

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

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

**Regeneron Pharmaceuticals, Inc.**

(Exact Name of Registrant as Specified in Its Charter)

**New York**  
(State or Other Jurisdiction of Incorporation or Organization)

**13-3444607**  
(I.R.S. Employer Identification No.)

777 Old Saw Mill River Road  
Tarrytown, New York 10591-6707  
(914) 847-7000

(Address, Including Zip Code, and Telephone Number, Including Area Code, of Registrant's Principal Executive Offices)

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Senior Vice President, General Counsel and Secretary  
Regeneron Pharmaceuticals, Inc.  
777 Old Saw Mill River Road  
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(914) 847-7000

(Name, Address, Including Zip Code, and Telephone Number, Including Area Code, of Agent for Service)

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**Approximate date of commencement of proposed sale to the public: From time to time after the effective date of this registration statement as determined by the Registrant**

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

Large accelerated filer   
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(1)	Amount to be Registered	Proposed Maximum Offering Price Per Unit	Proposed Maximum Aggregate Offering Price	Amount of Registration Fee
Common Stock, Preferred Stock, Debt Securities, Warrants	(2)	(2)	(2)	(2)

(1) Securities registered hereunder may be sold separately, together or as units with other securities registered hereunder.

(2) We are registering an indeterminate aggregate principal amount and number of securities of each identified class of securities, which may be offered from time to time in unspecified numbers and at indeterminate prices, and as may be issuable upon conversion, redemption, repurchase, exchange or exercise of any securities registered hereunder, including under any applicable anti-dilution provisions. Separate consideration may or may not be received for securities that are issuable on exercise, conversion or exchange of other securities. In accordance with Rules 456(b) and 457(r) under the Securities Act, the registrant is deferring payment of the entire registration fee. Registration fees will be paid subsequently on a pay-as-you-go basis.



PROSPECTUS

Regeneron Pharmaceuticals, Inc.

COMMON STOCK  
PREFERRED STOCK  
DEBT SECURITIES  
WARRANTS

We may from time to time offer to sell together or separately in one or more offerings:

- common stock;
- preferred stock;
- debt securities, which may be senior, subordinated or junior subordinated and convertible or non-convertible; and
- warrants to purchase our common stock, preferred stock or debt securities.

This prospectus describes some of the general terms that may apply to these securities. We will provide the specific prices and terms of these securities in one or more supplements to this prospectus at the time of the offering. You should read this prospectus and the accompanying prospectus supplement carefully before you make your investment decision.

We may offer and sell these securities through underwriters, dealers or agents or directly to purchasers, on a continuous or delayed basis. The prospectus supplement for each offering will describe in detail the plan of distribution for that offering and will set forth the names of any underwriters, dealers or agents involved in the offering and any applicable fees, commissions or discount arrangements.

This prospectus may not be used to sell securities unless accompanied by a prospectus supplement or a free writing prospectus.

Our Common Stock is listed on The Nasdaq Global Select Market under the trading symbol "REGN." Each prospectus supplement will indicate if the securities offered thereby will be listed on any securities exchange.

**Investing in our securities involves a high degree of risk. See "Risk Factors" on page 4 before you make your investment decision.**

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

**The date of this prospectus is November 13, 2018.**

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## ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission (the “SEC”) using a “shelf” registration process. Under the shelf process, we may sell any combination of the securities described in this prospectus in one or more offerings.

This prospectus only provides you with a general description of the securities we may offer. Each time we sell securities, we will provide a supplement to this prospectus that will contain specific information about the terms of that offering, including the specific amounts, prices and terms of the securities offered. The prospectus supplement may also add, update or change information contained in this prospectus. You should carefully read both this prospectus and any accompanying prospectus supplement or other offering materials, together with the additional information described under the heading “Where You Can Find More Information.”

You should rely only on the information contained or incorporated by reference in this prospectus. We have not authorized anyone to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. We are not making an offer to sell these securities in any jurisdiction where the offer or sale is not permitted.

This prospectus and any accompanying prospectus supplement or other offering materials do not contain all of the information included in the registration statement as permitted by the rules and regulations of the SEC. For further information, we refer you to the registration statement on Form S-3, including its exhibits. We are subject to the informational requirements of the Securities Exchange Act of 1934, as amended (“Exchange Act”), and, therefore, file reports and other information with the SEC. Statements contained in this prospectus and any accompanying prospectus supplement or other offering materials about the provisions or contents of any agreement or other document are only summaries. If SEC rules require that any agreement or document be filed as an exhibit to the registration statement, you should refer to that agreement or document for its complete contents.

You should not assume that the information in this prospectus, any prospectus supplement or any other offering materials is accurate as of any date other than the date on the front of each document. Our business, financial condition, results of operations and prospects may have changed since then.

In this prospectus, unless otherwise specified or the context requires otherwise, we use the terms “Regeneron,” “Company,” “we,” “us,” and “our” to refer to Regeneron Pharmaceuticals, Inc. References to “preferred stock” refer to shares of our preferred stock, par value \$0.01 per share; references to “Common Stock” refer to shares of our common stock, par value \$0.001 per share; references to “Class A Stock” refer to our Class A Stock, par value \$0.001 per share; and references to “common shares” mean, collectively, shares of Common Stock and shares of Class A Stock.

## CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

This prospectus, any accompanying prospectus supplements, and the documents incorporated by reference contain forward-looking statements that involve risks and uncertainties relating to future events and our future financial performance, and actual events or results may differ materially from these forward-looking statements. Words such as “anticipate,” “expect,” “intend,” “plan,” “believe,” “seek,” “estimate,” variations of such words and similar expressions are intended to identify such forward-looking statements, although not all forward-looking statements contain these identifying words. These statements concern, and these risks and uncertainties include, among others, the nature, timing, and possible success and therapeutic applications of our products, product candidates, and research and clinical programs now underway or planned, including without limitation EYLEA<sup>®</sup> (afibercept) Injection, Dupixent<sup>®</sup> (dupilumab) Injection, Praluent<sup>®</sup> (alirocumab) Injection, Kevzara<sup>®</sup> (sarilumab) Injection, Libtayo<sup>®</sup> (cemiplimab) Injection (marketed as Libtayo (cemiplimab-rwlc) Injection in the United States), fasinumab and evinacumab; the likelihood and timing of achieving any of our anticipated clinical development milestones; unforeseen safety issues resulting from the administration of products and product candidates in patients, including serious complications or side effects in connection with the use of our product candidates in clinical trials; the likelihood and timing of possible regulatory approval and commercial launch of our late-stage product candidates and new indications for marketed products, including without limitation EYLEA, Dupixent, Praluent, Kevzara, Libtayo, fasinumab and evinacumab; the extent to which the results from the research and development programs conducted by us or our collaborators may be replicated in other studies and lead to therapeutic applications; ongoing regulatory obligations and oversight impacting our marketed products (such as EYLEA, Dupixent, Praluent, Kevzara and Libtayo), research and clinical programs, and business, including those relating to patient privacy; determinations by regulatory and administrative governmental authorities which may delay or restrict our ability to continue to develop or commercialize our products and product candidates; competing drugs and product candidates that may be superior to our products and product candidates; uncertainty of market acceptance and commercial success of our products and product candidates; our ability to manufacture and manage supply chains for multiple products and product candidates; the ability of our collaborators, suppliers, or other third parties to perform filling, finishing, packaging, labeling, distribution and other steps related to our products and product candidates; coverage and reimbursement determinations by third-party payers, including Medicare and Medicaid; unanticipated expenses; the costs of developing, producing, and selling products; our ability to meet any of our financial projections or guidance, including without limitation capital expenditures, and changes to the assumptions underlying those projections or guidance; the potential for any license or collaboration agreement, including our agreements with Sanofi, Bayer and Teva Pharmaceutical Industries Ltd. (or their respective affiliated companies, as applicable), to be cancelled or terminated without any further product success; and risks associated with intellectual property of other parties and pending or future litigation relating thereto, including without limitation the patent litigation proceedings relating to EYLEA, Dupixent and Praluent. A list and description of risks, uncertainties, and other matters that should be considered in evaluating such forward-looking statements can be found in our Annual Report on Form 10-K for the fiscal year ended December 31, 2017 and in our Quarterly Report on Form 10-Q for the quarterly period ended September 30, 2018, in each case including in the sections thereof captioned “Item 1A. Risk Factors.” Any forward-looking statements are made by us based on management’s current beliefs and judgment, and the reader is cautioned not to rely on any such statements. We do not undertake any obligation to update publicly any forward-looking statement, whether as a result of new information, future events, or otherwise.

## NOTE REGARDING TRADEMARKS

“ARCALYST<sup>®</sup>”, “EYLEA<sup>®</sup>”, “Regeneron<sup>®</sup>”, “Regeneron Genetics Center<sup>®</sup>”, “*VelociGene*<sup>®</sup>”, “*VelociMab*<sup>®</sup>”, “*VelocImmune*<sup>®</sup>”, “*VelociMouse*<sup>®</sup>”, “*VelociSuite*<sup>®</sup>” and “ZALTRAP<sup>®</sup>” are our trademarks. Trademarks and trade names of other companies appearing in this prospectus are, to our knowledge, the property of their respective owners.

**SUMMARY**

*This is only a summary and may not contain all the information that is important to you. You should carefully read both this prospectus and any accompanying prospectus supplement and any other offering materials, together with the additional information described under the heading “Where You Can Find More Information.”*

**Regeneron Pharmaceuticals, Inc.**

Regeneron Pharmaceuticals, Inc. is a fully integrated biotechnology company that discovers, invents, develops, manufactures and commercializes medicines for the treatment of serious diseases. Our commercialized medicines and product candidates in development are designed to help patients with eye diseases, allergic and inflammatory diseases, cancer, cardiovascular and metabolic diseases, neuromuscular diseases, infectious diseases and rare diseases.

