RIGEL PHARMACEUTICALS INC Form 424B5 August 18, 2015

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Filed Pursuant to Rule 424(b)(5) Registration No. 333-203956

PROSPECTUS SUPPLEMENT (To Prospectus dated July 13, 2015)

Up to \$30,000,000 of Shares

Common Stock

We have entered into a certain Controlled Equity OfferingSM Sales Agreement, or sales agreement, with Cantor Fitzgerald & Co., or Cantor Fitzgerald, relating to shares of our common stock offered by this prospectus supplement and the accompanying prospectus. In accordance with the terms of the sales agreement, we may offer and sell shares of our common stock having an aggregate offering price of up to \$30,000,000 million from time to time through Cantor Fitzgerald, acting as sales agent.

Our common stock is quoted on The NASDAQ Global Market under the symbol "RIGL." The last reported sale price of our common stock on August 17, 2015 was \$3.02 per share.

Sales of our common stock, if any, under this prospectus supplement and the accompanying prospectus may be made in sales deemed to be "at the market offerings" as defined in Rule 415 promulgated under the Securities Act of 1933, as amended, or the Securities Act, including sales made directly on or through The NASDAQ Global Market, the existing trading market for our common stock, sales made to or through a market maker other than on an exchange or otherwise, in negotiated transactions at market prices prevailing at the time of sale or at prices related to such prevailing market prices, and/or any other method permitted by law. Cantor Fitzgerald is not required to sell any specific number or dollar amount of securities, but will act as a sales agent using commercially reasonable efforts consistent with its normal trading and sales practices, on mutually agreed terms between Cantor Fitzgerald and us. There is no arrangement for funds to be received in any escrow, trust or similar arrangement.

Cantor Fitzgerald will be entitled to compensation under the terms of the sales agreement at a fixed commission rate of 3.0% of the gross sales price per share sold. In connection with the sale of our common stock on our behalf, Cantor Fitzgerald will be deemed to be an "underwriter" within the meaning of the Securities Act and the compensation of Cantor Fitzgerald will be deemed to be underwriting commissions or discounts. We have also agreed to provide indemnification and contribution to Cantor Fitzgerald with respect to certain liabilities, including liabilities under the Securities Act or the Securities Exchange Act of 1934, as amended, or the Exchange Act.

Investing in our common stock involves a high degree of risk. Before making an investment decision, you should carefully consider all of the information set forth in this prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein and therein. You should review carefully the risks and uncertainties described under the heading "Risk Factors" beginning on page S-4 of this prospectus supplement and under similar headings in the other documents that are incorporated by reference into this prospectus supplement.

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

The date of this prospectus supplement is August 18, 2015.

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ABOUT THIS PROSPECTUS SUPPLEMENT

This document is in two parts. The first part is this prospectus supplement, which describes the terms of this offering of our common stock and supplements information contained in the accompanying prospectus and the documents incorporated by reference into the accompanying prospectus. The second part is the accompanying prospectus filed with the Securities and Exchange Commission, or the SEC, as part of a registration statement on Form S-3 (File No. 333-203956) that became effective on July 13, 2015, or the 2015 Registration Statement, registering securities of up to a maximum aggregate initial offering price of \$150,000,000, all of which remain unsold as of the date of this prospectus supplement. The second part gives more general information about us and the shares of common stock we may offer from time to time under the 2015 Registration Statement. We are including the accompanying prospectus with this prospectus supplement because the common stock offered by us pursuant to this prospectus supplement is registered under the 2015 Registration Statement pursuant to Rule 429 under the Securities Act, which contains the accompanying prospectus. To the extent there is a conflict between the information contained in this prospectus supplement, on the one hand, and the information contained in the accompanying prospectus or any document incorporated by reference therein, on the other hand, the information in this prospectus supplement shall control.

You should read this prospectus supplement, the accompanying prospectus, the documents and information incorporated by reference in this prospectus supplement and the accompanying prospectus, and any free writing prospectus that we have authorized for use in connection with this offering when making your investment decision. You should also read and consider the information in the documents we have referred you to under the headings "Where You Can Find More Information" and "Incorporation of Certain Information by Reference."

You should rely only on the information contained in or incorporated by reference into this prospectus supplement and the accompanying prospectus. We have not, and Cantor Fitzgerald has not, authorized anyone to provide you with information that is different. We are offering to sell and seeking offers to buy shares of our common stock only in jurisdictions where offers and sales are permitted. The information contained in this prospectus supplement, the accompanying prospectus, the documents and information incorporated by reference in this prospectus supplement and the accompanying prospectus, and any free writing prospectus that we have authorized for use in connection with this offering are accurate only as of their respective dates, regardless of the time of delivery of this prospectus supplement or of any sale of our common stock.

