Prospectus



\$100,000,000 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 having an aggregate offering price up to \$100,000,000.

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 Capital Market and on the Tel Aviv Stock Exchange under the symbol "CGEN." The closing sale price of our ordinary shares on The NASDAQ Capital Market and on the Tel Aviv Stock Exchange Ltd. (the "TASE") on January 15, 2013, was \$5.52 and \$5.65 per share, respectively. The currency in which our stock is traded on the TASE is the New Israeli Shekel, or NIS. The above closing price on the TASE represents a conversion from NIS to dollar amounts in accordance with the dollar - NIS conversion rate as of such date.

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 January 16, 2013

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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, or any combination of these securities, in one or more offerings up to a total dollar amount of \$100,000,000. We have provided to you in this prospectus a general description of the securities we may offer. Each time we sell securities, we will, to the extent required by law, provide a prospectus supplement that will contain specific information about the terms of the offering. We may also add, update or change in any accompanying prospectus supplement or any free writing prospectus we may authorize to be delivered to you any of the information contained in this prospectus. To the extent there is a conflict between the information contained in this prospectus and the prospectus supplement, you should rely on the information in the prospectus supplement, provided that if any statement in one of these documents is inconsistent with a statement in another document having a later date—for example, a document incorporated by reference in this prospectus or any prospectus supplement—the statement in the document having the later date modifies or supersedes the earlier statement. This prospectus, together with any accompanying prospectus supplement and any free writing prospectus we may authorize to be delivered to you, includes all material information relating to the offering of our securities.

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

In this prospectus, unless otherwise stated or the context otherwise requires, references to "Compugen," "the Company," "we," "us", "our" and similar references refer to Compugen Ltd. and our subsidiaries.

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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.

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.

Compugen is a leading drug discovery company focused on therapeutic proteins and monoclonal antibodies ("mAbs") to address important unmet needs in the fields of immunology and oncology. We utilize a broad and continuously growing integrated infrastructure of proprietary scientific understandings and predictive platforms, algorithms, machine learning systems and other computational biology capabilities for the *in silico* (by computer) prediction and selection of novel drug targets and drug candidates. Selected candidates are then incorporated to our Pipeline Program for *in vitro* and/or *in vivo* validation testing and preclinical drug development studies. Our business model includes collaborations covering the further development and commercialization of selected candidates from our Pipeline Program and various forms of research and discovery agreements, in both cases providing Compugen with potential milestone payments and royalties on product sales or other forms of revenue sharing. In 2012, we established operations in California to develop oncology and immunology mAb drug candidates against certain drug targets already discovered, and others expected to be discovered in the future, by the Company.

Research and Discovery

For over a decade, most of our R&D efforts were directed towards establishing a unique predictive discovery infrastructure that would enable accurate and broadly applicable in silico drug, drug target, and diagnostic candidate prediction and selection. An important aspect of our infrastructure development was the creation of our core infrastructure platforms, LEADS, MED and NexGen, which integrate our scientific understandings and predictive models. LEADS provides a comprehensive predictive view of the human transcriptome and proteome and enables the discovery of novel genes and proteins. MED provides a broad analysis of the expression levels of genes across a wide variety of tissues and disease states; and NexGen is designed to efficiently and accurately integrate and analyze a vast amount of Next Generation Sequencing data. We believe these infrastructure platforms, together with our other computational biology capabilities and platforms, now provide us with substantial advantages in the predictive discovery of potential targeted medicines. Following the establishment of an integrated "critical mass" of capabilities for predictive discovery, an increasing portion of our R&D activities has been committed to utilizing these capabilities for the discovery of such targeted medicines, while continuing to expand and enhance our discovery infrastructure.

