
**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**
Washington, D.C. 20549

FORM S-3
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

PIERIS PHARMACEUTICALS, INC.
(Exact name of registrant as specified in its charter)

Nevada
(State or other jurisdiction
of incorporation)

30-0784346
(IRS Employer
Identification No.)

255 State Street, 9th Floor
Boston, MA 02109
United States
1-857-246-8998

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Ahmed S. Mousa
General Counsel
255 State Street, 9th Floor
Boston, MA 02109
(857) 246-9889

(Name, address, including zip code, and telephone number, including, area code, of agent for service)

With copies to:
William C. Hicks, Esq.
Marc D. Mantell, Esq.
Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C.
One Financial Center
Boston, Massachusetts 02111
(617) 542-6000

Approximate date of commencement of proposed sale to the public: From time to time after the effective date of this registration statement.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box:

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box:

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box.

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

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

Large accelerated filer
Non-accelerated filer

Accelerated filer
Smaller reporting company
Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of Securities Act.

CALCULATION OF REGISTRATION FEE

Title of each Class of Securities to be Registered	Amount to be Registered (1)	Proposed Maximum Offering Price Per Share	Proposed Maximum Aggregate Offering Price	Amount of Registration Fee
Common Stock, \$0.001 par value per share	18,029,920	\$3.91(2)	\$70,496,987.20	\$9,150.51

- (1) Pursuant to Rule 416 under the Securities Act of 1933, as amended (the "Securities Act"), this registration statement also covers any additional number of shares of common stock issuable upon stock splits, stock dividends or other similar distributions, recapitalizations or similar events with respect to shares of the common stock being registered pursuant to this registration statement.
- (2) In accordance with Rule 457(c) under the Securities Act, the aggregate offering price of the common stock is estimated solely for the calculation of the registration fees due for this filing. This estimate was based on the average of the high and low sales price of our stock reported by The Nasdaq Capital Market on November 26, 2019.

THE REGISTRANT HEREBY AMENDS THIS REGISTRATION STATEMENT ON SUCH DATE OR DATES AS MAY BE NECESSARY TO DELAY ITS EFFECTIVE DATE UNTIL THE REGISTRANT SHALL FILE A FURTHER AMENDMENT WHICH SPECIFICALLY STATES THAT THIS REGISTRATION STATEMENT SHALL THEREAFTER BECOME EFFECTIVE IN ACCORDANCE WITH SECTION 8(a) OF THE SECURITIES ACT OF 1933, AS AMENDED, OR UNTIL THE REGISTRATION STATEMENT SHALL BECOME EFFECTIVE ON SUCH DATE AS THE SECURITIES AND EXCHANGE COMMISSION, ACTING PURSUANT TO SAID SECTION 8(a), MAY DETERMINE.

The information in this prospectus is not complete and may be changed. The selling stockholders may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED DECEMBER 4, 2019

PROSPECTUS



18,029,920 Shares of Common Stock

The selling stockholders of Pieris Pharmaceuticals, Inc. (“Pieris,” “we,” “us” or the “Company”) identified in this prospectus, including their pledgees, donees, transferees, assigns or other successors in interest, may offer and resell under this prospectus up to 18,029,920 shares of common stock, par value \$0.001 per share, of the Company (the “Common Stock”). The number of shares offered for sale by the selling stockholders consists of (i) 5,492,960 shares of Common Stock (the “Common Shares”) presently issued and outstanding, (ii) 3,522,000 shares of Common Stock (the “Underlying Shares”) issuable upon the conversion of 3,522 shares of the Company’s Series C Convertible Preferred Stock, par value \$0.001 per share (the “Preferred Shares”), and (iii) 9,014,960 shares of Common Stock issuable upon the exercise of warrants (the “2019 PIPE Warrants”) to purchase Common Stock (the “Warrant Shares”, and together with the Underlying Shares and the Common Shares, the “Shares”). The Common Shares, the Preferred Shares and the 2019 PIPE Warrants were sold to the selling stockholders, each of which is an accredited investor, in a private placement transaction that closed on November 6, 2019 (the “2019 PIPE”).

We are registering the resale of the Shares covered by this prospectus as required by the registration rights agreement we entered into with the selling stockholders on November 2, 2019 (the “2019 PIPE Registration Rights Agreement”). The selling stockholders will receive all of the proceeds from any sales of the Shares offered hereby. We will not receive any of the proceeds, but we will incur expenses in connection with the offering. To the extent the 2019 PIPE Warrants are exercised on a cash basis, if at all, we will receive the exercise price of the 2019 PIPE Warrants.

The selling stockholders may sell the Shares through public or private transactions at market prices prevailing at the time of sale or at negotiated prices. The timing and amount of any sale are within the sole discretion of the selling stockholders. The selling stockholders may sell any, all or none of the securities offered by this prospectus and we do not know when or in what amount the selling stockholders may sell their shares of Common Stock hereunder following the effective date of this registration statement. Our registration of the Shares covered by this prospectus does not mean that the selling stockholders will offer or sell any of the Shares. For further information regarding the possible methods by which the Shares may be distributed, see “Plan of Distribution” in this prospectus.

Our common stock is listed on The Nasdaq Capital Market under the symbol “PIRS”. On December 3, 2019, the last reported sale price for our common stock was \$3.90 per share.

Investing in our common stock involves a high degree of risk. Please consider carefully the risks described in this prospectus under “[Risk Factors](#)” beginning on page 5 of this prospectus and in our filings with the Securities and Exchange Commission.