We currently have seven products that have received marketing approval:

Product	Disease Area <sup>(1)</sup>	Territory			
		U.S.	EU	Japan	Certain other countries outside the U.S.
EYLEA (aflibercept) Injection <sup>(2)</sup>	• Neovascular age-related macular degeneration (wet AMD)	✓	✓	✓	✓
	• Diabetic macular edema (DME)	✓	✓	✓	✓
	• Macular edema following retinal vein occlusion (RVO), which includes macular edema following central retinal vein occlusion (CRVO) and macular edema following branch retinal vein occlusion (BRVO)	✓	✓	✓	✓
	• Myopic choroidal neovascularization (mCNV)		✓	✓	✓
	• Diabetic retinopathy in patients with DME	✓			

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Product	Disease Area <sup>(1)</sup>	Territory			
		U.S.	EU	Japan	Certain other countries outside the U.S.
Dupixent (dupilumab) Injection <sup>(3)</sup>	<ul style="list-style-type: none"> <li>Atopic dermatitis (in adults)</li> </ul>	✓	✓	✓	✓
Praluent (alirocumab) Injection <sup>(3)</sup>	<ul style="list-style-type: none"> <li>Asthma (in adults and adolescents)</li> <li>Heterozygous familial hypercholesterolemia (HeFH) or clinical atherosclerotic cardiovascular disease (ASCVD) (in adults)</li> </ul>	✓	✓	✓	✓
Kevzara (sarilumab) Solution for Subcutaneous Injection <sup>(3)</sup>	<ul style="list-style-type: none"> <li>Rheumatoid arthritis (RA) (in adults)</li> </ul>	✓	✓	✓	✓
Libtayo (cemiplimab) Injection <sup>(3)(5)</sup>	<ul style="list-style-type: none"> <li>Metastatic or locally advanced cutaneous squamous cell carcinoma (CSCC)</li> </ul>	✓			
ARCALYST® (rilonacept) Injection for Subcutaneous Use	<ul style="list-style-type: none"> <li>Cryopyrin-Associated Periodic Syndromes (CAPS), including Familial Cold Auto-inflammatory Syndrome (FCAS) and Muckle-Wells Syndrome (MWS)</li> </ul>	✓			
ZALTRAP® (ziv-aflibercept) Injection for Intravenous Infusion <sup>(4)</sup>	<ul style="list-style-type: none"> <li>Metastatic colorectal cancer (mCRC)</li> </ul>	✓	✓		✓

<sup>(1)</sup> Refer to label information in each territory for specific indication

<sup>(2)</sup> In collaboration with Bayer (outside the United States)

<sup>(3)</sup> In collaboration with Sanofi

<sup>(4)</sup> Pursuant to a 2015 amended and restated ZALTRAP agreement, Sanofi is solely responsible for the development and commercialization of ZALTRAP, and Sanofi pays us a percentage of aggregate net sales of ZALTRAP

<sup>(5)</sup> Marketed as Libtayo (cemiplimab-rwlc) Injection in the United States

In addition, we currently have 20 product candidates in clinical development that were discovered in our research laboratories.

Our core business strategy is to maintain a strong foundation in basic scientific research and discovery-enabling technologies, and to build on that foundation with our clinical development, manufacturing, and commercial capabilities. Our objective is to continue to be an integrated, multi-product biotechnology company that provides patients and medical professionals with important options for preventing and treating human diseases.

**Research and Development Technologies**

We believe that our ability to develop product candidates is enhanced by the application of our *VelociSuite*® technology platforms. Our discovery platforms are designed to identify specific proteins of therapeutic interest for a particular disease or cell type and validate these targets through high-throughput production of genetically modified mice using our *VelociGene*® technology to understand the role of these proteins in normal physiology, as well as in models of disease. Our human antibody technology (*VelociImmune*®) and cell line expression technologies (*VelociMab*®) may then be utilized to discover and produce new product candidates directed against the disease target. Our antibody product candidates currently in clinical trials were developed using *VelociImmune*. We continue to invest in the development of enabling technologies to assist in our efforts to identify, develop, manufacture, and commercialize new product candidates.

We have launched a human genetics initiative via a wholly owned subsidiary, Regeneron Genetics Center LLC (“RGC”). RGC leverages de-identified clinical, genomic, and molecular data from human volunteers to



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identify medically relevant associations in a blinded fashion designed to preserve patients' privacy. The objective of RGC is to expand the use of human genetics for discovering and validating genetic factors that cause or influence a range of diseases where there are major unmet medical needs, with the prospect of improving the drug discovery and development process. RGC is undertaking multiple approaches, including large population-based efforts as well as family- and founder-based approaches. RGC utilizes laboratory automation and innovative approaches to cloud computing to achieve high-quality throughput.

**Corporate Information**

Our principal executive offices are located at 777 Old Saw Mill River Road, Tarrytown, New York 10591, and our telephone number at that address is (914) 847-7000. Our website address is [www.regeneron.com](http://www.regeneron.com). The information on, or accessible through, our website is not part of this prospectus and should not be relied upon in connection with making any investment decision with respect to the securities offered by this prospectus.

## **RISK FACTORS**

You should consider the specific risks described in our Annual Report on Form 10-K for the fiscal year ended December 31, 2017 and our Quarterly Report on Form 10-Q for the quarterly period ended September 30, 2018, the risk factors described under the caption “Risk Factors” in any applicable prospectus supplement, and any risk factors set forth in our other filings with the SEC, pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, before making an investment decision. Each of the risks described in these documents could materially and adversely affect our business, financial condition, results of operations, and prospects, and could result in a partial or complete loss of your investment. See “Where You Can Find More Information” beginning on page 19 of this prospectus.

## **USE OF PROCEEDS**

We intend to use the net proceeds from the sale of the securities as set forth in the applicable prospectus supplement.

## DESCRIPTION OF SECURITIES

This prospectus contains summary descriptions of the Common Stock, preferred stock, debt securities and warrants that we may offer and sell from time to time. These summary descriptions are not meant to be complete descriptions of each security. The particular terms of any security will be described in the applicable prospectus supplement.

### DESCRIPTION OF CAPITAL STOCK

#### General

Our authorized capital stock consists of 320,000,000 shares of Common Stock, par value \$0.001 per share, of which 106,298,574 shares were issued and outstanding as of September 30, 2018, 40,000,000 shares of Class A Stock, par value \$0.001 per share, of which 1,911,354 shares were issued and outstanding as of September 30, 2018, and 30,000,000 shares of preferred stock, par value \$0.01 per share, none of which were issued and outstanding as of September 30, 2018.

The following is a description of our capital stock and certain provisions of our certificate of incorporation, by-laws, and certain provisions of applicable law. The following is only a summary and is qualified by applicable law and by the provisions of our certificate of incorporation and by-laws, copies of which are included as exhibits to the registration statement of which this prospectus forms a part.

#### Common Stock and Class A Stock

*General.* The rights of holders of Common Stock and holders of Class A Stock are identical except for voting rights, conversion rights, and restrictions on transferability.

*Voting Rights.* The holders of Class A Stock are entitled to ten votes per share and the holders of Common Stock are entitled to one vote per share. Except as otherwise expressly provided by law, and subject to any voting rights provided to holders of preferred stock, holders of common shares have exclusive voting rights on all matters requiring a vote of shareholders. Except as provided by law, the holders of Class A Stock and the holders of shares of Common Stock will vote together as a single class on all matters presented to the shareholders for their vote or approval, including the election of directors. Shareholders are not entitled to vote cumulatively for the election of directors and no class of outstanding common shares acting alone is entitled to elect any directors.

*Transfer Restrictions.* Class A Stock is subject to certain limitations on transfer that do not apply to the Common Stock.

*Dividends and Liquidation.* Except as described in this paragraph, holders of Class A Stock and holders of our Common Stock have an equal right to receive dividends when and if declared by our board of directors out of funds legally available therefor. If a dividend or distribution payable in Class A Stock is made on the Class A Stock, we must also make a pro rata and simultaneous dividend or distribution on the Common Stock payable in shares of Common Stock. Conversely, if a dividend or distribution payable in Common Stock is made on the Common Stock, we must also make a pro rata and simultaneous dividend or distribution on the Class A Stock payable in shares of Class A Stock. In the event of our liquidation, dissolution or winding up, holders of the shares of Class A Stock and Common Stock are entitled to share equally, share-for-share, in the assets available for distribution after payment of all creditors and the liquidation preferences of our preferred stock.

*Optional Conversion Rights.* Each share of Class A Stock may, at any time and at the option of the holder, be converted into one fully paid and nonassessable share of Common Stock. Upon conversion, such shares of Common Stock would not be subject to restrictions on transfer that applied to the shares of Class A Stock prior to conversion except to the extent such restrictions are imposed under applicable securities laws. The shares of Common Stock are not convertible into or exchangeable for shares of Class A Stock or any other of our shares or securities.

*Other Provisions.* Holders of Class A Stock and Common Stock have no preemptive rights to subscribe for any additional securities of any class which we may issue and there are no redemption provisions or sinking fund

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provisions applicable to either such class, nor are our shares of Class A Stock or the Common Stock subject to calls or assessments.

*Listing.* Our Common Stock is listed on The Nasdaq Global Select Market under the symbol “REGN.” Our Class A Stock is not listed on a securities exchange.

*Transfer Agent and Registrar.* The transfer agent and registrar for our Common Stock is American Stock Transfer & Trust Company.

**Preferred Stock**

The following is a description of certain general terms and provisions of our preferred stock. The particular terms of any series of preferred stock will be described in a prospectus supplement and the extent, if any, to which the general provisions set forth below may apply to the series of preferred stock so offered will be described in the prospectus supplement. The following description of the preferred stock does not purport to be complete. You should refer to the provisions of our Restated Certificate of Incorporation dated January 25, 2008, as amended (“Certificate of Incorporation”).

*General.* Our Certificate of Incorporation allows us to issue up to 30,000,000 shares of preferred stock in one or more series and as may be determined by our board of directors. As of September 30, 2018, no shares of our preferred stock were outstanding. Our board of directors has the authority, without shareholder consent, to establish from time to time the number of shares to be included in any series of our preferred stock, to fix the designation, powers, preference, and rights of the shares of any such series and any qualifications, limitations or restrictions thereof and to increase or decrease the number of shares of any such series without any further vote or action by the shareholders. The rights, preferences, and restrictions of the preferred stock of any series of preferred stock will be fixed by a Certificate of Amendment to our Certificate of Incorporation relating to such series. A prospectus supplement relating to such series will describe the terms of the preferred stock of the series, including the following:

- the number of shares in that series;
- the designation for that series by number, letter or title that shall distinguish the series from any other series of preferred stock;
- the dividend rate (or method for determining the rate) for that series and whether dividends on that series of preferred stock will be cumulative, noncumulative or partially cumulative;
- any liquidation preference per share of that series of preferred stock;
- any conversion or exchange provisions applicable to that series of preferred stock;
- any redemption or sinking fund provisions applicable to that series of preferred stock;
- any voting rights of that series of preferred stock; and
- the terms of any other preferences or rights applicable to that series of preferred stock.

