in the transaction taking it over the threshold and within the 90 days immediately preceding the date when the acquiring person acquired or offered to acquire a controlling interest become "control shares" to which the voting restrictions described above apply.

In addition, NRS 78.139 also provides that directors may resist a change or potential change in control if the directors, by majority vote of a quorum, determine that the change is opposed to, or not in, the best interest of the corporation.

Classified Board of Directors; Removal of Directors Only for Cause

Pursuant to our amended and restated articles of incorporation and amended and restated bylaws, our Board of Directors is divided into three classes, with the term of office of the first class to expire at the first annual meeting of stockholders following the initial classification of directors and until their successors are duly elected and qualified, the term of office of the second class to expire at the second annual meeting of stockholders following the initial classification of directors and until their successors are duly elected and qualified, and the term of office of the third class to expire at the third annual meeting of stockholders following the initial classification of directors and until their successors are duly elected and qualified. At each annual meeting of stockholders, directors elected to succeed those directors whose terms expire, other than directors elected by the holders of any series of preferred stock under specified circumstances, will be elected for a three-year term of office. All directors elected to our classified Board of Directors will serve until the election and qualification of their respective successors or their earlier resignation or removal. Members of the Board of Directors may only be removed for cause and only by the affirmative vote of at least 80% of our outstanding voting stock. These provisions are likely to increase the time required for stockholders to change the composition of the Board of Directors. For example, at least two annual meetings will be necessary for stockholders to effect a change in a majority of the members of the Board of Directors.

Dividends and Other Distributions

Under NRS 78.288, the directors of a Nevada corporation may authorize, and the corporation may make, distributions (including cash dividends) to stockholders, but no such distribution may be made if, after giving it effect:

- the corporation would not be able to pay its debts as they become due in the usual course of business; or
- except as otherwise specifically allowed by such corporation's articles of incorporation, the corporation's total assets would be less than the sum of (x) its total liabilities plus (y) the amount that would be needed, if the corporation were to be dissolved at the time of distribution, to satisfy the preferential rights upon dissolution of stockholders whose preferential rights are superior to those receiving the distribution.

The NRS prescribes the timing of the determinations above depending on the nature and timing of payment of the distribution. For cash dividends paid within 120 days after the date of authorization, the determinations above must be made as of the date the dividend is authorized. When making their determination that a distribution is not prohibited by NRS 78.288, directors may consider:

- financial statements prepared on the basis of accounting practices that are reasonable in the circumstances;
- a fair valuation, including, but not limited to, unrealized appreciation and depreciation; and/or
- any other method that is reasonable in the circumstances.

Declaration and payment of any dividend will be subject to the discretion of our Board of Directors. The payment of any future dividends will be at the discretion of our Board of Directors; however, the time and amount of such dividends, if any, will be dependent upon our financial condition, operations, compliance with applicable law, cash requirements and availability, debt repayment obligations, capital expenditure needs and restrictions in our debt instruments, contractual restrictions, business prospects, industry trends, the provisions of Nevada law affecting the payment of distributions and any other factors our Board of Directors may consider relevant. Our ability to pay dividends on our common stock may depend in part on our receipt of cash dividends from our operating subsidiaries, which may be restricted from paying us dividends as a result of the laws of their jurisdiction of organization, agreements of our subsidiaries or covenants under any existing and future outstanding indebtedness we or our subsidiaries incur.

Advance Notice Provisions for Stockholder Proposals and Stockholder Nominations of Directors

Our amended and restated bylaws provide that, for nominations to the Board of Directors or for other business to be properly brought by a stockholder before a meeting of stockholders, the stockholder must first have given timely notice of the proposal in writing to our Secretary. For an annual meeting, a stockholder's notice generally must be delivered not less than 90 days nor more than 120 days prior to the first anniversary of the previous year's annual meeting date. For a special meeting, the notice must generally be delivered not earlier than the 90th day prior to the meeting and not later than the later of (i) the 60th day prior to the meeting or (ii) the 10th day following the day on which public announcement of the meeting is first made. Detailed requirements as to the form of the notice and information required in the notice are specified in the amended and restated bylaws. If it is determined that business was not properly brought before a meeting in accordance with our bylaw provisions, such business will not be conducted at the meeting.

Special Meetings of Stockholders

Special meetings of the stockholders may be called only by our Board of Directors pursuant to a resolution adopted by a majority of the total number of directors.

