As filed with the Securities and Exchange Commission on August 26, 2014

Registration No. 333-

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

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

> Compugen Ltd. (Exact name of registrant as specified in its charter)

Not Applicable (Translation of Registrant's Name into English)

Israel (State or other jurisdiction of incorporation or organization) Not Applicable (I.R.S. Employer Identification No.)

72 Pinchas Rosen Street Tel Aviv, 6951294 Israel +972-3-765-8585 (Address and telephone number of registrant's principal executive offices)

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

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

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box. x

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

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

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

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

CALCULATION OF REGISTRATION FEE

		osed Maximum Aggregate	Amount of egistration
Title of each Class of Securities to be Registered(1)	Offer	ring $Price(2)(3)$	Fee(4)
Ordinary Shares, par value NIS 0.01 per share		(5)	(5)
Debt Securities		(5)	(5)
Rights		(5)	(5)
Warrants		(5)	(5)
Units		(5)	(5)
Total	\$	200,000,000	\$ 25,760

- (1) There are being registered hereunder such indeterminate number of ordinary shares, such indeterminate number of debt securities, such indeterminate number of subscription rights to purchase ordinary shares, such indeterminate number of warrants to purchase ordinary shares, and such indeterminate number of units comprising any combination of these securities as shall have an aggregate initial offering price not to exceed \$200,000,000. If any debt securities are issued at an original issue discount, then the issue price, and not the principal amount, of such debt securities shall be used for purposes of calculating the aggregate initial offering price of all securities issued. Any securities registered hereunder may be sold separately or as units with other securities registered hereunder. The securities registered also include such indeterminate amounts and numbers of ordinary shares and principal amounts of debt securities, as may be issued upon conversion of or exchange for debt securities that provide for conversion or exchange, upon exercise of warrants or pursuant to the anti-dilution provisions of any such securities.
- (2) In United States dollars or the equivalent thereof in any other currency, currency unit or units, or composite currency or currencies.
- (3) The proposed maximum aggregate offering prices per class of security will be determined from time to time by the Registrant in connection with the issuance by

the Registrant of the securities registered hereunder.

- (4) Calculated pursuant to Rule 457(o) under the Securities Act of 1933, as amended.
- (5) Not required to be included in accordance with General Instruction II.C of Form F-3.

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until this Registration Statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

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

Subject to Completion, Dated August 26, 2014

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 August 25, 2014, was \$8.58 and \$8.71 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 August 25, 2014.

AN INVESTMENT IN OUR SECURITIES INVOLVES RISKS. SEE THE SECTION ENTITLED "RISK FACTORS" BEGINNING ON PAGE 3.

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 , 2014

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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 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 drug discovery and development company utilizing a broadly applicable proprietary infrastructure for the in silico (by computer) prediction and selection of human therapeutic product candidates, which are then advanced in its Pipeline Program. The initial fields of focus selected by us are monoclonal antibodies and therapeutic proteins to address major unmet needs in the fields of oncology and immunology. Beginning in late 2010, we established the Pipeline Program, consisting of targets and product candidates for applications in oncology and immunology, based largely on novel immune checkpoint regulator candidates discovered by us during our first focused discovery program. Our business model includes entering into collaborations covering the further development and commercialization of product candidates at various stages from our Pipeline Program and various forms of research and discovery agreements, in both cases providing us with potential fees, research revenues, milestones, royalties and other revenue sharing payments.

Predictive Discovery Infrastructure

Our continuously growing discovery infrastructure, established over more than a decade of pioneering research with respect to key biological phenomena, consists of a multi-dimensional platform integrating proprietary scientific understandings and predictive models, algorithms, machine learning systems and other computational biology capabilities.

Initial Fields of Focus

Oncology and immunology are both areas of complex and challenging diseases with significant unmet medical needs. Therefore, these are areas of high industry interest with numerous efforts to identify novel therapeutic solutions. Our science-driven predictive capabilities are well suited for the identification of novel therapeutic candidates for these complex, multi-factorial and challenging therapeutic fields.

The Pipeline Program

Our Pipeline Program consists of therapeutic product candidates at various stages ranging from target validation to pre-clinical studies. The aim of the Pipeline Program is to advance in our validation pipeline monoclonal antibody, or mAb, targets and mAbs against such targets, and Fc fusion protein therapeutics, in each case discovered by us, in the fields of oncology and immunology and to further advance selected molecules beyond their animal proof of concept stage. The newly discovered candidates enter the Pipeline Program when they begin experimental evaluation following their in silico prediction and selection. These candidates then undergo in vitro and in vivo experimental validation, with selected candidates eventually being advanced toward pre-clinical, and, in selected cases, possibly future clinical activities. The experimental validation studies are conducted at our facilities, or at expert laboratories, selected specifically for each relevant field. In the case of drug targets for mAbs, target functional characterization and other validation studies, selected based on the nature of the target, confirming the target's therapeutic potential are undertaken, followed by the generation of a therapeutic mAb to be used for in vitro and in vivo proof of concept

studies in disease animal models. mAb candidates, either humanized or fully-human, selected to be advanced to pre-IND studies, will then enter the stage of lead candidate selection and optimization. For specific candidates we may choose to continue development into further clinical activities. With respect to therapeutic protein product candidates that have either been or will be successfully validated in vitro, these candidates are further advanced to in vivo proof of concept studies in disease animal models and to mechanism of action studies to explore their novel biology, followed by the selection of the final therapeutic form of the molecule to be used at later development stages.