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

This prospectus supplement, the accompanying prospectus and the information incorporated by reference herein and therein include trademarks, service marks and trade names owned by us or other companies. All trademarks, service marks and trade names included or incorporated by reference into this prospectus supplement or the accompanying prospectus are the property of their respective owners.

Rigel Pharmaceuticals, Inc.'s name and logo, are either registered trademarks or trademarks of Rigel Pharmaceuticals, Inc. in the United States and/or other countries. All other trademarks, service marks or other tradenames appearing in this prospectus supplement and the accompanying prospectus are the property of their respective owners. Unless otherwise mentioned or unless the context requires otherwise, all references in this prospectus supplement and the accompanying prospectus to the "Company," "Rigel," "we," "us," "our" or similar references mean Rigel Pharmaceuticals, Inc., a Delaware corporation.

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PROSPECTUS SUPPLEMENT SUMMARY

This summary highlights certain information about us, this offering and selected information contained elsewhere in or incorporated by reference into this prospectus supplement. This summary is not complete and does not contain all of the information that you should consider before deciding whether to invest in our common stock. For a more complete understanding of our company and this offering, we encourage you to read and consider carefully the more detailed information in this prospectus supplement and the accompanying prospectus, including the information included in any free writing prospectus that we have authorized for use in connection with this offering, including the information under the heading "Risk Factors" in this prospectus supplement on page S-4 and in the documents incorporated by reference into this prospectus.

About Rigel Pharmaceuticals, Inc.

We are a clinical-stage drug development company that discovers and develops novel, small-molecule drugs for the treatment of inflammatory and autoimmune diseases, and cancers. Our pioneering research focuses on signaling pathways that are critical to disease mechanisms. We currently have the following product candidates in development: fostamatinib, an oral spleen tyrosine kinase, or SYK, inhibitor, which is in Phase 3 clinical trials for immune thrombocytopenic purpura, or ITP, and a Phase 2 clinical trial for IgA nephropathy, or IgAN; R348, a topical opthalmic JAK/SYK inhibitor, in a Phase 2 clinical trial for dry eye in ocular graft-versus-host disease, or GvHD; two oncology product candidates in Phase 1 development with partners BerGenBio AS, or BerGenBio, and Daiichi Sankyo, or Daiichi; and two preclinical programs with partners AstraZeneca AB, or AZ, for R256 in asthma, and Bristol-Myers Squibb Company, or BMS, for TGF beta inhibitors in immuno-oncology.

Since the fall of 2014, we have experienced the following business events:

In February 2015, we announced that we entered into a collaboration agreement with BMS for the discovery, development and commercialization of cancer immunotherapies based on our extensive portfolio of small molecule TGF beta receptor kinase inhibitors. Pursuant to the collaboration agreement with BMS, we received a noncreditable and non-refundable upfront payment of \$30.0 million in March 2015.

In January 2015, we announced that our Phase 3 clinical program in fostamatinib for the treatment of ITP was actively enrolling patients in two studies in the United States and Europe. We expect to report top line results of these two clinical studies in the middle of 2016.

In January 2015, we announced that we were initiating a Phase 2 clinical trial of fostamatinib in patients with IgAN, a chronic autoimmune disease of the kidneys.

In January 2015, we announced that in December 2014 we earned a non-refundable payment of \$5.8 million from AZ resulting from AZ's continued development of R256 in asthma as of December 2014.

In November 2014, we announced that James M. Gower retired from our Board of Directors and from his positions as Chairman and Chief Executive Officer, and Raul R. Rodriguez, then President and Chief Operating Officer, assumed the position of Chief Executive Officer and joined our Board of Directors.

In October 2014, we earned a milestone payment of \$2.5 million from AZ for its initiation of a good laboratory practices toxicology study with R256 for the potential treatment of moderate to severe chronic asthma.

Company Information

We were incorporated in Delaware in June 1996. Our principal executive office is located at 1180 Veterans Boulevard, South San Francisco, California 94080. Our telephone number is (650) 624-1100. Our website address is www.rigel.com. Information found on, or accessible through, our website is not a part of, and is not incorporated into, this prospectus supplement and the accompanying prospectus, and you should not consider it part of this prospectus supplement and the accompanying prospectus. Our website address is included in this document as an inactive textual reference only.

For further information regarding us and our financial information, you should refer to our recent filings with the SEC. See "Where You Can Find More Information."