*Permanent Global Preferred Securities.* A series of preferred stock may be issued in whole or in part in the form of one or more global securities that will be deposited with a depositary or its nominee identified in the prospectus supplement relating to such series of preferred stock. The terms of the depositary arrangement with respect to any series of preferred stock and the rights of and limitations on owners of beneficial interests in a global security representing a series of preferred stock will be described in the related prospectus supplement.

*Transfer Agent and Registrar.* The transfer agent and registrar for each series of preferred stock will be set forth in the prospectus supplement.

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*Anti-Take-Over Effects.* Our board of directors may authorize, without shareholder approval, the issuance of preferred stock with voting and conversion rights that could adversely affect the voting power and other rights of holders of our Common Stock. Preferred stock could thus be issued quickly with terms designed to delay or prevent a change in control or to make the removal of management more difficult. In certain circumstances, this could have the effect of decreasing the market price of our Common Stock.

**Registration Rights of One of Our Shareholders**

One of our shareholders, Sanofi, has registration rights. Under the amended and restated investor agreement, as amended (the “Investor Agreement”), between us and such shareholder, such shareholder (and certain of its permitted transferees) may request that we file registration statements under the Securities Act and, upon such request and subject to minimum size and other conditions (such as the lock-up provisions set forth in the Investor Agreement), we will be required to use our best efforts to effect any such registration. We are not required to effect more than three such registrations. We are generally obligated to bear the expenses, other than underwriting discounts and sales commissions, of all of these registrations.

**Anti-Takeover Effects of Provisions of the Charter and By-Laws and New York corporate law**

For a description of anti-takeover effects of various provisions of our charter, by-laws, and the New York Business Corporation Law, please see “RISK FACTORS — Risks Related to Our Common Stock — *The anti-takeover effects of provisions of our charter, by-laws, and of New York corporate law, as well as the contractual provisions in our investor and collaboration agreements and certain provisions of our compensation plans and agreements, could deter, delay, or prevent an acquisition or other “change of control” of us and could adversely affect the price of our Common Stock*” in our Quarterly Report on Form 10-Q for the quarterly period ended September 30, 2018.

**DESCRIPTION OF DEBT SECURITIES**

The following descriptions of the debt securities do not purport to be complete and are subject to and qualified in their entirety by reference to the indenture, a form of which is included as an exhibit to the registration statement of which this prospectus is a part. Any future supplemental indenture or similar document also will be so filed. You should read the indenture and any supplemental indenture or similar document because they, and not this description, define your rights as holder of our debt securities. All capitalized terms have the meanings specified in the indenture.

We may issue, from time to time, debt securities, in one or more series, that will consist of either our senior debt, our senior subordinated debt, our subordinated debt, or our junior subordinated debt. The debt securities we offer will be issued under an indenture between us and one or more financial institutions qualified under the Trust Indenture Act of 1939, as amended (the “Trust Indenture Act”), to act as trustee. We may appoint more than one trustee under the indenture, each with respect to one or more series of debt securities. Each such trustee shall be a corporation or banking association organized and doing business in the United States that has a combined capital and surplus of at least \$50,000,000. Debt securities, whether senior, senior subordinated, subordinated, or junior subordinated, may be issued as convertible debt securities or exchangeable debt securities.

**General Terms of the Indenture**

The indenture does not limit the amount of debt securities that we may issue. It provides that we may issue debt securities up to the principal amount that we may authorize and may be in any currency or currency unit designated by us. Except for the limitations on consolidation, merger, and sale of all or substantially all of our assets contained in the indenture, the terms of the indenture do not contain any covenants or other provisions designed to afford holders of any debt securities protection with respect to our operations, financial condition or transactions involving us.

We may issue the debt securities issued under the indenture as “discount securities,” which means they may be sold at a discount below their stated principal amount. These debt securities, as well as other debt securities that are not issued at a discount, may, for U.S. federal income tax purposes, be treated as if they were issued with “original issue discount,” or “OID,” because of interest payment and other characteristics. Special U.S. federal

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income tax considerations applicable to debt securities issued with original issue discount will be described in more detail in any applicable prospectus supplement.

The applicable prospectus supplement for a series of debt securities that we issue will describe, among other things, the following terms of the offered debt securities:

- the title;
- the principal amount being offered, and, if a series, the total amount authorized and the total amount outstanding;
- any limit on the amount that may be issued;
- whether or not we will issue the series of debt securities in global form and, if so, the terms and who the depository will be;
- the maturity date;
- the principal amount due at maturity, and whether the debt securities will be issued with any original issue discount;
- whether and under what circumstances, if any, we will pay additional amounts on any debt securities held by a person who is not a United States person for tax purposes, and whether we can redeem the debt securities if we have to pay such additional amounts;
- the annual interest rate, which may be fixed or variable, or the method for determining the rate, the date interest will begin to accrue, the dates interest will be payable and the regular record dates for interest payment dates or the method for determining such dates;
- whether or not the debt securities will be secured or unsecured, and the terms of any secured debt;
- the terms of the subordination of any series of subordinated debt;
- the form and terms of any guarantee of any debt securities;
- the place where payments will be payable;
- restrictions on transfer, sale or other assignment, if any;
- our right, if any, to defer payment of interest and the maximum length of any such deferral period;
- the date, if any, after which, the conditions upon which, and the price at which we may, at our option, redeem the series of debt securities pursuant to any optional or provisional redemption provisions, and any other applicable terms of those redemption provisions;
- provisions for a sinking fund purchase or other analogous fund, if any;
- the date, if any, on which, and the price at which we are obligated, pursuant to any mandatory sinking fund or analogous fund provisions or otherwise, to redeem, or at the holder's option to purchase, the series of debt securities;
- whether the indenture will restrict our ability and/or the ability of our subsidiaries to:
  - incur additional indebtedness;
  - issue additional securities;

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- create liens;
- pay dividends, make distributions in respect of our capital stock and the capital stock of our subsidiaries or transfer assets;
- redeem capital stock;
- make investments or other restricted payments;
- sell or otherwise dispose of assets;
- enter into sale-leaseback transactions;
- engage in transactions with stockholders and affiliates;
- issue or sell stock of our subsidiaries; or
- effect a consolidation or merger;
- whether the indenture will require us to maintain any interest coverage, fixed charge, cash flow-based, asset-based or other financial ratios;
- information describing any book-entry features;
- the procedures for any auction and remarketing, if any;
- the denominations in which we will issue the series of debt securities, if other than denominations of \$1,000 and any integral multiple thereof;
- if other than dollars, the currency in which the series of debt securities will be denominated; and
- any other specific terms, preferences, rights or limitations of, or restrictions on, the debt securities, including any events of default that are in addition to those described in this prospectus or any covenants provided with respect to the debt securities that are in addition to those described above, and any terms which may be required by us or advisable under applicable laws or regulations or advisable in connection with the marketing of the debt securities.

The applicable prospectus supplement will set forth certain U.S. federal income tax considerations for holders of any debt securities and the securities exchange or quotation system on which any debt securities are listed or quoted, if any.

Unless otherwise provided in the applicable prospectus supplement, all securities of any one series need not be issued at the same time and may be issued from time to time without consent of any holder.

### **Senior Debt Securities**

Payment of the principal of, premium, if any, and interest on senior debt securities will rank on a parity with all of our other existing and future unsecured and unsubordinated debt.

### **Senior Subordinated Debt Securities**

Payment of the principal of, premium, if any, and interest on senior subordinated debt securities will be junior in right of payment to the prior payment in full of all of our existing and future unsecured and unsubordinated debt. We will set forth in the applicable prospectus supplement relating to any senior subordinated debt securities the subordination terms of such securities as well as the aggregate amount of outstanding debt, as of the most recent practicable date, that by its terms would be senior to the senior subordinated debt securities. We will also set forth in such prospectus supplement limitations, if any, on issuance of additional senior debt securities or additional senior subordinated debt securities.

### **Subordinated Debt Securities**

Payment of the principal of, premium, if any, and interest on subordinated debt securities will be subordinated and junior in right of payment to the prior payment in full of all of our senior and senior subordinated debt. We will set forth in the applicable prospectus supplement relating to any subordinated debt securities the subordination terms of such securities as well as the aggregate amount of outstanding indebtedness, as of the most recent practicable date, that by its terms would be senior to the subordinated debt securities. We will also set forth in such prospectus supplement limitations, if any, on issuance of additional senior debt securities, additional senior subordinated debt securities, or additional subordinated debt securities.

### **Junior Subordinated Debt Securities**

Payment of the principal of, premium, if any, and interest on junior subordinated debt securities will be subordinated and junior in right of payment to the prior payment in full of all of our senior, senior subordinated, and subordinated debt. We will set forth in the applicable prospectus supplement relating to any junior subordinated debt securities the subordination terms of such securities as well as the aggregate amount of outstanding debt, as of the most recent practicable date, that by its terms would be senior to the junior subordinated debt securities. We will also set forth in such prospectus supplement limitations, if any, on issuance of additional debt securities.

### **Conversion or Exchange Rights**

Debt securities may be convertible into or exchangeable for our other securities or property. The terms and conditions of conversion or exchange will be set forth in the applicable prospectus supplement. The terms will include, among others, the following:

- the conversion or exchange price;
- the conversion or exchange period;
- provisions regarding the ability of us or the holder to convert or exchange the debt securities;
- events requiring adjustment to the conversion or exchange price; and
- provisions affecting conversion or exchange in the event of our redemption of the debt securities.

### **Consolidation, Merger or Sale**

The indenture in the form initially filed as an exhibit to the registration statement of which this prospectus is a part does 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 of ours or acquiror of such assets must assume all of our obligations under the indenture and the debt securities.

If the debt securities are convertible for our other securities, the person with whom we consolidate or merge or to whom we sell all of our property must make provisions for the conversion of the debt securities into securities which the holders of the debt securities would have received if they had converted the debt securities before the consolidation, merger or sale.

### **Events of Default**

Unless otherwise indicated, the term “Event of Default,” when used in the indenture in respect of a series of debt securities, means any of the following:

- if we fail to pay interest when due and payable 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 payable 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 contained in the debt securities or the indenture, other than a covenant specifically relating to another series of debt securities, and our failure continues for 90 days after we receive notice from the trustee or holders of at least 25% in aggregate principal amount of the outstanding debt securities of the applicable series;
- events in bankruptcy, insolvency or reorganization of our company; or
- any other Event of Default provided in the applicable resolution of our board of directors or the supplemental indenture under which we issue such series of debt securities.

