

COMPUGEN LTD
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Registration No. 333-213007

Prospectus

\$200,000,000
Ordinary Shares
Debt Securities
Rights
Warrants
Units

We may offer and sell from time to time in one or more offerings our ordinary shares, debt securities, rights, warrants and units comprising any combination of these securities having an aggregate offering price up to \$200,000,000.

Each time we sell securities pursuant to this prospectus, we will provide in a supplement to this prospectus the price and any other material terms of any such offering and the securities offered. Any prospectus supplement may also add, update or change information contained in the prospectus. You should read this prospectus and any applicable prospectus supplement, as well as the documents incorporated by reference or deemed incorporated by reference into this prospectus, carefully before you invest in any securities.

Our ordinary shares are traded on The NASDAQ Global Market and on the Tel Aviv Stock Exchange under the symbol "CGEN." The closing sale price of our ordinary shares on The NASDAQ Global Market and on the Tel Aviv Stock Exchange on October 10, 2016, was \$6.37 and \$6.32 per share, respectively. The currency in which our stock is traded on the Tel Aviv Stock Exchange is the New Israeli Shekel, or NIS. The above closing price on the Tel Aviv Stock Exchange represents a conversion from NIS to dollar amounts in accordance with the dollar - NIS conversion rate as of October 11, 2016.

AN INVESTMENT IN OUR SECURITIES INVOLVES A HIGH DEGREE OF RISK. SEE THE SECTION ENTITLED "RISK FACTORS" BEGINNING ON PAGE 4.

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

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

The date of this prospectus is October 11, 2016

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission, or the SEC, using a “shelf” registration process. Under this shelf registration process, we may from time to time sell ordinary shares, debt securities, rights, warrants or units comprising any combination of these securities, in one or more offerings up to a total dollar amount of \$200,000,000. We have provided to you in this prospectus a general description of the securities we may offer. Each time we sell securities, we will, to the extent required by law, provide a prospectus supplement that will contain specific information about the terms of the offering. We may also add, update or change in any accompanying prospectus supplement or any free writing prospectus we may authorize to be delivered to you any of the information contained in this prospectus. To the extent there is a conflict between the information contained in this prospectus and the prospectus supplement, you should rely on the information in the prospectus supplement, provided that if any statement in one of these documents is inconsistent with a statement in another document having a later date—for example, a document incorporated by reference in this prospectus or any prospectus supplement—the statement in the document having the later date modifies or supersedes the earlier statement. This prospectus, together with any accompanying prospectus supplement and any free writing prospectus we may authorize to be delivered to you, includes all material information relating to the offering of our securities.

As permitted by the rules and regulations of the SEC, the registration statement, of which this prospectus forms a part, includes additional information not contained in this prospectus. You may read the registration statement and the other reports we file with the SEC at the SEC's web site or at the SEC's offices described below under the heading "Where You Can Find Additional Information."

In this prospectus, unless otherwise stated or the context otherwise requires, references to "Compugen," "the Company," "we," "us", "our" and similar references refer to Compugen Ltd. and our wholly owned subsidiary, Compugen USA, Inc. except where the context otherwise requires or as otherwise indicated.

You should rely only on the information contained or incorporated by reference in this prospectus, any accompanying prospectus supplement or any "free writing prospectus" we may authorize to be delivered to you. 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. You should assume that the information appearing in this prospectus, any prospectus supplement and the documents incorporated by reference herein and therein are accurate only as of their respective dates. Our business, financial condition, results of operations and prospects may have changed since those dates.

Neither this prospectus nor any accompanying prospectus supplement shall constitute an offer or solicitation by anyone in any jurisdiction in which such offer or solicitation is not authorized or in which the person making such offer or solicitation is not qualified to do so or to anyone to whom it is unlawful to make such offer or solicitation.

(i)

PROSPECTUS SUMMARY

This summary highlights only some of the information included or incorporated by reference in this prospectus. You should carefully read this prospectus together with the additional information about us described in the sections entitled “Where You Can Find Additional Information” and “Incorporation of Certain Information by Reference” before purchasing our securities.

Compugen Ltd.

Overview

Compugen is a leading therapeutic discovery company utilizing its broadly applicable predictive discovery infrastructure to identify novel drug targets and develop first-in-class biologics. The Company’s current pipeline primarily consists of early-stage immuno-oncology programs aimed at harnessing the immune system to fight cancer. Our pipeline’s focus is on immune checkpoint target candidates discovered by us, which are predicted to serve as promising drug targets for cancer immunotherapies addressing various cancer types and patient populations, both as monotherapy and in combination with other drugs. Our business model relies on extracting the commercial value of our systematic discovery capability by entering into various forms of revenue-sharing collaborations for our novel drug target candidates and therapeutic product candidates at various stages of research and development. Compugen is headquartered in Holon, Israel, with R&D facilities located in both Holon and South San Francisco. At the U.S. facilities, therapeutic monoclonal antibodies (mAbs) are discovered and developed against our novel drug target candidates.

Predictive Discovery of Novel Targets

The establishment of our broadly applicable discovery approach evolved over a decade of pioneering multidisciplinary research involving in-depth understanding of key biological phenomena combined with the development of superior computational modeling capabilities. This approach, which is constantly enhanced and broadened, has been designed to allow us to focus on a selected biomedical field of research, and to emerge with a set of novel drug targets that otherwise would have been challenging to identify. We employ our discovery approach in multiple therapeutic and diagnostic areas and have demonstrated significant advantages of our methodologies in terms of ability to discover novel target candidates, cost, time and probability of successful experimental validation, in comparison to traditional discovery methods.

Therapeutic/Disease Fields of Focus

Oncology and immunology (autoimmune diseases) are two medical fields with significant unmet medical needs. Biologics, such as mAb and Fc-fusion proteins, have revolutionized patients’ treatment in these two disease areas and have demonstrated substantial clinical benefit and commercial success. Compugen has chosen these two growing disease areas as its focus for its broadly applicable predictive capabilities. Biologics are one of the fastest growing segments in the drug industry and made up 27% of 2014 FDA approvals. Seven of the top ten selling drugs in 2014 were biologics including Humira (adalimumab), the top selling drug in 2014 with sales of \$12.5 billion, Remicade (infliximab) and Rituxan/MabThera (rituximab), all indicated for the treatment of arthritis. Additionally, biologics to treat cancer represented three of the top ten best-selling drugs in 2014, and included Rituxan, Herceptin and Avastin.

For these reasons oncology and autoimmune diseases continue to be disease areas of high interest to pharmaceutical companies with numerous efforts to identify novel therapeutic solutions. Our science-driven predictive capabilities are well suited for the identification of novel target candidates suitable for therapeutic intervention for these complex, multi-factorial diseases. In recent years, we further focused our activities to be mainly in the field of immuno-oncology, an area of high medical promise and industry interest, where the modulation of the immune system

has shown notable clinical success in treating various types of cancer.

Monoclonal Antibody Therapy for Oncology

mAb therapeutics is a class of biological drugs that harnesses the exquisite specificity and potent binding properties of antibodies to create a mono-specific antibody (drug) that binds to the drug target of interest with high specificity and thereby limits the potential for off-target toxicity that is often seen with small molecule drugs. The extremely large repertoire of possible mAb that can be generated means that one can generate highly specific mAb drug candidates that can: a) bind to almost any extracellular or cell surface target protein; b) bind and antagonize the target of interest or c) bind and agonize the target of interest. Due to the versatility and high specificity of this approach, mAb therapies are being intensively researched, developed and commercialized as treatments for numerous serious diseases with the belief that they have the potential to be more effective treatments with fewer side effects compared to traditional small molecule chemical drugs. During the past two decades, mAbs have emerged as an important and rapidly growing drug class, with over 20 mAbs already approved for therapeutic use in the United States for various clinical indications, including oncology, chronic inflammatory diseases, transplantation, infectious diseases and cardiovascular diseases. For cancer therapy, a mAb may inhibit cellular processes critical for tumor growth, stimulate the patient's immune system to attack the target cancerous cells, or be used for targeted delivery of chemotherapy specifically to the cells identified by the antibodies (known ADC technology). Moreover, according to an analysis by Tufts University, the rate of success for mAb therapeutics from first use in humans to regulatory approval is more than double that of traditional small molecule chemical drugs.

