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 August 2016

Commission File Number 000-30902

COMPUGEN LTD.

(Translation of registrant's name into English)

26 Harokmim Street
Holon 5885849, 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 August 2, 2016, Compugen Ltd. ("Compugen" or the "Company") issued a press release reporting financial results for the second quarter ended June 30, 2016. 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 on Form 6-K, including the exhibit hereto, is hereby incorporated by reference into the Company's Registration Statement on Form F-3, File No. 333-198368.

Exhibits

Exhibit Number	**Description of Exhibit**
99.1	Press Release dated August 2, 2016.

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: August 2, 2016

By: /s/ Donna Gershowitz
Donna Gershowitz
General Counsel

Exhibit 99.1

FOR IMMEDIATE RELEASE

Compugen Ltd. Reports 2nd Quarter 2016 Financial Results

HOLON, ISRAEL – August 2, 2016 – Compugen Ltd. (NASDAQ: CGEN), a leading predictive drug discovery company, today reported financial results for the second quarter ending June 30, 2016.

Anat Cohen-Dayag, Ph.D., Compugen's President and Chief Executive Officer, stated, "Our broad portfolio of novel targets for immuno-oncology is comprised of two key categories - T cell-based and myeloid cell-based immune checkpoint target candidates, with candidates in both categories identified within the tumor microenvironment of multiple types of cancers. These discoveries provide Compugen with the potential for the development of multiple transformational, first-in-class, antibody drugs for immuno-oncology. In this respect, during the past quarter we selected a lead therapeutic antibody for CGEN-15029, named COM701, which is now undergoing preclinical development activities in preparation for advancement to clinical trials, with an anticipated IND filing next year."

Dr. Cohen-Dayag continued, "In parallel with our therapeutic development activities, we are also pursuing a significant, previously undisclosed research activity, under which we have established a comprehensive *in vivo* validation system, based on knockout mice, where the target of interest has been genetically removed. This activity was initiated in early 2015 and was applied to the majority of the Company's immuno-oncology target candidates, in order to further evaluate *in vivo* their likely clinical relevance, identify effective drug combinations, and assess the mechanisms-of-action by which our targets suppress immune response. Similar evaluations in knockout mice were a major factor driving the development of approved immuno-oncology therapies such as PD-1 and CTLA-4 inhibitors, and have been shown to be predictive of the ultimate clinical relevance of their respective target proteins."

Dr. Cohen-Dayag concluded, "Now, with our immuno-oncology target pipeline consisting of both T cell-based and myeloid cell-based immune checkpoint target candidates, we are focusing on target candidates that have the potential to complement each other, and that are expected to substantially enhance the overall value of our pipeline, particularly when taking into consideration the need for combination therapies."

Revenues for the second quarter of 2016 and six months ending June 30, 2016 were $0.5 million and $0.6 million respectively, compared with $0.2 million and $0.7 million for the comparable periods in 2015, reflecting primarily the milestone in the amount of $0.4 million achieved in the second quarter of 2016 and the non-cash amortization during these periods of the upfront payment, in both cases related to the August 2013 collaboration and license agreement with Bayer.

R&D expenses for the second quarter of 2016 and six months ending June 30, 2016 were $5.5 million and $12.2 million respectively, compared with $5.2 million and $10.1 million in the comparable periods in 2015. The increase primarily reflects expanded activities involving our pipeline program candidates, including the hiring of additional professional employees and manufacturing and regulatory consultants to support pre-clinical activities.

Net loss for the second quarter of 2016 was $6.6 million, or $0.13 per diluted share, compared with a net loss of $6.8 million, or $0.14 per diluted share, for the comparable period in 2015. Net loss for the six months ending June 30, 2016 was $15.2 million, or $0.30 per diluted share, compared with a net loss of $13.0 million, or $0.26 per diluted share, for the comparable period in 2015.

As of June 30, 2016, cash and cash related accounts totaled $74.1 million, compared with $81.4 million as of December 31, 2015. The Company has no debt.