If an Event of Default with respect to debt securities of any series occurs and is continuing, other than an Event of Default specified in the last bullet point above, the trustee or the holders of at least 25% in aggregate principal amount of the outstanding debt securities of that series, by notice to us in writing, and to the trustee if notice is given by such holders, may declare the unpaid principal of, premium, if any, and accrued interest, if any, due and payable immediately. If an Event of Default specified in the last bullet point above occurs with respect to us, the principal amount of and accrued interest, if any, of each issue of debt securities then outstanding will be due and payable without any notice or other action on the part of the trustee or any holder.

The holders of a majority in principal amount of the outstanding debt securities of an affected series may waive any default or Event of Default with respect to the series and its consequences, except defaults or events of default regarding payment of principal, premium, if any, or interest, unless we have cured the default or Event of Default in accordance with the indenture.

Subject to the terms of the indenture, if an Event of Default under the indenture occurs and is continuing, the trustee will be under no obligation to exercise any of its rights or powers under the indenture at the request or direction of any of the holders of the applicable series of debt securities, unless such holders have offered the 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 trustee, or exercising any trust or power conferred on the 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 indenture; and
- subject to its duties under the Trust Indenture Act, the 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 indenture or to appoint a receiver or trustee, or to seek other remedies if:

- the holder has given written notice to the trustee of a continuing Event of Default with respect to that series;
- the holders of at least 25% in aggregate principal amount of the outstanding debt securities of that series have made written request, and those holders have offered reasonable indemnity to the trustee to institute the proceeding as trustee; and
- the 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 other conflicting directions within 90 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 trustee regarding our compliance with specified covenants in the indenture.

## **Global Securities**

Unless we inform you otherwise in the applicable prospectus supplement, the debt securities of a series may be issued in whole or in part in the form of one or more global securities that will be deposited with, or on behalf of, a depository identified in the applicable prospectus supplement. Global securities will be issued in registered form and in either temporary or definitive form. Unless and until it is exchanged in whole or in part for the individual debt securities, a global security may not be transferred except as a whole by the depository for such global security to a nominee of such depository or by a nominee of such depository to such depository or another nominee of such depository or by such depository or any such nominee to a successor of such depository or a nominee of such successor. The specific terms of the depository arrangement with respect to any debt securities of a series and the rights of and limitations upon owners of beneficial interests in a global security will be described in the applicable prospectus supplement.

## **Discharge, Defeasance and Covenant Defeasance**

We can discharge or defease our obligations under the indenture as set forth below. Unless otherwise set forth in the applicable prospectus supplement, the subordination provisions applicable to any subordinated securities will be expressly made subject to the discharge and defeasance provisions of the indenture.

We may discharge some of our obligations to holders of any series of debt securities that have not already been delivered to the trustee for cancellation and that have either become due and payable or are by their terms to become due and payable within one year (or are scheduled for redemption within one year). We may effect a discharge by irrevocably depositing with the trustee cash or U.S. government obligations, as trust funds, in an amount certified to be sufficient to pay when due, whether at maturity, upon redemption or otherwise, the principal of, premium, if any, and interest on the debt securities, and any mandatory sinking fund payments.

Unless otherwise provided in the applicable prospectus supplement, we may also discharge any and all of our obligations to holders of any series of debt securities at any time (“defeasance”). We also may be released from the obligations imposed by any covenants of any outstanding series of debt securities and provisions of the indenture, and we may omit to comply with those covenants without creating an Event of Default (“covenant defeasance”). We may effect defeasance and covenant defeasance only if, among other things:

- we irrevocably deposit with the trustee cash or U.S. government obligations, as trust funds, in an amount certified to be sufficient to pay at maturity (or upon redemption) the principal, premium, if any, and interest on all outstanding debt securities of the series; and
- we deliver to the trustee an opinion of counsel from a law firm to the effect that the holders of the series of debt securities will not recognize income, gain or loss for U.S. federal income tax purposes as a result of the defeasance or covenant defeasance and that defeasance or covenant defeasance will not otherwise alter the holders’ U.S. federal income tax treatment of principal, premium, if any, and interest payments on the series of debt securities, which opinion, in the case of legal defeasance, must be based on a ruling of the Internal Revenue Service issued or a change in U.S. federal income tax law.

Although we may discharge or defease our obligations under the indenture as described in the two preceding paragraphs, we may not avoid, among other things, our duty to register the transfer or exchange of any series of debt securities, to replace any temporary, mutilated, destroyed, lost or stolen series of debt securities or to maintain an office or agency in respect of any series of debt securities.

## **Modification of the Indenture; Waiver**

The indenture provides that we and the trustee may enter into supplemental indentures without the consent of the holders of debt securities of a series with respect to certain specific matters, including:

- to cure any ambiguity, defect or inconsistency in the indenture;
- to comply with the provisions described above under “— Consolidation, Merger or Sale”;

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- to comply with any requirements of the SEC in connection with the qualification of the indenture under the Trust Indenture Act;
- to evidence and provide for the acceptance of appointment under the indenture by a successor trustee;
- to provide for uncertificated debt securities and to make all appropriate changes for that purpose;
- to add to, delete from, or revise the conditions, limitations and restrictions on the authorized amount, terms or purposes of issuance, authorization and delivery of debt securities or any series;
- to add to our covenants such new covenants, restrictions, conditions or provisions for the protection of the holders, to make the occurrence, or the occurrence and the continuance, of a default in any such additional covenants, restrictions, conditions or provisions an Event of Default, or to surrender any of our rights or powers under the indenture; or
- to change anything that does not materially adversely affect the interests of any holder of debt securities of any series.

In addition, under the indenture, the rights of holders of a series of debt securities may be changed by us and the 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 that is affected. However, we and the trustee 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 reducing any premium payable upon the redemption of any debt securities; or
- reducing the percentage of debt securities, the holders of which are required to consent to any supplemental indenture.

### **Concerning the Trustee**

The indenture provides that there may be more than one trustee under the indenture, each with respect to one or more series of debt securities. If there are different trustees for different series of debt securities, each trustee will be a trustee of a trust under the indenture separate and apart from the trust administered by any other trustee under the indenture. Except as otherwise indicated in this prospectus or any prospectus supplement, any action permitted to be taken by a trustee may be taken by such trustee only with respect to the one or more series of debt securities for which it is the trustee under the indenture. Any trustee under the indenture may resign or be removed with respect to one or more series of debt securities. All payments of principal of, premium, if any, and interest on, and all registration, transfer, exchange, authentication, and delivery of (including authentication and delivery on original issuance of the debt securities), the debt securities of a series (other than debt securities issued in bearer form) will be effected by the trustee with respect to that series at an office designated by the trustee in New York, New York.

The indenture contains limitations on the right of the trustee, should it become a creditor of our company, to obtain payment of claims in some cases or to realize on certain property received in respect of any such claim as security or otherwise. The trustee may engage in other transactions. If it acquires any conflicting interest relating to any duties with respect to the debt securities, however, it must eliminate the conflict or resign as trustee.

The holders of a majority in aggregate principal amount of any series of debt securities then outstanding will have the right to direct the time, method, and place of conducting any proceeding for exercising any remedy available to the trustee with respect to such series of debt securities, provided that the direction would not conflict with any rule of law or with the indenture, would not be unduly prejudicial to the rights of another holder of the debt securities, and would not involve any trustee in personal liability. The indenture provides that if an Event of Default shall occur and be known to any trustee and not be cured, the trustee must use the same degree of care as a prudent

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person would use in the conduct of his or her own affairs in the exercise of the trustee's power. Subject to these provisions, the trustee will be under no obligation to exercise any of its rights or powers under the indenture at the request of any of the holders of the debt securities, unless they shall have offered to the trustee security and indemnity satisfactory to the trustee.

**No Individual Liability of Incorporators, Shareholders, Officers or Directors**

The indenture provides that neither our incorporator nor any of our past, present or future shareholders, officers or directors of our company or any successor corporation in their capacity as such shall have any individual liability for any of our obligations, covenants or agreements under the debt securities or the indenture.

**Governing Law**

The indenture and the debt securities will be governed by, and construed in accordance with, the laws of the State of New York without regard to conflict of law principles thereof.

**DESCRIPTION OF WARRANTS**

We may issue warrants for the purchase of Common Stock, preferred stock, or debt securities. We may issue warrants independently or together with any offered securities. The warrants may be attached to or separate from those offered securities. We will issue the warrants under one or more warrant agreements to be entered into between us and a warrant agent to be named in the applicable prospectus supplement. The warrant agent will act solely as our agent in connection with the warrants and will not assume any obligation or relationship of agency or trust for or with any holders or beneficial owners of warrants.

The prospectus supplement relating to any warrants that we may offer will contain the specific terms of the warrants. These terms may include the following:

- the title of the warrants;
- the price or prices at which the warrants will be issued;
- the designation, amount and terms of the securities for which the warrants are exercisable;
- the designation and terms of the other securities, if any, with which the warrants are to be issued and the number of warrants issued with each other security;
- the aggregate number of warrants;
- any provisions for adjustment of the number or amount of securities receivable upon exercise of the warrants or the exercise price of the warrants;
- the price or prices at which the securities purchasable upon exercise of the warrants may be purchased;
- if applicable, the date on and after which the warrants and the securities purchasable upon exercise of the warrants will be separately transferable;
- a discussion of any material U.S. federal income tax considerations applicable to the exercise of the warrants;
- the date on which the right to exercise the warrants will commence, and the date on which the right will expire;
- the maximum or minimum number of warrants that may be exercised at any time;
- information with respect to book-entry procedures, if any; and

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- any other terms of the warrants, including terms, procedures and limitations relating to the exchange and exercise of the warrants.

**Exercise of Warrants**

Each warrant will entitle the holder of the warrant to purchase for cash the amount of Common Stock, preferred stock or debt securities at the exercise price stated or determinable in the applicable prospectus supplement for the warrants. Warrants may be exercised at any time up to the close of business on the expiration date shown in the applicable prospectus supplement, unless otherwise specified in such prospectus supplement. After the close of business on the expiration date, unexercised warrants will become void. Warrants may be exercised as described in the applicable prospectus supplement. When the warrant holder makes the payment and properly completes and signs the warrant certificate at the corporate trust office of the warrant agent or any other office indicated in the prospectus supplement, we will, as soon as possible, forward the Common Stock, preferred stock or debt securities that the warrant holder has purchased. If the warrant holder exercises the warrant for less than all of the warrants represented by the warrant certificate, we will issue a new warrant certificate for the remaining warrants.