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. Under the terms of this agreement, 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 preclinical 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. Under this agreement, Compugen and Bayer will jointly pursue a preclinical research program with respect to each of the two immune checkpoint regulators. A joint steering committee consisting of representatives from each party will be responsible for overseeing and directing each such research program pursuant to an agreed upon workplan. Following each such research program, Bayer will have full control over further clinical development of any cancer therapeutic product candidates targeting the Compugen-discovered immune checkpoint regulators and will have worldwide commercialization rights for any approved products.

Corporate Information

Our legal and commercial name is Compugen Ltd. We were incorporated on February 10, 1993 as an Israeli corporation. The legislative framework within which Compugen Ltd. now operates is the Israel Companies Law, 5759-1999, as amended (the "Companies Law"), which originally became effective on February 1, 2000, and the Israeli Companies Ordinance (New Version) 1983, as amended. Our principal offices are located at 72 Pinchas Rosen Street, Tel Aviv 6951294, Israel, and our telephone number is +972-3-765-8585. Our primary Internet 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 involves risks. 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).

CAPITALIZATION AND INDEBTEDNESS

The table below sets forth our unaudited capitalization and indebtedness as of June 30, 2014.

	As of June
	30, 2014
	(in
	thousands,
	except
	share and
	per share
	data)
Indebtedness:	
Research and development funding arrangement (1)	\$13,074
Total Indebtedness	13,074
Shareholder's Equity:	
Ordinary Shares, NIS 0.01 nominal value:	132
100,000,000 shares authorized and 48,468,328 shares issued and outstanding (1) (2) (3)	
Additional paid in capital	308,531
Accumulated other comprehensive income	1,885
Accumulated deficit	(212,419)
Total Shareholders' Equity	\$98,129

(1) Subsequent to June 30, 2014, and pursuant to the Termination and Equity Conversion Agreement entered into with Baize Investments (Israel) Ltd. ("Baize") on August 20, 2014, the research and development funding arrangement liability was eliminated and we will issue 1,600,000 ordinary shares to Baize. As of the issuance date of the ordinary shares, we will re-measure the fair value of the liability in respect to the research and development funding arrangement and will reclassify the liability measured at fair value to equity. If the fair value of the ordinary shares issued exceeds the fair value of the liability and warrants, the difference will be recorded as financial expenses in the statement of comprehensive loss.

(2) Does not include as of June 30, 2014 (i) outstanding options to purchase a total of 5,984,174 ordinary shares, at a weighted average exercise price of \$4.03 per share, (ii) outstanding warrants to purchase a total of 500,000 ordinary shares at an exercise price of \$7.50 per share, and (iii) ordinary shares issuable upon the conversion by Baize of its right to receive future research and development payments under the research and funding arrangement. Pursuant to the Termination and Equity Conversion Agreement entered into with Baize on August 20, 2014, the warrants set forth in clause (ii) and the right to receive ordinary shares upon the conversion by Baize of its right to receive future research and development payments under the research and funding arrangement set forth in clause (ii) and the right to receive ordinary shares upon the conversion by Baize of its right to receive future research and development payments under the research and funding arrangement set forth in clause (ii) have been terminated.

(3)Does not include options to purchase an aggregate of 150,000 ordinary shares at an exercise price of \$10.07 per share granted to our President and Chief Executive Officer and our Chairman of the Board, as approved by our shareholders at the 2014 Annual General Meeting on August 7, 2014.

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	Enc	led									Hi	gh	Lo	W
D 2009	e	c	e	m	b	e	r		3	1	, \$	5.86	\$	0.39
D 2010	e	с	e	m	b	e	r		3	1	, \$	5.32	\$	3.04
	e	с	e	m	b	e	r		3	1	, \$	5.80	\$	3.32
	nbe	er 31, 2	2012								\$	6.47	\$	2.96
	e	с		m	b	e	r		3	1	, \$	11.92	\$	4.56
Quart	or l	Ended												
M		a	r	с	h			3]	1	_			
2012			-	•				U	-	-	, \$	6.47	\$	4.96
J		u	n		e			3	0		,			
2012									2	0	\$	6.19	\$	3.33
2012	e	р	t	e n		e	r		3	0	, \$	4.50	\$	2.96
D 2012	e	с	e	m	b	e	r		3	1	, \$	5.86	\$	3.53
M 2013		a	r	с	h			3]	l	, \$	6.32	\$	4.84
J 2013		u	n		e			3	0		, \$	6.60	\$	4.56
S 2013	e	р	t	e n	ı b	e	r		3	0	, , \$	10.60	\$	5.04
2013 D	e	с	e	m	b	e	r		3	1	φ ,	10.00	ψ	5.04
2013	-		-		-	-	-				\$	11.92	\$	7.92
M 2014		a	r	с	h			3	1	l	, \$	14.32	\$	8.76
J 2014		u	n		e			3	0		, \$	11.55	\$	7.58
Month Ended														
F 2014	e		r	u	а	r	у		2	8	, ¢	14.32	\$	10.10
Μ		a	r	с	h			3]	l	,			
2014 A		р	r	i	1			3	()		12.43	\$	9.64
A 2014		Ч	I	1	1			3	t	,	, \$	11.55	\$	8.76