Conference Call and Webcast Information
Compugen will hold a conference call to discuss its second quarter 2016 results today, August 2, 2016 at 10:00 a.m. ET. To access the conference call, please dial 1-888-407-2553 from the US or +972-3-918-0685 internationally. The call will also be available via live webcast 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 1-888-326-9310 from the US or +972-3-925-5925 internationally. The replay will be available through August 4, 2016.

(Tables to follow)

About Compugen
Compugen is a leading therapeutic discovery company utilizing its broadly applicable predictive discovery infrastructure to identify novel drug targets and develop first-in-class biologics. The primary focus of the Company's current pipeline is on immune checkpoint target candidates discovered by the Company, potentially providing the basis for a next wave of therapeutics for cancer immunotherapy. Compugen's business model is based on selectively entering into collaborations for its novel target candidates and drug product candidates at various stages of research and development under revenue-sharing agreements. The Company is headquartered in Israel, with R&D facilities in Israel and South San Francisco. At the US facilities, monoclonal antibody therapeutic candidates are discovered and developed against the Company's novel target candidates. For additional information, please visit Compugen's corporate website at http://www.cgen.com.

Forward-Looking Statement

This press release contains “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements can be identified by the use of terminology such as “will,” “may,” “expects,” “anticipates,” “believes,” and “intends,” and describe opinions about future events. 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. Among these risks: Compugen’s business model is substantially dependent on entering into collaboration agreements with third parties, and Compugen may not be successful in generating adequate revenues or commercializing aspects of its business model; and the development and commercialization of therapeutic candidates involve many inherent risks, including failure to progress to clinical trials or, if they progress to or enter clinical trials, failure to receive regulatory approval. These and other factors are more fully discussed in the "Risk Factors" section of Compugen’s most recent Annual Report on Form 20-F as filed with the Securities and Exchange Commission as well as other documents that may be subsequently filed by Compugen from time to time 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 June 30,		Six Months Ended June 30,	
	2016	**2015**	**2016**	**2015**
Revenues	496	223	589	736
Cost of revenues	86	148	167	396
Gross profit	410	75	422	340
Operating expenses				
Research and development expenses, net	5,463	5,189	12,237	10,109
Marketing and business development expenses	199	248	471	478
General and administrative expenses	1,756	1,591	3,593	3,028
Total operating expenses	7,418	7,028	16,301	13,615
Operating loss	**(7,008)**	**(6,953)**	**(15,879)**	**(13,275)**
Financing and other income, net	396	145	666	324
Loss before taxes on income	**(6,612)**	**(6,808)**	**(15,213)**	**(12,951)**
Taxes on income	20	-	20	-
Net loss	**(6,632)**	**(6,808)**	**(15,233)**	**(12,951)**
Basic and diluted net loss per ordinary share	(0.13)	(0.14)	(0.30)	(0.26)
Weighted average number of ordinary shares used in computing basic and diluted net loss per share	50,820,607	50,405,022	50,724,004	50,374,993

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

	June 30, 2016 Unaudited	December 31, 2015 Audited
ASSETS		
Current assets		
Cash, cash equivalents, short-term bank deposits and restricted cash	74,078	81,421
Investment in marketable securities	104	426
Trade receivable	400	7,800
Other accounts receivable and prepaid expenses	1,332	1,352
Total current assets	75,914	90,999
Non-current assets		
Non-current prepaid expenses	96	101
Severance pay fund	2,281	2,179
Property and equipment, net	6,169	6,028
Total non-current assets	8,546	8,308
Total assets	**84,460**	**99,307**
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current liabilities		
Other accounts payable, accrued expenses and trade payables	4,415	6,542
Deferred revenues	123	312
Total current liabilities	4,538	6,854
Non-current liabilities		
Accrued severance pay	2,789	2,556
Total non-current liabilities	2,789	2,556
Total shareholders' equity	77,133	89,897
Total liabilities and shareholders' equity	**84,460**	**99,307**