THE OFFERING

Common Stock Offered By Us	Shares of our common stock having an aggregate offering price of up to \$30.0 million.
Manner of Offering	"At-the-market" offering that may be made from time to time through our sales agent, Cantor Fitzgerald. See "Plan of Distribution" on page S-9.
Use of Proceeds	We currently intend to use the net proceeds from this offering for general corporate purposes, which may include research and development, capital expenditures, working capital and general and administrative expenses. We may also use a portion of the net proceeds to acquire or invest in businesses, products and technologies that are complementary to our own, although we have no commitments or agreements with respect to any acquisitions as of the date of this prospectus supplement. See "Use of Proceeds" on page S-7.
Risk Factors	Investing in our common stock involves significant risks. See "Risk Factors" on page S-4, and under similar headings in other documents incorporated by reference into this prospectus supplement and the accompanying prospectus.
NASDAQ Global Market Symbol	RIGL

RISK FACTORS

Investing in our securities involves a high degree of risk. You should carefully review the risks and uncertainties described below and under the heading "Risk Factors" in our most recent Annual Report on Form 10-K, as revised and supplemented by our Quarterly Reports on Form 10-Q filed since the filing of our most recent Annual Report on Form 10-K, each of which is incorporated by reference herein, and any subsequent reports we file after the date of this prospectus supplement, all other information contained or incorporated by reference into this prospectus supplement and the accompanying prospectus and any free writing prospectus with respect to this offering filed by us with the SEC, before deciding whether to purchase any of the common stock being offered under this prospectus supplement. Each of the risk factors could adversely affect our business, operating results and financial condition, as well as adversely affect the value of an investment in our securities, and the occurrence of any of these risks might cause you to lose all or part of your investment. Moreover, the risks described are not the only ones that we face. Additional risks not presently known to us or that we currently believe are immaterial may also significantly impair our business operations. Please also read carefully the section below titled "Special Note Regarding Forward-Looking Statements."

Additional Risks Related to This Offering

If you purchase shares of our common stock in this offering, you will experience immediate and substantial dilution in the net tangible book value of your shares.

The offering price per share in this offering may exceed the net tangible book value per share of our common stock outstanding prior to this offering. Assuming that an aggregate of 9,933,775 shares of our common stock are sold at a price of \$3.02 per share, the last reported sale price of our common stock on The NASDAQ Global Market on August 17, 2015, for aggregate gross proceeds of \$30,000,000, and after deducting commissions and estimated offering expenses payable by us, you will experience immediate dilution of \$1.70 per share, representing the difference between our as adjusted net tangible book value per share as of June 30, 2015 after giving effect to this offering and the assumed offering price. The exercise of outstanding stock options and warrants will result in further dilution of your investment. See the section titled "Dilution" below for a more detailed illustration of the dilution you would incur if you participate in this offering.

You may experience future dilution as a result of future equity offerings.

In order to raise additional capital, we may in the future offer additional shares of our common stock or other securities convertible into or exchangeable for our common stock at prices that may not be the same as the price per share in this offering. We may sell shares or other securities in any other offering at a price per share that is less than the price per share paid by investors in this offering, and investors purchasing shares or other securities in the future could have rights superior to existing stockholders. The price per share at which we sell additional shares of our common stock, or securities convertible or exchangeable into common stock, in future transactions may be higher or lower than the price per share paid by investors in this offering.

Our management will have broad discretion in the use of the net proceeds from this offering and may allocate the net proceeds from this offering in ways that you and other stockholders may not approve.

Our management will have broad discretion in the use of the net proceeds, including for any of the purposes described in the section titled "Use of Proceeds," and you will not have the opportunity as part of your investment decision to assess whether the net proceeds are being used appropriately. Because of the number and variability of factors that will determine our use of the net proceeds from this offering, their ultimate use may vary substantially from their currently intended use. The failure of our management to use these funds effectively could have a material adverse effect on our business,

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cause the market price of our common stock to decline and impair the commercialization of our products and/or delay the development of our product candidates. Pending their use, we may invest the net proceeds from this offering in short-term, investment-grade, interest-bearing instruments and U.S. government securities. These investments may not yield a favorable return to our stockholders.

Because we do not intend to declare cash dividends on our shares of common stock in the foreseeable future, stockholders must rely on appreciation of the value of our common stock for any return on their investment.