Although significant progress has been made in recent years in mAb therapeutics, numerous challenges still remain. One of the main challenges in this extremely promising field of mAb therapeutics is the identification of novel extracellular or cell surface targets that can translate into clinically relevant therapies for a variety of disease indications. To this end, we have developed several proprietary target discovery platforms through focusing on and integration of various aspects of our unique predictive discovery capabilities to identify novel drug targets for mAb therapies. Our Pipeline Program activities are currently focused on mAbs as the therapeutic modality for cancer immunotherapy, with an additional Fc fusion therapeutics program for autoimmune diseases.

Therapeutic Proteins for Immunology

Therapeutic proteins are another type of biological drug, typically a large biological molecule or a fragment derived from a relevant extracellular or cell surface protein and usually engineered and produced by recombinant technologies to have drug-like properties. For example a cell surface or extracellular protein could be engineered to be fused to the Fc domain of an IgG (antibody) protein to provide a longer half-life in the blood. Therapeutic proteins are clinically used to treat a wide range of diseases including cancer, autoimmune diseases, infectious diseases, blood-related disorders and others. CGEN-15001, our lead program for autoimmune diseases, is an Fc fusion protein. This class of therapeutic proteins, known as Fc fusion proteins, has achieved significant clinical and commercial success as exemplified by the anti-rheumatic biologics ENBREL® (etanercept) with sales of about \$8.9 billion in 2014, and ORENCIA® (abatacept) with about \$1.6 billion in sales in 2014.

The Pipeline Program

In order to leverage our capability to predict multiple novel drug targets with each discovery effort, we established our Pipeline Program to allow the parallel target validation and early development of multiple therapeutic candidates based on such targets. Our Pipeline Program currently ranges from target validation to pre-clinical studies in the fields of oncology and immunology, with a primary focus on immuno-oncology. The aim of the Pipeline Program is to advance the validation of Compugen-discovered drug target candidates to generate therapeutic drug candidates against such targets – mainly as mAb therapeutics or to a lesser extent as Fc fusion protein therapeutics - and to further advance selected therapeutic candidates beyond their animal proof of concept stage. The newly discovered target candidates enter the Pipeline Program when they begin experimental evaluation following their in silico prediction and selection and undergo various experimental validation studies to confirm their therapeutic potential. The experimental validation studies are conducted at our facilities, or at external expert laboratories, selected specifically for each

relevant field. This is followed by the generation of a therapeutic product candidate to be used for in vitro and in vivo proof of concept studies in disease animal models, as applicable. Therapeutic Fc fusion proteins or mAb product candidates, either humanized or fully-human, then enter the stage of lead candidate selection and optimization, with a final lead to be advanced to investigational new drug application (IND) enabling studies. For selected therapeutic product candidates we intend to continue development into early clinical development. Our strategy is to partner our novel drug target candidates and their respective therapeutic product candidates in our Pipeline Program will be partnered at different stages of the drug development process, under collaborative and/or licensing arrangements of different types with third parties.

Bayer Collaboration

On August 5, 2013, we and Bayer Pharma AG, or Bayer, entered into a Research and Development Collaboration and License Agreement for the research, development and commercialization of antibody-based therapeutics against two novel Compugen-discovered immune checkpoint regulators, CGEN 15001T and CGEN 15022 (referred to herein as the “Bayer Collaboration”).

Under the terms of the Bayer Collaboration, we received an upfront payment of \$10 million, and we are eligible to receive an aggregate of over \$500 million in potential milestone payments for both programs, not including aggregate pre-clinical milestone payments of up to \$30 million during the research programs. Additionally, we are eligible to receive mid- to high single digit royalties on global net sales of any approved products under the collaboration. In 2014, we achieved the first and second pre-clinical milestones and in 2015 we achieved the third pre-clinical milestone with respect to CGEN-15001T, one of the two immune checkpoint regulators licensed to Bayer, receiving a total of \$15 million in milestone payments for this program. Pursuant to the terms of the Bayer Collaboration, this program was transferred to Bayer’s full control for further preclinical and clinical development activities, and worldwide commercialization under milestone and royalty bearing licenses from Compugen.

Bayer and Compugen are continuing the preclinical research program for CGEN-15022, the second of two checkpoint protein candidates discovered by Compugen that are being developed pursuant to the Agreement. In April 2016, pursuant to an amendment to the Bayer Collaboration, we achieved the first preclinical milestone for CGEN-15022 for which we received a \$400,000 payment. A joint steering committee consisting of representatives from each party is responsible for overseeing and directing the research program pursuant to an agreed upon workplan. Following the completion of this second research program, Bayer will have full control over further pre-clinical and clinical development of any cancer therapeutic product candidates targeting CGEN-15022 and will have worldwide commercialization under milestone and royalty bearing licenses from Compugen.

Bayer may terminate the Bayer Collaboration, either in whole or only with respect to one of the programs, and in each case also on a product-by-product and/or country-by country basis, at any time without cause, upon prior written notice. Either party may also terminate the Bayer Collaboration, either in whole or with respect to only one of the programs, if the other party is in material breach and such breach has not been cured within the applicable cure period. Upon any termination of the Agreement, depending upon the circumstances, the parties have varying rights and obligations with respect to the continued development and commercialization of any products and certain payment and royalty obligations.

Corporate Information

Our legal and commercial name is Compugen Ltd. We were incorporated on February 10, 1993 as an Israeli corporation and operate under the Israel Companies Law, 5759-1999, as amended (the “Companies Law”). Our principal offices are located at 26 Harokmim Street, Holon 5885849, Israel, and our telephone number is +972-3-765-8585. Our web address is www.cgen.com. The information on our website is not incorporated by reference into this prospectus, is not considered a part of this prospectus and should not be relied upon with respect to any offering.

Compugen USA, Inc., our wholly owned subsidiary, was incorporated in Delaware in March 1997 and is qualified to do business in California. This subsidiary did not have any significant operations from 2008 to March 2012.

RISK FACTORS

Investing in our securities may involve a high degree of risk. Before making an investment decision, you should carefully consider the risks described under “Risk Factors” in the applicable prospectus supplement and in our most recent Annual Report on Form 20-F, or any updates in our Reports on Form 6-K, together with all of the other information appearing in this prospectus or incorporated by reference into this prospectus and any applicable prospectus supplement, in light of your particular investment objectives and financial circumstances. The risks so described are not the only risks facing our company. Additional risks not presently known to us or that we currently deem immaterial may also impair our business operations. Our business, financial condition and results of operations could be materially adversely affected by any of these risks. The trading price of our securities could decline due to any of these risks, and you may lose all or part of your investment.

NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains, and any accompanying prospectus supplement will contain, forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act, and the Private Securities Litigation Reform Act of 1995. Also, documents that we incorporate by reference into this prospectus, including documents that we subsequently file with the SEC, will contain forward-looking statements. Forward-looking statements are those that predict or describe future events or trends and that do not relate solely to historical matters. You can generally identify forward-looking statements as statements containing the words “may,” “will,” “could,” “should,” “expect,” “anticipate,” “objective,” “goal,” “intend,” “estimate,” “believe,” “project,” “plan,” “assume” or other similar expressions, or negatives of the expressions, although not all forward-looking statements contain these identifying words. All statements contained or incorporated by reference in this prospectus and any prospectus supplement regarding our future strategy, future operations, projected financial position, proposed products, anticipated collaborations, estimated future revenues, projected costs, future prospects, the future of our industry and results that might be obtained by pursuing management’s current plans and objectives are forward-looking statements.

You should not place undue reliance on our forward-looking statements because the matters they describe are subject to certain risks, uncertainties and assumptions, including in many cases decisions or actions by third parties, that are difficult to predict. Our forward-looking statements are based on the information currently available to us and speak only as of the date on the cover of this prospectus, the date of any prospectus supplement, or, in the case of forward-looking statements incorporated by reference, the date of the filing that includes the statement. Over time, our actual results, performance or achievements may differ from those expressed or implied by our forward-looking statements, and such difference might be significant and materially adverse to our security holders. We undertake no obligation to update publicly any forward-looking statements, whether as a result of new information, future events or otherwise.