The description in the applicable prospectus supplement of any warrants we offer will not necessarily be complete and will be qualified in its entirety by reference to the applicable warrant agreement and warrant certificate, which will be filed with the SEC if we offer warrants. For more information on how you can obtain copies of any warrant certificate or warrant agreement if we offer warrants, see “Where You Can Find More Information” beginning on page 19 of this prospectus. We urge you to read the applicable warrant certificate, the applicable warrant agreement, and any applicable prospectus supplement in their entirety.

**PLAN OF DISTRIBUTION**

We may sell the securities offered by this prospectus from time to time in one or more transactions, including without limitation:

- directly to one or more purchasers;
- through agents;
- to or through underwriters, brokers or dealers; or
- through a combination of any of these methods.

A distribution of the securities offered by this prospectus may also be effected through the issuance of derivative securities, including without limitation, warrants, subscriptions, exchangeable securities, forward delivery contracts, and the writing of options.

In addition, the manner in which we may sell some or all of the securities covered by this prospectus includes, without limitation:

- in a block trade in which a broker-dealer will attempt to sell as agent, but may position or resell a portion of the block, as principal, in order to facilitate the transaction;
- through purchases by a broker-dealer, as principal, and resale by the broker-dealer for its account;
- in ordinary brokerage transactions and transactions in which a broker solicits purchasers;
- in exchange for outstanding indebtedness; or
- in privately negotiated transactions.

We may also enter into hedging transactions. For example, we may:

- enter into transactions with a broker-dealer or affiliate thereof in connection with which such broker-dealer or affiliate will engage in short sales of the Common Stock pursuant to this

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prospectus, in which case such broker-dealer or affiliate may use shares of Common Stock received from us to close out its short positions;

- sell securities short and redeliver such shares to close out our short positions;
- enter into option or other types of transactions that require us to deliver Common Stock to a broker-dealer or an affiliate thereof, who will then resell or transfer the Common Stock under this prospectus; or
- loan or pledge the Common Stock to a broker-dealer or an affiliate thereof, who may sell the loaned shares or, in an Event of Default in the case of a pledge, sell the pledged shares pursuant to this prospectus.

In addition, we may enter into derivative or hedging transactions with third parties, or sell securities not covered by this prospectus to third parties in privately negotiated transactions. In connection with such a transaction, the third parties may sell securities covered by and pursuant to this prospectus and an applicable prospectus supplement or pricing supplement, as the case may be. If so, the third party may use securities borrowed from us or others to settle such sales and may use securities received from us to close out any related short positions. We may also loan or pledge securities covered by this prospectus and an applicable prospectus supplement to third parties, who may sell the loaned securities or, in an Event of Default in the case of a pledge, sell the pledged securities pursuant to this prospectus and the applicable prospectus supplement or pricing supplement, as the case may be.

A prospectus supplement with respect to each offering of securities will state the terms of the offering of the securities, including:

- the name or names of any underwriters or agents and the amounts of securities underwritten or purchased by each of them, if any;
- the public offering price or purchase price of the securities and the net proceeds to be received by us from the sale;
- any delayed delivery arrangements;
- any underwriting discounts or agency fees and other items constituting underwriters' or agents' compensation;
- any discounts or concessions allowed or reallocated or paid to dealers; and
- any securities exchange or markets on which the securities may be listed.

The offer and sale of the securities described in this prospectus by us, the underwriters or the third parties described above may be effected from time to time in one or more transactions, including privately negotiated transactions, either:

- at a fixed price or prices, which may be changed;
- at market prices prevailing at the time of sale;
- at prices related to the prevailing market prices; or
- at negotiated prices.

### **Underwriters and Agents**

Any public offering price and any discounts, commissions, concessions, or other items constituting compensation allowed or reallocated or paid to underwriters, dealers, agents, or remarketing firms may be changed from time to time. Underwriters, dealers, agents, and remarketing firms that participate in the distribution of the

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offered securities may be “underwriters” as defined in the Securities Act. Any discounts or commissions they receive from us and any profits they receive on the resale of the offered securities may be treated as underwriting discounts and commissions under the Securities Act. We will identify any underwriters, agents or dealers and describe their commissions, fees, or discounts in the applicable prospectus supplement or pricing supplement, as the case may be. If underwriters are used in a sale, they will acquire the offered securities for their own account. The underwriters may resell the offered securities in one or more transactions, including negotiated transactions. These sales may be made at a fixed public offering price or prices, which may be changed, at market prices prevailing at the time of the sale, at prices related to such prevailing market price or at negotiated prices. We may offer the securities to the public through an underwriting syndicate or through a single underwriter. The underwriters in any particular offering will be mentioned in the applicable prospectus supplement or pricing supplement, as the case may be.

Unless otherwise specified in connection with any particular offering of securities, the obligations of the underwriters to purchase the offered securities will be subject to certain conditions contained in an underwriting agreement that we will enter into with the underwriters at the time of the sale to them. The underwriters will be obligated to purchase all of the securities of the series offered if any of the securities are purchased, unless otherwise specified in connection with any particular offering of securities. Any initial offering price and any discounts or concessions allowed, reallocated, or paid to dealers may be changed from time to time.

We may designate agents to sell the offered securities. Unless otherwise specified in connection with any particular offering of securities, the agents will agree to use their best efforts to solicit purchases for the period of their appointment. We may also sell the offered securities to one or more remarketing firms, acting as principals for their own accounts or as agents for us. These firms will remarket the offered securities upon purchasing them in accordance with a redemption or repayment pursuant to the terms of the offered securities. A prospectus supplement or pricing supplement, as the case may be will identify any remarketing firm and will describe the terms of its agreement, if any, with us and its compensation.

In connection with offerings made through underwriters or agents, we may enter into agreements with such underwriters or agents pursuant to which we receive our outstanding securities in consideration for the securities being offered to the public for cash. In connection with these arrangements, the underwriters or agents may also sell securities covered by this prospectus to hedge their positions in these outstanding securities, including in short sale transactions. If so, the underwriters or agents may use the securities received from us under these arrangements to close out any related open borrowings of securities.

### **Dealers**

We may sell the offered securities to dealers as principals. We may negotiate and pay dealers’ commissions, discounts, or concessions for their services. The dealer may then resell such securities to the public either at varying prices to be determined by the dealer or at a fixed offering price agreed to with us at the time of resale. Dealers engaged by us may allow other dealers to participate in resales.

### **Direct Sales**

We may choose to sell the offered securities directly. In this case, no underwriters or agents would be involved.

### **Institutional Purchasers**

We may authorize agents, dealers or underwriters to solicit certain institutional investors to purchase offered securities on a delayed delivery basis pursuant to delayed delivery contracts providing for payment and delivery on a specified future date. The applicable prospectus supplement or pricing supplement, as the case may be will provide the details of any such arrangement, including the offering price and commissions payable on the solicitations.

We will enter into such delayed contracts only with institutional purchasers that we approve. These institutions may include commercial and savings banks, insurance companies, pension funds, investment companies, and educational and charitable institutions.

**Indemnification; Other Relationships**

We may have agreements with agents, underwriters, dealers and remarketing firms to indemnify them against certain civil liabilities, including liabilities under the Securities Act. Agents, underwriters, dealers and remarketing firms, and their affiliates, may engage in transactions with, or perform services for, us in the ordinary course of business. This includes commercial banking and investment banking transactions.

**Market-Making, Stabilization and Other Transactions**

There is currently no market for any of the offered securities, other than the Common Stock which is listed on The Nasdaq Global Select Market. If the offered securities are traded after their initial issuance, they may trade at a discount from their initial offering price, depending upon prevailing interest rates, the market for similar securities and other factors. While it is possible that an underwriter could inform us that it intends to make a market in the offered securities, such underwriter would not be obligated to do so, and any such market-making could be discontinued at any time without notice. Therefore, no assurance can be given as to whether an active trading market will develop for the offered securities. We have no current plans for listing of the debt securities, preferred stock, or warrants on any securities exchange or quotation system; any such listing with respect to any particular debt securities, preferred stock, or warrants will be described in the applicable prospectus supplement or pricing supplement, as the case may be.

In connection with any offering of Common Stock, the underwriters may purchase and sell shares of Common Stock in the open market. These transactions may include short sales, syndicate covering transactions, and stabilizing transactions. Short sales involve syndicate sales of Common Stock in excess of the number of shares to be purchased by the underwriters in the offering, which creates a syndicate short position. "Covered" short sales are sales of shares made in an amount up to the number of shares represented by the underwriters' over-allotment option. In determining the source of shares to close out the covered syndicate short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may purchase shares through the over-allotment option. Transactions to close out the covered syndicate short involve either purchases of the Common Stock in the open market after the distribution has been completed or the exercise of the over-allotment option. The underwriters may also make "naked" short sales of shares in excess of the over-allotment option. The underwriters must close out any naked short position by purchasing shares of Common Stock in the open market. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of the shares in the open market after pricing that could adversely affect investors who purchase in the offering. Stabilizing transactions consist of bids for or purchases of shares in the open market while the offering is in progress for the purpose of pegging, fixing, or maintaining the price of the securities.

In connection with any offering, the underwriters may also engage in penalty bids. Penalty bids permit the underwriters to reclaim a selling concession from a syndicate member when the securities originally sold by the syndicate member are purchased in a syndicate covering transaction to cover syndicate short positions. Stabilizing transactions, syndicate covering transactions, and penalty bids may cause the price of the securities to be higher than it would be in the absence of the transactions. The underwriters may, if they commence these transactions, discontinue them at any time.



## LEGAL MATTERS

Unless otherwise indicated in the applicable prospectus supplement, Skadden, Arps, Slate, Meagher & Flom LLP, New York, New York will provide opinions regarding the authorization and validity of the securities. Skadden, Arps, Slate, Meagher & Flom LLP may also provide opinions regarding certain other matters. Any underwriters will also be advised about legal matters by their own counsel, which will be named in the prospectus supplement.

## EXPERTS

The financial statements and management's assessment of the effectiveness of internal control over financial reporting (which is included in Management's Report on Internal Control over Financial Reporting) incorporated in this prospectus by reference to the Annual Report on Form 10-K for the year ended December 31, 2017 have been so incorporated in reliance on the report of PricewaterhouseCoopers LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

## WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports, proxy statements, and other information with the SEC under the Exchange Act. The SEC maintains an Internet site, [www.sec.gov](http://www.sec.gov), that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC, including Regeneron Pharmaceuticals, Inc. Our SEC filings are also available on our website at [www.regeneron.com](http://www.regeneron.com). Other than as specifically incorporated by reference into this prospectus, the information on, or accessible through, our website is not part of this prospectus and should not be relied upon in connection with making any investment decision with respect to the securities offered by this prospectus.