We have never declared or paid cash dividends on our common stock. We currently anticipate that we will retain future earnings for the development, operation and expansion of our business and do not anticipate declaring or paying any cash dividends in the foreseeable future. In addition, the terms of any existing or future debt agreements may preclude us from paying dividends. As a result, we expect that only appreciation of the price of our common stock, if any, will provide a return to investors in this offering for the foreseeable future.

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SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus supplement and the accompanying prospectus, the documents we file with the SEC that are incorporated by reference in this prospectus supplement and the accompanying prospectus and any free writing prospectus that we have authorized for use in connection with this offering, contain "forward-looking statements" within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act. These statements relate to future events or to our future operating or financial performance and involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from any future results, performances or achievements expressed or implied by the forward-looking statements. Forward-looking statements may include, but are not limited to, statements about:

our business and scientific strategies;

the progress of our product development programs, including clinical testing, and the timing of commencement and results thereof;

our corporate collaborations, and revenues that may be received from collaborations and the timing of those potential payments;

our drug discovery technologies;

our research and development expenses;

protection of our intellectual property;

the sufficiency of our cash resources and need for additional capital; and

our operations and legal risks.

In some cases, you can identify forward-looking statements by terms such as "anticipate," "believe," "could," "estimate," "expects," "intend," "may," "plan," "potential," "predict," "project," "should," "will," "would" or the negative of those terms, and similar expressions. These forward-looking statements reflect our management's beliefs and views with respect to future events and are based on estimates and assumptions as of the date of this prospectus supplement and are subject to risks and uncertainties.

We operate in a very competitive and rapidly changing environment. New risks emerge from time to time. It is not possible for our management to predict all risks, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements we may make. Given these uncertainties, you should not place undue reliance on these forward-looking statements.

You should carefully read this prospectus supplement and the accompanying prospectus, together with the information incorporated herein by reference as described under the heading "Where You Can Find More Information," completely and with the understanding that our actual future results may be materially different from what we expect. We can give no assurances that any of the events anticipated by the forward-looking statements will occur or, if any of them do, what impact they will have on our business, results of operations and financial condition. We hereby qualify these forward looking statements by these cautionary statements.

Except as required by law, we assume no obligation to update these forward-looking statements publicly, or to update the reasons actual results could differ materially from those anticipated in these forward-looking statements, even if new information becomes available in the future. Thus, you should not assume that our silence over time means that actual events are bearing out as expressed or implied in such forward-looking statements.

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USE OF PROCEEDS

We may issue and sell shares of our common stock having aggregate sales proceeds of up to \$30,000,000 million from time to time. Because there is no minimum offering amount required as a condition to close this offering, the actual total public offering amount, commissions and proceeds to us, if any, are not determinable at this time. There can be no assurance that we will sell any shares under or fully utilize the sales agreement with Cantor Fitzgerald as a source of financing.

We will retain broad discretion over the use of the net proceeds from the sale of the securities offered hereby. Except as described in any related free writing prospectus that we may authorize to be provided to you, we currently intend to use the net proceeds from the sale of the securities offered hereby for general corporate purposes, which may include research and development, capital expenditures, working capital and general and administrative expenses. We may also use a portion of the net proceeds to acquire or invest in businesses, products and technologies that are complementary to our own, although we have no commitments or agreements with respect to any acquisitions as of the date of this prospectus supplement. Pending these uses, we intend to invest the net proceeds primarily in government securities.

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DILUTION

If you invest in our common stock, your interest will be diluted immediately to the extent of the difference between the public offering price per share of our common stock and the as adjusted net tangible book value per share of our common stock after this offering.

The net tangible book value of our common stock as of June 30, 2015 was approximately \$101.2 million, or approximately \$1.14 per share. Net tangible book value per share represents the amount of our total tangible assets less total liabilities divided by the total number of shares of our common stock outstanding.

After giving effect to the sale of \$30,000,000 of common stock in this offering at an assumed public offering price of \$3.02 per share (the last reported sale price of our common stock on The NASDAQ Global Market on August 17, 2015), and after deducting commissions and estimated aggregate offering expenses payable by us, our as adjusted net tangible book value as of June 30, 2015 would have been approximately \$129.9 million, or approximately \$1.32 per share. This represents an immediate increase in net tangible book value of approximately \$0.18 per share to our existing stockholders and an immediate dilution in as adjusted net tangible book value of approximately \$1.70 per share to investors participating in this offering, as illustrated by the following table:

Assumed public offering price per share	9	\$ 3.02
Net tangible book value per share at June 30, 2015	\$ 1.14	
Increase in net tangible book value per share attributable to investors purchasing our common stock in this		
offering	\$ 0.18	
As adjusted net tangible book value per share as of June 30, 2015 after giving effect to this offering	9	5 1.32
Dilution per share to investors purchasing our common stock in this offering	9	\$ 1.70
	¥	1.70

The table above assumes for illustrative purposes that an aggregate of 9,933,775 shares of our common stock are sold at a price of \$3.02 per share, the last reported sales price of our common stock on The NASDAQ Global Market on August 17, 2015, for aggregate gross proceeds of approximately \$30.0 million. The shares sold in this offering, if any, will be sold from time to time at various prices.