We have identified some of the important factors that could cause future events to differ from our current expectations and they are described in this prospectus and supplements to this prospectus under the caption “Risk Factors,” as well as in our most recent Annual Report on Form 20-F, including without limitation under the captions “Risk Factors” and “Operating and Financial Review and Prospects,” and in other documents that we may file with the SEC, all of which you should review carefully. Please consider our forward-looking statements in light of those risks as you read this prospectus and any prospectus supplement.

OFFER STATISTICS AND EXPECTED TIMETABLE

We may sell from time to time pursuant to this prospectus (as may be detailed in prospectus supplements) an indeterminate number of securities as shall have a maximum aggregate offering price of \$200,000,000. The actual number of securities and price of the securities that we will offer pursuant hereto will depend on a number of factors

that may be relevant as of the time of offer (see “Plan of Distribution” below).

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CAPITALIZATION

The table below sets forth our unaudited capitalization as of June 30, 2016. As of June 30, 2016, we had no indebtedness.

| | As of June 30, 2016 (in thousands, except share and per share data) |
|--|--|
| Shareholder's Equity: | |
| Ordinary Shares, NIS 0.01 nominal value: | |
| 100,000,000 shares authorized and 50,908,454 shares issued and outstanding (1) | 139 |
| Additional paid in capital | 331,538 |
| Accumulated other comprehensive income | 148 |
| Accumulated deficit | (254,692) |
| Total Shareholders' Equity | \$77,133 |

(1) Does not include as of June 30, 2016 outstanding options to purchase a total of 7,490,463 ordinary shares, at a weighted average exercise price of \$5.11 per share.

PRICE RANGE OF OUR ORDINARY SHARES

Our ordinary shares were listed on The NASDAQ Global Market through June 16, 2009. On June 17, 2009, we transferred the listing of our ordinary shares from The NASDAQ Global Market to The NASDAQ Capital Market, and on January 27, 2014 we transferred the listing of our ordinary shares from The NASDAQ Capital Market back to The NASDAQ Global Market. The high and low sales prices per share of our ordinary shares for the periods indicated are set forth below:

| Year Ended | High | Low |
|-------------------|---------|--------|
| December 31, 2011 | \$5.80 | \$3.32 |
| December 31, 2012 | \$6.47 | \$2.96 |
| December 31, 2013 | \$11.92 | \$4.56 |
| December 31, 2014 | \$14.32 | \$6.27 |
| December 31, 2015 | \$9.65 | \$4.64 |

| Quarter Ended | | |
|--------------------|---------|--------|
| March 31, 2014 | \$14.32 | \$8.76 |
| June 30, 2014 | \$11.55 | \$7.58 |
| September 30, 2014 | \$10.02 | \$8.19 |
| December 31, 2014 | \$9.09 | \$6.27 |
| March 31, 2015 | \$9.65 | \$6.92 |
| June 30, 2015 | \$7.98 | \$6.10 |
| September 30, 2015 | \$7.41 | \$4.64 |
| December 31, 2015 | \$7.79 | \$4.91 |
| March 31, 2016 | \$6.92 | \$4.32 |

| | | |
|-------------------|--------|--------|
| June 30, 2016 | \$7.14 | \$5.48 |
| Month Ended | | |
| February 29, 2016 | \$5.03 | \$4.32 |
| March 31, 2016 | \$6.09 | \$4.75 |
| April 30, 2016 | \$7.14 | \$5.48 |
| May 31, 2016 | \$7.13 | \$6.42 |
| June 30, 2016 | \$7.04 | \$6.13 |
| July 31, 2016 | \$6.83 | \$6.36 |

The high and low sales prices per share of our ordinary shares on the Tel Aviv Stock Exchange for the periods indicated are set forth below. The currency in which our stock is traded on the Tel Aviv Stock Exchange is the New Israeli Shekel, or NIS. The below dollar amounts represent a conversion from NIS to dollar amounts in accordance with the dollar NIS conversion rate as of the relevant date.

| Year Ended | High | Low |
|-------------------|---------|--------|
| December 31, 2011 | \$5.92 | \$3.27 |
| December 31, 2012 | \$6.35 | \$3.03 |
| December 31, 2013 | \$11.80 | \$4.57 |
| December 31, 2014 | \$13.48 | \$6.40 |
| December 31, 2015 | \$9.66 | \$4.59 |

| Quarter Ended | | |
|--------------------|---------|--------|
| March 31, 2014 | \$13.48 | \$8.79 |
| June 30, 2014 | \$11.35 | \$7.62 |
| September 30, 2014 | \$9.69 | \$8.29 |
| December 31, 2014 | \$9.07 | \$6.40 |
| March 31, 2015 | \$9.66 | \$7.33 |
| June 30, 2015 | \$7.88 | \$6.16 |
| September 30, 2015 | \$7.20 | \$4.59 |
| December 31, 2015 | \$7.74 | \$5.02 |
| March 31, 2016 | \$6.93 | \$4.31 |
| June 30, 2016 | \$7.29 | \$5.51 |

| Month Ended | | |
|-------------------|--------|--------|
| February 29, 2016 | \$5.09 | \$4.31 |
| March 31, 2016 | \$5.93 | \$4.68 |
| April 30, 2016 | \$7.29 | \$5.51 |
| May 31, 2016 | \$7.14 | \$6.33 |
| June 30, 2016 | \$6.99 | \$6.12 |
| July 31, 2016 | \$6.78 | \$6.38 |

The closing sale price of our ordinary shares on The NASDAQ Global Market and on the Tel Aviv Stock Exchange on October 10, 2016, was \$6.37 and \$6.32 per share, respectively.

REASONS FOR THE OFFER AND USE OF PROCEEDS

We cannot assure you that we will receive any proceeds in connection with securities offered pursuant to this prospectus. Unless otherwise indicated in the applicable prospectus supplement, we intend to use any net proceeds from the sale of securities under this prospectus for our operations and for other general corporate purposes, which may include repayment or refinancing of indebtedness or other corporate borrowings, working capital, intellectual property protection and enforcement, capital expenditures, investments, acquisitions or collaborations, research and development and product development. We may set forth additional information on the use of proceeds from the sale of securities we offer under this prospectus in a prospectus supplement relating to the specific offering. We have not determined the amount of net proceeds to be used specifically for the foregoing purposes. As a result, our management will have broad discretion in the allocation of the net proceeds. Pending use of the net proceeds, we would expect to invest any proceeds in a variety of capital preservation instruments, including short-term, investment grade, interest bearing instruments.

DESCRIPTION OF SECURITIES

The descriptions of the securities contained in this prospectus, together with the applicable prospectus supplements, summarize the material terms and provisions of the various types of securities that we may offer. We will describe in the applicable prospectus supplement relating to any securities the particular terms of the securities offered by that prospectus supplement. If we so indicate in the applicable prospectus supplement, the terms of the securities may differ from the terms we have summarized below.

We may sell from time to time, in one or more offerings, ordinary shares, debt securities, rights, warrants to purchase ordinary shares and units comprising any combination of these securities.

In this prospectus, we refer to the ordinary shares, debt securities, rights, warrants and units that may be offered by us collectively as “securities.” The total dollar amount of all securities that we may issue under this prospectus will not exceed \$200,000,000.

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

DESCRIPTION OF ORDINARY SHARES

Our authorized share capital consists of 100,000,000 ordinary shares, nominal (par) value NIS 0.01 per share. As of August 1, 2016, 50,908,454 ordinary shares were issued and outstanding. Subject to our articles of association (the “Articles”), fully paid ordinary shares of the Company confer on the holders thereof rights to attend and to vote at general meetings of the shareholders. Subject to the rights of holders of shares with limited or preferred rights which may be issued in the future, the ordinary shares of the Company confer upon the holders thereof equal rights to vote, to receive dividends and to participate in the distribution of the assets of the Company upon its winding-up, in proportion to the amount paid up or credited as paid up on account of the nominal value of the shares held by them respectively and in respect of which such dividends are being paid or such distribution is being made, without regard to any premium paid in excess of the nominal value, if any. All outstanding ordinary shares are validly issued and fully paid.