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 _____, 2019

TABLE OF CONTENTS

	Page No.
PROSPECTUS SUMMARY	1
THE OFFERING	3
RISK FACTORS	5
SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS	6
USE OF PROCEEDS	8
SELLING STOCKHOLDERS	9
PLAN OF DISTRIBUTION	12
LEGAL MATTERS	14
EXPERTS	14
WHERE YOU CAN FIND MORE INFORMATION	15
INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE	16

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we have filed with the Securities and Exchange Commission (the “SEC”) pursuant to which the selling stockholders named herein may, from time to time, offer and sell or otherwise dispose of the Shares covered by this prospectus. You should not assume that the information contained in this prospectus is accurate on any date subsequent to the date set forth on the front cover of this prospectus or that any information we have incorporated by reference is correct on any date subsequent to the date of the document incorporated by reference, even though this prospectus is delivered or Shares are sold or otherwise disposed of on a later date.

This prospectus does not contain all of the information included in the registration statement. For a more complete understanding of the offering of the Shares, you should refer to the registration statement including the 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. Copies of some of the documents referred to herein have been filed, will be filed or will be incorporated by reference as exhibits to the registration statement of which this prospectus is a part, and you may obtain copies of those documents as described below under the heading “Where You Can Find More Information.” 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. It is important for you to read and consider all information contained in this prospectus, including the documents incorporated by reference therein, in making your investment decision. You should also read and consider the information in the documents to which we have referred you under “Where You Can Find More Information” and “Incorporation of Certain Documents by Reference” in this prospectus.

We and the selling stockholders have not authorized anyone to give any information or to make any representation to you other than those contained or incorporated by reference in this prospectus. You must not rely upon any information or representation not contained or incorporated by reference in this prospectus. This prospectus does not constitute an offer to sell or the solicitation of an offer to buy any of our shares of Common Stock other than the Shares covered hereby, nor does this prospectus constitute an offer to sell or the solicitation of an offer to buy any securities in any jurisdiction to any person to whom it is unlawful to make such offer or solicitation in such jurisdiction. Persons who come into possession of this prospectus in jurisdictions outside the United States are required to inform themselves about, and to observe, any restrictions as to the offering and the distribution of this prospectus applicable to those jurisdictions.

This prospectus, including the documents incorporated by reference herein, include 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 5 of this prospectus and described in 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 that 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 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 Statements.”

As used in this prospectus, unless the context indicates or otherwise requires, references in this prospectus to “Pieris,” the “Company,” “we,” “us” and “our” refer to Pieris Pharmaceuticals, Inc. and our consolidated subsidiaries.

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. Investing in our securities involves risks. Therefore, carefully consider the risk factors set forth in this prospectus and in our most recent annual and quarterly filings with the SEC, as well as other information in this prospectus 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-4R α antagonist to treat uncontrolled asthma, PRS-060, and an immuno-oncology (IO) bispecific targeting 4-1BB and HER2, PRS-343. 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 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 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. We also believe that the drug-like properties of Anticalin proteins have been demonstrated in various clinical trials with different Anticalin-based drug candidates.

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 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 with Seattle Genetics Inc., or Seattle Genetics, in IO.

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

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 that 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 early 2020, 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 in February 2014 to conduct research and development activities in Australia. Pieris Pharmaceuticals Securities Corporation, a wholly-owned subsidiary of Pieris Pharmaceuticals, Inc. was formed in December 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.

[Table of Contents](#)

Our corporate website address is www.pieris.com. The information on our website is not part of this prospectus or incorporated by reference into this prospectus, 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

This prospectus relates to the resale from time to time by the selling stockholders identified herein of up to 18,029,920 shares of our Common Stock. We are not offering any shares for sale under the registration statement of which this prospectus is a part.

Common stock offered by the selling stockholders hereunder:	18,029,920 (including 3,522,000 of the Underlying Shares and 9,014,960 of the Warrant Shares)
Common stock to be outstanding after this offering:	67,512,626 (assuming the 3,522 Preferred Shares are converted in full, and the 9,014,960 2019 PIPE Warrants are exercised in full)
Use of proceeds:	We will not receive any proceeds from the sale of Common Stock offered by the selling stockholders under this prospectus. We may receive up to approximately \$64,006,216 in aggregate gross proceeds from cash exercises of the 2019 PIPE Warrants, based on the per share exercise price of the 2019 PIPE Warrants, in the event any of the 2019 PIPE Warrants are exercised on a cash basis. Any proceeds we receive from the exercise of the 2019 PIPE Warrants will be used for advancement of our proprietary and partnered drug candidates and may be used in particular to facilitate Pieris' potential opt-into the co-development of PRS-060/AZD1402 in the event of positive Phase 2a data. Any proceeds we receive from the exercise of the 2019 PIPE Warrants may also be used for working capital and general corporate purposes.
Offering price:	The selling stockholders may sell all or a portion of their Shares through public or private transactions at prevailing market prices or at privately negotiated prices.
Risk factors:	Investing in our securities involves a high degree of risk and purchasers may lose their entire investment. See the disclosure under the heading "Risk Factors" on page 5 of this prospectus.
Nasdaq Capital Market symbol:	PIRS

The number of shares of Common Stock to be outstanding after this offering, unless otherwise indicated, the information in this prospectus 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 a weighted average exercise price of \$7.10 per share;

Table of Contents

- 3,009,999 shares of Common Stock issuable upon the exercise of outstanding stock options as of September 30, 2019 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 as of September 30, 2019 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 as of September 30, 2019 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 as of September 30, 2019 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, each, as of September 30, 2019; and
- 1,425,000 shares of Common Stock issuable upon the exercise of outstanding stock options as of September 30, 2019 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 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. You should carefully consider the risks and uncertainties and all other information, documents or reports included or incorporated by reference in this prospectus and, if applicable, any prospectus supplement or other offering materials, including the risks and uncertainties discussed under Item 1A, “Risk Factors,” in our Annual Report on Form 10-K for the fiscal year ended December 31, 2018 filed with the SEC on March 18, 2019, as updated by our subsequent filings with the SEC under the Securities Exchange Act of 1934, as amended (the “Exchange Act”), which are incorporated by reference, in this prospectus, and any updates to those risk factors included from time to time in our periodic and current reports filed with the SEC and incorporated by reference in this prospectus, before making any decision to invest in shares of our Common Stock. If any of the events discussed in these risk factors occurs, our business, prospects, results of operations, financial condition and cash flows could be materially harmed. If that were to happen, the trading price of our Common Stock could decline, and you could lose all or part of your investment. Additional risks not currently known to us or other factors not perceived by us to present significant risks to our business at this time also may impair our business operations.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This 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 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.