The above discussion and table are based on 88,484,500 shares outstanding as of June 30, 2015, and excludes as of such date:

20,138,459 shares issuable upon the exercise of outstanding stock options at a weighted average exercise price of \$7.74 per share;

4,272,986 additional shares of common stock reserved for future issuance under our equity incentive plan;

3,290,397 additional shares of common stock reserved for future issuance under our employee stock purchase plan; and

200,000 shares issuable upon the exercise of warrants at a weighted average exercise price of \$6.61 per share.

To the extent that any of these outstanding options are exercised or we issue additional shares under our equity incentive plans, there will be further dilution to new investors. In addition, we may choose to raise additional capital due to market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans. To the extent that additional capital is raised through the sale of equity or convertible debt securities, the issuance of these securities could result in further dilution to our stockholders.

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PLAN OF DISTRIBUTION

We have entered into a Controlled Equity OfferingSM sales agreement with Cantor Fitzgerald, under which we may offer and sell shares of our common stock having an aggregate gross sales price of up to \$30,000,000 from time to time through Cantor Fitzgerald acting as agent. The sales agreement has been filed as an exhibit to a Current Report on Form 8-K and incorporated by reference into this prospectus supplement.

Upon delivery of a placement notice and subject to the terms and conditions of the sales agreement, Cantor Fitzgerald may sell shares of our common stock by any method permitted by law deemed to be an "at the market offering" as defined in Rule 415 promulgated under the Securities Act, including sales made directly on The NASDAQ Global Market, on any other existing trading market for our common stock or to or through a market maker. Cantor Fitzgerald may also sell our common stock by any other method permitted by law, including in privately negotiated transactions. We may instruct Cantor Fitzgerald not to sell our common stock if the sales cannot be effected at or above the price designated by us from time to time. We or Cantor Fitzgerald may suspend the offering of our common stock upon notice and subject to other conditions.

We will pay Cantor Fitzgerald commissions, in cash, for its services in acting as agent in the sale of our common stock. Cantor Fitzgerald will be entitled to compensation at a commission rate of 3.0% of the gross sales price per share sold. Because there is no minimum offering amount required as a condition to close this offering, the actual total public offering amount, commissions and proceeds to us, if any, are not determinable at this time. We have also agreed to reimburse Cantor Fitzgerald for certain specified expenses, including the fees and disbursements of its legal counsel in an amount not to exceed \$50,000. We estimate that the total expenses for the offering, excluding compensation and reimbursements payable to Cantor Fitzgerald under the terms of the sales agreement, will be approximately \$300,000.

Settlement for sales of common stock will occur on the third business day following the date on which any sales are made, or on some other date that is agreed upon by us and Cantor Fitzgerald in connection with a particular transaction, in return for payment of the net proceeds to us. Sales of our common stock as contemplated in this prospectus supplement and the accompanying prospectus will be settled through the facilities of The Depository Trust Company or by such other means as we and Cantor Fitzgerald may agree upon. There is no arrangement for funds to be received in an escrow, trust or similar arrangement.

Cantor Fitzgerald will use its commercially reasonable efforts, consistent with its sales and trading practices, to solicit offers to purchase the common stock shares under the terms and subject to the conditions set forth in the sales agreement. In connection with the sale of the common stock on our behalf, Cantor Fitzgerald will be deemed to be an "underwriter" within the meaning of the Securities Act and the compensation of Cantor Fitzgerald will be deemed to be underwriting commissions or discounts. We have agreed to provide indemnification and contribution to Cantor Fitzgerald against certain civil liabilities, including liabilities under the Securities Act.

The offering of our common stock pursuant to the sales agreement will terminate upon the earlier of (1) the sale of all shares of our common stock subject to the sales agreement, or (2) termination of the sales agreement as permitted therein. We and Cantor Fitzgerald may each terminate the sales agreement at any time upon five days' and ten days' prior notice, respectively.