Pipeline Program

During 2010, we broadened our approach to drug target and drug discovery, moving from a "technology driven" individual platform capability approach to a "market-need driven" approach. In this "market-need driven" approach we harness all of our relevant platforms and other capabilities towards a selected unmet need in order to predict and validate novel molecules that we believe have the highest probability of leading to successful targeted medicines for that need. At the same time we chose, as a focus for our discovery efforts, the therapeutic fields of oncology and immunology, both highly complex areas with major unmet needs. Within these fields, we elected to primarily pursue therapeutic proteins and mAbs which represent the fastest growing segment in therapeutics. Based on these changes, in late 2010 we initiated our Pipeline Program, pursuant to which we have both (i) accelerated the number of predicted and selected product candidates being evaluated by us, primarily in our fields of focus, and (ii) taken selected product candidates further beyond their proof of concept into preclinical activities.

Our first "market-need driven" discovery effort within our chosen fields of focus was aimed at the discovery of immune checkpoint regulatory proteins, and this effort has successfully yielded a significant number of such proteins which were previously unknown. In general, each of these novel immune checkpoint proteins has the potential to serve as (i) a drug target for monoclonal antibodies for cancer immunotherapy, and (ii) the basis for Fc fusion proteins for the treatment of autoimmune diseases, both areas of very high interest to the medical community and biopharma industry:

At present, among the product candidates included in our Pipeline Program are the following molecules, which are at various stages from and validation to preclinical studies:

- CGEN-15001 a novel fusion protein which has shown potential for the treatment of autoimmune diseases;
- CGEN-15021 a novel fusion protein which has shown potential for the treatment of autoimmune diseases;
- CGEN-15091 a novel fusion protein which has shown potential for the treatment of multiple sclerosis;
- CGEN-15001T a novel mAb drug target candidate for cancer immunotherapy;
- CGEN- 15022 a novel mAb drug target candidate for cancer immunotherapy;
- CGEN-671 a novel mAb drug target candidate for treatment of multiple epithelial tumors;
- CGEN-928 a novel mAb drug target candidate for the treatment of multiple myeloma;
- CGEN 15092 a novel mAb drug target candidate for cancer immunotherapy.

Consistent with the initiation of our Pipeline Program, in 2010 we began to build in-house preclinical development capabilities that would allow us to further advance our drug candidates prior to entering into collaborations for their final development and commercialization. Our initial efforts resulted in the establishment of capabilities to advance therapeutic proteins at Compugen Ltd. More recently, in March 2012, we established operations in South San Francisco, California for the development of oncology and immunology monoclonal antibody drug candidates against novel mAb drug targets discovered and validated by us.

Opportunities in Non-focus Areas

In view of the wide applicability of our predictive biology capabilities, we have in the past formed, or participated in the formation, of companies to utilize certain of these capabilities in other fields, and have entered into other arrangements for the further development and commercialization of various non-focus specific discoveries of interest, most of which resulted from our infrastructure development and validation activities. In all such cases, these arrangements provide the potential for future financial gain to Compugen without any further financial commitment for either development or commercialization from us. Two such arrangements were concluded during 2012: (i) the joint establishment of a new Israeli company, Neviah Genomics Ltd., with Merck Serono, a division of Merck, Darmstadt, Germany, in the field of toxicity biomarkers, and (ii) a financing arrangement with a United States investment company to allow the further development of Keddem Bioscience Ltd., previously a wholly owned, but inactive, subsidiary of Compugen, in the field of small molecule drugs.

Corporate Information

We were incorporated under the laws of the State of Israel on February 10, 1993 as Compugen Ltd, which is both our legal and commercial name. We have operated under the laws of the State of Israel since 1993 and in particular the Israeli Companies Ordinance (New Version) 1983, as amended, which was largely replaced by the Israeli Companies Law, 5759-1999, as amended (the "Companies Law"). Compugen Inc., a wholly owned subsidiary, was incorporated in Delaware in March 1997 and is qualified to do business in California.

Our principal executive offices are located at 72 Pinchas Rosen Street, Tel Aviv, Israel 69512. Our telephone number is +972-3-765-8585 and our website 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.

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 part or all 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 Commission, and any "free writing prospectus" that may be provided by us, 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," "might," "expect," "anticipate" "objective," "goal," "intend," "estimate," "believe," "project," "plan," "assume" or other similar expressions, or negatives of those 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 or in any "free writing prospectus" regarding our future strategy, future operations, timing of possible future events, 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 Commission, 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 \$100,000,000. 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 September 30, 2012.