Actual results could differ from those projected in any forward-looking statements due to numerous factors. Such factors include, among others, our ability to raise the additional funding we will need to continue to pursue our business and product development plans; the inherent uncertainties associated with developing new products or technologies and operating as a development stage company; our ability to develop, complete clinical trials for, obtain approvals for and commercialize any of our product candidates, including our ability to recruit and enroll patients in our studies; our ability to address the requests of the FDA; competition in the industry in which we operate; the timing and nature of data from the phase 2a study of PRS-060/AZD1402; whether or not Pieris opts-into co-development of PRS-060/AZD1402; whether or not any of the warrants issued in the private placement will be exercised for cash; the use of any proceeds from any warrant exercise; and market conditions. You should refer to the section titled “Risk Factors” of this prospectus and in our other filings with the SEC, including our Annual Report on Form 10-K for the year ended December 31, 2018, for further discussion of the 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 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, 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 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.

[Table of Contents](#)

You should read this prospectus, 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 will not receive any proceeds from the sale of the Shares offered pursuant to this prospectus. The selling stockholders will receive all of the proceeds from the sale of the Shares offered by this prospectus. For information about the selling stockholders, see the section titled “Selling Stockholders” included in this prospectus. The selling stockholders will pay any underwriting discounts and commissions and expenses incurred by the selling stockholders in disposing of the shares, except we have agreed to reimburse up to an aggregate of \$25,000 of fees and expenses of counsel for the selling stockholders. We will bear all other costs, fees and expenses incurred in effecting the registration of the shares covered by this prospectus, including all registration and filing fees and fees and expenses of our counsel and accountants. We may receive up to approximately \$64,006,216 in aggregate gross proceeds from cash exercises of the 2019 PIPE Warrants, based on the per share exercise price of the warrants, in the event any of the 2019 PIPE Warrants are exercised on a cash basis. Any proceeds we receive from the exercise of the warrants will be used for our proprietary and partnered drug candidates and may be used in particular to facilitate Pieris’ potential opt-into the co-development of PRS-060/AZD1402 in the event of positive Phase 2a data. Any proceeds we receive from the exercise of the 2019 PIPE Warrants may also be used for working capital and general corporate purposes.

SELLING STOCKHOLDERS

This prospectus covers the resale from time to time by the selling stockholders identified in the table below, including their pledgees, donees, transferees, assigns or other successors in interest, of up to an aggregate 18,029,920 shares of our Common Stock, which includes (i) 5,492,960 issued and outstanding Common Shares, (ii) 3,522,000 Underlying Shares upon the conversion of 3,522 Preferred Shares and (iii) 9,014,960 shares of our Common Stock issuable upon exercise of the 2019 PIPE Warrants, all of which were issued in connection with the 2019 PIPE.

Pursuant to the 2019 PIPE Registration Rights Agreement, we have filed with the SEC the registration statement of which this prospectus forms a part in order to register such resales of our Common Stock under the Securities Act. We have also agreed to cause this registration statement to become effective and to keep such registration statement effective within and for the time periods set forth in the 2019 PIPE Registration Rights Agreement. Our failure to satisfy the filing or effectiveness deadlines set forth in the 2019 PIPE Registration Rights Agreement may subject us to payment of certain monetary penalties pursuant to the terms of the 2019 PIPE Registration Rights Agreement.

The selling stockholders identified in the table below may from time to time offer and sell under this prospectus any or all of the shares of Common Stock described under the column "Number of Shares of Common Stock Being Offered" in the table below. The table below has been prepared based upon information furnished to us by the selling stockholders as of the dates represented in the footnotes accompanying the table. The selling stockholders identified below may have sold, transferred or otherwise disposed of some or all of their shares since the date on which the information in the following table is presented in transactions exempt from or not subject to the registration requirements of the Securities Act. Information concerning the selling stockholders may change from time to time and, if necessary, we will amend or supplement this prospectus accordingly and as required.

The following table and footnote disclosure following the table sets forth the name of each selling stockholder, the nature of any position, office or other material relationship, if any, that the selling stockholders have had within the past three years with us or with any of our predecessors or affiliates, and the number of shares of our Common Stock beneficially owned by the selling stockholders before this offering. The number of shares reflected are those beneficially owned, as determined under applicable rules of the SEC, and the information is not necessarily indicative of beneficial ownership for any other purpose. Under applicable SEC rules, beneficial ownership includes any shares of Common Stock as to which a person has sole or shared voting power or investment power and any shares of Common Stock which the person has the right to acquire within 60 days after November 7, 2019 through the exercise of any option, warrant or right or through the conversion of any convertible security. Unless otherwise indicated in the footnotes to the table below and subject to community property laws where applicable, we believe, based on information furnished to us that each of the selling stockholders named in this table has sole voting and investment power with respect to the shares indicated as beneficially owned.

Unless otherwise indicated in the footnotes to the table below and subject to community property laws where applicable, we believe, based on information furnished to us that each of the selling stockholders named in this table has sole voting and investment power with respect to the shares indicated as beneficially owned.

We have assumed that all shares of Common Stock reflected in the table as being offered in the offering covered by this prospectus will be sold from time to time in this offering. We cannot provide an estimate as to the number of shares of Common Stock that will be held by the selling stockholders upon termination of the offering covered by this prospectus because the selling stockholders may offer some, all or none of their shares of Common Stock being offered in the offering. Information about the selling stockholders may change over time. Any changed information will be set forth in an amendment to the registration statement or supplement to this prospectus, to the extent required by law.