The SEC allows us to "incorporate by reference" information into this prospectus and any accompanying prospectus, which means that we can disclose important information to you by referring you to other documents filed separately with the SEC. The information incorporated by reference is considered part of this prospectus, and information filed with the SEC subsequent to this prospectus and prior to the termination of the particular offering referred to in such prospectus supplement will automatically be deemed to update and supersede this information. We incorporate by reference into this prospectus and any accompanying prospectus supplement the documents listed below (excluding any portions of such documents that have been "furnished" but not "filed" for purposes of the Exchange Act):

- Our Annual Report on Form 10-K for the fiscal year ended December 31, 2017, filed on February 8, 2018.
- Portions of our Definitive Proxy Statement on Schedule 14A filed on April 23, 2018 that are incorporated by reference into Part III of our Annual Report on Form 10-K for the fiscal year ended December 31, 2017, filed on February 8, 2018.
- Our Quarterly Reports on Form 10-Q for the quarterly period ended March 31, 2018, filed on May 3, 2018; for the quarterly period ended June 30, 2018, filed on August 2, 2018; and for the quarterly period ended September 30, 2018, filed on November 6, 2018.
- Our Current Reports on Form 8-K filed on January 2, 2018; January 8, 2018 (solely as to Item 1.01 thereof); January 18, 2018; June 13, 2018; and October 12, 2018 (solely as to Item 8.01 thereof).
- The description of our Common Stock set forth in a Registration Statement on Form 8-A, including any amendment or report filed for the purpose of updating such description (filing date October 15, 1996; Commission File No. 000-19034).

We also incorporate by reference any future filings made with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act between the date of this prospectus and the date all of the securities offered hereby are sold or the offering is otherwise terminated, with the exception of any information furnished under Item 2.02 and

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Item 7.01 of Form 8-K, which is not deemed filed and which is not incorporated by reference herein. Any such filings shall be deemed to be incorporated by reference and to be a part of this prospectus from the respective dates of filing of those documents.

We will provide without charge upon written or oral request to each person, including any beneficial owner, to whom a prospectus is delivered, a copy of any and all of the documents which are incorporated by reference into this prospectus but not delivered with this prospectus (other than exhibits unless such exhibits are specifically incorporated by reference in such documents).

You may request a copy of these documents by writing or telephoning us at:

Investor Relations Department  
Regeneron Pharmaceuticals, Inc.  
777 Old Saw Mill River Road  
Tarrytown, New York 10591  
(914) 847-7000

**PART II**  
**INFORMATION NOT REQUIRED IN PROSPECTUS**

**Item 14. Other Expenses of Issuance and Distribution.**

The expenses relating to the registration of the securities will be borne by the registrant.

Securities and Exchange Commission Registration Fee	\$	*
Accounting Fees and Expenses	\$	**
Legal Fees and Expenses	\$	**
Printing Fees	\$	**
Transfer Agent and Trustees' Fees and Expenses	\$	**
Rating Agency Fees	\$	**
Stock Exchange Listing Fees	\$	**
Miscellaneous	\$	**
<b>Total</b>	<b>\$</b>	<b>**</b>

\* Deferred in reliance on Rules 456(b) and 457(r) under the Securities Act.

\*\* Since an indeterminate amount of securities is covered by this registration statement, the expenses in connection with the issuance and distribution of the securities are not currently determinable.

**Item 15. Indemnification of Directors and Officers.**

Article VII of our Certificate of Incorporation provides that, to the fullest extent permitted under the New York Business Corporation Law, no director or officer of our company shall be personally liable to the company or its shareholders for monetary damages for any breach of fiduciary duty in such capacity.

Section 722 of the New York Business Corporation Law permits a corporation to provide for the indemnification of the members of its board of directors and its officers against actions or proceedings, or the threat thereof, by or in the right of the corporation. In order to receive indemnification, such director or officer must have (i) acted in good faith for a purpose which he reasonably believed was in the best interest of the corporation, and (ii) in the case of a criminal proceeding, also had no reasonable belief that such conduct was unlawful.

Article IV of our Amended and Restated By-Laws provides that the directors and certain other personnel of our company shall be indemnified against expenses and certain other liabilities arising out of legal actions brought or threatened against them for their conduct on behalf of our company, subject to certain qualifications and provided that each such person acted in good faith and in a manner that they reasonably believed was in our best interest.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers, or persons controlling us pursuant to the foregoing provisions or otherwise, we have been informed that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

Our employment agreement with our President and Chief Executive Officer includes a provision indemnifying him to the fullest extent permitted by law in connection with his serving as an officer or director of the Company. Such indemnification is in addition to and not in lieu of other indemnification rights. We maintain directors' and officers' liability insurance which insures against liabilities that our directors or officers may incur in such capacities.

**Item 16. Exhibits.**

The Exhibits to this registration statement are listed in the Index to Exhibits on page II-4 and are incorporated by reference herein.

**Item 17. Undertakings.**

The undersigned registrant hereby undertakes:

(A)(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 SEC pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement.

(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) above 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 Exchange Act 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, 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 to any purchaser:

A. 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

B. 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; or

(5) That, for the purpose of determining liability of the registrant under the Securities Act to any purchaser in the initial distribution of the securities, the undersigned registrant undertakes that in a primary offering of securities of

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the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

- (i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;
- (ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;
- (iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and
- (iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

(B) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) 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 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the SEC 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>	
1.1*	Form of Underwriting Agreement.
4.1	<a href="#">Restated Certificate of Incorporation of Regeneron Pharmaceuticals, Inc., as amended (incorporated by reference to Exhibit 3.1 to the Form 10-Q for Regeneron Pharmaceuticals, Inc. for the quarter ended June 30, 2015, filed on August 4, 2015).</a>
4.2	<a href="#">Amended and Restated By-Laws of Regeneron Pharmaceuticals, Inc. (incorporated by reference to Exhibit 3.2 to the Form 8-K for Regeneron Pharmaceuticals, Inc., filed on December 21, 2016.)</a>
4.3	<a href="#">Specimen Common Stock Certificate (incorporated by reference to Exhibit 4.16 to the Form S-3 for Regeneron Pharmaceuticals, Inc., filed on February 9, 2005).</a>
4.4*	Specimen Preferred Stock Certificate and Form of Certificate of Designation, Preferences and Rights with respect to any series of Preferred Stock issued hereunder.
4.5	<a href="#">Form of Indenture (incorporated by reference to Exhibit 4.5 to the Form S-3 for Regeneron Pharmaceuticals, Inc., filed on November 5, 2013).</a>
4.6*	Form of any Debt Security.
4.7*	Form of Warrant Agreement (including form of Warrant Certificate).
5.1	<a href="#">Opinion of Skadden, Arps, Slate, Meagher &amp; Flom LLP.</a>
23.1	<a href="#">Consent of PricewaterhouseCoopers LLP.</a>
23.2	<a href="#">Consent of Skadden, Arps, Slate, Meagher &amp; Flom LLP (included in Exhibit 5.1).</a>
24.1	<a href="#">Power of Attorney (included on signature page hereto).</a>
25.1	<a href="#">Form T-1 Statement of Eligibility under the Trust Indenture Act of 1939, as amended, of U.S. Bank National Association, as trustee under the Indenture.</a>

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\* To be filed by amendment or as an exhibit to a document to be incorporated by reference herein in connection with an offering of the offered securities.

**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 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 Town of Greenburgh, State of New York, on the 13th day of November, 2018.

REGENERON PHARMACEUTICALS, INC.

By: /s/ Robert E. Landry

Name: Robert E. Landry  
Title: Senior Vice President, Finance and  
Chief Financial Officer

**SIGNATURES AND POWER OF ATTORNEY**

In accordance with the requirements of the Securities Act of 1933, as amended, this Registration Statement has been signed by the following persons in the capacities and on the dates stated. Each person whose signature appears below constitutes and appoints each of Robert E. Landry, Christopher Fenimore, and Joseph J. LaRosa, as his or her true and lawful attorney-in-fact and agent, each acting along with full power of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign any or all amendments (including post-effective amendments) and exhibits to the Registration Statement on Form S-3, and to any registration statement filed under SEC Rule 462, and to file the same, with all exhibits thereto, and all documents in connection therewith, with the SEC, granting unto said attorney-in-fact and agent, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorney-in-fact and agent, or his or her 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/ Leonard S. Schleifer</u> Leonard S. Schleifer, M.D., Ph.D.	President, Chief Executive Officer, and Director (Principal Executive Officer)	November 13, 2018
<u>/s/ Robert E. Landry</u> Robert E. Landry	Senior Vice President, Finance and Chief Financial Officer (Principal Financial Officer)	November 13, 2018
<u>/s/ Christopher Fenimore</u> Christopher Fenimore	Vice President, Controller (Principal Accounting Officer)	November 13, 2018
<u>/s/ George D. Yancopoulos</u> George D. Yancopoulos, M.D., Ph.D.	President, Chief Scientific Officer, and Director	November 13, 2018
<u>/s/ P. Roy Vagelos</u> P. Roy Vagelos, M.D.	Chairman of the Board	November 13, 2018
<u>/s/ Bonnie L. Bassler</u> Bonnie L. Bassler, Ph.D.	Director	November 13, 2018

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<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Michael S. Brown</u> Michael S. Brown, M.D.	Director	November 13, 2018
<u>/s/ N. Anthony Coles</u> N. Anthony Coles, M.D.	Director	November 13, 2018
<u>/s/ Joseph L. Goldstein</u> Joseph L. Goldstein, M.D.	Director	November 13, 2018
<u>/s/ Christine A. Poon</u> Christine A. Poon	Director	November 13, 2018
<u>/s/ Arthur F. Ryan</u> Arthur F. Ryan	Director	November 13, 2018
<u>/s/ George L. Sing</u> George L. Sing	Director	November 13, 2018
<u>/s/ Marc Tessier-Lavigne</u> Marc Tessier-Lavigne, Ph.D.	Director	November 13, 2018
<u>/s/ Huda Y. Zoghbi</u> Huda Y. Zoghbi, M.D.	Director	November 13, 2018



November 13, 2018

Regeneron Pharmaceuticals, Inc.  
777 Old Saw Mill River Road  
Tarrytown, New York 10591-6707

Re: Regeneron Pharmaceuticals, Inc.  
Registration Statement on Form S-3

Ladies and Gentlemen:

We have acted as special counsel to Regeneron Pharmaceuticals, Inc., a New York corporation (the "Company"), in connection with the registration statement on Form S-3 (the "Registration Statement") to be filed on the date hereof by the Company with the Securities and Exchange Commission (the "Commission") under the Securities Act of 1933, as amended (the "Securities Act"). The Registration Statement relates to the issuance and sale by the Company from time to time, pursuant to Rule 415 of the General Rules and Regulations of the Commission promulgated under the Securities Act (the "Rules and Regulations"), of (i) shares of common stock, par value \$0.001 per share, of the Company ("Common Stock"), (ii) shares of preferred stock, par value \$0.01 per share, of the Company ("Preferred Stock"), which may be issued in one or more series, (iii) debt securities of the Company ("Debt Securities"), which may be issued in one or more series under an indenture (the "Indenture") proposed to be entered into between the Company and U.S. Bank National Association, as trustee, the form of which is filed as an exhibit to the Registration Statement, (iv) warrants to purchase shares of Common Stock, shares of Preferred Stock or Debt Securities ("Warrants"), which may be issued pursuant to one or more warrant agreements (each, a "Warrant Agreement") proposed to be entered into by the Company and one or more warrant agents to be named therein and (v) such indeterminate number of shares of Common Stock or Preferred Stock and indeterminate amount of Debt Securities as may be issued upon conversion, exchange or exercise, as applicable, of any Preferred Stock, Debt Securities or Warrants, including such shares of Common Stock or Preferred Stock as may be issued pursuant to anti-dilution adjustments determined at the time of offering (collectively, "Indeterminate Securities"). The Common Stock, Preferred Stock, Indeterminate Securities, Debt Securities and Warrants offered pursuant to the Registration Statement are collectively referred to herein as the "Securities."