	(in the except s	nber 30, 012 ousands, share and are data)
Indebtedness:		
Research and development funding arrangements	\$	5,811
Total Indebtedness		5,811
Shareholder's Equity:		
Ordinary Shares, NIS 0.01 nominal value:		
100,000,000 shares authorized and 35,995,311 shares issued and outstanding (1)		97
Additional paid in capital		202,916
Accumulated other comprehensive income		4,424
Accumulated deficit		(188,746)
Total Shareholders' Equity	\$	18,691

Obes not include as of September 30, 2012 (i) outstanding options to purchase a total of 6,592,211 ordinary shares, at a weighted average exercise price of \$3.31per share, (ii) outstanding warrants to purchase a total of 500,000 ordinary shares at an exercise price of \$6.00 per share; (iii) 833,334 shares issuable upon the possible forfeiture by Baize of its rights to receive future research and development payments under the funding agreement entered into on December 31, 2010; and, (iv) ordinary shares issuable upon the possible forfeiture by Baize of its right to receive future research and development payments under the funding agreement entered into on December 20, 2011 and amended on July 24, 2012 and December 27, 2012.

PRICE RANGE OF OUR ORDINARY SHARES

Our ordinary shares were listed on The NASDAQ Global Market from August 15, 2000 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. The high and low sales prices per share of our ordinary shares for the periods indicated are set forth below:

Year Ended	Hi	gh*	Low*
December 31, 2008	\$	2.80 \$	0.34
December 31, 2009	\$	5.86 \$	0.39
December 31, 2010	\$	5.32 \$	3.04
December 31, 2011	\$	5.80 \$	3.32
December 31, 2012	\$	6.47 \$	2.96
Quarter Ended			
March 31, 2011	\$	5.80 \$	4.64
June 30, 2011	\$	5.15 \$	3.75
September 30, 2011	\$	4.67 \$	3.32
December 31, 2011	\$	5.35 \$	3.78
March 31, 2012	\$	6.47 \$	4.96
June 30, 2012	\$	6.19 \$	3.33
September 30, 2012	\$	4.50 \$	2.96
December 31, 2012	\$	5.86 \$	3.53
Month Ended			
July 31, 2012	\$	3.99 \$	3.08
August 31, 2012	\$	3.82 \$	2.96
September 30, 2012	\$	4.50 \$	3.45
October 31, 2012	\$	4.43 \$	3.53
November 30, 2012	\$	4.60 \$	3.59
December 31, 2012	\$	5.86 \$	4.50

On January 15, 2013, the closing price of our ordinary shares on The NASDAQ Capital Market was \$5.52.

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 of trade.

Year Ended	H	igh*	Low*
December 31, 2008	\$	2.81	\$ 0.41
December 31, 2009	\$	6.06	\$ 0.42
December 31, 2010	\$	5.64	\$ 3.08
December 31, 2011	\$	5.92	\$ 3.27
December 31, 2012	\$	6.35	\$ 3.03
Quarter Ended			
March 31, 2011	\$	5.92	\$ 4.64
June 30, 2011	\$		\$ 3.80
September 30, 2011	\$	4.71	\$ 3.27
December 31, 2011	\$	5.23	\$ 3.76
March 31, 2012	\$	6.25	\$ 4.95
June 30, 2012	\$	6.35	\$ 3.30
September 30, 2012	\$	4.47	\$ 3.03
December 31, 2012	\$	5.81	\$ 3.59
Month Ended			
July 31, 2012	\$	4.02	\$ 3.18
August 31, 2012	\$	3.75	\$ 3.03
September 30, 2012	\$	4.47	\$ 3.41
October 31, 2012	\$	4.38	\$ 3.59
November 30, 2012	\$	4.66	\$ 3.62
December 31, 2012	\$	5.81	\$ 4.57

On January 15, 2013, the closing price of our ordinary shares on the Tel-Aviv Stock Exchange was \$5.65.