\$ 7.58
\$ 7.84
\$ 8.41

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 Er	nded									Hi	gh	Lo	W
D e 2009	С	e	m	b	e	r		3	1	, \$	6.06	\$	0.42
D e 2010	с	e	m	b	e	r		3	1	, \$	5.64	\$	3.08
D e 2011		e	m	b	e	r		3	1	, \$	5.92	\$	3.27
D e 2012		e	m	b	e	r		3	1	, \$	6.35	\$	3.03
D e 2013	С	e	m	b	e	r		3	1	, \$	11.79	\$	4.58
Quarter	Ended												
M 2012	a	r	с	h			3	1		, \$	6.25	\$	4.95
J 2012	u	n	e				3	0		, \$	6.35	\$	3.30
S e 2012	р	t	e m		e	r		3	0	, \$	4.47	\$	3.03
D e 2012	С	e	m	b	e	r		3	1	, \$	5.81	\$	3.59
M 2013	a	r	с	h			3	1		, \$	6.31	\$	4.87
J 2013	u	n	e				3	0		, \$	6.52	\$	4.57
S e 2013	р	t	e m	b	e	r		3	0	, \$	10.57	\$	5.18
D e 2013	С	e	m	b	e	r		3	1	, \$	11.79	\$	4.58
M 2014	a	r	с	h			3	1		, \$	13.48	\$	8.79
J 2014	u	n	е				3	0		, \$	11.35	\$	7.62
Month 1													
F e 2014	b	r	u	а	r	У		2	8	, \$	13.48	\$	10.13
M 2014	a	r	с	h			3	1		, \$	12.40	\$	9.63
A 2014	р	r	i	1			3	0		, \$	11.35	\$	8.93
M 2014	а		У			3		1		, \$	9.45	\$	7.62

J	u	n	e	3	0	,	
2014						\$ 9.50	\$ 7.88
July 31	, 2014					\$ 9.64	\$ 8.38

The closing sale price of our ordinary shares on The NASDAQ Global Market and on the Tel Aviv Stock Exchange on August 25, 2014, was \$8.58 and \$8.71 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.

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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 22, 2014, 48,479,328 ordinary shares were issued and outstanding (excluding the 1,600,000 ordinary shares issuable to Baize pursuant to the Termination and Equity Conversion Agreement entered into on August 20, 2014). As of August 22, 2014, there were approximately 74 shareholders of record of our ordinary shares. 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 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 (the "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 otherwise 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.

Under the Companies Law, the declaration of a dividend does not require the approval of the shareholders of the company, unless the company's articles of association require otherwise. Our Articles provide that the Board of Directors may declare and distribute dividends without the approval of the shareholders.

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. 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. Our ordinary shares do not have cumulative voting rights in the election of directors. As a result, 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 in accordance with the Companies Law.

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 the 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 shareholder 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.

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. Pursuant to the Companies Law, the holder or holders of one percent of the Company's voting rights may request the inclusion of an item on the agenda of a shareholder meeting, provided the item is appropriate for discussion at a shareholder meeting. The manner in which a shareholder may request the inclusion of an item is provided for in regulations promulgated pursuant to the Companies Law. 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 Articles, the Company is 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, the Company will publicize the convening of a general meeting in any manner reasonably determined by the Company, 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 the Company in its 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 or by proxy card.

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 or by proxy card, and voting on the matter, unless a different majority is required by law (but including with respect to matters which would require a special majority under the Companies Law due only to the Company's status as a company that was incorporated prior to the effective date of the Companies Law) or pursuant to the Articles. For example, under Israeli company law, a resolution for the voluntary winding up of our Company would require the approval of holders of 75% of the voting power presented and voting, in person or by proxy at the meeting.

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 22, 2014, 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, 2011, we have issued 3,489,663 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. This agreement enabled us to offer and sell an aggregate of up to 6,000,000 of our ordinary shares, from time to time through Cantor Fitzgerald & Co., as our sales agent. The gross proceeds from all sales made pursuant to this agreement could not exceed \$40 million in the aggregate as per our effective shelf registration filed with the SEC on Form F-3 (File No. 333-171655). Sales of our ordinary shares under the registration statement and the accompanying prospectus were made in sales deemed to be "at-the-market" equity offerings as defined in Rule 415 promulgated under the Securities Act. Cantor Fitzgerald & Co. was entitled to receive a commission of 3.0% of gross sales in connection with the sale of our ordinary shares on our behalf. During the period January 10, 2012 to January 16, 2014, we sold an aggregate of 4,174,120 of our ordinary shares under this agreement for gross proceeds of approximately \$31 million, before deducting issuance expenses. The average sale price of shares sold through this agreement was \$7.38 per share.
- •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, among other things, we will issue 1,600,000 ordinary shares to Baize.