This opinion is being furnished in accordance with the requirements of Item 601(b)(5) of Regulation S-K under the Securities Act.

In rendering the opinions stated herein, we have examined and relied upon the following:

- (a) the Registration Statement;
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- (b) the form of Indenture filed as an exhibit to the Registration Statement;
- (c) an executed copy of a certificate of Joseph J. LaRosa, Senior Vice President, General Counsel and Secretary of the Company, dated the date hereof (the “Secretary’s Certificate”);
- (d) a copy of the Company’s Certificate of Incorporation, as amended and in effect as of the date hereof, certified by the Department of State of the State of New York as of November 7, 2018, and certified pursuant to the Secretary’s Certificate;
- (e) a copy of the Company’s By-Laws, as amended and in effect as of the date hereof and certified pursuant to the Secretary’s Certificate; and
- (f) a copy of certain resolutions of the Board of Directors of the Company, adopted on November 9, 2018, certified pursuant to the Secretary’s Certificate.

We have also examined originals or copies, certified or otherwise identified to our satisfaction, of such records of the Company and such agreements, certificates and receipts of public officials, certificates of officers or other representatives of the Company and others, and such other documents as we have deemed necessary or appropriate as a basis for the opinions stated below.

In our examination, we have assumed the genuineness of all signatures, the legal capacity and competency of all natural persons, the authenticity of all documents submitted to us as originals, the conformity to original documents of all documents submitted to us as facsimile, electronic, certified or photostatic copies, and the authenticity of the originals of such copies. As to any facts relevant to the opinions stated herein that we did not independently establish or verify, we have relied upon statements and representations of officers and other representatives of the Company and others and of public officials, including the factual representations and warranties contained in the Secretary’s Certificate.

We do not express any opinion with respect to the laws of any jurisdiction other than the laws of the State of New York, including the Business Corporation Law of the State of New York (“NYBCL”) (collectively, “Opined-on Law”).

As used herein, “Transaction Documents” means the Indenture and the supplemental indentures thereto and officer’s certificates establishing the terms of the Debt Securities pursuant thereto, any Warrant Agreement and any applicable underwriting or purchase agreement.

The opinions stated in paragraphs 1 through 4 below presume that all of the following (collectively, the “general conditions”) shall have occurred prior to the issuance of the Securities referred to therein: (i) the Registration Statement, as finally amended (including all necessary post-effective amendments), has become effective under the Securities Act; (ii) an appropriate prospectus supplement or term sheet with respect to such Securities has been prepared, delivered and filed in compliance with the Securities Act and the applicable Rules and

Regulations; (iii) the applicable Transaction Documents shall have been duly authorized, executed and delivered by the Company and the other parties thereto, including, if such Securities are to be sold or otherwise distributed pursuant to a firm commitment underwritten offering, the underwriting agreement or purchase agreement with respect thereto; (iv) the Board of Directors of the Company, including any duly authorized committee thereof, shall have taken all necessary corporate action to approve the issuance and sale of such Securities and related matters and appropriate officers of the Company shall have taken all related action as directed by or under the direction of the Board of Directors of the Company; and (v) the terms of the applicable Transaction Documents and the issuance and sale of such Securities have been duly established in conformity with the certificate of incorporation of the Company so as not to violate any applicable law, the certificate of incorporation of the Company or the by-laws of the Company, or result in a default under or breach of any agreement or instrument binding upon the Company, and so as to comply with any requirement or restriction imposed by any court or governmental body having jurisdiction over the Company.

Based upon the foregoing and subject to the qualifications and assumptions stated herein, we are of the opinion that:

1. With respect to any shares of Common Stock offered by the Company, including any Indeterminate Securities constituting Common Stock (the "Offered Common Stock"), when (a) the general conditions shall have been satisfied, (b) if the Offered Common Stock is to be certificated, certificates in the form required under the NYBCL representing the shares of Offered Common Stock are duly executed and countersigned and (c) the shares of Offered Common Stock are registered in the Company's share registry and delivered upon payment of the agreed-upon consideration therefor, the shares of Offered Common Stock, when issued and sold or otherwise distributed in accordance with the provisions of the applicable Transaction Document, will be duly authorized by all requisite corporate action on the part of the Company under the NYBCL and validly issued, fully paid and nonassessable, provided that the consideration therefor is not less than \$0.001 per share of Common Stock.

2. With respect to the shares of any series of Preferred Stock offered by the Company, including any Indeterminate Securities constituting Preferred Stock of such series (the "Offered Preferred Stock"), when (a) the general conditions shall have been satisfied, (b) the Board of Directors of the Company, or a duly authorized committee thereof, has duly adopted a Certificate of Amendment to the Company's certificate of incorporation for the Offered Preferred Stock in accordance with the NYBCL (the "Certificate of Amendment"), (c) the filing of the Certificate of Amendment with the Department of State of the State of New York has duly occurred, (d) if the Offered Preferred Stock is to be certificated, certificates in the form required under the NYBCL representing the shares of Offered Preferred Stock are duly executed and countersigned and (e) the shares of Offered Preferred Stock are registered in the Company's share registry and delivered upon payment of the agreed-upon consideration therefor, the shares of Offered Preferred Stock, when issued and sold or otherwise distributed in accordance with the provisions of the applicable Transaction Documents, will be duly authorized by all requisite corporate action on the part of the Company under the NYBCL and validly issued, fully paid and

nonassessable, provided that the consideration therefor is not less than \$0.01 per share of Preferred Stock.

3. With respect to any series of Debt Securities offered by the Company, including any Indeterminate Securities constituting Debt Securities of such series (the “Offered Debt Securities”), when (a) the general conditions shall have been satisfied, (b) the issuance, sale and terms of the Offered Debt Securities and related matters have been approved and established in conformity with the applicable Transaction Documents and (c) the certificates evidencing the Offered Debt Securities have been issued in a form that complies with the provisions of the applicable Transaction Documents and have been duly executed and authenticated in accordance with the provisions of the Indenture and any other applicable Transaction Documents and issued and sold or otherwise distributed in accordance with the provisions of the applicable Transaction Document upon payment of the agreed-upon consideration therefor, the Offered Debt Securities will constitute valid and binding obligations of the Company, enforceable against the Company in accordance with their terms under the laws of the State of New York.

4. With respect to any Warrants offered by the Company (the “Offered Warrants”), when (a) the general conditions shall have been satisfied, (b) the Common Stock, Preferred Stock and/or Debt Securities for which the Offered Warrants are exercisable have been duly authorized for issuance by the Company and (c) certificates evidencing the Offered Warrants have been duly executed, delivered and countersigned in accordance with the provisions of the applicable Warrant Agreement, the Offered Warrants, when issued and sold or otherwise distributed in accordance with the provisions of the applicable Transaction Documents upon payment of the agreed-upon consideration therefor, will constitute valid and binding obligations of the Company, enforceable against the Company in accordance with their respective terms under the laws of the State of New York.

The opinions stated herein are subject to the following qualifications:

(a) the opinions stated herein are limited by applicable bankruptcy, insolvency, reorganization, moratorium, fraudulent transfer, preference and other similar laws affecting creditors’ rights generally, and by general principles of equity (regardless of whether enforcement is sought in equity or at law);

(b) we do not express any opinion with respect to any law, rule or regulation that is applicable to any party to any of the Transaction Documents or the transactions contemplated thereby solely because such law, rule or regulation is part of a regulatory regime applicable to any such party or any of its affiliates as a result of the specific assets or business operations of such party or such affiliates;

(c) except to the extent expressly stated in the opinions contained herein, we have assumed that each of the Transaction Documents constitutes the valid and binding obligation of each party to such Transaction Document, enforceable against such party in accordance with its terms;

(d) we do not express any opinion with respect to the enforceability of any provision, however expressed, (i) limiting reliance on statements by a party, (ii) exculpating a party from liability, (iii) disclaiming, limiting, or extending a party's liability, (iv) waiving, limiting, or excluding remedies, (v) providing for indemnification or contribution, or (vi) waiving, lengthening or shortening the period during which claims otherwise could be made under the applicable statute of limitations

(e) we do not express any opinion with respect to the enforceability of any provision of any Transaction Document to the extent that such section purports to bind the Company to the exclusive jurisdiction of any particular federal court or courts;

(f) we call to your attention that irrespective of the agreement of the parties to any Transaction Document, a court may decline to hear a case on grounds of forum non conveniens or other doctrine limiting the availability of such court as a forum for resolution of disputes; in addition, we call to your attention that we do not express any opinion with respect to the subject matter jurisdiction of the federal courts of the United States of America in any action arising out of or relating to any Transaction Document;

(g) we do not express any opinion with respect to the enforceability of any provision contained in any Transaction Document providing for indemnity by any party thereto against any loss in obtaining the currency due to such party under any Transaction Document from a court judgment in another currency;

(h) we have assumed that the choice of a currency other than U.S. dollars as the currency in which any Securities may be denominated does not contravene any exchange control or other laws of the jurisdiction of any such currency, and further we call to your attention that a court may not award a judgment in any currency other than U.S. dollars;

(i) we have assumed that the laws of the State of New York will be chosen to govern any Warrant Agreements and that such choice is and will be a valid and legal provision;

(j) we have assumed that the Indenture will be duly authorized, executed and delivered by the trustee in substantially the form reviewed by us, and that any Debt Securities and Warrants that may be issued will be manually authenticated, signed or countersigned, as the case may be, by duly authorized officers of any trustee and warrant agent, as the case may be;

(k) to the extent that any opinion relates to the enforceability of the choice of New York law provisions contained in any Transaction Document, the opinions stated herein are subject to the qualification that such enforceability may be subject to, in each case, (i) the exceptions and limitations in New York General Obligations Law sections 5-1401 and 5-1402 and (ii) principles of comity and constitutionality; and

(l) In connection with rendering the opinions set forth in paragraphs 1 and 2, we draw your attention to Section 630 of the NYBCL. Section 630 may impose liability for unpaid

debts, wages or salaries owing to employees for services performed by them on the ten largest shareholders of (i) corporations organized under the laws of the State of New York or (ii) corporations organized under the laws of other jurisdictions when the unpaid services were performed in the State of New York. NYBCL Section 630 does not apply to a corporation that has shares listed on a national securities exchange or regularly quoted in an over-the-counter market. We have assumed that Section 630 of the NYBCL does not presently apply to the Company and that such section will continue to be inapplicable to the Company.