Cantor Fitzgerald and its affiliates may in the future provide various investment banking, commercial banking and other financial services for us and our affiliates, for which services they may in the future receive customary fees. To the extent required by Regulation M, Cantor Fitzgerald will not engage in any market making activities involving our common stock while the offering is ongoing under this prospectus supplement.



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

LEGAL MATTERS

The validity of the common stock offered by this prospectus supplement will be passed upon for us by Cooley LLP, San Francisco, California. Latham & Watkins LLP, San Diego, California, is counsel for Cantor Fitzgerald in connection with this offering.

EXPERTS

Ernst & Young LLP, independent registered public accounting firm, has audited our financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2014, and the effectiveness of our internal control over financial reporting as of December 31, 2014, as set forth in their reports, which are incorporated by reference in this prospectus supplement and elsewhere in the registration statement. Our financial statements are incorporated by reference in reliance on Ernst & Young LLP's reports, given on their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

This prospectus supplement is part of the 2015 Registration Statement on Form S-3 that we filed with the SEC. The 2015 Registration Statement that contains this prospectus supplement, including the exhibits to the 2015 Registration Statement, contains additional information about us and the securities offered by this prospectus supplement.

We file annual, quarterly and special reports, proxy statements and other information with the SEC. You may read and copy any document we file with the SEC at the SEC's Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the Public Reference Room. The SEC maintains an Internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC, including Rigel Pharmaceuticals, Inc. The SEC's Internet site can be found at http://www.sec.gov.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to "incorporate by reference" information from other documents that we file with it, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be part of this prospectus supplement and the accompanying prospectus. Information contained in this prospectus supplement and the accompanying prospectus and information that we file with the SEC in the future and incorporate by reference in this prospectus supplement and the accompanying prospectus will automatically update and supersede this information. We incorporate by reference the documents listed below and any future filings (other than Current Reports on Form 8-K furnished under Item 2.02 or Item 7.01 and exhibits filed on such form that are related to such items) we make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act after the date of the prospectus supplement and before the sale of all the securities covered by this prospectus supplement:

our Annual Report on Form 10-K for the year ended December 31, 2014, filed with the SEC on March 3, 2015;

the information specifically incorporated by reference into our Annual Report on Form 10-K for the year ended December 31, 2014 from our definitive proxy statement relating to our 2015 annual meeting of stockholders, which was filed with the SEC on March 30, 2015;

our Quarterly Report on Form 10-Q for the three months ended March 31, 2015, filed with the SEC on May 7, 2015;

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our Quarterly Report on Form 10-Q for the six months ended June 30, 2015, filed with the SEC on August 4, 2015;

our Current Reports on Form 8-K filed with the SEC on January 30, 2015, May 15, 2015, July 1, 2015 and August 18, 2015; and

the description of our common stock in our registration statement on Form 8-A filed with the SEC on October 3, 2000, including any amendments or reports filed for the purpose of updating such description.

You may request a copy of these filings at no cost, by writing us at Rigel Pharmaceuticals, Inc., 1180 Veterans Blvd., South San Francisco, CA 94080, Attn: Secretary or telephoning us at (650) 624-1100.

Prospectus

\$150,000,000 Common Stock Preferred Stock Debt Securities Warrants

From time to time, we may offer and sell up to \$150,000,000 of any combination of our common stock, preferred stock, debt securities or warrants described in this prospectus, either individually or in combination. We may also offer common stock or preferred stock upon the conversion of debt securities, common stock upon the conversion of preferred stock, or common stock, preferred stock or debt securities upon the exercise of warrants.

We will provide the specific terms of these offerings and securities in one or more supplements to this prospectus. We may also authorize one or more free writing prospectuses to be provided to you in connection with these offerings. The prospectus supplement and any related free writing prospectus may also add, update or change information contained in this prospectus. You should carefully read this prospectus, the applicable prospectus supplement and any related free writing prospectus, as well as any documents incorporated by reference, before buying any of the securities being offered.

Our common stock is listed on the Nasdaq Global Market under the trading symbol "RIGL." On May 5, 2015, the last reported sale price of our common stock was \$4.00 per share. The applicable prospectus supplement will contain information, where applicable, as to other listings, if any, on the Nasdaq Global Market or other securities exchange of the securities covered by the applicable prospectus supplement.

Investing in our securities involves a high degree of risk. You should review carefully the risks and uncertainties described under the heading "Risk Factors" contained in the applicable prospectus supplement and in any free writing prospectuses we have authorized for use in connection with a specific offering, and under similar headings in the documents that are incorporated by reference into this prospectus.