AuthorizedShare Capital

On April 15, 2010 our shareholders approved an increase to our authorized share capital of NIS 500,000, divided into 50,000,000 ordinary shares with a par (nominal) value of NIS 0.01 each. Following such increase, our authorized share capital is NIS 1,000,000 divided into 100,000,000 ordinary shares with a nominal (par) value of NIS 0.01 each.

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:

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any limit on the amount that may be issued;

the title of the notes;

• 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.

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

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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.

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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

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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.

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 subcription rights to purchase our ordinary shares. 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.

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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 exercise price for such rights;
 the number of such rights issued with respect to each ordinary share;
 - 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

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Each right will entitle the holder of the right to purchase for cash such number of ordinary shares 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.

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. 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 settle such sales and may use securities or, in the event of default in 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 to third parties pursuant to this prospectus and the applicable prospectus supplement to third parties 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.

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 Tulchinsky Stern Marciano Cohen Levitski & Co., Law Offices.

EXPERTS

The consolidated financial statements of Compugen Ltd. appearing in the Annual Report on Form 20-F for the year ended December 31, 2013 and the effectiveness of Compugen Ltd. internal control over financial reporting as of December 31, 2013, as filed with the SEC on February 18, 2014, 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.

S	Е	С	r	e	g	i	S	t	r	а	t	i	0	n
fee	;													\$25,760
FII	NRA	A rev	view											30,500
L	e	g	a	1		f	e	e	S			a	n	d
exp	pens	ses*												20,000
Accounting fees and expenses* 9,000														
Miscellaneous* 4,740								4,740						
То	tal*													\$90,000

*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, 2013, filed on February 18, 2014 (File No. 000-30902);
- •Reports on Form 6-K filed on February 28, 2014, March 5, 2014, April 7, 2014, May 12, 2014, May 19, 2014, June 26, 2014, July 7, 2014, August 6, 2014, August 11, 2014, August 21, 2014, August 25, 2014 and August 26, 2014 (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).

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:

Tami Fishman Jutkowitz

General Counsel Compugen Ltd. 72 Pinchas Rosen Street Tel Aviv, 69512 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, substantially all of whom reside outside the United States, may be difficult to effect in the United States. Furthermore, because a substantial portion of our assets are located outside the United States, any judgment obtained in the United States against us or any of our directors and officers may not be collectible within the United States.

Under Israeli law, subject to various time limitations, an Israeli court may declare a judgment rendered by a foreign court in a civil matter, including judgments awarding monetary or other damages in non civil matters, enforceable if it finds that

- the judgment was rendered by a court which was, according to the foreign country's laws, competent to render the judgment;
 - the judgment is no longer appealable;
 - the obligation in the judgment is enforceable according to the rules relating to the enforceability of judgments in Israel and the substance of the judgment is not contrary to public policy in Israel; and
 - the judgment can be executed in the state in which it was given.

A foreign judgment will not be declared enforceable by Israeli courts if:

• the judgment was given in a state, the laws of which do not provide for the enforcement of judgments of Israeli courts (subject to exceptional cases);

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• the enforcement of the judgment is likely to prejudice the sovereignty or security of the State of Israel;

An Israeli court also will not declare a foreign judgment enforceable if it is proven to the Israeli court that:

• the judgment was obtained by fraud;

there was no due process;

- the judgment was rendered by a court not competent to render it according to the rules of private international law in Israel;
- the judgment conflicts with another judgment that was given in the same matter between the same parties and which is still valid; or
- at the time the action was brought in the foreign court, a claim in the same matter and between the same parties was pending before a court or tribunal in Israel.

A foreign judgment that was declared enforceable by an Israeli court will generally be payable in Israeli currency according to the applicable exchange rate on the payment date.

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.

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 8. Indemnification of Directors and Officers

Article 57 of our Articles of Association provides as follows:

EXEMPTION, INDEMNIFICATION AND INSURANCE

57. Indemnity and Insurance

- 57.1 Insurance. Subject to the provisions of the Companies Law, the Company may enter into contracts to insure the liabilities of its Office Holders for any liabilities or expenses incurred by or imposed upon them arising from or as a result of any act (or omission) carried out by them as Office Holders of the Company, to the fullest extent permitted by law, including in respect of any liability imposed on any Office Holder with respect to any of the following:
 - (a) A breach of the duty of care owed to the Company or to any other person;
 - (b) A breach of the duty of loyalty owed to the Company, provided that, the Office Holder acted in good faith and had reasonable grounds to assume that such act would not prejudice the interests of the Company;
 - (c) Monetary liabilities or obligations imposed on him in favor of another person;
 - (d) A payment which the Office Holder is obligated to make to an injured party as set forth in Section 52(54)(a)(1)(a) of the Israel Securities Law, 5728-1968 (the "Securities Law") and expenses that the Office Holder incurred in connection with a proceeding under Chapters H'3, H'4 or I'1 of the Securities Law, including reasonable litigation expenses, including attorney's fees, or in connection with Article D of Chapter Four of Part Nine of the Companies Law;
 - (e) Expenses incurred by the Office Holder in connection with a proceeding under Chapter G'1, of the Israel Restrictive Trade Practices Law, 5748-1988 (the "Restrictive Trade Law"), including reasonable litigation expenses, including attorney's fees.
- 57.2 Indemnification. Subject to the provisions of the Companies Law, the Company may indemnify any of its Office Holders for all liabilities and expenses incurred by them arising from or as a result of any act (or omission) carried out by them as Office Holders of the Company and which is indemnifiable pursuant to applicable law, to the fullest extent permitted by law, including, as follows:

(a) retrospectively; and

(b)

undertake in advance to indemnify the Office Holders to the fullest extent permitted by law, including, as follows:

- (i) For any monetary liabilities or obligations imposed on the Office Holder in favor of another person pursuant to a court judgment, including a compromise judgment or an arbitrator's decision approved by a court;
- (ii) For any payments which the Office Holder is obligated to make to an injured party as set forth in Section 52(54)(a)(1)(a) of the Securities Law and expenses the Office Holder incurred in connection with a proceeding under Chapters H'3, H'4 or I'1 of the Securities Law, including reasonable litigation expenses, including attorney's fees, or in connection with Article D of Chapter Four of Part Nine of the Companies Law;
- (iii) For reasonable litigation expenses, including attorney's fees, incurred by the Office Holder in consequence of an investigation or proceeding instituted against the Office Holder by an authority that is authorized to conduct such investigation or proceeding, and which was concluded without filing of an indictment against the Office Holder and without imposing on the Office Holder a financial obligation in lieu of criminal proceedings, or which was concluded without filing of an indictment against the Office Holder but with imposing on such Office Holder a financial obligation in lieu of criminal proceedings in respect of an offense that does not require proof of criminal intent or in connection with a financial sanction;

For the purposes hereof: (i) "a proceeding that concluded without filing an indictment in a matter in respect of which an investigation was conducted"; and (ii) "financial obligation in lieu of a criminal proceeding", shall have the meanings specified in Section 260(a)(1A) of the Companies Law;

- (iv) For reasonable litigation expenses, including attorney's fees, incurred by the Office Holder or which the Office Holder is ordered to pay by a court, in a proceeding filed against the Office Holder by the Company or on its behalf or by another person, or in a criminal action of which the Office Holder is acquitted, or in a criminal action in which the Office Holder is convicted of an offense that does not require proof of criminal intent;
- (v) For expenses incurred by the Office Holder in connection with a proceeding under Chapter G'1, of the Restrictive Trade Law, including reasonable litigation expenses, including attorney's fees;
- (vi)For any other liability, obligation or expense indemnifiable or which may from time to time be indemnifiable by law.

provided that: (x) an undertaking in advance to indemnify an Office Holder with respect to the matters specified in Article 57.2(b)(i) above is limited to types of occurrences, which in the opinion of the Board of Directors, in light of the Company's actual activities at the time of the undertaking, are foreseeable and to an amount or to criteria the Board of Directors has determined to be reasonable in the circumstances; and (y) in the undertaking in advance to indemnify an Office Holder, the types of occurrences that the Board of Directors believes to be foreseeable in light of the Company's actual activities at the time the undertaking to indemnify was given are mentioned, as is the amount or criteria that the Board of Directors determined to be reasonable under the circumstances.

- 57.3 Exemption of Office Holders. Subject to the provisions of the Companies Law, the Company may, to the fullest extent permitted by law, exempt and release its Office Holders, including in advance, from and against all or part of such Office Holders' liability for monetary or other damages due to, or arising or resulting from, a breach of their duty of care to the Company. The Directors of the Company are released and exempt from any and all liability as aforesaid to the fullest extent permitted by law with respect to any such breach, which has been or may be committed.
- 57.4 The provisions of this Article 57 are not intended, and shall not be interpreted so as to restrict the Company, in any manner, in respect of the procurement of insurance and/or indemnification and/or exculpation, in favor of any person who is not an Office Holder, including, without limitation, any employee, agent, consultant or contractor of the Company who is not an Office Holder.
- 57.5 The Company may, as aforesaid, indemnify, insure and exempt from liability any Office Holder to the fullest extent permitted by applicable law. Accordingly: (i) any amendment to the Companies Law, the Securities Law, the Restrictive Trade Law or any other applicable law expanding the ability of the Company to indemnify, insure or exempt from liability any Office Holder, or expanding the right of any Office Holder to be indemnified, insured or exempted from liability, beyond or in addition to the provisions of these Articles, shall, to the fullest extent possible, automatically and immediately apply to the Office Holders of the Company and be deemed as included in these Articles to the fullest extent permitted by applicable law; and (ii)

any amendment to the Companies Law, the Securities Law, the Restrictive Trade Law or any other applicable law adversely affecting the ability of the Company to indemnify, insure or exempt from liability any Office Holder or adversely affecting the right of any Office Holder to be indemnified, insured or exempted from liability as provided for in these Articles shall have no effect post factum and shall not affect the Company's obligations or ability to indemnify, insure or exempt from liability an Office Holder for any act (or omission) carried out prior to such amendment, unless otherwise provided by applicable law.