[Table of Contents](#)

	Shares of Common Stock Beneficially Owned Before this Offering		Number of Shares of Common Stock Being Offered	Shares of Common Stock To Be Beneficially Owned Upon Completion of this Offering	
	Number	Percentage(2)		Number(3)	Percentage(2) (3)
Selling Stockholder(1)					
Biotechnology Value Fund, L.P.(4)	11,399,255	17.8%	3,592,000	7,807,255	10.7%
Biotechnology Value Fund II, L.P.(5)	9,127,674	14.8%	2,890,000	6,237,674	8.7%
Biotechnology Value Trading Fund OS, L.P.(6)	1,698,539	3.0%	530,000	1,168,539	1.7%
MSI BVF SPV, L.L.C.(7)	846,237	1.5%	32,000	814,237	1.2%
EcoR1 Capital Fund Qualified LP(8)	4,220,620	7.4%	4,220,620	—	—
EcoR1 Capital Fund, LP(9)	849,804	1.5%	849,804	—	—
Aquilo Capital, L.P.(10)	4,797,324	8.6%	2,253,522	2,543,802	3.8%
Citadel Multi-Strategy Equities Master Fund Ltd.(11)	2,253,522	4.0%	2,253,522	—	—
Samsara BioCapital, L.P.(12)	1,408,452	2.5%	1,408,452	—	—

- (1) All information regarding investors in the 2019 PIPE is provided as of November 6, 2019.
- (2) Percentage ownership is based on a denominator equal to the sum of (i) 54,975,666 shares of our Common Stock outstanding as of November 7, 2019 and (ii) the number of shares of Common Stock issuable upon exercise or conversion of convertible securities beneficially owned by the applicable selling stockholder.
- (3) Assumes that all shares of Common Stock being registered under the registration statement of which this prospectus forms a part are sold in this offering, and that none of the selling stockholders acquire additional shares of our Common Stock after the date of this prospectus and prior to completion of this offering.
- (4) Includes (i) 1,567,000 shares of our Common Stock issuable upon the conversion of 1,567 Series A Preferred Shares, (ii) 2,573,000 shares of our Common Stock issuable upon the conversion of 2,573 Series B Preferred Shares, (iii) 1,796,000 shares of Common Stock issuable upon the conversion of 1,796 Series C Preferred Shares, and (iv) warrants to purchase 3,078,200 shares of our Common Stock. The Series A, Series B, and Series C Preferred Shares held by the selling stockholder and warrants held by the selling stockholder may not be converted if, after such conversion, the selling stockholder and its affiliated entities would beneficially own, as determined in accordance with Section 13(d) of the Exchange Act, more than 9.99% of the number of shares of our Common Stock then issued and outstanding. BVF Partners, L.P., or Partners, is the general partner of the selling stockholder and along with BVF Inc., its general partner, may be deemed to beneficially own these shares. Mr. Mark N. Lampert, as a director and officer of BVF Inc., may also be deemed to beneficially own these securities. Each of Partners, BVF Inc. and Mr. Lampert disclaims beneficial ownership with respect to these securities, except to the extent of their pecuniary interests therein.
- (5) Includes (i) 1,021,000 shares of our Common Stock issuable upon the conversion of 1,021 Series A Preferred Shares, (ii) 2,143,000 shares of our Common Stock issuable upon the conversion of 2,143 Series B Preferred Shares, (iii) 1,445,000 shares of Common Stock issuable upon the conversion of 1,445 Series C Preferred Shares, and (iv) warrants to purchase 2,285,600 shares of our Common Stock. The Series A, Series B, and Series C Preferred Shares held by the selling stockholder and warrants held by the selling stockholder may not be converted if, after such conversion, the selling stockholder and its affiliated entities would beneficially own, as determined in accordance with Section 13(d) of the Exchange Act, more than 9.99% of the number of shares of our Common Stock then issued and outstanding. Partners is the general partner of the selling stockholder and along with BVF Inc., its general partner, may be deemed to beneficially own these securities. Mr. Mark M. Lampert, as a director and officer of BVF Inc., may also be deemed to beneficially own these shares. Each of Partners, BVF Inc. and Mr. Lampert disclaims beneficial ownership with respect to these securities, except to the extent of their pecuniary interests therein.
- (6) Includes (i) 319,000 shares of our Common Stock issuable upon the conversion of 319 Series A Preferred Shares, (ii) 284,000 shares of our Common Stock issuable upon the conversion of 284 Series B Preferred Shares, (iii) 265,000 shares of our Common Stock issuable upon the conversion of 265 Series C Preferred Shares, and (iv) warrants to purchase 516,400 shares of our Common Stock. The Series A, Series B, and Series C Preferred Shares held by the selling stockholder and warrants held by the selling stockholder may not be converted if, after such conversion, the selling stockholder and its affiliated entities would beneficially own, as determined in accordance with Section 13(d) of the Exchange Act, more than 9.99% of the number of shares of our Common Stock then issued and outstanding. BVF Partners OS Ltd., or Partners OS, is the general partner of the selling stockholder, and along with Partners, its sole member and the investment manager of the selling stockholder, and BVF Inc., the general partner of Partners, may be deemed to beneficially own these shares. Mr. Mark M. Lampert, as a director and officer of BVF Inc., may also be deemed to beneficially own these securities. Each of Partners OS, Partners, BVF Inc. and Mr. Lampert disclaims beneficial ownership with respect to these securities, except to the extent of their pecuniary interests therein.

