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

Form 6-K

REPORT OF FOREIGN PRIVATE ISSUER PURSUANT TO RULE 13a-16 OR 15d-16 UNDER THE SECURITIES EXCHANGE ACT OF 1934

For the month of November 2012

Commission File Number 000-30902

COMPUGEN LTD.
(Translation of registrant's name into English)

72 Pinchas Rosen Street
Tel-Aviv 69512, Israel
(Address of Principal Executive Offices)

Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-For Form 40-F:
Form 20-F [√] Form 40-F [ ]

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1): [ ]

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7): [ ]

Compugen Ltd.

On November 5, 2012, Compugen Ltd. (the "Company") issued a press release reporting financial results for the third quarter ending September 30, 2012

A copy of the press release is filed as Exhibit 99.1 to this Form 6-K and incorporated by reference herein.

The information contained in this Report, including the exhibit hereto, is hereby incorporated by reference into the Company's Registration Statement on Form F-3, File No. 333-171655.

Exhibits

Exhibit Number	**Description of Exhibit**
99.1	Press release dated November 5, 2012.

Signatures

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

COMPUGEN LTD.

Date: November 5, 2012

By: /s/ Dikla Czaczkes Axselbrad
Dikla Czaczkes Axselbrad
Chief Financial Officer

Compugen Ltd. Reports Third Quarter 2012 Financial Results

TEL AVIV, ISRAEL – November 5, 2012 – Compugen Ltd. (NASDAQ: CGEN) today reported financial results for the third quarter ending September 30, 2012.

Anat Cohen-Dayag, Ph.D., President and CEO of Compugen, stated, "Less than three years ago, Compugen selected Fc fusion and monoclonal antibody therapeutics for oncology and immunology as our first areas of focus. Today, we have an internally discovered Pipeline Program consisting of multiple candidates for targeted medicines in key areas of significant unmet medical need and high industry interest. This unprecedented achievement, in terms of both quantity and quality, demonstrates the power of the unique predictive discovery infrastructure that has been established at Compugen."

Dr. Cohen-Dayag continued, "In addition, during this time period, we have successfully integrated in-house development expertise and capabilities for both arms of our Pipeline Program, while maintaining and enhancing our computational discovery leadership. At our South San Francisco subsidiary, which was established earlier this year, we have quickly and efficiently formed a team of scientists with extensive industry experience in the fields of therapeutic human mAb generation and preclinical development. To date, this team has initiated mAb programs for three drug targets, with several binding antibodies already identified for two of these targets."

Dr. Cohen-Dayag concluded, "A further, and critically important, confirmation of the commercial potential that has been created at Compugen is the clear positive feedback we are now receiving from major pharmaceutical companies in North America, Europe and Asia, in terms of their recognition of our unique discovery capabilities and interest in possible alliances with respect to our leading product candidates."

As previously stated with respect to Compugen's financial results, revenues in the short-term will likely result primarily from agreement related payments, and therefore quarterly results may fluctuate substantially due to the timing of receipt of any such revenues. Revenues for both the third quarter of 2012 and the nine months ending September 30, 2012 were $108,000 compared with no revenues for the comparable periods in 2011, reflecting amounts received for certain activities in support of our joint venture with Merck-Serono.

Net loss for the most recent quarter was $3.5 million (after reflecting a non-cash expense of $708,000

related to stock based compensation and non-cash financial loss of $58,000 related to the accounting for certain research and development funding arrangements as further described below) or $0.10 per share, compared with a net loss of $3.6 million (after reflecting a non-cash expense of $587,000 related to stock based compensation and non-cash financial income of $60,000 related to the research and development funding arrangements) or $0.10 per share, for the corresponding quarter of 2011.

The net loss for the first nine months of 2012 was $8.3 million (after reflecting non-cash expense of $1.8 million related to stock based compensation and non-cash financial income of $1.3 million related to the research and development funding arrangements), or $0.23 per share, compared with net loss of $7.7 million (after reflecting a non-cash expense of $2.6 million related to stock based compensation and non-cash financial income of $793,000 related to the research and development funding arrangements), or $0.22 per share, for the same period in 2011. The increase in net loss for the first nine months of 2012 compared with the same period in 2011 resulted in large part from increased research and development expenses, net, as further discussed below.

Research and development expenses, net, were $2.8 million for the third quarter of 2012, compared with $2.1 million for the third quarter of 2011, and remain the Company’s largest expense. Research and development expenses, net, were $6.8 million for the first nine months of 2012, compared with $4.9 million for the first nine months of 2011. The growth in research and development expenses, net, for the first nine months of 2012 reflects establishment and initiation of activities at the South San Francisco operation as well as increasing levels of activity in support of the Company’s Pipeline Program, and a decrease in governmental and other grants, which are deducted from research and development expenses in calculating research and development expenses, net.

As of September 30, 2012 and 2011, the liability related to the "Research and development funding arrangements" amounted to $5.8 million and $3.2 million, respectively, resulting from the accounting for the Baize research and development funding arrangements signed in December 2011 and December 2010. The liability balances are primarily related to the estimated fair values of the derivative instruments resulting from the right of the investor under both arrangements to waive his right to receive potential future payments in exchange for Compugen ordinary shares.

As of September 30, 2012, cash and cash related accounts totaled $20.1 million, compared with $22.4 million at December 31, 2011. Both the September 30, 2012 and December 31, 2011 balances do not include either the market value of Compugen’s holdings of Evogene shares at the end of each such period, or the $5.0 million and $6.0 million as of September 30, 2012 and December 31, 2011, respectively, to be received during the remainder of 2012 under the payment schedule for the December 2011 Baize research and development funding arrangement, as amended.