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 any sale of securities under this prospectus for our operations and for other general corporate purposes, including, but not limited to, 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 may offer under this prospectus in a prospectus supplement relating to the specific offering. We have not determined the amount of any net proceeds to be used specifically for the foregoing purposes. As a result, our management will have broad discretion in the allocation of any net proceeds. Pending their use,, we would expect to invest any proceeds in a variety of capital preservation instruments, including short-term, investment-grade, interest-bearing instruments.

DESCRIPTION OF SECURITIES

Under this prospectus, we may sell from time to time, in one or more offerings, ordinary shares, debt securities, rights, warrants to purchase any such securities and units. In this prospectus, we refer to all of the preceding collectively as "securities". The total dollar amount of all securities that we may issue under this prospectus will not exceed \$100,000,000.

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.

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, par value NIS 0.01 per share. As of January 4, 2013, 36,608,779 ordinary shares were issued and outstanding. As of January 4, 2013, there were approximately 72 shareholders of record of our ordinary shares. Holders of ordinary shares have one vote per share, and are entitled to participate equally in the payment of dividends and share distributions and, in the event of our liquidation, in the distribution of assets after satisfaction of liabilities to creditors. No preferred shares are currently authorized. All outstanding ordinary shares are validly issued and fully paid.

Transfer of Shares

Fully paid ordinary shares of the Company are issued in registered form and may be freely transferred under our Articles of Association unless the transfer is restricted or prohibited by another instrument or by applicable securities law.

Voting Rights

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 as required under the Companies Law.

Subject to the provisions of our Articles of Association, holders of our ordinary shares have one vote for each ordinary share held by such shareholder 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.

Under the Companies Law, unless otherwise provided in the articles of association or by applicable law, all resolutions of the shareholders require a simple majority. Pursuant to the Companies Law and regulations promulgated thereunder shareholders' meetings generally require prior notice of not less than 21 days. Our Articles of Association provide that, except with respect to matters which require the approval of a special majority under the Companies Law, all resolutions of the shareholders shall be deemed adopted if approved by the holders of a simple majority of the voting power represented at the meeting, in person, by proxy or by proxy card, and voting thereon.

Annual and Special General Meetings

Our annual general meeting is held once in every calendar year at such time (within a period of not more than 15 months after the last preceding annual general meeting), at a time and place determined by our board of directors. The 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 two directors or one quarter of the directors in office or upon the demand of the holder or holders of five percent of the Company's issued share capital and one percent of its voting rights or upon the demand of 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 future shareholder meeting, provided the item is appropriate for discussion at a shareholder meeting. 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 our Articles, the quorum required for a meeting of shareholders consists of at least two shareholders, present in person or by proxy or by proxy card and holding shares conferring in the aggregate 33.3% or more of the voting power of our Company. If within an hour from the time appointed for the meeting a quorum is not present, the meeting, if convened upon the requisition of shareholders or upon the demand of less than 50% of the directors then in office as detailed above, shall be dissolved, but in any other case it shall stand adjourned to the same day in the following week at the same time and place or any time and place as the chairman may determine with the consent of the holders of a majority of the voting power represented at the meeting in person or by proxy and voting on the question of adjournment. At the adjourned meeting, the required quorum consists of any two shareholders present, in person, by proxy or by proxy card.

Limitations on the Rights to Own Securities

Our Articles and Israeli law do not restrict the ownership or voting of ordinary shares by non-residents or persons who are not citizens of Israel except with respect of nationals of countries which are in a state of war with the State of Israel.

Approval of Certain Transactions

An "office holder" is defined in the Companies Law as a managing director, chief executive officer, executive vice president, vice president, any other person fulfilling or assuming any of the foregoing positions without regard to such person's title, as well as a director or a manager directly subordinate to the managing director.

Fiduciary Duties of Office Holders

The Companies Law imposes on all office holders of a company fiduciary duties which consist of a duty of care and a duty of loyalty. The duty of care requires an office holder to act with the standard of skills with which a reasonable office holder in the same position would have acted under the same circumstances.