Table of Contents

- (7) Includes (i) 16,000 shares of our Common Stock issuable upon the conversion of 16 Series C Preferred Shares and (ii) warrants to purchase 412,600 shares of our Common Stock. The Series C Preferred Shares held by the selling stockholder and warrants held by the selling stockholder may not be converted if, after such conversion, the selling stockholder and its affiliated entities would beneficially own, as determined in accordance with Section 13(d) of the Exchange Act, more than 9.99% of the number of shares of our Common Stock then issued and outstanding. Partners is the investment manager of the selling stockholder, and BVF Inc., the general partner of Partners, may be deemed to beneficially own these shares. Mr. Mark M. Lampert, as a director and officer of BVF Inc., may also be deemed to beneficially own these securities. Each of Partners, BVF Inc. and Mr. Lampert disclaims beneficial ownership with respect to these securities, except to the extent of their pecuniary interests therein.
- (8) Includes: (i) 2,110,310 shares of our Common Stock, and (ii) warrants exercisable for 2,110,310 shares of our Common Stock (the “EcoR1 Qualified Warrants”). The EcoR1 Qualified Warrants may not be exercised if, after such exercise, EcoR1 Capital Fund Qualified, L.P. (“EcoR1 Qualified”) and its affiliated entities would beneficially own, as determined in accordance with Section 13(d) of the Exchange Act, more than 9.99% of the number of shares of our Common Stock then issued and outstanding. EcoR1 Qualified is managed by EcoR1 Capital, LLC, which is managed by Oleg Nodelman. The address of EcoR1 Qualified is 357 Tehama Street, #3, San Francisco, CA 94103.
- (9) Includes: (i) 424,902 shares of our Common Stock and (ii) warrants exercisable for 424,902 shares of our Common Stock (the “EcoR1 Capital Warrants”). The EcoR1 Capital Warrants may not be exercised if, after such exercise, EcoR1 Capital Fund, L.P. (“EcoR1 Capital Fund”) and its affiliated entities would beneficially own, as determined in accordance with Section 13(d) of the Exchange Act, more than 9.99% of the number of shares of our Common Stock then issued and outstanding. EcoR1 Capital Fund is managed by EcoR1 Capital, LLC, which is managed by Oleg Nodelman. The address of EcoR1 Capital Fund is 357 Tehama Street, #3, San Francisco, CA 94103.
- (10) Includes: (i) 3,670,563 shares of our Common Stock, including 1,126,761 shares of our Common Stock purchased in the 2019 PIPE, and (ii) warrants exercisable for 1,126,761 shares of our Common Stock (the “Aquila Warrants”). The Aquila Warrants may not be exercised if, after such exercise, Aquilo Capital, L.P. and its affiliated entities would beneficially own, as determined in accordance with Section 13(d) of the Exchange Act, more than 9.99% of the number of shares of our Common Stock then issued and outstanding. The address of Aquilo is c/o Aquilo Capital Management, LLC, One Letterman Drive, Suite D4900, San Francisco, CA 94129.
- (11) Includes (i) 1,126,761 shares of our Common Stock and (ii) warrants exercisable for 1,126,761 shares of our Common Stock (the “Surveyor Warrants”). The Surveyor Warrants may not be exercised if, after such exercise, Citadel Multi-Strategy Equities Master Fund Ltd. (“Citadel”) and its affiliated entities would beneficially own, as determined in accordance with Section 13(d) of the Exchange Act, more than 9.99% of the number of shares of our Common Stock then issued and outstanding. Citadel Advisors LLC (“Citadel Advisors”), acts as the portfolio manager of Citadel. Citadel Advisors Holdings LP (“CAH”) is the sole member of Citadel Advisors. Citadel GP LLC (“CGP”) is the general partner of CAH. Mr. Kenneth Griffin is the President and Chief Executive Officer of CGP and owns a controlling interest in CGP and may be deemed to share voting and dispositive power over shares held by Citadel. The address for this entity is c/o Citadel Advisors LLC, 601 Lexington Avenue, New York, NY 10022.
- (12) Includes (i) 704,226 shares of our Common Stock and (ii) warrants exercisable for 704,226 shares of our Common Stock (the “Samsara Warrants”). The Samsara Warrants may not be exercised if, after such exercise, Samsara BioCapital, L.P. (“Samsara”) and its affiliated entities would beneficially own, as determined in accordance with Section 13(d) of the Exchange Act, more than 9.99% of the number of shares of our Common Stock then issued and outstanding. Srinivas Akkaraju, MD, Ph.D. has sole voting and dispositive power with respect to the securities held by Samsara. The address of Samsara is 628 Middlefield Road, Palo Alto, CA 94301.

PLAN OF DISTRIBUTION

We are registering the Common Shares, the Underlying Shares and the Warrant Shares issued to the selling stockholders to permit the resale of these shares of Common Stock by the holders of the shares of Common Stock and warrants from time to time after the date of this prospectus. We will not receive any of the proceeds from the sale by the selling stockholders of the shares of Common Stock. We will bear all fees and expenses incident to our obligation to register the shares of Common Stock.

The selling stockholders may sell all or a portion of the shares of Common Stock beneficially owned by them and offered hereby from time to time directly or through one or more underwriters, broker-dealers or agents. If the shares of Common Stock are sold through underwriters or broker-dealers, the selling stockholders will be responsible for underwriting discounts or commissions or agent's commissions. The shares of Common Stock may be sold on any national securities exchange or quotation service on which the securities may be listed or quoted at the time of sale, in the over-the-counter market or in transactions otherwise than on these exchanges or systems or in the over-the-counter market and in one or more transactions at fixed prices, at prevailing market prices at the time of the sale, at varying prices determined at the time of sale, or at negotiated prices. These sales may be effected in transactions, which may involve crosses or block transactions. The selling stockholders may use any one or more of the following methods when selling shares:

- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- an exchange distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions;
- settlement of short sales entered into after the effective date of the registration statement of which this prospectus is a part;
- broker-dealers may agree with the selling stockholders to sell a specified number of such shares at a stipulated price per share;
- through the writing or settlement of options or other hedging transactions, whether such options are listed on an options exchange or otherwise;
- a combination of any such methods of sale; and
- any other method permitted pursuant to applicable law.

