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 March 2020

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-F or 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 March 9, 2020, Compugen Ltd. (the "**Company**") issued a press release, a copy of which is furnished as Exhibit 99.1 to this Form 6-K and incorporated by reference herein.

The information contained in the first, third, fourth, fifth and sixth paragraphs and the section titled "Forward-Looking Statement" in the press release is hereby incorporated by reference into the Company's Registration Statement on Form F-3, File No. 333-233001.

Exhibits

Exhibit Number	**Description of Exhibit**
99.1	Press Release dated March 9, 2020.

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: March 9, 2020

By: /s/ Eran Ben Dor
Eran Ben Dor
General Counsel

Exhibit 99.1

FOR IMMEDIATE RELEASE

Compugen Announces Updated Clinical Data from Ongoing COM701 Phase 1 Study

COM701 demonstrates preliminary antitumor activity with confirmed partial responses as monotherapy in a patient with primary peritoneal cancer and in combination with Opdivo® (Nivolumab) in a patient with MSS-CRC

Data further supports the inclusion of colorectal cancer in the expansion cohorts

HOLON, ISRAEL – March 9, 2020 – Compugen Ltd. (NASDAQ: CGEN), a clinical-stage cancer immunotherapy company and leader in predictive target discovery, reported today updated data from its ongoing Phase 1 dose escalation study of COM701 in patients with advanced solid tumors who have exhausted all available standard therapies. COM701 is a first-in-class investigational therapeutic antibody targeting PVRIG, a novel immune checkpoint discovered computationally by Compugen and part of the DNAM axis, which also includes the TIGIT inhibitory pathway.

“We continue to be encouraged by the updated data which further supports our focus on the indications we previously selected for our planned expansion cohorts, based on our biomarker-informed approach and our predictive discovery capability,” said Anat Cohen-Dayag, Ph.D., President and CEO of Compugen. “We look forwad to presenting the full data at a future scientific conference.”

As of February 9, 2020, the data cutoff date, a total of 28 patients with a variety of tumor types who had failed all available standard therapies were enrolled onto the study, 16 patients in the COM701 monotherapy dose escalation arm and 12 patients in the COM701 in combination with nivolumab dose escalation arm.

At the Society for Immunotherapy of Cancer (SITC) Annual Meeting 2019, we reported antitumor activity (stable disease) in 9 of the 13 patients enrolled in the first seven cohorts of the COM701 monotherapy dose escalation arm.

The updated data reported today is from the eighth cohort of the COM701 monotherapy dose escalation arm treated with a dose of 20 mg/kg on a Q4 weekly dosing schedule and from the dose escalation arm of COM701 in combination with nivolumab.

A summary of key data is presented below:

- COM701 was well-tolerated and with no reported dose-limiting toxicities in both treatment arms.
- Encouraging signals of preliminary antitumor activity in two patients with confirmed partial responses:
    - A confirmed partial response in a patient from the COM701 monotherapy dose escalation arm with microsatellite stable primary peritoneal cancer, a type of challenging-to-treat ovarian cancer that was selected as a tumor type for the COM701 monotherapy expansion study based on our preclinical biomarker prediction of likely response to treatment with COM701; the patient is one of the three patients enrolled in the eighth cohort and is continuing on study treatment (more than 18 weeks).
    - A confirmed partial response in a patient from the dose escalation arm of COM701 in combination with nivolumab with microsatellite stable colorectal cancer (MSS-CRC); the patient is continuing on study treatment (more than 36 weeks).
        - At SITC Annual Meeting 2019, we reported antitumor activity (stable disease) in 5 of 6 patients with MSS-CRC in the COM701 monotherapy dose escalation arm.

About COM701
COM701 is a humanized antibody that binds with high affinity to PVRIG, a novel immune checkpoint discovered computationally by Compugen, blocking the interaction with its ligand, PVRL2. Blockade of PVRIG by COM701 has demonstrated in preclinical studies potent, reproducible enhancement of T cell activation, consistent with the desired mechanism of action of activating T cells in the tumor microenvironment to generate anti-tumor immune responses. PVRIG and TIGIT, also discovered by Compugen's computational discovery platform in 2009, constitute parallel immune checkpoint pathways that counteract DNAM, a costimulatory molecule on T cells and NK cells. As such, preclinical data suggest that the inhibition of PVRIG together with TIGIT and/or PD-1 has the potential to further enhance anti-tumor immune response and improve patient outcomes in a broad variety of tumor types.

About Compugen
Compugen is a clinical-stage therapeutic discovery and development company utilizing its broadly applicable, predictive computational discovery platforms to identify novel drug targets and develop therapeutics in the field of cancer immunotherapy. The Company's lead product candidate, COM701, a first-in-class anti-PVRIG antibody, for the treatment of solid tumors, is undergoing a Phase 1 clinical study. In addition, COM902, Compugen's antibody targeting TIGIT, is expected to enter the clinic in early 2020. The Company's therapeutic pipeline also includes early stage immuno-oncology programs focused largely on myeloid targets. 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 offices in South San Francisco, CA. Compugen's shares are listed on the 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 Securities Act of 1933 and the Securities Exchange Act of 1934, as amended, and the safe-harbor provisions 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,” “plan,” “goal,” “estimate,” “likely,” “should,” “confident,” and “intends,” and similar expressions that are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. Forward-looking statements include, but are not limited to, statements regarding our plan to continue our evolution with multiple clinical milestones, including the first data presentation evaluating the potential of COM701 in combination with Opdivo®, our continued progress as we advance multiple clinical studies to expand the reach of cancer immunotherapy treatments, completing enrollment in the COM701 monotherapy expansion cohorts and presenting data from our studies. 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 ability to present data derived from collaborations with our partners is dependent in some cases on the agreement of our partners to present such data, and in any event is dependent on our acceptance to present data in relevant conferences, and 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 advance through clinical development or 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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