Transfer of Shares

Our ordinary shares which have been fully paid-up are transferable by submission of a proper instrument of transfer together with the certificate of the shares to be transferred and such other evidence of title, as our Board of Directors may require, unless such transfer is prohibited by another instrument or by applicable securities laws.

Dividends

Under the Companies Law, dividends may be distributed only out of profits available for dividends as determined by the Companies Law, provided that there is no reasonable concern that the distribution will prevent the Company from being able to meet its existing and anticipated obligations when they become due. If the company does not meet the profit requirement, a court may nevertheless allow the company to distribute a dividend, as long as the court is convinced that there is no reasonable concern that such distribution will prevent the company from being able to meet its existing and anticipated obligations when they become due. Pursuant to our Articles, no dividend shall be paid other than out of the profits of the Company. Generally, under the Companies Law, the decision to distribute dividends and the amount to be distributed is made by a company’s board of directors.

Our Articles provide that our Board of Directors, may, subject to the Companies Law, from time to time, declare and cause the Company to pay such dividends as may appear to the Board of Directors to be justified by the profits of our

Company. Subject to the rights of the holders of shares with preferential, special or deferred rights that may be authorized in the future, our profits which shall be declared as dividends shall be distributed according to the proportion of the nominal (par) value paid up or credited as paid up on account of the shares held at the date so appointed by the Company and in respect of which such dividend is being paid, without regard to the premium paid in excess of the nominal (par) value, if any. The declaration of dividends does not require shareholders' approval.

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To date, we have not declared or distributed any dividend and we do not intend to pay cash dividends on our ordinary shares in the foreseeable future.

Voting Rights

Subject to the provisions of our Articles, holders of ordinary shares have one vote for each ordinary share held by such shareholder of record, on all matters submitted to a vote of shareholders. Shareholders may vote in person, by proxy or by proxy card. Alternatively, shareholders who hold shares through members of the Tel Aviv Stock Exchange may vote electronically via the electronic voting system of the Israel Securities Authority (“Electronic Vote”). These voting rights may be affected by the grant of any special voting rights to the holders of a class of shares with preferential rights that may be authorized in the future. As our ordinary shares do not have cumulative voting rights in the election of directors, the holders of the majority of the shares present and voting at a shareholders meeting generally have the power to elect all of our directors, except the external directors whose election requires a special majority.

Liquidation Rights

In the event of our winding up on liquidation or dissolution, subject to applicable law, our assets available for distribution among the shareholders shall be distributed to the holders of ordinary shares in proportion to the amount paid up or credited as paid up on account of the nominal value of the shares held by them respectively and in respect of which such distribution is being made, without regard to any premium paid in excess of the nominal value, if any. This liquidation right may be affected by the grant of limited or preferential rights as to liquidation to the holders of a class of shares that may be authorized in the future.

Redemption Provisions

We may, subject to applicable law and to our Articles, issue redeemable shares and redeem the same upon such terms and conditions as determined by our Board of Directors.

Capital Calls

Under our Articles, the liability of each shareholder for the Company’s obligations is limited to the unpaid sum, if any, owing to the Company in consideration for the issuance of the shares held by such shareholder.

Shareholders Meetings and Resolutions

Our Articles provide that our annual general meeting shall be held once in every calendar year at such time (within a period of not more than fifteen months after the last preceding annual general meeting), and place determined by our Board of Directors. Our Board of Directors may, in its discretion, convene additional special shareholders meetings and, pursuant to the Companies Law, must convene a meeting upon the demand of: (a) two directors or one quarter of the directors in office; or (b) the holder or holders of (i) 5% or more of the Company’s issued share capital and one percent or more of its voting rights; or (ii) 5% or more of the Company’s voting rights. All demands for shareholders meetings must set forth the items to be considered at that meeting.

The chairman of the Board of Directors shall preside as chairman at each of our general meetings. If there is no such chairman, or if the appointed chairman is unwilling to take the chair, or if he shall have indicated in advance that he will not be attending, or if at any meeting such chairman is not present within fifteen (15) minutes after the time fixed for holding the meeting, then those present at the meeting shall choose someone present to be chairman of the meeting. The office of chairman shall not, by itself, entitle the holder thereof to vote at any general meeting nor shall it entitle a second or casting vote.

According to regulations promulgated pursuant to the Companies Law and governing the terms of notice and publication of shareholder meetings of public companies (the “General Meeting Regulations”), holder(s) of one percent or more of the Company’s voting rights may propose any matter appropriate for deliberation at a shareholder meeting to be included on the agenda of a shareholder meeting, generally by submitting a proposal within seven days of publicizing the convening of a shareholder meeting, or, if the Company publishes a preliminary notice at least 21 days prior to publicizing the convening of a meeting, stating its intention to convene such meeting and the agenda thereof, within fourteen days of such preliminary notice. Any such proposal must further comply with the information requirements under applicable law and the Articles. The agenda for a shareholder meeting is determined by the Board of Directors and must include matters in respect of which the convening of a shareholder meeting was demanded and any matter requested to be included by holder(s) of one percent of the Company’s voting rights, as detailed above.

Pursuant to the Companies Law and the General Meeting Regulations shareholder meetings generally require prior notice of not less than 21 days, and not less than 35 days in certain cases. Pursuant to the Articles, we are not required to deliver or serve notice of a general meeting or of any adjournments thereof to any shareholder. However, subject to applicable law and stock exchange rules and regulations, we will publicize the convening of a general meeting in any manner reasonably determined by us, such as posting a notice on the Company's website, filing an appropriate periodic report with the SEC, or publishing on one or more international wire services or in one or more newspapers, and any such publication shall be deemed duly made, given and delivered to all shareholders on the date on which it is first made, posted, filed or published in the manner so determined by us in our sole discretion.

The function of the annual general meeting is to elect directors, receive and consider the profit and loss account, the balance sheet and the ordinary reports and accounts of the directors and auditors, appoint auditors and transact any other business which under our Articles or applicable law may be transacted by the shareholders of the Company in a general meeting.

Pursuant to our Articles, the quorum required for a meeting of shareholders consists of at least two shareholders, present in person, by proxy or by proxy card and holding shares conferring in the aggregate thirty-three and a third percent (33.3%) or more of the voting power of the Company. If within half an hour from the time appointed for the meeting a quorum is not present, the meeting, if convened by the Board of Directors upon the demand of shareholders or upon the demand of less than 50% of the directors then in office or directly by such shareholders or directors, shall be cancelled. Otherwise, if a meeting is otherwise called and no quorum is present within half an hour from the time appointed for such meeting it shall stand adjourned to the same day in the following week at the same time and place or to such other day, time and place as the Board of Directors may determine. At the adjourned meeting, the required quorum consists of any two shareholders present, in person, by proxy, by proxy card or by Electronic Vote.

Generally, under the Companies Law and our Articles, shareholder resolutions are deemed adopted if approved by the holders of a simple majority of the voting rights represented at the meeting, in person, by proxy, by proxy card or by Electronic Vote, and voting on the matter, unless a different majority is required by law or pursuant to the Articles such as a resolution for the voluntary winding up of our Company which requires the approval of holders of 75% of the voting power presented and voting at the meeting.

Change of Control

Merger

Under the Companies Law, a merger is generally required to be approved by the shareholders and board of directors of each of the merging companies. If the share capital of the company that will not be the surviving company is divided into different classes of shares, the approval of each class is also required, unless determined otherwise by the court. Similarly, unless an Israeli court determines otherwise, a merger will not be approved if it is objected to by shareholders holding a majority of the voting rights participating and voting at the meeting (abstentions are disregarded), after excluding the shares held by the other party to the merger, by any person who holds 25% or more of the other party to the merger or by anyone on their behalf, including by the relatives of, or corporations controlled by, these persons. In approving a merger, the board of directors of both merging companies must determine that there is no reasonable concern that, as a result of the merger, the surviving company will not be able to satisfy its obligations to its creditors. Similarly, upon the request of a creditor of either party to the proposed merger, an Israeli court may prevent or delay the merger if it concludes that there exists a reasonable concern that, as a result of the merger, the surviving company will not be able to satisfy the obligations of the merging parties. A court may also issue other instructions for the protection of the creditors' rights in connection with a merger. Further, a merger may not be completed unless at least (i) 50 days have passed from the time that the requisite proposals for the approval of the merger were filed with the Israeli registrar of companies; and (ii) 30 days have passed since the merger was approved by the shareholders of each party.