The selling stockholders also may resell all or a portion of the shares in open market transactions in reliance upon Rule 144 under the Securities Act, as permitted by that rule, or Section 4(a)(1) under the Securities Act, if available, rather than under this prospectus, provided that they meet the criteria and conform to the requirements of those provisions. Broker-dealers engaged by the selling stockholders may arrange for other broker-dealers to participate in sales. If the selling stockholders effect such transactions by selling shares of Common Stock to or through underwriters, broker-dealers or agents, such underwriters, broker-dealers or agents may receive commissions in the form of discounts, concessions or commissions from the selling stockholders or commissions from purchasers of the Shares for whom they may act as agent or to whom they may sell as principal. Such commissions will be in amounts to be negotiated, but, except as set forth in a supplement to this Prospectus, in the case of an agency transaction will not be in excess of a customary brokerage commission in compliance with FINRA Rule 2121; and in the case of a principal transaction a markup or markdown in compliance with FINRA Rule 2121.01.

In connection with sales of the Shares or otherwise, the selling stockholders may enter into hedging transactions with broker-dealers or other financial institutions, which may in turn engage in short sales of the Shares in the course of hedging in positions they assume. The selling stockholders may also sell Shares short and if such short sale shall take place after the date that this Registration Statement is declared effective by the Commission, the selling stockholders may deliver Shares covered by this prospectus to close out short positions and to return borrowed shares in connection with such short sales. The selling stockholders may also loan or pledge Shares to broker-dealers that in turn may sell such shares, to the extent permitted by applicable law. The selling stockholders may also enter into option or other transactions with broker-dealers or other financial institutions or the creation of one or more derivative securities which require the delivery to such broker-dealer or other financial institution of shares offered by this prospectus, which shares such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction). Notwithstanding the foregoing, the selling stockholders have been advised that they may not use shares registered on this registration statement to cover short sales of our Common Stock made prior to the date the registration statement, of which this prospectus forms a part, has been declared effective by the SEC.

Table of Contents

The selling stockholders may, from time to time, pledge or grant a security interest in some or all of the 2019 PIPE Warrants or Shares owned by them and, if they default in the performance of their secured obligations, the pledgees or secured parties may offer and sell the shares of Common Stock from time to time pursuant to this prospectus or any amendment to this prospectus under Rule 424(b)(3) or other applicable provision of the Securities Act of 1933, as amended, amending, if necessary, the list of selling stockholders to include the pledgee, transferee or other successors in interest as selling stockholders under this prospectus. The selling stockholders also may transfer and donate the shares of Common Stock in other circumstances in which case the transferees, donees, pledgees or other successors in interest will be the selling beneficial owners for purposes of this prospectus.

The selling stockholders and any broker-dealer or agents participating in the distribution of the Shares may be deemed to be “underwriters” within the meaning of Section 2(11) of the Securities Act in connection with such sales. In such event, any commissions paid, or any discounts or concessions allowed to, any such broker-dealer or agent and any profit on the resale of the shares purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act. Selling Stockholders who are “underwriters” within the meaning of Section 2(11) of the Securities Act will be subject to the applicable prospectus delivery requirements of the Securities Act including Rule 172 thereunder and may be subject to certain statutory liabilities of, including but not limited to, Sections 11, 12 and 17 of the Securities Act and Rule 10b-5 under the Securities Exchange Act of 1934, as amended, or the Exchange Act.

Each selling stockholder has informed the Company that it is not a registered broker-dealer and does not have any written or oral agreement or understanding, directly or indirectly, with any person to distribute the Common Stock. Upon the Company being notified in writing by a selling stockholder that any material arrangement has been entered into with a broker-dealer for the sale of our Common Stock through a block trade, special offering, exchange distribution or secondary distribution or a purchase by a broker or dealer, a supplement to this prospectus will be filed, if required, pursuant to Rule 424(b) under the Securities Act, disclosing (i) the name of each such selling stockholder and of the participating broker-dealer(s), (ii) the number of shares involved, (iii) the price at which such the shares of Common Stock were sold, (iv) the commissions paid or discounts or concessions allowed to such broker-dealer(s), where applicable, (v) that such broker-dealer(s) did not conduct any investigation to verify the information set out or incorporated by reference in this prospectus, and (vi) other facts material to the transaction.

Under the securities laws of some states, the Shares may be sold in such states only through registered or licensed brokers or dealers. In addition, in some states the Shares may not be sold unless such shares have been registered or qualified for sale in such state or an exemption from registration or qualification is available and is complied with.

There can be no assurance that any selling stockholder will sell any or all of the Shares registered pursuant to the shelf registration statement, of which this prospectus forms a part.

Each selling stockholder and any other person participating in such distribution will be subject to applicable provisions of the Exchange Act and the rules and regulations thereunder, including, without limitation, to the extent applicable, Regulation M of the Exchange Act, which may limit the timing of purchases and sales of any of the Shares by the selling stockholder and any other participating person. To the extent applicable, Regulation M may also restrict the ability of any person engaged in the distribution of the shares of Common Stock to engage in market-making activities with respect to the shares of Common Stock. All of the foregoing may affect the marketability of the shares of Common Stock and the ability of any person or entity to engage in market-making activities with respect to the shares of Common Stock.

We will pay all expenses of the registration of the shares of Common Stock pursuant to the registration rights agreement, including, without limitation, Securities and Exchange Commission filing fees and expenses of compliance with state securities or “blue sky” laws; *provided, however*, that each selling stockholder will pay all underwriting discounts and selling commissions, if any and any related legal expenses incurred by it; provided further that we have agreed to reimburse up to \$25,000 of fees and expenses of counsel for the selling stockholders. We may receive up to approximately \$64,006,216 in aggregate gross proceeds from cash exercises of the 2019 PIPE Warrants, based on the per share exercise price of the warrants, in the event any of the 2019 PIPE Warrants are exercised on a cash basis. Any proceeds we receive from the exercise of the warrants will be used for our proprietary and partnered drug candidates and may be used in particular to facilitate Pieris’ potential opt-into the co-development of PRS-060/AZD1402 in the event of positive Phase 2a data. Any proceeds we receive from the exercise of the 2019 PIPE Warrants may also be used for working capital and general corporate purposes.