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

The securities may be sold directly by us to investors, through agents designated from time to time or to or through underwriters or dealers, on a continuous or delayed basis. For additional information on the methods of sale, you should refer to the section titled "Plan of Distribution" in this prospectus. If any agents or underwriters are involved in the sale of any securities with respect to which this prospectus is being delivered, the names of such agents or underwriters and any applicable fees, commissions, discounts and over-allotment options will be set forth in a prospectus supplement. The price to the public of such securities and the net proceeds we expect to receive from such sale will also be set forth in a prospectus supplement.

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

The date of this prospectus is July 13, 2015.

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement on Form S-3 that we filed with the Securities and Exchange Commission (SEC), utilizing a "shelf" registration process. Under this shelf registration process, we may offer and sell, either individually or in combination, in one or more offerings, up to a total dollar amount of \$150,000,000 of any combination of the securities described in this prospectus. This prospectus provides you with a general description of the securities we may offer.

Each time we offer securities under this prospectus, we will provide a prospectus supplement that will contain more specific information about the terms of that offering. We may also authorize one or more free writing prospectuses to be provided to you that may contain material information relating to these offerings. The prospectus supplement and any related free writing prospectus that we may authorize to be provided to you may also add, update or change any of the information contained in this prospectus or in the documents that we have incorporated by reference into this prospectus. We urge you to read carefully this prospectus, any applicable prospectus supplement and any free writing prospectuses we have authorized for use in connection with a specific offering, together with the information incorporated herein by reference as described under the heading "Incorporation of Certain Information by Reference," before buying any of the securities being offered.

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

You should rely only on the information contained in, or incorporated by reference into, this prospectus and any applicable prospectus supplement, along with the information contained in any free writing prospectuses we have authorized for use in connection with a specific offering. We have not authorized anyone to provide you with different or additional information. This prospectus is an offer to sell only the securities offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so.

The information appearing in this prospectus, any applicable prospectus supplement or any related free writing prospectus is accurate only as of the date on the front of the document and that any information we have incorporated by reference is accurate only as of the date of the document incorporated by reference, regardless of the time of delivery of this prospectus, any applicable

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prospectus supplement or any related free writing prospectus, or any sale of a security. Our business, financial condition, results of operations and prospects may have changed since those dates.

This prospectus contains summaries of certain provisions contained in some of the documents described herein, but reference is made to the actual documents for complete information. All of the summaries are qualified in their entirety by the actual documents. Copies of some of the documents referred to herein have been filed, will be filed or will be incorporated by reference as exhibits to the registration statement of which this prospectus is a part, and you may obtain copies of those documents as described below under the section titled "Where You Can Find More Information."

This prospectus and the information incorporated herein by reference include trademarks, service marks and trade names owned by us or other companies. All trademarks, service marks and trade names included or incorporated by reference into this prospectus, any applicable prospectus supplement or any related free writing prospectus are the property of their respective owners.

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PROSPECTUS SUMMARY

This summary highlights selected information contained elsewhere in this prospectus or incorporated by reference in this prospectus, and does not contain all of the information that you need to consider in making your investment decision. You should carefully read the entire prospectus (as supplemented and amended), including the risks of investing in our securities discussed under the heading "Risk Factors" contained in this prospectus (as supplemented and amended), and under similar headings in the other documents that are incorporated by reference into this prospectus. You also should carefully read the information incorporated by reference into this prospectus, including our financial data and related notes, and the exhibits to the registration statement of which this prospectus is a part. Unless otherwise mentioned or unless the context requires otherwise, all references in this report to "we," "our," "us," or similar references mean Rigel Pharmaceuticals, Inc., a Delaware corporation.

Rigel Pharmaceuticals, Inc.

Rigel Pharmaceuticals, Inc. was incorporated in Delaware in June 1996, and is based in South San Francisco, California.

We are a clinical-stage drug development company that discovers and develops novel, small-molecule drugs for the treatment of inflammatory and autoimmune diseases, cancers, and muscle disorders. Our pioneering research focuses on signaling pathways that are critical to disease mechanisms. We currently have the following product candidates in development: fostamatinib, an oral spleen tyrosine kinase (SYK) inhibitor, which is in Phase 3 clinical trials for immune thrombocytopenic purpura (ITP) and recently initiated a Phase 2 clinical trial for IgA nephropathy (IgAN); R348, an opthalmic JAK/SYK inhibitor, in a Phase 2 clinical trial for dry eye in ocular graft-versus-host disease (GvHD); two oncology product candidates in Phase 1 development with partners BerGenBio AS (BerGenBio) and Daiichi Sankyo (Daiichi); and two preclinical programs with partners AstraZeneca AB (AZ), for R256 in asthma, and Bristol-Myers Squibb Company (BMS), for TGF beta inhibitors in immuno-oncology.