The Companies Law provides that a company may, if its articles of association include provisions which allow it to do so:

- (1) enter into a contract to insure the liability of an office holder (as such term is defined in the Companies Law) of the company ("Office Holder ") by reason of acts or omissions carried out by him or her as an Office Holder of the company for:
 - (a) the breach of his or her duty of care to the company or to any other person;
 - (b) the breach of his or her duty of loyalty to the company, provided that, he or she acted in good faith and had reasonable grounds to assume that the act would not prejudice the interests of the company; and
 - (c) monetary liabilities which may be imposed upon him or her in favor of another person.
- (2) indemnify an Office Holder of the company for the following liabilities or expenses that may be imposed upon him or her or that he or she may incur as a result of acts or omissions carried out by him or her as an Office Holder of the company, for:
 - (a) monetary liabilities imposed upon him or her in favor of another person pursuant to a court judgment, including a compromise judgment or an arbitrator's decision approved by a court;
 - (b) reasonable litigation expenses, including attorney's fees, incurred by the Office Holder in consequence of an investigation or proceeding instituted against him or her by an authority that is authorized to conduct such investigation or proceeding, and which was concluded without filing of an indictment against him or her and without imposing on him or her a monetary liability in lieu of a criminal proceeding, or which was concluded without filing of an indictment against him or her a monetary liability in lieu of a criminal proceeding, or which was concluded without filing of an indictment against him or her but with imposing on him or her a monetary liability in lieu of a criminal proceeding in respect of an offense that does not require proof of criminal intent or in connection with a financial sanction;

In this subsection: (i) "a proceeding that concluded without filing of an indictment in a matter in respect of which a criminal investigation was initiated" shall mean the relevant case against him or her being closed in accordance with the provisions of Section 62 of the Israeli Criminal Procedure Law, 5742-1982, or by virtue of a stay of proceedings by the Attorney General in accordance with the provisions of Section 231 of the Israeli Criminal Procedure Law, 5742-1982; and (ii) "a monetary liability in lieu of a criminal proceeding" means a monetary liability imposed by law as an alternative to a criminal proceeding, including an administrative fine in accordance with the Israeli Administrative Crimes Law,

5746-1985, a fine for an offense that is considered an offense in respect of which a fine may be imposed, in accordance with the provisions of the Israeli Criminal Procedure Law, 5742-1982, a financial sanction or a penalty; and

- (c) reasonable litigation expenses, including attorney's fees, incurred by the Office Holder or which the Office Holder is ordered to pay by a court, in a proceeding filed against him or her by the company or on its behalf or by another person, or in a criminal action of which he or she was acquitted, or in a criminal action in which he or she was convicted of an offense that does not require proof of criminal intent.
- (3) exempt an Office Holder, in advance, from and against all or part of his or her liability for damages due to a breach of his or her duty of care to it, provided that a company may not exempt a director in advance from his or her liability to it due to a breach of his or her duty of care with respect to a 'Distribution' (as defined in Section 1 of the Companies Law).

The Companies Law provides that a company's articles of association (X) may provide for indemnification of an Office Holder retrospectively; and (Y) may also provide that a company may undertake to indemnify an Office Holder in advance as follows: (i) as detailed in section 2(a) above, provided that the undertaking is limited to occurrences, which in the opinion of the company's board of directors, are foreseeable in light of the company's activities at the time of the undertaking, and to an amount or to criteria that the board of directors has determined to be reasonable in the circumstances, and that in such undertaking, the occurrences that the board of directors believes to be foreseeable in light of the company's activities at the time of the undertaking, and the amount or criteria that the board of directors determined to be reasonable under the circumstances, are mentioned, and (ii) as detailed in sections 2(b) and 2(c) above.

The Companies Law provides that a provision in a company's articles of association which permits the company to enter into a contract to insure the liability of or to indemnify an Office Holder or to exempt an Office Holder from his or her liability to the company, or a resolution of a company's board of directors to indemnify an Office Holder with respect to the following, will not be valid:

- a breach of his or her duty of loyalty, other than, in respect of indemnification and insurance, to the extent described in Section 1(b) above;
- a breach of his or her duty of care that was done intentionally or recklessly, unless the breach was done only in negligence;
- · an act or omission done with the intent to unlawfully realize personal gain; or
- a fine, forfeit, financial sanction or penalty imposed upon him or her.

The Company's Office Holders are currently covered by a directors' and officers' liability insurance policy. The Company has also resolved to exempt and release to the maximum extent permitted by law the Company's Office Holders and to indemnify them in advance for certain matters, costs and expenses as set forth in a letter of indemnification and exemption and release approved for issuance to them.

