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 May 2017

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 May 31, 2017, Compugen Ltd. (“Compugen” or the “Company”) issued a press release, a copy of which 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 Statements on Form F-3, File Nos. 333-198368 and 333-213007.

Exhibits

Exhibit Number	**Description of Exhibit**
99.1	Press Release dated May 31, 2017.

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: May 31, 2017

By: /s/ Donna Gershowitz
Donna Gershowitz
General Counsel

EXHIBIT 99.1

Compugen Provides Update on COM701 and Upcoming Presentations

HOLON, ISRAEL – May 31, 2017 – Compugen Ltd. (NASDAQ: CGEN), a therapeutic discovery company, announced today that it anticipates a delay of several months in the submission of an investigational new drug application (IND) for COM701, Compugen's clinical candidate antibody targeting CGEN-15029/PVRIG. Previously the Company had disclosed an expectation of IND filing in Q4 of this year.

The Company was recently informed by its manufacturing service provider for COM701 - a global contract development and manufacturing organization (CDMO) - that the batch of material they manufactured for Compugen's planned GLP (good laboratory practice) toxicity studies was contaminated during the manufacturing process. The contamination was discovered during quality control procedures prior to release of the affected batch and, as such, was not used in any preclinical studies. This contamination has necessitated the production of a new batch of material for the execution of these studies. As a result, Compugen anticipates a delay of several months in the submission of an investigational new drug application (IND) for COM701 and will provide further updates as appropriate.

Anat Cohen-Dayag, PhD, CEO and President of Compugen, commented, "As previously disclosed, the COM701 program is one of the four program areas that are currently the focus of the Company's therapeutics and business development efforts. While we are disappointed in the delay of our anticipated IND filing date, we would like to stress that this contamination and resulting delay are related to a technical issue in the CDMO's manufacturing process, and does not detract from the quality of the data generated by the Company supporting the clinical rationale for COM701. Therefore, based on the information currently available to us, we expect this delay may have a limited effect with respect to our on-going business development discussions for this program."

As previously announced, new data on COM701 will be presented at the American Society of Clinical Oncology (ASCO) Annual Meeting in Chicago, Illinois next week. Compugen's poster presentation at ASCO will take place on Monday, June 5 at 8:00-11:30am CT (Abstract 3074, location: Hall A). The following day, Tuesday, June 6 at 2:00 pm ET, Dr. Cohen-Dayag will present at the Jefferies Global Healthcare Conference. A live webcast and slide presentation of the Jefferies talk will be available on the Company's website.

About Compugen

Compugen is a leading therapeutic discovery company whose mission is to utilize its broadly applicable predictive discovery infrastructure to discover novel drug targets and develop first-in-class therapeutics. Our current pipeline consists of early and preclinical stage immuno-oncology programs based on novel drug targets discovered internally, primarily immune checkpoint and myeloid protein target candidates. These programs focus on the development of first-in-class cancer immunotherapy drugs with the potential to harness the immune system to provide treatment solutions in areas of unmet medical need in various cancer types and patient populations, both as monotherapy and in combination with other drugs. In addition, our pipeline currently includes a preclinical fusion protein autoimmune product candidate. Compugen's business model is based on selectively entering into collaborations for its novel target candidates and related 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, therapeutic monoclonal antibodies are discovered and developed against the Company's novel drug target candidates. For additional information, please visit Compugen's corporate website at http://www.cgen.com.

Forward-looking Statements

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,” “potential,” and “intends,” and describe opinions about possible future events, including the status of development of our product candidates, the manufacturing process for those product candidates and the potential timing of planned regulatory filings. 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. Moreover, 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 (SEC) as well as other documents that may be subsequently filed by Compugen from time to time with the SEC. 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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