The duty of care includes a duty to use reasonable means to obtain: (i) information regarding the business advisability of a given action brought for the office holder's approval or performed by the office holder by virtue of his or her position; and (ii) all other information of importance pertaining to the aforesaid actions.

The duty of loyalty requires an office holder to act in good faith and for the benefit of the company and includes the duty to: (i) refrain from any act involving a conflict of interest between the fulfillment of his or her position in the company and the fulfillment of any other position or his or her personal affairs; (ii) refrain from any act that is competitive with the business of the company; (iii) refrain from exploiting any business opportunity of the company with the aim of obtaining a personal gain for himself or herself or for others, and (iv) disclose to the company all information and provide it with all documents relating to the company's affairs which the office holder obtained due to his or her position in the company.

Approval of Related Party Transactions

The Companies Law requires that transactions between a company and its office holders or that benefit its office holders be approved as provided for in the Companies Law and the company's articles of association. The approval of a majority of the disinterested members of the audit committee and of the board of directors is generally required and, in some circumstances, shareholder approval may also be required.

Pursuant to a recent amendment to the Companies Law, which became effective on December 12, 2012, the Companies Law further requires that any arrangement between a company and an office holder as to such office holder's terms of office and employment, including the grant of exculpation, indemnification or insurance, any grant, payment, remuneration, compensation, or other benefit provided in affiliation to such office holder's termination of service, and any benefit, other payment or undertaking to provide any such payment, be approved as provided for in the Companies Law and the company's articles of association and generally requires the approval of the compensation committee and the board of directors and, in some circumstances, shareholder approval may also be required.

Disclosure by Office Holders

The Companies Law requires that an office holder of a company promptly disclose to the company any personal interest that the office holder may have in an existing or proposed transaction by the company. The office holder must also disclose related material information and documents that the office holder has about the existing or proposed transaction. The office holder must further disclose the interests of any entity in which he or she is a 5% or greater shareholder, director or general manager, or in which the office holder has the power to appoint one or more directors or the general manager. If the transaction is an extraordinary transaction, the office holder must also disclose any personal interest of his or her spouse, siblings, parents, grandparents, descendants, spouse's descendants, siblings and parents and the spouses of any of these people. This disclosure must be made no later than the first meeting of the board of directors at which the transaction is discussed. The disclosure is made to the board of directors and to the audit committee if it must approve the transaction. In those circumstances in which shareholder approval is also required, shareholders have the right to review any documents in the company's possession related to the proposed transaction. However, the company may prohibit a shareholder from reviewing the documents if the company believes the request was made in bad faith, the documents include trade secrets or patents or their disclosure could otherwise harm the company's interests.

After the office holder complies with these disclosure requirements, the company may approve the transaction under the provisions of applicable law and its articles of association. If the transaction is with an office holder or with a third party in which the office holder has a personal interest, the approval must confirm that the transaction is not adverse to the company's interest. If the transaction is an extraordinary transaction, it must be approved as required by the articles of association and must also be approved by the audit committee and the board of directors. An extraordinary transaction is a transaction: (i) other than in the ordinary course of business; (ii) on terms other than on market terms; or (iii) that is likely to have a material impact on the company's profitability, assets or liabilities

In some circumstances, shareholder approval is required. A person with a personal interest in any matter may not generally be present at any audit committee or board of directors meeting where the matter is being considered, and if a member of the committee or a director, may not generally vote on the matter. Although the Companies Law does not apply this limitation on participation on discussions at the compensation committee, the Company intends, as part of its good corporate governance practice, to adopt similar limitations with respect to the discussions of its compensation committee.