Liability and Indemnification of Directors and Officers

The Nevada Revised Statutes empower us to indemnify our directors and officers against expenses relating to certain actions, suits or proceedings as provided for therein. In order for such indemnification under the statutes to be available, the applicable director or officer must not have acted in a manner that constituted a breach of his or her fiduciary duties and involved intentional misconduct, fraud or a knowing violation of law and was material to the action, or must have acted in good faith and reasonably believed that his or her conduct was in, or not opposed to, our best interests. In the event of a criminal action, the applicable director or officer must not have had reasonable cause to believe his or her conduct was unlawful. However, the indemnification pursuant to the NRS and advancement of expenses authorized in or ordered by a court pursuant to the statutes does not exclude any other rights to which a person seeking indemnification or advancement of expenses may be entitled under our amended and restated articles of incorporation or any bylaw, agreement, vote of stockholders or disinterested directors or otherwise, for either an action in the person's official capacity or an action in another capacity while holding office, except that indemnification, unless ordered by a court pursuant to Section 78.7502 of the NRS or for the advancement of expenses made pursuant to Section 78.751(2) of the NRS, may not be made to or on behalf of any director or officer if a final adjudication establishes that the director's or officer's acts or omissions involved intentional misconduct, fraud or a knowing violation of the law and was material to the cause of action.

Under applicable provisions of the Nevada Revised Statutes, our amended and restated articles of incorporation, amended and restated bylaws or any separate agreement may provide for our payment of expenses incurred by any such director or officer in advance of the final disposition of the applicable action, suit or proceeding, upon delivery by such director or officer of an undertaking to repay all amounts so advanced if it is ultimately determined that the director or officer is not entitled to be indemnified by us.

Our amended and restated articles of incorporation provide for indemnification of our directors and officers substantially identical in scope to that permitted under applicable Nevada law. Our amended and restated articles of incorporation also provide that the expenses of our directors and officers incurred in defending any applicable action, suit or proceeding must be paid by us as they are incurred and in advance of the final disposition of the action, suit or proceeding, provided that the required undertaking by the director or officer is delivered to us.

We have also entered into separate indemnification agreements with each of our current directors and executive officers consistent with Nevada law and in the form approved by our Board of Directors and our stockholders, and we contemplate entering into such indemnification agreements with directors and certain executive officers that may be elected or appointed in the future. Those indemnification agreements require that under the circumstances and to the extent provided for therein, we indemnify such persons to the fullest extent permitted by applicable law against certain expenses incurred by any such person as a result of such person being made a party to certain actions, suits and proceedings by reason of the fact that such person is or was a director, officer, employee or agent of our company, any entity that was a predecessor corporation of our company or any of our affiliates. The rights of each

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person who is a party to such an indemnification agreement are in addition to any other rights such person may have under applicable Nevada law, our amended and restated articles of incorporation, our amended and restated bylaws, any other agreement, a vote of our stockholders, a resolution adopted by our Board of Directors or otherwise. The foregoing is only a brief description of the form of indemnification agreement, does not purport to be a complete description of the rights and obligations of the parties thereunder and is qualified in its entirety by reference to the form of indemnification agreement filed as an exhibit to this prospectus and incorporated herein by reference.

We also maintain a customary insurance policy that indemnifies our directors and officers against various liabilities, including liabilities arising under the Securities Act that may be incurred by any director or officer in his or her capacity as such.

At present, there is no pending litigation or proceeding involving any of our directors or officers for which indemnification is sought, nor are we aware of any threatened litigation that is likely to result in claims for indemnification.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted for our directors, officers and controlling persons pursuant to the foregoing provisions, or otherwise, we have been informed that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event a claim for indemnification against such liabilities (other than payment by us for expenses incurred or paid by a director, officer or controlling person of ours in successful defense of any action, suit, or proceeding) is asserted by a director, officer or controlling person in connection with the securities being registered, we will, unless in the opinion of our counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction, the question of whether such indemnification by it is against public policy in the Securities Act and will be governed by the final adjudication of such issue.

No Stockholder Action by Written Consent

Any action to be effected by our stockholders must be effected at a duly called annual or special meeting of the stockholders and not by written consent.

Super Majority Stockholder Vote Required for Certain Actions

Our amended and restated articles of incorporation and amended and restated bylaws provide that the Board of Directors is expressly authorized to make, alter, amend, change, add to, rescind or repeal, in whole or in part, our bylaws without a stockholder vote in any manner not inconsistent with Nevada law and our amended and restated articles of incorporation. Our amended and restated articles of incorporation require the affirmative vote of the holders of at least 80% of our outstanding voting stock to amend or repeal any of the provisions discussed in this section under the heading "Anti-Takeover Effects of Our Amended and Restated Articles of Incorporation and Amended and Restated Bylaws and Certain Provisions of Nevada Law," as well as certain other provisions of our amended and restated articles of incorporation. This 80% stockholder vote would be in addition to any separate class vote that might in the future be required pursuant to the terms of any preferred stock that might then be outstanding. An 80% vote is also required for any amendment to, or repeal of, our amended and restated bylaws by the stockholders and for the removal of any member of or our entire Board of Directors. Our amended and restated bylaws may be amended or repealed by a majority vote of the Board of Directors.

Deemed Notice and Consent

Our amended and restated articles of incorporation provide that any person purchasing or otherwise acquiring any interest in shares of our capital stock shall be deemed, to the fullest extent permitted by law, to have notice of and consented to all of the provisions of our amended and restated articles of incorporation, our Amended and restated bylaws and any amendment to our articles of incorporation or bylaws enacted in accordance therewith and applicable law.