Item 9. Exhibits

Exhibit

Number Description of Document

- 1.1 Form of Underwriting Agreement (to be filed, if applicable, as an exhibit to a post-effective amendment to this registration statement or as an exhibit to a report filed under the Securities Exchange Act of 1934, as amended, and incorporated herein by reference).
- 4.1 Specimen Certificate for Ordinary Shares (incorporated by reference to Exhibit 4.1 to the Registrant's Registration Statement on Form F-1/A filed with the Securities and Exchange Commission on August 2, 2000 (Reg. No 333-12316).
- 4.2* Form of Senior Indenture.
- 4.3* Form of Subordinated Indenture.
- 4.4 Form of Senior Note (to be filed, if applicable, as an exhibit to a post-effective amendment to this registration statement or as an exhibit to a report filed under

the Securities Exchange Act of 1934, as amended, and incorporated herein by reference).

- 4.5 Form of Subordinated Note (to be filed, if applicable, as an exhibit to a post-effective amendment to this registration statement or as an exhibit to a report filed under the Securities Exchange Act of 1934, as amended, and incorporated herein by reference).
- 4.6 Form of Warrant (to be filed, if applicable, as an exhibit to a post-effective amendment to this registration statement or as an exhibit to a report filed under the Securities Exchange Act of 1934, as amended, and incorporated herein by reference).

4.7	Form of Unit Agreement (to be filed, if applicable, as an exhibit to a post-effective amendment to this registration statement or as an exhibit to a report filed under the Securities Exchange Act of 1934, as amended, and incorporated herein by reference).
5.1*	Opinion of Tulchinsky Stern Marciano Cohen Levitski & Co., Law Offices.
23.1*	Consent of Kost Forer Gabbay & Kasierer, a member of Ernst & Young Global.
23.2	Consent of Tulchinsky Stern Marciano Cohen Levitski & Co., Law Offices (included in Exhibit 5.1 to this registration statement on Form F-3).
24.1	Power of Attorney (included on signature page).
25.1	The Statement of Eligibility on Form T-1 under the Trust Indenture Act of 1939 of the Trustee under the Senior Indenture (to be filed, if applicable, as an exhibit to a post-effective amendment to this registration statement or as an exhibit to a report filed under the Securities Exchange Act of 1934, as amended, and incorporated herein by reference, in accordance with Section 305(b)(2) of the Trust Indenture Act of 1939).
25.2	The Statement of Eligibility on Form T-1 under the Trust Indenture Act of 1939 of the Trustee under the Subordinated Indenture (to be filed, if applicable, as an exhibit to a post-effective amendment to this registration statement or as an exhibit to a report filed under the Securities Exchange Act of 1934, as amended, and incorporated herein by reference, in accordance with Section 305(b)(2) of the Trust Indenture Act of 1939).

* Filed herewith.

Item 10. Undertakings

(a) The undersigned Registrant hereby undertakes:

1. To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) To include any prospectus required by section 10(a)(3) of the Securities Act of 1933;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement.

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

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

(2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(4) To file a post-effective amendment to the registration statement to include any financial statements required by Item 8.A. of Form 20-F at the start of any delayed offering or throughout a continuous offering. Financial statements and information otherwise required by Section 10(a)(3) of the Act need not be furnished, provided, that the registrant includes in the prospectus, by means of a post-effective amendment, financial statements required pursuant to this paragraph (a)(4) and other information necessary to ensure that all other information in the prospectus is at least as current as the date of those financial statements. Notwithstanding the foregoing, with respect to registration statements on Form F-3, a post-effective amendment need not be filed to include financial statements and information required by Section 10(a)(3) of the Act or Rule 3-19 of this chapter if such financial statements and information are contained in periodic reports filed with or furnished to the Commission by the registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the Form F-3.

(5) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser:

(i) If the registrant is relying on Rule 430B:

(A) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and

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

(ii) If the registrant is subject to Rule 430C, each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of sale prior to such first use, supersede or modify any statement that was made in the

registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use.

(6) That, for the purpose of determining liability of a registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities, the undersigned Registrant undertakes that in a primary offering of securities of the undersigned Registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned Registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

(i) Any preliminary prospectus or prospectus of the undersigned Registrant relating to the offering required to be filed pursuant to Rule 424;

(ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned Registrant or used or referred to by the undersigned Registrant;

(iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned Registrant or its securities provided by or on behalf of the undersigned Registrant; and

(iv) Any other communication that is an offer in the offering made by the undersigned Registrant to the purchaser.

(b) That, for purposes of determining any liability under the Securities Act of 1933, each filing of the Registrant's Annual Report pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934 that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(c) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the Registrant, the Registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

(d) To file an application for the purpose of determining the eligibility of the trustee to act under subsection (a) of Section 310 of the Trust Indenture Act ("Act") in accordance with the rules and regulations prescribed by the Commission under Section 305(b)(2) of the Act.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form F-3 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunder duly authorized, in the City of Tel Aviv, State of Israel, on August 26, 2014.

COMPUGEN LTD.