Transactions with controlling shareholders

The Companies Law extends the disclosure requirements applicable to an office holder to a controlling shareholder in a public company. A shareholder that holds 25% or more of the voting rights in a company would be considered a controlling shareholder for the purposes of these disclosure requirements if no other shareholder holds more than 50% of the voting rights. If two or more shareholders are interested parties in the same transaction, their shareholdings are combined for the purposes of calculating percentages. Extraordinary transactions of a public company with a controlling shareholder or in which a controlling shareholder has a personal interest, as well as any engagement by a public company of a controlling shareholder or such controlling shareholder's relative, directly or indirectly, with respect to the provision of services to the company, and, if such person is also an office holder of such company, with respect to such person's terms of service and employment as an office holder, and if such person is an employee of the company but not an office holder, with respect to such person's employment by the company, generally require the approval of the audit committee (or with respect to terms of office and employment - the compensation committee), the board of directors and the shareholders of the company. If required, shareholder approval must include at least a majority of the shareholders who do not have a personal interest in the transaction and are present and voting at the meeting. Alternatively, the total shareholdings of the disinterested shareholders who vote against the transaction must not represent more than two percent of the voting rights in the company. The Israeli Minister of Justice may determine a different percentage. Transactions that are for a period of more than three years generally need to be brought for approval in accordance with the above procedure every three years.

Under the Companies Law, a shareholder of an Israeli company has a duty to act in good faith towards the company and other shareholders and refrain from abusing his, her or its power in the company, including, among other things, in voting at the general meeting of shareholders on certain matters. Israeli law provides that these duties are applicable to shareholder votes on, among other things.:

- amendments to a company's Articles of Association;
- · increases in a company's authorized share capital;
- · mergers; and
- · interested party transactions requiring shareholder approval.

In addition a shareholder who knows that it possesses the power to determine the outcome of a shareholders' vote or to appoint or prevent the appointment of an office holder, has a duty of fairness towards the company. However, Israeli law does not define the substance of this duty of fairness. Because Israeli corporate law has undergone extensive revisions in recent years, there is little case law available to assist in understanding the implications of these provisions that govern shareholder behavior.

Dividend and Liquidation Rights

Our Articles of Association provide that our board of directors, may, subject to the applicable provisions of 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, holders of ordinary shares are entitled to receive dividends according to their rights and interests in our profits. Dividends, to the extent declared, are distributed according to the proportion of the nominal (par) value paid up on account of the shares held at the date so appointed by the Company, without regard to the premium paid in excess of the nominal (par) value, if any. Under the Companies Law, a company may distribute a dividend only if the distribution does not create a reasonable concern that the company will be unable to meet its existing and anticipated obligations as they become due. A company may only distribute a dividend out of its profits, as defined under the Companies Law. 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 might prevent the company from being able to meet its existing and anticipated obligations as they become due. However, pursuant to our Articles of Association, no dividend shall be paid otherwise than out of the profits of the company. Under the Companies Law, the declaration of a dividend does not require the approval of the shareholders of the company, and anticipated obligations as they become due. However, pursuant to our Articles of Association, no dividend shall be paid otherwise of Association require otherwise. Our Articles of Association provide that the board of directors may declare and distribute dividends without the approval of the shareholders. In the event of our liquidation, winding

Anti-Takeover Provisions under Israeli Law

Under the Companies Law, a merger is generally required to be approved by the shareholders and board of directors of each of the merging companies. If the share capital of the company that will not be the surviving company is divided into different classes of shares, the approval of each class is also required, unless determined otherwise by the court. Similarly, unless an Israeli court determines otherwise, a merger will not be approved if it is objected to by shareholders holding a majority of the voting rights participating and voting at the meeting, after excluding the shares held by the other party to the merger, by any person who holds 25% or more of the other party to the merger or by anyone on their behalf, including by the relatives of or corporations controlled by these persons. In addition, upon the request of a creditor of either party to the proposed merger, an Israeli court may delay or prevent the merger if it concludes that there exists a reasonable concern that, as a result of the merger, the surviving company will be unable to satisfy the obligations of any of the parties to the merger. Further, a merger can be completed only after all approvals have been submitted to the Israeli Companies Registrar and 30 days have passed from the time that shareholder resolutions were adopted in each of the merging companies and 50 days have passed from the time that a proposal for approval of the merger was filed with the Israeli Companies Registrar. In addition, subject to certain exceptions, an acquisition of shares in a public company must be made by means of a tender offer to the extent that as a result of such acquisition the acquirer will hold 25% or more of the voting rights in the company if there is no other holder of 25% or more of the company's voting rights, or hold more than 45% of the voting rights in the company if there is no other holder of company is the company of the parties of the stock exchange on which their shares are traded, there is a limitation on the percentage of control which m