In addition, in rendering the foregoing opinions we have assumed that:

(a) neither the execution and delivery by the Company of the Transaction Documents nor the performance by the Company of its obligations thereunder, including the issuance and sale of the applicable Securities: (i) constitutes or will constitute a violation of, or a default under, any lease, indenture, instrument or other agreement to which the Company or its property is subject, (ii) contravened or will contravene any order or decree of any governmental authority to which the Company or its property is subject, or (iii) violates or will violate any law, rule or regulation to which the Company or its property is subject (except that we do not make the assumption set forth in this clause (iii) with respect to the Opined-on Law);

(b) neither the execution and delivery by the Company of the Transaction Documents nor the performance by the Company of its obligations thereunder, including the issuance and sale of the applicable Securities, requires or will require the consent, approval, licensing or authorization of, or any filing, recording or registration with, any governmental authority under any law, rule or regulation of any jurisdiction.

We hereby consent to the reference to our firm under the heading “Legal Matters” in the prospectus forming part of the Registration Statement. We also hereby consent to the filing of this opinion with the Commission as an exhibit to the Registration Statement. In giving this consent, we do not thereby 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. This opinion is expressed as of the date hereof unless otherwise expressly stated, and we disclaim any undertaking to advise you of any subsequent changes in the facts stated or assumed herein or of any subsequent changes in applicable laws.

Very truly yours,

/s/ Skadden, Arps, Slate, Meagher & Flom LLP

DJG

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in this Registration Statement on Form S-3 of Regeneron Pharmaceuticals, Inc. of our report dated February 8, 2018 relating to the financial statements, and the effectiveness of internal control over financial reporting, which appears in Regeneron Pharmaceuticals, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2017. We also consent to the reference to us under the heading "Experts" in such Registration Statement.

/s/ PricewaterhouseCoopers LLP

Florham Park, New Jersey

November 13, 2018

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**SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

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**FORM T-1**

**STATEMENT OF ELIGIBILITY UNDER  
THE TRUST INDENTURE ACT OF 1939 OF A  
CORPORATION DESIGNATED TO ACT AS TRUSTEE**

**Check if an Application to Determine Eligibility of  
a Trustee Pursuant to Section 305(b)(2)**

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**U.S. BANK NATIONAL ASSOCIATION**

(Exact name of Trustee as specified in its charter)

**31-0841368**

I.R.S. Employer Identification No.

**800 Nicollet Mall  
Minneapolis, Minnesota**  
(Address of principal executive offices)

**55402**  
(Zip Code)

**Rick Barnes  
U.S. Bank National Association  
333 Thornall St. 4<sup>th</sup> Fl.  
Edison, NJ 08837  
(732) 321-2516**

(Name, address and telephone number of agent for service)

**REGENERON PHARMACEUTICALS, INC.**

(Issuer with respect to the Securities)

**New York**  
(State or other jurisdiction of incorporation or organization)

**13-3444607**  
(I.R.S. Employer Identification No.)

**777 Old Saw Mill River Road  
Tarrytown, New York**  
(Address of Principal Executive Offices)

**10591**  
(Zip Code)

**Debt Securities**  
(Title of the Indenture Securities)

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**FORM T-1**

**Item 1. GENERAL INFORMATION.** Furnish the following information as to the Trustee.

- a) *Name and address of each examining or supervising authority to which it is subject.*

Comptroller of the Currency  
Washington, D.C.

- b) *Whether it is authorized to exercise corporate trust powers.*

Yes

**Item 2. AFFILIATIONS WITH OBLIGOR.** *If the obligor is an affiliate of the Trustee, describe each such affiliation.*

None

**Items 3-15** *Items 3-15 are not applicable because to the best of the Trustee's knowledge, the obligor is not in default under any Indenture for which the Trustee acts as Trustee.*

**Item 16. LIST OF EXHIBITS:** *List below all exhibits filed as a part of this statement of eligibility and qualification.*

1. A copy of the Articles of Association of the Trustee.\*
2. A copy of the certificate of authority of the Trustee to commence business, attached as Exhibit 2.
3. A copy of the certificate of authority of the Trustee to exercise corporate trust powers, attached as Exhibit 3.
4. A copy of the existing bylaws of the Trustee.\*\*
5. A copy of each Indenture referred to in Item 4. Not applicable.
6. The consent of the Trustee required by Section 321(b) of the Trust Indenture Act of 1939, attached as Exhibit 6.
7. Report of Condition of the Trustee as of June 30, 2018 published pursuant to law or the requirements of its supervising or examining authority, attached as Exhibit 7.

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\* Incorporated by reference to Exhibit 25.1 to Amendment No. 2 to the Registration Statement on Form S-4, Registration Number 333-128217 filed on November 15, 2005.

\*\* Incorporated by reference to Exhibit 25.1 to the Registration Statement on Form S-3ASR, Registration Number 333-199863 filed on November 5, 2014.

**SIGNATURE**

Pursuant to the requirements of the Trust Indenture Act of 1939, as amended, the Trustee, U.S. BANK NATIONAL ASSOCIATION, a national banking association organized and existing under the laws of the United States of America, has duly caused this statement of eligibility and qualification to be signed on its behalf by the undersigned, thereunto duly authorized, all in the Township of Edison, State of New Jersey on the 13th of November, 2018.

By: /s/ Rick Barnes

Rick Barnes  
Vice President

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## Exhibit 2



Office of the Comptroller of the Currency

Washington, DC 20219

### **CERTIFICATE OF CORPORATE EXISTENCE**

I, Joseph Otting, Comptroller of the Currency, do hereby certify that:

1. The Comptroller of the Currency, pursuant to Revised Statutes 324, et seq, as amended, and 12 USC 1, et seq, as amended, has possession, custody, and control of all records pertaining to the chartering, regulation, and supervision of all national banking associations.

2. "U.S. Bank National Association," Cincinnati, Ohio (Charter No. 24), is a national banking association formed under the laws of the United States and is authorized thereunder to transact the business of banking on the date of this certificate.

IN TESTIMONY WHEREOF, today,

May 8, 2018, I have hereunto subscribed

my name and caused my seal of office to

be affixed to these presents at the U.S.

Department of the Treasury, in the City

of Washington, District of Columbia



*Joseph Otting*

Comptroller of the Currency



## Exhibit 3



Office of the Comptroller of the Currency

Washington, DC 20219

### **CERTIFICATION OF FIDUCIARY POWERS**

I, Joseph Otting, Comptroller of the Currency, do hereby certify that:

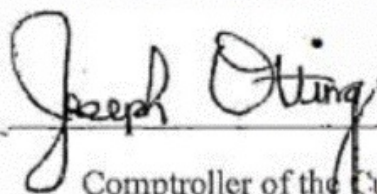
1. The Office of the Comptroller of the Currency, pursuant to Revised Statutes 324, et seq, as amended, and 12 USC 1, et seq, as amended, has possession, custody, and control of all records pertaining to the chartering, regulation, and supervision of all national banking associations.
2. "U.S. Bank National Association," Cincinnati, Ohio (Charter No. 24), was granted, under the hand and seal of the Comptroller, the right to act in all fiduciary capacities authorized under the provisions of the Act of Congress approved September 28, 1962, 76 Stat. 668, 12 USC 92a, and that the authority so granted remains in full force and effect on the date of this certificate.

IN TESTIMONY WHEREOF, today,

May 8, 2018, I have hereunto subscribed my name and caused my seal of office to be affixed to these presents at the U.S.

Department of the Treasury, in the City of Washington, District of Columbia.



  
Comptroller of the Currency



**Exhibit 6**

**CONSENT**

In accordance with Section 321(b) of the Trust Indenture Act of 1939, the undersigned, U.S. BANK NATIONAL ASSOCIATION hereby consents that reports of examination of the undersigned by Federal, State, Territorial or District authorities may be furnished by such authorities to the Securities and Exchange Commission upon its request therefor.

Dated: November 13, 2018

By: /s/ Rick Barnes  
Rick Barnes  
Vice President

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**Exhibit 7**

**U.S. Bank National Association  
Statement of Financial Condition  
As of 6/30/2018**

(\$000's)

	<u>6/30/2018</u>
<b>Assets</b>	
Cash and Balances Due From Depository Institutions	\$ 18,933,741
Securities	111,465,209
Federal Funds	92,722
Loans & Lease Financing Receivables	279,066,037
Fixed Assets	3,726,559
Intangible Assets	13,023,820
Other Assets	26,714,957
<b>Total Assets</b>	<b>\$ 453,023,045</b>
<b>Liabilities</b>	
Deposits	\$ 350,952,197
Fed Funds	2,497,543
Treasury Demand Notes	0
Trading Liabilities	904,426
Other Borrowed Money	34,319,863
Acceptances	0
Subordinated Notes and Debentures	3,300,000
Other Liabilities	13,252,394
<b>Total Liabilities</b>	<b>\$ 405,226,423</b>
<b>Equity</b>	
Common and Preferred Stock	18,200
Surplus	14,266,915
Undivided Profits	32,711,429
Minority Interest in Subsidiaries	800,078
<b>Total Equity Capital</b>	<b>\$ 47,796,622</b>
<b>Total Liabilities and Equity Capital</b>	<b>\$ 453,023,045</b>