Special Tender Offer

The Companies Law provides that an acquisition of shares of an Israeli public company must be made by means of a special tender offer if as a result of the acquisition the purchaser would become a holder of 25% or more of the voting rights in the company. This rule does not apply if there is already another holder of 25% or more of the voting rights in the company. Similarly, the Companies Law provides that an acquisition of shares in a public company must be made by means of a tender offer if as a result of the acquisition the purchaser would become a holder of more than 45% of the voting rights in the company, if there is no other shareholder of the company who holds more than 45% of the voting rights in the company. These requirements do not apply if the acquisition (i) occurs in the context of a private placement by the company that received shareholder approval, (ii) was from a shareholder holding 25% or more of the voting rights in the company and resulted in the acquirer becoming a holder of 25% or more of the voting rights in the company, or (iii) was from a holder of more than 45% of the voting rights in the company and resulted in the acquirer becoming a holder of more than 45% of the voting rights in the company. A special tender offer may be consummated only if (i) at least 5% of the voting power attached to the company's outstanding shares will be acquired by the offeror and (ii) the number of shares tendered in the offer exceeds the number of shares whose holders objected to the offer (excluding controlling shareholders, holders of 25% or more of the voting rights in the company and any person having a personal interest in the acceptance of the tender offer).

In the event that a special tender offer is made, a company's board of directors is required to express its opinion on the advisability of the offer, or shall abstain from expressing any opinion if it is unable to do so, provided that it gives the reasons for its abstention. An office holder in a target company who, in his or her capacity as an office holder, performs an action the purpose of which is to cause the failure of an existing or foreseeable special tender offer or is to impair the chances of its acceptance, is liable to the potential purchaser and shareholders for damages, unless such office holder acted in good faith and had reasonable grounds to believe he or she was acting for the benefit of the company. However, office holders of the target company may negotiate with the potential purchaser in order to improve the terms of the special tender offer, and may further negotiate with third parties in order to obtain a competing offer.

If a special tender offer is accepted, then shareholders who did not respond to or that had objected the offer may accept the offer within four days of the last day set for the acceptance of the offer. In the event that a special tender offer is accepted, then the purchaser or any person or entity controlling it or under common control with the purchaser or such controlling person or entity may not make a subsequent tender offer for the purchase of shares of the target company and may not enter into a merger with the target company for a period of one year from the date of the offer, unless the purchaser or such person or entity undertook to effect such an offer or merger in the initial special tender offer.

Full Tender Offer

Under the Companies Law, a person may not acquire shares in a public company if, after the acquisition, the acquirer will hold more than 90% of the shares or more than 90% of any class of shares of that company, unless a tender offer is made to purchase all of the shares or all of the shares of the particular class. The Companies Law also generally provides that as long as a shareholder in a public company holds more than 90% of the company's shares or of a class of shares, that shareholder shall be precluded from purchasing any additional shares. In order for all of the shares that the purchaser offered to purchase be transferred to him by operation of law, one of the following needs to have occurred: (i) the shareholders who declined or do not respond to the tender offer hold less than 5% of the company's outstanding share capital or of the relevant class of shares and the majority of offerees who do not have a personal interest in accepting the tender offer accepted the offer, or (ii) the shareholders who declined or do not respond to the tender offer hold less than 2% of the company's outstanding share capital or of the relevant class of shares.

A shareholder that had his or her shares so transferred, whether he or she accepted the tender offer or not, has the right, within six months from the date of acceptance of the tender offer, to petition the court to determine that the tender offer was for less than fair value and that the fair value should be paid as determined by the court. However, the purchaser may provide in its offer that shareholders who accept the tender offer will not be entitled to such rights.

If the conditions set forth above are not met, the purchaser may not acquire additional shares of the company from shareholders who accepted the tender offer to the extent that following such acquisition, the purchaser would own more than 90% of the company's issued and outstanding share capital. The above restrictions apply, in addition to the acquisition of shares, to the acquisition of voting power.

Transfer Agent and Registrar

The transfer agent and registrar for our ordinary shares is American Stock Transfer & Trust Company, LLC.

The NASDAQ Global Market and the Tel Aviv Stock Exchange

Our ordinary shares are listed on The NASDAQ Global Market and the Tel Aviv Stock Exchange under the symbol "CGEN."

Warrants

As of August 1, 2016, we had no warrants outstanding.

Share History

The following is a summary of the history of our share capital for the last three years.

Ordinary Share Issuances

Stock Options. Since January 1, 2013 and through August 1, 2016, we have issued a total of 2,829,724 ordinary shares upon the exercise of stock options.

Cantor Sales Agreement. On August 30, 2011, we entered into a sales agreement with Cantor Fitzgerald & Co. (the "Cantor Sales Agreement"), which enabled us to offer and sell an aggregate of up to 6,000,000 of our ordinary shares, from time to time, through Cantor, as our sales agent. The gross proceeds from all sales made pursuant to the Cantor Sales Agreement could not exceed \$40.0 million in the aggregate. Sales of our ordinary shares under the Cantor Sales Agreement were made in sales deemed to be "at-the-market" equity offerings as defined in Rule 415 promulgated under the Securities Act of 1933, as amended. On January 21, 2014, the registration statement on Form F-3 under which we had been selling ordinary shares pursuant to the Cantor Sales Agreement terminated. Between January 1, 2013 and January 21, 2014, we had sold through the Cantor Sales Agreement an aggregate of 2,988,252 ordinary shares, and received gross proceeds of approximately \$24.2 million, before deducting issuance expenses. Cantor received a commission of 3.0% of gross sales in connection with the sale of these ordinary shares.

March 2014 Underwritten Offering. On March 5, 2014, we closed an underwritten public offering of 6,900,000 ordinary shares, including 900,000 shares sold pursuant to the full exercise of the underwriters' option to purchase additional shares, at a price to the public of \$10.50 per share. Gross proceeds were approximately \$72.5 million, before deducting the underwriting discounts and commissions and estimated offering expenses payable by us. Jefferies LLC acted as the sole bookrunner for the offering, and JMP Securities LLC, Oppenheimer & Co. Inc. and Chardan Capital Markets acted as co-managers. The offering was conducted pursuant to our effective shelf registration filed with the SEC on Form F-3 (File No. 333-185910).

Termination and Equity Conversion Agreement with Baize Investments (Israel) Ltd. (“Baize”). On August 20, 2014, we and Baize entered into a Termination and Equity Conversion Agreement pursuant to which the funding arrangement with Baize was terminated and we issued 1,600,000 ordinary shares to Baize.

Authorized Share Capital

There has been no amendment to our authorized share capital since January 1, 2013.

DESCRIPTION OF DEBT SECURITIES

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

We will issue senior notes under a senior indenture that we will enter into with a trustee to be named in the senior indenture. We will issue subordinated notes under a subordinated indenture that we will enter into with a trustee to be named in the subordinated indenture. We have filed forms of these documents as exhibits to the registration statement, of which this prospectus forms a part. We will describe changes to the indentures in connection with an offering of debt securities in a prospectus supplement. We use the term “indentures” to refer to both the senior indenture and the subordinated indenture. The indentures will be qualified under the Trust Indenture Act of 1939, or the Trust Indenture Act. We use the term “trustee” to refer to either the trustee under the senior indenture or the trustee under the subordinated indenture, as applicable.

The following summaries of material provisions of senior notes, subordinated notes and the indentures are subject to, and qualified in their entirety by reference to, the provisions of the indenture applicable to a particular series of debt securities. Except as we may otherwise indicate, the terms of the senior indenture and the subordinated indenture are identical.