LEGAL MATTERS

The validity of the issuance of the shares of our common stock or preferred stock offered hereby will be passed upon for us by Brownstein Hyatt Farber Schreck, LLP, Las Vegas, Nevada. Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C., Boston, Massachusetts, will pass upon the binding nature of any other securities being offered hereby. Additional legal matters may be passed upon for us or any underwriters, dealers or agents, by counsel that we will name in the applicable prospectus supplement.

EXPERTS

The consolidated financial statements of Pieris Pharmaceuticals, Inc. appearing in Pieris Pharmaceuticals, Inc.'s Annual Report (Form 10-K) for the year ended December 31, 2017 have been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in their report thereon included therein, and incorporated herein by reference. Such financial statements are, and audited financial statements to be included in subsequently filed documents will be, incorporated herein in reliance upon the report of Ernst & Young LLP pertaining to such financial statements (to the extent covered by consents filed with the Securities and Exchange Commission) given on the authority of such firm as experts in accounting and auditing.

WHERE YOU CAN FIND ADDITIONAL INFORMATION

We are subject to the reporting requirements of the Securities Exchange Act of 1934, as amended, and file annual, quarterly and current reports, proxy statements and other information with the SEC. You may read and copy these reports, proxy statements and other information at the SEC's public reference facilities at 100 F Street, N.E., Room 1580, Washington, D.C. 20549. You can request copies of these documents by writing to the SEC and paying a fee for the copying cost. Please call the SEC at 1-800-SEC-0330 for more information about the operation of the public reference facilities. SEC filings are also available at the SEC's web site at <http://www.sec.gov>.

This prospectus is only part of a registration statement on Form S-3 that we have filed with the SEC under the Securities Act of 1933, as amended, and therefore omits certain information contained in the registration statement. We have also filed exhibits and schedules with the registration statement that are excluded from this prospectus, and you should refer to the applicable exhibit or schedule for a complete description of any statement referring to any contract or other document. You may inspect a copy of the registration statement, including the exhibits and schedules, without charge, at the public reference room or obtain a copy from the SEC upon payment of the fees prescribed by the SEC.

We also maintain a website at www.pieris.com, through which you can access our SEC filings. The information set forth on our website is not part of this prospectus.

INFORMATION INCORPORATED BY REFERENCE

The SEC allows us to “incorporate by reference” into this prospectus information that we have filed with the SEC. This means we can disclose important information to you by referring you to other documents that contain that information. The information incorporated by reference is considered part of this prospectus. We incorporate by reference the documents listed below:

- Our Annual Report on Form 10-K for the fiscal year ended December 31, 2017 that we filed with the SEC on [March 15, 2018](#);
- the portions of our definitive proxy statement on Schedule 14A filed on [June 14, 2018](#) that are deemed “filed” with the SEC under the Exchange Act;
- our Quarterly Reports on Form 10-Q for the fiscal quarters ended March 31, 2018 and June 30, 2018 that we filed with the SEC on [May 10, 2018](#) and [August 9, 2018](#);
- Our Current Reports on Form 8-K that we filed with the SEC on [February 9, 2018](#), [February 13, 2018](#), [February 14, 2018](#), [February 20, 2018](#), [April 25, 2018](#) and [July 26, 2018](#);
- the description of our common stock contained in our Registration Statement on Form 8-A filed on [June 24, 2015](#), including any amendment or report filed for the purpose of updating such description; and
- all reports and other documents subsequently filed by us pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act after the date of this prospectus and prior to the termination or completion of the offering of securities under this prospectus shall be deemed to be incorporated by reference in this prospectus and to be a part hereof from the date of filing such reports and other documents.

The SEC file number for each of the documents listed above is 001-37471.

Any statement contained in this prospectus or in a document incorporated or deemed to be incorporated by reference into this prospectus will be deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained in this prospectus or any other subsequently filed document that is deemed to be incorporated by reference into this prospectus modifies or supersedes the statement. Any statements so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this prospectus.

You may request a copy of these documents, orally or in writing, which will be provided to you at no cost, by contacting:

Pieris Pharmaceuticals, Inc.
255 State Street, 9th Floor
Boston, Massachusetts 02109
Attention: Investor Relations
Telephone: +1 (857) 246-8998

You may also access these documents on our website, <http://www.pieris.com>. The information contained on, or that can be accessed through, our website is not a part of this prospectus. We have included our website address in this prospectus solely as an inactive textual reference.

You should rely only on information contained in, or incorporated by reference into, this prospectus and any prospectus supplement. We have not authorized anyone to provide you with information different from that contained in this prospectus or incorporated by reference in this prospectus. We are not making offers to sell the securities in any jurisdiction in which such an offer or solicitation is not authorized or in which the person making such offer or solicitation is not qualified to do so or to anyone to whom it is unlawful to make such offer or solicitation.



**Up to \$50,000,000
Common Stock**

PROSPECTUS SUPPLEMENT

Jefferies

November 12, 2019