Conference Call and Webcast Information

Compugen will hold a conference call to discuss its third quarter 2012 results today, November 5, 2012, at 10:00 a.m. EST. To access the conference call, please dial 1-888-668-9141 from the US or +972-3-918-0609 internationally. The call will also be available via live webcast through Compugen's website, located at the following link. A replay of the conference call will be available approximately two hours after the completion of the live conference call. To access the replay, please dial 1-888-782-4291 from the US or +972-3-925-5904 internationally. The replay will be available through November 8, 2012

(Tables to follow)

About Compugen

Compugen is a leading therapeutic product discovery company focused on therapeutic proteins and monoclonal antibodies to address important unmet needs in the fields of immunology and oncology. Unlike traditional high throughput trial and error experimental based discovery, Compugen utilizes 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 product candidates, which are then advanced in its Pipeline Program to the pre-IND stage. The Company's business model primarily involves collaborations covering the further development and commercialization of product candidates from its 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, Compugen established operations in California for the development of oncology and immunology monoclonal antibody therapeutic candidates against Compugen-discovered drug targets. In 2002, Compugen established an affiliate, Evogene Ltd., (www.evogene.com) (TASE: EVGN.TA), to utilize certain of the Company's *in silico* predictive discovery capabilities in agricultural biotechnology. For additional information, please visit Compugen's corporate website at www.cgen.com.

This press release may contain "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. These statements include words such as "may," "expects," "projects," "anticipates," "believes," and "intends," and describe opinions about future events. Forward-looking statements in this press release include, but are not limited to the medical and/or commercial potential for molecules discovered by the Company, and, possible alliances with respect to our leading product candidates. These forward-looking statements involve known and unknown risks and uncertainties that may cause the actual results, performance or achievements of Compugen to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. Some of these risks are: changes in relationships with collaborators, including without limitation, corporate partners or licensees; the impact of competitive products and technological changes; risks relating to the development of new products in general; risks relating to the research, development, regulatory approval, manufacturing or marketing of new therapeutic or diagnostic products; the ability to implement technological improvements and risks related to obtaining necessary resources, including, without limitation, capital. These and other factors are discussed in the "Risk Factors" section of Compugen's Annual Report on Form 20-F for the year ended December 31, 2011 as filed with the Securities and Exchange Commission. In addition, any forward-looking statements represent Compugen's views only as of the date of this release and should not be relied upon as representing its views as of any subsequent date. Compugen does not assume any obligation to update any forward-looking statements unless required by law.

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COMPUGEN LTD.
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(U.S. dollars in thousands, except for share and per-share amounts)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2012	**2011**	**2012**	**2011**
	Unaudited	**Unaudited**	**Unaudited**	**Unaudited**
Revenues	108	-	108	-
Cost of revenues	33	-	33	-
Gross profit	**75**	-	**75**	-
Operating expenses				
Research and development expenses, net	2,787	2,112	6,834	4,924
Marketing and business development expenses	147	198	498	496
General and administrative expenses	765	797	2,444	3,849
Total operating expenses *	**3,699**	**3,107**	**9,776**	**8,909**
Operating loss	**(3,624)**	**(3,107)**	**(9,701)**	**(8,909)**
Financing income (loss), net **	114	(495)	1,446	1,017
Other income	-	-	-	240
Net loss	**(3,510)**	**(3,602)**	**(8,255)**	**(7,652)**
Basic net loss per ordinary share	(0.10)	(0.10)	(0.23)	(0.22)
Weighted average number of Ordinary shares used in computing basic net loss per share	35,991,398	34,317,515	35,750,276	34,219,308
Diluted net loss per ordinary share	(0.10)	(0.10)	(0.30)	(0.25)
Weighted average number of Ordinary shares used in computing diluted net loss per share	36,797,405	34,317,515	36,406,301	34,491,398

* Includes non-cash stock based compensation.
** Includes non-cash income (loss) due to change in fair value of exchange option and embedded derivatives within research and development arrangements of approximately $(58) and $1,255 for the most recent quarter and for the nine month of 2012, respectively, and $60 and $793 for the comparable periods of 2011.

COMPUGEN LTD.
CONDENSED CONSOLIDATED BALANCE SHEETS DATA
(U.S. dollars, in thousands)

	September 30, 2012 Unaudited	December 31, 2011 Audited
ASSETS		
Current assets		
Cash, cash equivalents and short-term bank deposits	20,061	22,371
Restricted cash	91	92
Other accounts receivable and prepaid expenses	607	546
Total current assets	**20,759**	**23,009**
Long-term investments		
Investment in Evogene	4,254	4,093
Long-term lease deposits	60	17
Severance pay fund	1,578	1,465
Total long-term investments	**5,892**	**5,575**
Long-term prepaid expenses	**350**	**-**
Property and equipment, net	**1,066**	**497**
Total assets	**28,067**	**29,081**
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current liabilities		
Accounts payable and accrued expenses	1,753	1,707
Total current liabilities	**1,753**	**1,707**
Long-term liabilities		
Research and development funding arrangements	5,811	6,150
Accrued severance pay	1,812	1,643
Total long-term liabilities	**7,623**	**7,793**
Total shareholders' equity	**18,691**	**19,581**
Total liabilities and shareholders' equity	**28,067**	**29,081**