General

If we decide to issue any senior notes or subordinated notes pursuant to this prospectus, we will describe in a prospectus supplement the terms of the series of notes, including the following:

- the title of the notes;
- any limit on the amount that may be issued;
- whether or not we will issue the series of notes in global form, the terms and who the depository will be;
- the maturity date;
- the annual interest rate, which may be fixed or variable, or the method for determining the rate and 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;

- If the notes are guaranteed the name of the guarantor and a brief outline of the contract of guarantee;
- whether or not the notes will be secured or unsecured, and the terms of any secured debt;
- whether or not the notes will be senior or subordinated;
- the terms of the subordination of any series of subordinated debt;

the terms on which the notes may be convertible into or exchangeable for ordinary shares or other securities of ours, including provisions as to whether conversion or exchange is mandatory, at the option of the holder or at our option and provisions pursuant to which the number of ordinary shares or other securities of ours that the holders of the series of debt securities receive would be subject to adjustment;
- the place where payments will be payable and the currency in which the debt is payable;
- our right, if any, to defer payment of interest and the maximum length of any such deferral period;

the date, if any, after which, and the price at which, we may, at our option, redeem the series of notes pursuant to any optional redemption provisions ;

the date, if any, on which, and the price at which we are obligated, pursuant to any mandatory sinking fund provisions or otherwise, to redeem, or at the holder's option to purchase, any series of notes which are not convertible into or exchangeable for our securities;
- whether the indenture will restrict our ability to pay dividends, or will require us to maintain any asset ratios or reserves;
- whether we will be restricted from incurring any additional indebtedness;
- a discussion of any material or special U.S. federal income tax considerations;

the denominations in which we will issue the series of notes, if other than denominations of \$1,000 and any integral multiple thereof;
- the definition and consequences of events of default under the indentures; and
- any other specific terms, preferences, rights or limitations of, or restrictions on, the debt securities.

Subordination of Subordinated Notes

Subordinated notes will be unsecured and will be subordinate and junior in priority of payment to certain indebtedness to which we may be subject to the extent described in a prospectus supplement. The subordinated indenture does not limit the amount of subordinated notes that we may issue. It also does not limit us from issuing any other secured or unsecured debt.

Form, Exchange and Transfer

We will issue the notes of each series only in fully registered form without coupons and, unless we otherwise specify in the applicable prospectus supplement, in denominations of \$1,000 and any integral multiple thereof. The indentures provide that we may issue notes of a series in temporary or permanent global form and as book-entry securities that will be deposited with, or on behalf of, The Depository Trust Company, New York, New York, or DTC, or another

depository named by us and identified in a prospectus supplement with respect to that series.

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

Subject to the terms of the indentures and the limitations applicable to global securities set forth in the applicable prospectus supplement, holders of the notes may present the notes for exchange or for registration of transfer, duly endorsed or with the form of transfer endorsed thereon duly executed if so required by us or the security registrar, at the office of the security registrar or at the office of any transfer agent designated by us for this purpose. Unless otherwise provided in the notes that the holder presents for transfer or exchange, we will not require any payment for any registration of transfer or exchange, but we may require payment of any taxes or other governmental charges.

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

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

reissue, register the transfer of, or exchange any notes of that series during a period beginning at the opening of business 15 days before the day of mailing of a notice of redemption of any notes that may be selected for redemption and ending at the close of business on the day of the mailing; or

register the transfer of or exchange any notes so selected for redemption, in whole or in part, except the unredeemed portion of any notes we are redeeming in part.

Consolidation, Merger or Sale

The indentures do not contain any covenant that restricts our ability to merge or consolidate, or sell, convey, transfer or otherwise dispose of all or substantially all of our assets. However, any successor to or acquirer of such assets must assume all of our obligations under the indentures or the notes, as appropriate.

Events of Default Under the Indentures

The following are events of default under the indentures with respect to any series of notes that we may issue:

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

if we fail to pay the principal, or premium, if any, when due and the time for payment has not been extended or delayed;

if we fail to observe or perform any other covenant contained in the notes or the indentures, other than a covenant specifically relating to another series of notes, 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 notes of the applicable series; and

if we experience specified events of bankruptcy, insolvency or reorganization.

If an event of default with respect to notes of any series occurs and is continuing, the trustee or the holders of at least 25% in aggregate principal amount of the outstanding notes 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, or premium, if any, on and accrued interest, if any, on the notes due and payable immediately.

The holders of a majority in principal amount of the outstanding notes of an affected series may waive any default or event of default with respect to the series and its consequences, except uncured defaults or events of default regarding payment of principal, or premium, if any, or interest, unless we have cured the default or event of default in accordance with the indenture. Any waiver shall cure the default or event of default.

Subject to the terms of the indentures, if an event of default under an indenture shall occur and be continuing, the trustee will be under no obligation to exercise any of its rights or powers under such indenture at the request or direction of any of the holders of the applicable series of notes, unless such holders have offered the trustee reasonable indemnity. In such event, the holders of a majority in principal amount of the outstanding notes 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 notes of that series, provided that:

- the direction so given by the holder is not in conflict with any law or the applicable indenture; and
- subject to its duties under the Trust Indenture Act, the 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 notes of any series will only have the right to institute a proceeding under the indentures or to appoint a receiver or trustee, or to seek other remedies, if:

- the holder 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 notes of that series have made written request, and such 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 notes of that series other conflicting directions within 60 days after the notice, request and offer.

These limitations do not apply to a suit instituted by a holder of notes if we default in the payment of the principal of, or the premium, if any, or interest on, the notes.

We will periodically file statements with the trustee regarding our compliance with specified covenants in the indentures.

Discharge

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

- register the transfer or exchange of debt securities of the series;
- replace stolen, lost or mutilated debt securities of the series;
- maintain paying agencies;

- hold monies for payment in trust;
- compensate and indemnify the trustee; and
- appoint any successor trustee.

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

Modification of Indenture; Waiver

We and the trustee may change an indenture without the consent of any holders with respect to specific matters, including:

- to fix any ambiguity, defect or inconsistency in the indenture; or
- to change anything that does not materially adversely affect the interests of any holder of notes or any series.

In addition, under the indentures, we and the trustee may change the rights of holders of a series of notes with the written consent of the holders of at least a majority in aggregate principal amount of the outstanding notes of each series that is affected. However, we and the trustee may only make the following changes with the consent of each holder of any outstanding notes affected:

- extending the fixed maturity of the series of notes;
- reducing the principal amount, the rate of interest or any premium payable upon the redemption of any notes; or
- reducing the minimum percentage of notes, the holders of which are required to consent to any amendment.

Information Concerning the Trustee

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

Payment and Paying Agents

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

We will pay principal of and any premium and interest on the notes of a particular series at the office of the paying agents designated by us, except that unless we otherwise indicate in the applicable prospectus supplement, we will make interest payments by check which we will mail to the holder. Unless we otherwise indicate in a prospectus supplement, we will designate the corporate trust office of the trustee as our sole paying agent for payments with respect to notes of each series. We will name in the applicable prospectus supplement any other paying agents that we initially designate for the notes of a particular series. We will maintain a paying agent in each place of payment for the

notes of a particular series.

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

DESCRIPTION OF RIGHTS

General

We may issue rights to purchase any of our securities or any combination thereof. Rights may be issued independently or together with any other offered security and may or may not be transferable by the person purchasing or receiving the rights. In connection with any rights offering to our shareholders, we may enter into a standby underwriting arrangement with one or more underwriters pursuant to which such underwriters will purchase any offered securities remaining unsubscribed for after such rights offering. We may also appoint a rights agent that may act solely as our agent in connection with the rights that are sold. Any such agent will not assume any obligation or relationship of agency or trust with any of the holders of the rights. In connection with a rights offering to our shareholders, we will distribute certificates evidencing the rights and a prospectus supplement to our shareholders on the record date that we set for receiving rights in such rights offering.