Under the Companies Law, a person may not acquire shares in a public company if, after the acquisition, he will hold more than 90% of the shares or more than 90% of any class of shares of that company, unless a tender offer is made to purchase all of the shares or all of the shares of the particular class. The Companies Law also provides (subject to certain exceptions with respect to shareholders who held more than 90% of a company's shares or of a class of its shares as of February 1, 2000) that as long as a shareholder in a public company holds more than 90% of the company's shares or of a class of shares, that shareholder shall be precluded from purchasing any additional shares. In order that all of the shares that the purchaser offered to purchase transferred to him by operation of law, one of the following needs to have occurred: (i) the shareholders who declined or did not respond to the tender offer hold less than 5% of the company's outstanding share capital or of the relevant class of shares and the majority of offerees who do not have a personal interest in accepting the tender offer accepted the offer, or (ii) the shareholders who declined or did not respond to the tender offer hold less than 2% of the company's outstanding share capital or of the relevant class of shares

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

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

In addition, Israeli tax law treats some acquisitions, including stock-for-stock swaps between an Israeli company and a foreign company, less favorably than U.S. tax law. Israeli tax law may, for instance, subject a shareholder who exchanges ordinary shares for shares in a non-Israeli corporation to immediate taxation.

Transfer Agent and Registrar

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

The NASDAQ Capital Market and the TASE

Our ordinary shares are listed on The NASDAQ Capital Market and the TASE under the symbol "CGEN".

Warrants

As of January 4, 2013, we had the following warrants outstanding:

• Warrants issued to Baize Investments (Israel) Ltd. ("Baize"). In connection with a funding agreement we entered into on December 29, 2010, we issued to Baize warrants to purchase 500,000 ordinary shares at an exercise price of \$6.00 per share through June 30, 2013.

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, 2010, we have issued 2,540,198 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 pursuant to an effective shelf registration filed on Form F-3 (File No. 333-171655) filed with the SEC on January 11, 2011 and declared effective on January 21, 2011. The sales agreement with Cantor (the "Cantor Sales Agreement") enables 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 the Cantor Sales Agreement may not exceed \$40 million in the aggregate as per the above mentioned registration statement. Sales of our ordinary shares under the registration statement and the accompanying prospectus are made in sales deemed to be "at-the-market" equity offerings as defined in Rule 415 promulgated under the Securities Act of 1933, as amended. Cantor Fitzgerald & Co. is entitled to receive a commission rate of 3.0% of gross sales in connection with the sale of our ordinary shares on our behalf. No sales were made under the registration statement prior to January 10, 2012. During the period from January 10, 2012 to January 4, 2013, we sold through the Cantor Sales Agreement an aggregate of 1,200,669 of our ordinary shares, and received gross proceeds of approximately \$6.7 million, before deducting issuance expenses. The average sale price of shares sold through the Cantor Sales Agreement was \$5.54

Authorized Share 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 par (nominal) 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 indentures. We have filed forms of these documents as exhibits to the registration statement, of which this prospectus forms a part. We will describe changes to the indentures in connection with an offering of debt securities in a prospectus supplement. We use the term "indentures" to refer to both the senior indenture and the subordinated indenture. The indentures will be qualified under the Trust Indenture Act of 1939, or the Trust Indenture Act. We use the term "trustee" to refer to either the trustee under the senior indenture or the trustee under the subordinated indenture, as applicable.