We will indemnify the selling stockholders against certain liabilities, including some liabilities under the Securities Act, in accordance with the registration rights agreement, or the selling stockholders will be entitled to contribution. We may be indemnified by the selling stockholders against civil liabilities, including liabilities under the Securities Act, that may arise from any written information furnished to us by the selling stockholders specifically for use in this prospectus, in accordance with the related registration rights agreements, or we may be entitled to contribution.

LEGAL MATTERS

The validity of the common stock being offered by this prospectus is being passed upon by Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C.

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 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 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.

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The SEC allows us to “incorporate by reference” information into this prospectus, 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, 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. This prospectus 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. Statements in this prospectus 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 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 statement so modified or superseded will not be deemed, except as so modified or superseded, to constitute a part of this prospectus.

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.
255 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. 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. We and the selling stockholders have not authorized anyone to provide you with information different from that contained in this prospectus or incorporated by reference in this prospectus. We and the selling stockholders 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.

18,029,920 Shares



Common Stock

PROSPECTUS

, 2019

PART II
INFORMATION NOT REQUIRED IN PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution.

Set forth below is an estimate (except for registration fees, which are actual) of the approximate amount of the types of fees and expenses listed below that were paid or are payable by us in connection with the issuance and distribution of the shares of common stock to be registered by this registration statement. None of the expenses listed below are to be borne by any of the selling stockholders named in the prospectus that forms a part of this registration statement.

<u>Expense</u>	<u>Amount</u>
SEC Registration Fee	\$ 9,151
Accounting Fees and Expenses	20,000
Legal Fees and Expenses	50,000
Miscellaneous Fees and Expenses	2,500
Total	\$81,651

Item 15. 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 NRS 78.7502 or for the advancement of expenses made pursuant to NRS 78.751(2), 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 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 the registration statement of which this prospectus forms a part 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.

Table of Contents

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.

Any underwriting agreements that we may enter into will likely provide for the indemnification of us, our controlling persons, our directors and certain of our officers by the underwriters against certain liabilities, including liabilities under the Securities Act of 1933, as amended.

Item 16. Exhibits and Financial Statements Schedules.

The exhibits to this registration statement are listed in the Exhibit Index immediately prior the signature page hereto, which Exhibit Index is hereby incorporated by reference into this Item 16 by reference.

Item 17. Undertakings.

- (a) The undersigned registrant hereby undertakes:
- (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:
 - (i) To include any prospectus required by section 10(a)(3) of the Securities Act of 1933;
 - (ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and
 - (iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

provided, however, that paragraphs (a)(1)(i), (a)(1)(ii) and (a)(1)(iii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to section 13 or section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement.

- (2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
- (4) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser:
 - (i) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and
 - (ii) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date.

[Table of Contents](#)

- (b) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to section 13(a) or section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- (c) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

EXHIBIT INDEX

<u>Exhibit Number</u>	<u>Item</u>
4.1	Amended and Restated Articles of Incorporation of the Registrant (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K (File No. 333-190728) filed on December 18, 2014).
4.2	Certificate of Designation of Series A Convertible Preferred Stock (incorporated by reference to Exhibit 3.1 to the Registrant's Quarterly Report on Form 10-Q (File No. 001-37471) filed with the Commission on August 11, 2016).
4.3	Certificate of Designation of Series B Convertible Preferred Stock (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K (File No. 001-37471) filed with the Commission on February 4, 2019).
4.4	Certificate of Designation of Series C Convertible Preferred Stock (incorporated by reference to Exhibit 3.1 to the Registrant's Quarterly Report on Form 10-Q (File No. 001-37471) filed with the Commission on November 12, 2019).
4.5	Amended and Restated Bylaws of the Registrant (incorporated by reference to Exhibit 3.2 to the Registrant's Quarterly Report on Form 10-Q (File No. 001-37471) filed with the Commission on November 12, 2019).
4.6	Form of Common Stock certificate (incorporated by reference to Exhibit 4.2 to the Registrant's Annual Report on Form 10-K (File No. 001-37471) filed with the Commission on March 23, 2016).
4.7	Form of Warrant to Purchase Common Stock (incorporated by reference to Exhibit 10.2 to the Registrant's Current Report on Form 8-K (File No. 001-37471) filed with the Commission on November 4, 2019).
4.8	Registration Rights Agreement, dated November 2, 2019, by and among the Company and the Investors named therein (incorporated by reference to Exhibit 10.3 to the Registrant's Current Report on Form 8-K (File No. 001-37471) filed with the Commission on November 4, 2019).
5.1	* Opinion of Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C.
10.1	Securities Purchase Agreement, dated November 2, 2019, by and among the Company and the Investors named therein (incorporated by reference to Exhibit 10.3 to the Registrant's Current Report on Form 8-K (File No. 001-37471) filed with the Commission on November 4, 2019).
23.1	* Consent of Ernst & Young LLP.
23.2	* Consent of Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C. (contained in Exhibit 5.1 hereto).
24.1	* Powers of Attorney (included in the signature page of this registration statement).

* Filed herewith.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Boston, Commonwealth of Massachusetts, on December 4, 2019.

PIERIS PHARMACEUTICALS, INC.