The applicable prospectus supplement will describe the following terms of rights in respect of which this prospectus is being delivered:

- the title of such rights;
- the securities for which such rights are exercisable;
- the exercise price for such rights;
- the number of such rights issued with respect to each ordinary share;
- the extent to which such rights are transferable;
- if applicable, a discussion of the material Israeli and U.S. income tax considerations applicable to the issuance or exercise of such rights;
- the date on which the right to exercise such rights shall commence, and the date on which such rights shall expire (subject to any extension);
- the extent to which such rights include an over-subscription privilege with respect to unsubscribed securities;
- if applicable, the material terms of any standby underwriting or other purchase arrangement, or any agency agreement, that we may enter into in connection with the rights offering; and
- any other terms of such rights, including terms, procedures and limitations relating to the exchange and exercise of such rights.

Exercise of Rights

Each right will entitle the holder of the right to purchase for cash such securities or any combination thereof at such exercise price as shall in each case be set forth in, or be determinable as set forth in, the prospectus supplement relating to the rights offered thereby. Rights may be exercised at any time up to the close of business on the expiration date for such rights set forth in the prospectus supplement. After the close of business on the expiration date, all

unexercised rights will become void.

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Rights may be exercised as set forth in the prospectus supplement relating to the rights offered thereby. Upon receipt of payment and the rights certificate properly completed and duly executed at the corporate trust office of the rights agent or any other office indicated in the prospectus supplement, we will forward, as soon as practicable, the securities purchasable upon such exercise. We may determine to offer any unsubscribed offered securities directly to persons other than shareholders, to or through agents, underwriters or dealers or through a combination of such methods, including pursuant to standby underwriting arrangements, as set forth in the applicable prospectus supplement.

DESCRIPTION OF WARRANTS

We may issue warrants to purchase ordinary shares. We may issue warrants independently or together with any other securities offered by any prospectus supplement and the warrants may be attached to or separate from those securities. Any series of warrants may be issued under a separate warrant agreement, which may be entered into between us and a warrant agent specified in a prospectus supplement. Any such warrant agent will act solely as our agent in connection with the warrants of such series and will not assume any obligation or relationship of agency or trust with any of the holders of the warrants. We will set forth further terms of the warrants and any applicable warrant agreements in the applicable prospectus supplement relating to the issuance of any warrants, including, where applicable, the following:

- the title of the warrants;
- the aggregate number of the warrants;
- the number of ordinary shares purchasable upon exercise of the warrants;
- the designation and terms of the securities, if any, with which the warrants are issued and the number of the warrants issued with each such offered security;
- the date, if any, on and after which the warrants and the related securities will be separately transferable;
- the price at which, and form of consideration for which, each security purchasable upon exercise of the warrants may be purchased;
- the date on which the right to exercise the warrants will commence and the date on which the right will expire;
- the minimum or maximum amount of the warrants which may be exercised at any one time;
- any circumstances that will cause the warrants to be deemed to be automatically exercised; and
- any other material terms of the warrants.

DESCRIPTION OF UNITS

As specified in the applicable prospectus supplement, we may issue units consisting of our ordinary shares, debt securities, rights, warrants or any combination of such securities. The applicable prospectus supplement will describe:

- the terms of the units and of the ordinary shares, debt securities, rights and/or warrants comprising the units, including whether and under what circumstances the securities comprising the units may be traded separately;

- a description of the terms of any unit agreement governing the units or any arrangement with an agent that may act on our behalf in connection with the unit offering; and
- a description of the provisions for the payment, settlement, transfer or exchange of the units.

PLAN OF DISTRIBUTION

We may sell the offered securities on a negotiated or competitive bid basis to or through underwriters or dealers. We may also sell the securities directly to corporate partners in various programs of the Company, institutional investors or other purchasers or through agents. We will identify any underwriter, dealer, or agent involved in the offer and sale of the securities, and any applicable commissions, discounts and other terms constituting compensation to such underwriters, dealers or agents, in a prospectus supplement.

We may distribute our securities from time to time in one or more transactions:

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

Only underwriters named in the prospectus supplement are underwriters of our securities offered by the prospectus supplement.

If underwriters are used in the sale of our securities, such securities will be acquired by the underwriters for their own account and may be resold from time to time in one or more transactions, including negotiated transactions, at a fixed public offering price or at varying prices determined at the time of sale. Unless stated otherwise in a prospectus supplement, the obligation of any underwriters to purchase our securities will be subject to certain conditions and the underwriters will be obligated to purchase all of the applicable securities if any are purchased. If a dealer is used in a sale, we may sell our securities to the dealer as principal. The dealer may then resell the securities to the public at varying prices to be determined by the dealer at the time of resale. In effecting sales, dealers engaged by us may arrange for other dealers to participate in the resales.

We or our agents may solicit offers to purchase securities from time to time. Unless stated otherwise in a prospectus supplement, any agent will be acting on a best efforts basis for the period of its appointment. In addition, we may enter into derivative, sale or forward sale transactions with third parties, or sell securities not covered by this prospectus to third parties in privately negotiated transactions. If the applicable prospectus supplement indicates, in connection with such transaction, the third parties may, pursuant to this prospectus and the applicable prospectus supplement, sell securities covered by this prospectus and the applicable prospectus supplement. If so, the third party may use securities borrowed from us or others to settle such sales and may use securities received from us or others to close out any related short positions. We may also loan or pledge securities covered by this prospectus and the applicable prospectus supplement to third parties, who may sell the loaned securities or, in the event of default in the case of a pledge, sell the pledged securities pursuant to this prospectus and the applicable prospectus supplement. The third party in such transactions will be an underwriter and will be identified in the applicable prospectus supplement or in a post-effective amendment.

In connection with the sale of our securities, underwriters or agents may receive compensation (in the form of discounts, concessions or commissions) from us or from purchasers of securities for whom they may act as agents.

Underwriters may sell securities to or through dealers, and such dealers may receive compensation in the form of discounts, concessions or commissions from the underwriters and/or commissions from the purchasers for whom they may act as agents. Underwriters, dealers and agents that participate in the distribution of our securities may be deemed to be “underwriters” as that term is defined in the Securities Act, and any discounts or commissions received by them from us and any profits on the resale of the shares by them may be deemed to be underwriting discounts and commissions under the Securities Act. Compensation as to a particular underwriter, dealer or agent might be in excess of customary commissions and will be in amounts to be negotiated in connection with transactions involving our securities. We will identify any such underwriter or agent, and we will describe any such compensation paid, in the related prospectus supplement. Maximum compensation to any underwriters, dealers or agents will not exceed any applicable FINRA limitations.

Underwriters, dealers and agents may be entitled, under agreements with us, to indemnification against and contribution toward certain civil liabilities, including liabilities under the Securities Act.

If stated in a prospectus supplement, we will authorize agents and underwriters to solicit offers by certain specified institutions or other persons to purchase our securities at the public offering price set forth in the prospectus supplement pursuant to delayed delivery contracts providing for payment and delivery on a specific date in the future. Institutions with whom such contracts may be made include commercial savings banks, insurance companies, pension funds, investment companies, educational and charitable institutions, and other institutions, but shall in all cases be subject to our approval. Such contracts will be subject only to those conditions set forth in the prospectus supplement, and the prospectus supplement will set forth the commission payable for solicitation of such contracts. The obligations of any purchase under any such contract will be subject to the condition that the purchase of the securities shall not be prohibited at the time of delivery under the laws of Israel and of the jurisdiction to which the purchaser is subject. The underwriters and other agents will not have any responsibility in respect of the validity or performance of such contracts.

If underwriters or dealers are used in the sale, until the distribution of our securities is completed, SEC rules may limit the ability of any such underwriters and selling group members to bid for and purchase the securities. As an exception to these rules, representatives of any underwriters are permitted to engage in certain transactions that stabilize the price of the securities. Such transactions may consist of bids or purchases for the purpose of pegging, fixing or maintaining the price of the securities. If the underwriters create a short position in the securities in connection with the offering (in other words, if they sell more shares than are set forth on the cover page of the prospectus supplement), the representatives of the underwriters may reduce that short position by purchasing securities in the open market. The representatives of the underwriters also may elect to reduce any short position by exercising all or part of any over-allotment option we may grant to the underwriters, as described in the prospectus supplement. In addition, the representatives of the underwriters may impose a penalty bid on certain underwriters and selling group members. This means that if the representatives purchase securities in the open market to reduce the underwriters' short position or to stabilize the price of our securities, they may reclaim the amount of the selling concession from the underwriters and selling group members who sold those securities as part of the offering. In general, purchases of a security for the purpose of stabilizing or to reduce a short position could cause the price of the security to be higher than it might be in the absence of such purchases. The imposition of a penalty bid might also have the effect of causing the price of the securities to be higher than it would otherwise be. If commenced, the representatives of the underwriters may discontinue any of the transactions at any time. These transactions may be effected on any exchange on which our securities are traded, in the over-the-counter market, or otherwise.