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

General

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

- the title of the notes:
- · any limit on the amount that may be issued;
- whether or not we will issue the series of notes in global form, the terms and who the depository will be;
- the maturity date
- the annual interest rate, which may be fixed or variable, or the method for determining the rate and the date interest will begin to accrue, the dates interest will be payable and the regular record dates for interest payment dates or the method for determining such dates;
- If the notes are guaranteed the name of the guarantor and a brief outline of the contract of guarantee;
- · whether or not the notes will be secured or unsecured, and the terms of any secured debt;
- · whether or not the notes will be senior or subordinated;
- · the terms of the subordination of any series of subordinated debt;
- the terms on which the notes may be convertible into or exchangeable for ordinary shares or other securities of ours, including provisions as to whether conversion or exchange is mandatory, at the option of the holder or at our option and provisions pursuant to which the number of ordinary shares or other securities of ours that the holders of the series of debt securities receive would be subject to adjustment;

- the place where payments will be payable and the currency in which the debt is payable;
- our right, if any, to defer payment of interest and the maximum length of any such deferral period;
- · the date, if any, after which, and the price at which, we may, at our option, redeem the series of notes pursuant to any optional redemption provisions;
- the date, if any, on which, and the price at which we are obligated, pursuant to any mandatory sinking fund provisions or otherwise, to redeem, or at the holder's option to purchase, any series of notes which are not convertible into or exchangeable for our securities;
- whether the indenture will restrict our ability to pay dividends, or will require us to maintain any asset ratios or reserves;
- whether we will be restricted from incurring any additional indebtedness;
- a discussion of any material or special Israeli and 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

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

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

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

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

Information Concerning the Trustee

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

Payment and Paying Agents

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

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

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

DESCRIPTION OF RIGHTS

General

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

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

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

Exercise of Rights

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

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 any of our securities. 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 and type of securities 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, rights, warrants or any combination of such securities. The applicable prospectus supplement will describe:

- the terms of the units and of the ordinary shares, rights and/or warrants comprising the units, including whether and under what circumstances the securities comprising the units may be traded separately;
- a description of the terms of any unit agreement governing the units or any arrangement with an agent that may act on our behalf in connection with the unit offering; and
- a description of the provisions for the payment, settlement, transfer or exchange of the units.

PLAN OF DISTRIBUTION

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

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

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

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

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

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

In connection with the sale of our securities, underwriters or agents may receive compensation (in the form of discounts, concessions or commissions) from us or from purchasers of securities for whom they may act as agents. Underwriters may sell securities to or through dealers, and such dealers may receive compensation in the form of discounts, concessions or commissions from the underwriters and/or commissions from the purchasers for whom they may act as agents. Underwriters, dealers and agents that participate in the distribution of our securities may be deemed to be "underwriters" as that term is defined in the Securities Act of 1933, or 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 transaction 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 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, Commission 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 overallotment 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

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 validity of the issuance of the ordinary shares offered by this prospectus will be passed upon for us by Tulchinsky Stern Marciano Cohen Levitski &Co.

EXPERTS

The consolidated financial statements of Compugen Ltd. appearing in the Annual Report on Form 20-F for the year ended December 31, 2011 and the effectiveness of Compugen Ltd. internal control over financial reporting as of December 31, 2011, as filed with the SEC on March 14, 2012, 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 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 67067.

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 any offering of our securities pursuant to this prospectus. Any such additional expenses will be disclosed in a prospectus supplement.

SEC registration fee	\$ 13,640
FINRA review	15,500
Legal fees and expenses*	25,000
Accounting fees and expenses*	5,000
Miscellaneous*	 5,860
Total*	\$ 65,000

^{*}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, 2011, filed on March 14, 2012 (File No. 000-30902);
- $Reports \ on \ Form \ 6-K \ filed \ on \ February \ 7, 2012, \ March \ 28, 2012, \ May \ 1, 2012, \ May \ 22, 2012, \ June \ 25, 2012, \ July \ 9, 2012, \ July \ 25, 2012, \ October \ 11, 2012 \ (Form \ 6-K/A), \ November \ 5, 2012, \ May \ 1, 2012, \ May \ 1$ 2012 and December 27, 2012 (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 **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); or
- 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, 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.