Since the fall of 2014, we have experienced the following business events:

In February 2015, we announced that we entered into a collaboration agreement with BMS for the discovery, development and commercialization of cancer immunotherapies based on our extensive portfolio of small molecule TGF beta receptor kinase inhibitors. Pursuant to the collaboration agreement with BMS, we received a noncreditable and non-refundable upfront payment of \$30.0 million in March 2015.

In January 2015, we announced that our Phase 3 clinical program in fostamatinib for the treatment of ITP is actively enrolling patients in the United States (U.S.) and Europe. We expect to report top line results of the two clinical studies in the middle of 2016.

In January 2015, we announced that we are initiating a Phase 2 clinical trial of fostamatinib in patients with IgAN, a chronic autoimmune disease of the kidneys, and expect to report results in the second half of 2016.

In January 2015, we announced that in December 2014 we earned a non-refundable payment of \$5.8 million from AZ resulting from AZ's continued development of R256 in asthma as of December 2014.

In November 2014, we announced that James M. Gower retired from the Board of Directors and from his positions as Chairman and Chief Executive Officer, and Raul R. Rodriguez, then President and Chief Operating Officer, assumed the position of Chief Executive Officer and joined the Board of Directors.

In October 2014, we earned a milestone payment of \$2.5 million from AZ for its initiation of a good laboratory practices (GLP) toxicology study with R256 for the potential treatment of moderate to severe chronic asthma.

Company Information

We were incorporated in Delaware in June 1996. Our principal executive office is located at 1180 Veterans Boulevard, South San Francisco, California 94080. Our telephone number is (650) 624-1100. Our website address is www.rigel.com. Information found on, or accessible through, our website is not a part of, and is not incorporated into, this prospectus, and you should not consider it part of this prospectus or part of any prospectus supplement. Our website address is included in this document as an inactive textual reference only.

The Securities We May Offer

We may offer shares of our common stock and preferred stock, various series of debt securities and/or warrants to purchase any of such securities, either individually or in combination, up to a total dollar amount of \$150,000,000, from time to time under this prospectus, together with the applicable prospectus supplement and any related free writing prospectus, at prices and on terms to be determined by market conditions at the time of any offering. We may also offer common stock, preferred stock and/or debt securities upon the exercise of warrants. This prospectus provides you with a general description of the securities we may offer. Each time we offer a type or series of securities under this prospectus, we will provide a prospectus supplement that will describe the specific amounts, prices and other important terms of the securities, including, to the extent applicable:

designation or classification;

aggregate principal amount or aggregate offering price;

maturity date, if applicable;

original issue discount, if any;

rates and times of payment of interest or dividends, if any;

redemption, conversion, exercise, exchange or sinking fund terms, if any;

conversion or exchange prices or rates, if any, and, if applicable, any provisions for changes to or adjustments in the conversion or exchange prices or rates and in the securities or other property receivable upon conversion or exchange;

ranking;

restrictive covenants, if any;

voting or other rights, if any; and

material or special U.S. federal income tax considerations, if any.

The applicable prospectus supplement and any related free writing prospectus that we may authorize to be provided to you may also add, update or change any of the information contained in this prospectus or in the documents we have incorporated by reference. However, no prospectus supplement or free writing prospectus will offer a security that is not registered and described in this prospectus at the time of the effectiveness of the registration statement of which this prospectus is a part.

THIS PROSPECTUS MAY NOT BE USED TO CONSUMMATE A SALE OF SECURITIES UNLESS IT IS ACCOMPANIED BY A PROSPECTUS SUPPLEMENT.

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

the names of those agents or underwriters;

applicable fees, discounts and commissions to be paid to them;

details regarding over-allotment options, if any; and

the net proceeds to us.

Common Stock. We may issue shares of our common stock from time to time. The holders of our common stock are entitled to one vote for each share held of record on all matters submitted to a vote of stockholders. Subject to preferences that may be applicable to any outstanding shares of preferred stock, the holders of common stock are entitled to receive ratably such dividends as may be declared by our board of directors out of legally available funds. Upon our liquidation, dissolution or winding up, holders of our common stock are entitled to share ratably in all assets legally available for distribution to stockholders remaining after payment of liabilities and the liquidation preferences of any outstanding shares of preferred stock. Holders of common stock have no preemptive rights and no right to convert their common stock into any other securities. There are no redemption or sinki