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 April 2018

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 $101(b)(1)$: \Box	
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 April 27, 2018, Compugen Ltd. (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 is hereby incorporated by reference into the Company's Registration Statement on Form F-3, File No. 333-213007.

Exhibits

Exhibit

Number Description of Exhibit

99.1 Press Release dated April 27, 2018.

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: April 27, 2018 By: /s/ Donna Gershowitz

Donna Gershowitz General Counsel



FOR IMMEDIATE RELEASE

Compugen Reports on Status of Investigational New Drug Application f or COM701, a First-in-Class Immuno-Oncology Therapeutic Antibody

HOLON, ISRAEL – April 27, 2018 – Compugen Ltd. (Nasdaq: CGEN), a leader in predictive discovery and development of first-in-class therapeutics for cancer immunotherapy, today announced that the U.S. Food and Drug Administration (FDA) requested that the Company provide additional CMC information in support of its IND application for COM701, initially submitted in late March 2018. COM701 is a first-in-class immuno-oncology therapeutic antibody targeting PVRIG. FDA recommended a lower starting dose of COM701 for the trial, which now requires a more sensitive COM701 assay detection method for this dose. The FDA informed the Company that the IND application review can be completed and the application can be taken off clinical hold once the requested information is provided by Compugen. The IND is intended to support initiation of a planned Phase 1 clinical trial of COM701 in patients with advanced solid tumors. This trial is not yet active at any investigational sites and has not recruited any patients.

"We are working closely with the FDA to provide the additional information requested as quickly as possible. In anticipation for FDA clearance, site selection activities in multiple centers in the United States are currently ongoing to allow future patient enrollment, and we look forward to evaluating COM701 in a clinical setting," stated Anat Cohen-Dayag, PhD, President and CEO of Compugen. "We continue to be encouraged by the preclinical data for COM701, which suggest that targeting PVRIG may be a primary means of stimulating an anti-tumor immune response in certain cancers that may be unresponsive to available treatments."

The Company will continue to provide updates on this matter as appropriate.

About Compugen

Compugen is a therapeutic discovery and development company utilizing its broadly applicable predictive discovery infrastructure to identify novel drug targets and develop first-in-class therapeutics in the field of cancer immunotherapy. The Company's therapeutic pipeline consists of immuno-oncology programs against novel drug targets it has discovered, including T cell immune checkpoints and myeloid target programs. Compugen's business model is to selectively enter into collaborations for its novel targets and related drug product candidates at various stages of research and development. The Company is headquartered in Israel with R&D facilities in both Israel and South San Francisco, CA. Compugen's ordinary shares are listed on Nasdaq and the Tel Aviv Stock Exchange under the ticker symbol CGEN. For additional information, please visit Compugen's corporate website at 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," "potential," "plan," "goal," "estimate," "likely," "should," "confident," and "intends," and describe opinions about possible 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. 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, including the ability to finance the Company, 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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