Certain of the underwriters or agents and their associates may engage in transactions with and perform services for us or our affiliates in the ordinary course of their respective businesses.

LEGAL MATTERS

Certain legal matters with respect to the legality of the issuance of the ordinary shares offered by this prospectus will be passed upon for us by Shibolet & Co.

EXPERTS

The consolidated financial statements of Compugen Ltd. appearing in the Annual Report on Form 20-F for the year ended December 31, 2015 and the effectiveness of Compugen Ltd. internal control over financial reporting as of December 31, 2015, as filed with the SEC on March 7, 2016, have been audited by Kost Forer Gabbay & Kasierer (a Member of Ernst & Young Global), independent registered public accounting firm, as set forth in their report thereon, included therein, and incorporated herein by reference. Such consolidated financial statements are incorporated herein by reference in reliance upon such reports pertaining to such consolidated financial statements and the effectiveness of Compugen Ltd. internal control over financial reporting as of the respective dates, given on the authority of such firm

as experts in accounting and auditing. The address of Kost Forer Gabbay & Kasierer is 3 Aminadav St., Tel-Aviv, Israel 6706703.

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EXPENSES

The following are the estimated expenses related to the filing of the registration statement of which this prospectus forms a part, all of which will be paid by us. In addition, we anticipate incurring additional expenses in the future in connection with the offering of our securities pursuant to this prospectus. Any such additional expenses will be disclosed in a prospectus supplement.

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|-------------------------------|----------|
| SEC registration fee | \$20,140 |
| FINRA review | 30,500 |
| Legal fees and expenses* | 22,000 |
| Accounting fees and expenses* | 9,000 |
| Miscellaneous* | 3,360 |
| Total* | \$85,000 |

*Estimated

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to “incorporate by reference” the information 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 and information we file later with the SEC will automatically update and supersede this information. The documents we are incorporating by reference as of their respective dates of filing are:

· Annual Report on Form 20-F for the year ended December 31, 2015, filed on March 7, 2016 (File No. 000-30902);

· Reports on Form 6-K filed on March 8, 2016, April 18, 2016, April 20, 2016, May 10, 2016, June 22, 2016, August 2, 2016 and August 9, 2016 (File Nos. 000-30902); and

· the description of our ordinary shares contained in our Form 8-A filed on August 2, 2000 (File No. 000-30902), as updated and amended by the disclosure contained under “Description of Ordinary Shares” in this registration statement on Form F-3.

All subsequent annual reports on Form 20-F, Form 40-F or Form 10-K filed by us, all subsequent filings on Forms 10-Q and 8-K filed by us, and all subsequent reports on Form 6-K filed by us that are identified by us as being incorporated by reference shall be deemed to be incorporated by reference into this prospectus and deemed to be a part hereof after the date of this prospectus but before the termination of the offering by this prospectus.

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

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

Donna Gershowitz
General Counsel
Compugen Ltd.
26 Harokmim Street
Holon 5885849, Israel
Phone: +972-3-765-8585
Fax: +972-3-765-8555

WHERE YOU CAN FIND ADDITIONAL INFORMATION

This prospectus is part of a registration statement on Form F-3 that we filed with the SEC relating to the securities offered by this prospectus, which includes additional information. You should refer to the registration statement and its exhibits for additional information. Whenever we make reference in this prospectus to any of our contracts, agreements or other documents, the references are not necessarily complete and you should refer to the exhibits attached to the registration statement for copies of the actual contract, agreements or other document.

We are subject to the informational requirements of the Exchange Act applicable to foreign private issuers. We, as a “foreign private issuer,” are exempt from the rules under the Exchange Act prescribing certain disclosure and procedural requirements for proxy solicitations, and our officers, directors and principal shareholders are exempt from the reporting and “short-swing” profit recovery provisions contained in Section 16 of the Exchange Act, with respect to their purchases and sales of shares. In addition, we are not required to file annual, quarterly and current reports and financial statements with the SEC as frequently or as promptly as U.S. companies whose securities are registered under the Exchange Act.

You may read and copy any materials we file or furnish with the SEC at the SEC’s Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549. You may also obtain copies of the documents at prescribed rates by writing to the Public Reference Section of the SEC at 100 F Street, N.E., Washington, DC 20549. Please call the SEC at 1-800-SEC-0330 for further information on the operation of the Public Reference Room. You can review our SEC filings and the registration statement by accessing the SEC’s internet site at <http://www.sec.gov>.

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

ENFORCEABILITY OF CIVIL LIABILITIES

We are incorporated under the laws of the State of Israel. Service of process upon us and upon our directors and officers, almost all of whom reside outside the United States, may be difficult to obtain within the United States. Furthermore, because the majority of our assets and investments, and almost all of our directors and officers are located outside the United States, any judgment obtained in the United States against us or any of them may not be collectible within the United States.

Additionally, it may be difficult to assert U.S. securities law claims in original actions instituted in Israel. Israeli courts may refuse to hear a claim based on an alleged violation of U.S. securities laws because Israel is not the most appropriate forum to bring such a claim. In addition, even if an Israeli court agrees to hear such a claim, it may determine that Israeli law and not U.S. law is applicable to the claim. If U.S. law is found to be applicable, the content of applicable U.S. law must be proved as a fact which can be a time-consuming and costly process. Certain matters of procedure will also be governed by Israeli law. There is little binding case law in Israel that addresses the matters described above.

Subject to specified time limitations and legal procedures, Israeli courts may enforce a United States judgment in a civil matter which, subject to certain exceptions, is non-appealable, including judgments based upon the civil liability provisions of the Securities Act and the Exchange Act and including a monetary or compensatory judgment in a non-civil matter, provided that among other things:

the judgments are obtained after due process before a court of competent jurisdiction, according to the laws of the state in which the judgment is given and the rules of private international law currently prevailing in Israel;

the prevailing law of the foreign state in which the judgments were rendered allows for the enforcement of judgments of Israeli courts;

adequate service of process has been effected and the defendant has had a reasonable opportunity to be heard and to present his or her evidence;

the judgments are not contrary to public policy of Israel, and the enforcement of the civil liabilities set forth in the judgment is not likely to impair the security or sovereignty of Israel;

the judgments were not obtained by fraud and do not conflict with any other valid judgments in the same matter between the same parties;

an action between the same parties in the same matter is not pending in any Israeli court at the time the lawsuit is instituted in the foreign court;

the judgment is not subject to any further appeal procedures; and

the judgment is enforceable according to the laws of Israel and according to the law of the foreign state in which the relief was granted.

Generally, an Israeli court will not enforce a foreign judgment if the motion for enforcement was filed more than five years after the date of its award in the United States, unless Israel and the United States have agreed otherwise on a different period, or if an Israeli court finds exceptional reasons justifying the delay.

If a foreign judgment is enforced by an Israeli court, it generally will be payable in Israeli currency, which can then be converted into non-Israeli currency and transferred out of Israel. The usual practice in an action before an Israeli court to recover an amount in a non-Israeli currency is for the Israeli court to issue a judgment for the equivalent amount in Israeli currency at the rate of exchange in force on the date of the judgment, but the judgment debtor may make payment in foreign currency. Pending collection, the amount of the judgment of an Israeli court stated in Israeli currency ordinarily will be linked to the Israeli consumer price index plus interest at the annual statutory rate set by Israeli regulations prevailing at the time. Judgment creditors must bear the risk of unfavorable exchange rates.

INDEMNIFICATION FOR SECURITIES ACT LIABILITIES

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to our directors, officers and controlling persons, 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.