By: /s/ Stephen S. Yoder
Stephen S. Yoder
President and Chief Executive Officer

SIGNATURES AND POWER OF ATTORNEY

We, the undersigned officers and directors of Pieris Pharmaceuticals, Inc., hereby severally constitute and appoint Stephen S. Yoder and Thomas Bures and each of them singly (with full power to each of them to act alone), our true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution in each of them for him and in his name, place and stead, and in any and all capacities, to sign any and all amendments (including, without limitation, post-effective amendments) to this registration statement (or any other registration statement for the same offering that is to be effective upon filing pursuant to Rule 462(b) under the Securities Act of 1933), and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite or necessary to be done in and about the premises, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or any of them or their or his substitute or substitutes may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Stephen S. Yoder</u> Stephen S. Yoder	President, Chief Executive Officer and Director (<i>Principal Executive Officer</i>)	December 4, 2019
<u>/s/ Thomas Bures</u> Thomas Bures	Vice President, Finance and Treasurer (<i>Principal Financial and Accounting Officer</i>)	December 4, 2019
<u>/s/ James Geraghty</u> James Geraghty	Chairman of the Board of Directors	December 4, 2019
<u>/s/ Michael Richman</u> Michael Richman	Director	December 4, 2019
<u>/s/ Ann Barbier, M.D., Ph.D.</u> Ann Barbier, M.D., Ph.D.	Director	December 4, 2019
<u>/s/ Jean-Pierre Bizzari, M.D.</u> Jean-Pierre Bizzari, M.D.	Director	December 4, 2019
<u>/s/ Christopher Kiritsy</u> Christopher Kiritsy	Director	December 4, 2019
<u>/s/ Peter Kiener, D.Phil.</u> Peter Kiener, D.Phil.	Director	December 4, 2019
<u>/s/ Matthew L. Sherman, M.D.</u> Matthew L. Sherman, M.D.	Director	December 4, 2019
<u>/s/ Maya R. Said, Sc.D.</u> Maya R. Said, Sc.D.	Director	December 4, 2019

One Financial Center
Boston, MA 02111
617 542 6000
mintz.com



December 4, 2019

Pieris Pharmaceuticals, Inc.
255 State Street, 9th Floor
Boston, MA 02109

Ladies and Gentlemen:

We have acted as counsel to Pieris Pharmaceuticals, Inc. (the “Company”) in connection with the filing by the Company of a Registration Statement on Form S-3 (as amended, the “Registration Statement”) with the Securities and Exchange Commission (the “Commission”) relating to the registration under the Securities Act of 1933, as amended (the “Securities Act”), the offering from time to time by the selling stockholders, as described in the Registration Statement, of up to 18,029,920 shares of the Company’s common stock, par value \$0.001 per share (the “Common Shares”), consisting of (a) 5,492,960 Common Shares (the “Private Placement Shares”), (ii) 3,522,000 Common Shares (the “Underlying Shares”) issuable upon the conversion of 3,522 shares of the Company’s Series C Convertible Preferred Stock, par value \$0.001 per share (the “Series C Preferred Shares”), and (iii) 9,014,960 Common Shares (the “Warrant Shares”) issuable upon exercise of common stock purchase warrants (the “Warrants” and together with the Private Placement Shares and the Series C Preferred Shares, the “PIPE Securities”). The PIPE Securities were sold to accredited investors in a private placement offering which closed on November 6, 2019.

In connection with this opinion, we have examined the Company’s Amended and Restated Articles of Incorporation and Amended and Restated Bylaws, each as currently in effect; such other records of the corporate proceedings of the Company and certificates of the Company’s officers as we have deemed relevant; and the Registration Statement and the exhibits thereto.

In our examination, we have assumed the genuineness of all signatures, the legal capacity of natural persons, the authenticity of all documents submitted to us as originals, the conformity to original documents of all documents submitted to us as certified or photostatic copies and the authenticity of the originals of such copies, and the truth and correctness of any representations and warranties contained therein. As to questions of fact material to this opinion, we have relied upon certificates or comparable documents of public officials and of officers and representatives of the Company.

Our opinion is limited to the general corporate laws of the State of Nevada and we express no opinion with respect to the laws of any other jurisdiction. No opinion is expressed herein with respect to the qualification of the Common Shares under the securities or blue sky laws of any state or any foreign jurisdiction.

BOSTON LONDON LOS ANGELES NEW YORK SAN DIEGO SAN FRANCISCO WASHINGTON
MINTZ, LEVIN, COHN, FERRIS, GLOVSKY AND POPEO, P.C.

December 4, 2019

Page 2

Based upon and subject to the foregoing, it is our opinion that: (i) the Private Placement Shares and Series C Preferred Shares are validly issued, fully paid and non-assessable, (ii) the Underlying Shares have been duly authorized and, when issued and delivered by the Company upon conversion of the Series C Preferred Shares in accordance with the terms of the Company's Amended and Restated Articles of Incorporation, including the Certificate of Designation for the Series C Preferred Shares, and the Registration Statement, including the payment of the conversion price therefor, the Underlying Shares will be validly issued, fully paid and non-assessable and (iii) the Warrant Shares have been duly authorized and, when issued and delivered by the Company upon exercise of the Warrants in accordance with the Warrants and the Registration Statement, including the payment of the exercise price therefor, the Warrant Shares will be validly issued, fully paid and non-assessable.

Please note that we are opining only as to the matters expressly set forth herein, and no opinion should be inferred as to any other matters. This opinion is based upon currently existing statutes, rules, regulations and judicial decisions, and we disclaim any obligation to advise you of any change in any of these sources of law or subsequent legal or factual developments which might affect any matters or opinions set forth herein.

We understand that you wish to file this opinion with the Commission as an exhibit to the Registration Statement in accordance with the requirements of Item 601(b)(5) of Regulation S-K promulgated under the Securities Act and to reference the firm's name under the caption "Legal Matters" in the prospectus which forms part of the Registration Statement, and we hereby consent thereto. In giving this consent, we do not admit that we are within the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission promulgated thereunder.

Very truly yours,

/s/ Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C.

Consent of Independent Registered Public Accounting Firm

We consent to the reference to our firm under the caption “Experts” in the Registration Statement (FormS-3) and related Prospectus of Pieris Pharmaceuticals, Inc. for the registration of 18,029,920 shares of its common stock and to the incorporation by reference therein of our report dated March 18, 2019, with respect to the consolidated financial statements of Pieris Pharmaceuticals, Inc. included in its Annual Report (Form 10-K) for the year ended December 31, 2018, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

Boston, Massachusetts
December 4, 2019