By:

/s/ Anat Cohen-Dayag,
Ph.D.
Name: Anat Cohen-Dayag,
Ph.D.
Title: President and Chief
Executive Officer

POWER OF ATTORNEY

That the undersigned officers and directors of Compugen Ltd., an Israeli corporation, do hereby constitute and appoint Anat Cohen-Dayag, Ph.D., President and Chief Executive Officer, and Tami Fishman Jutkowitz, General Counsel, and each of them individually, with full powers of substitution and resubstitution, the lawful attorneys-in-fact and agents with full power and authority to do any and all acts and things and to execute any and all instruments which said attorneys and agents, determine may be necessary or advisable or required to enable said corporation to comply with the Securities Act of 1933, as amended, and any rules or regulations or requirements of the Securities and Exchange Commission in connection with this Registration Statement. Without limiting the generality of the foregoing power and authority, the powers granted include the power and authority to sign the names of the undersigned officers and directors in the capacities indicated below to this Registration Statement, to any and all amendments, both pre-effective and post-effective, and supplements to this Registration Statement, and to any and all instruments or documents filed as part of or in conjunction with this Registration Statement or amendments or supplements thereof, and each of the undersigned hereby ratifies and confirms that said attorneys and agents, shall do or cause to be done by virtue hereof. This Power of Attorney may be signed in several counterparts.

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

Signature	Title(s)	Date
/s/ Anat Cohen-Dayag, Ph.D.	President and Chief Executive Officer and Director	August 26, 2014
Anat Cohen-Dayag, Ph.D.	(principal executive officer)	
/s/ Avihai Shen Avihai Shen	Interim Chief Financial Officer (principal financial and accounting officer)	August 26, 2014
/s/ Martin S. Gerstel Martin S. Gerstel	Chairman of the Board	August 26, 2014

/s/ Yair Aharonowitz Prof. Yair Aharonowitz	Director	August 26, 2014
/s/ Ruth Arnon Prof. Ruth Arnon	Director	August 26, 2014
/s/ Dov Hershberg Dov Hershberg	Director	August 26, 2014
/s/ Arie Ovadia, Ph.D. Arie Ovadia, Ph.D.	Director	August 26, 2014
/s/ Joshua Shemer Prof. Joshua Shemer	Director	August 26, 2014

SIGNATURE OF AUTHORIZED REPRESENTATIVE IN THE UNITED STATES

Pursuant to the Securities Act of 1933, as amended, the undersigned, Compugen USA Inc., the duly authorized representative in the United States of Compugen Ltd., has signed this registration statement on August 26, 2014.

COMPUGEN USA INC.

By:

/s/ John Hunter John Hunter, Vice President – Antibody Research & Development Compugen USA Inc.

EXHIBIT INDEX

Exhibit	
Number 1.1	Description of Document Form of Underwriting Agreement (to be filed, if applicable, as an exhibit to a post-effective amendment to this registration statement or as an exhibit to a report filed under the Securities Exchange Act of 1934, as amended, and incorporated herein by reference).
4.1	Specimen Certificate for Ordinary Shares (incorporated by reference to Exhibit 4.1 to the Registrant's Registration Statement on Form F-1/A filed with the Securities and Exchange Commission on August 2, 2000 (Reg. No 333-12316).
4.2*	Form of Senior Indenture.
4.3*	Form of Subordinated Indenture.
4.4	Form of Senior Note (to be filed, if applicable, as an exhibit to a post-effective amendment to this registration statement or as an exhibit to a report filed under the Securities Exchange Act of 1934, as amended, and incorporated herein by reference).
4.5	Form of Subordinated Note (to be filed, if applicable, as an exhibit to a post-effective amendment to this registration statement or as an exhibit to a report filed under the Securities Exchange Act of 1934, as amended, and incorporated herein by reference).
4.6	Form of Warrant (to be filed, if applicable, as an exhibit to a post-effective amendment to this registration statement or as an exhibit to a report filed under the Securities Exchange Act of 1934, as amended, and incorporated herein by reference).
4.7	Form of Unit Agreement (to be filed, if applicable, as an exhibit to a post-effective amendment to this registration statement or as an exhibit to a report filed under the Securities Exchange Act of 1934, as amended, and incorporated herein by reference).
5.1*	Opinion of Tulchinsky Stern Marciano Cohen Levitski & Co., Law Offices.
23.1*	Consent of Kost Forer Gabbay & Kasierer, a member of Ernst & Young Global.
23.2	Consent of Tulchinsky Stern Marciano Cohen Levitski & Co., Law Offices (included in Exhibit 5.1 to this registration statement on Form F-3).
24.1	Power of Attorney (included on signature page).

25.1	The Statement of Eligibility on Form T-1 under the Trust Indenture Act of 1939 of the Trustee under the Senior Indenture (to be filed, if applicable, as an exhibit to a post-effective amendment to this registration statement or as an exhibit to a report filed under the Securities Exchange Act of 1934, as amended, and incorporated herein by reference, in accordance with Section 305(b)(2) of the Trust Indenture Act of 1939).
25.2	The Statement of Eligibility on Form T-1 under the Trust Indenture Act of 1939 of the Trustee under the Subordinated Indenture (to be filed, if applicable, as an exhibit to a post-effective amendment to this registration statement or as an exhibit to a report filed under the Securities Exchange Act of 1934, as amended, and incorporated herein by reference, in accordance with Section 305(b)(2) of the Trust Indenture Act of 1939).
* Filed herewith.	
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