
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 2022

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 November 7, 2022, Compugen Ltd. (the “**Company**”) issued a press release announcing publication of an abstract on preliminary data showing anti-tumor activity and potent immune modulation with the combination of COM701 and nivolumab in metastatic MSS-CRC patients, a copy of which is furnished as Exhibit 99.1 to this Report on Form 6-K and, with the exception of the 2nd, 3rd and 4th paragraphs, is incorporated by reference herein.

On November 7, 2022, the Company issued another press release announcing publication of the abstract on data demonstrating that anti-tumor activity following blockade of PVRIG with COM701 is supported by potent tumor microenvironment (TME) immune activation in MSS-CRC patients, a copy of which is furnished as Exhibit 99.2 to this Report on Form 6-K and, with the exception of the 2nd and 3rd paragraphs, is 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. 333-240183.

Exhibit Number	Description of Exhibit
<u>99.1</u>	<u>Compugen’s COM701 (anti-PVRIG) in Combination with Nivolumab Demonstrates Preliminary Anti-Tumor Activity and Potent Immune Activation in Metastatic MSS-CRC Patients</u>
<u>99.2</u>	<u>Compugen’s COM701 (anti-PVRIG) Induces Potent Immune Activation in MSS-CRC Patients</u>

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 7, 2022

By: /s/ Eran Ben Dor

Eran Ben Dor
General Counsel



FOR IMMEDIATE RELEASE

**Compugen's COM701 (anti-PVRIG) in Combination with
Nivolumab Demonstrates Preliminary Anti-Tumor Activity
and Potent Immune Activation in Metastatic MSS-CRC
Patients**

- COM701 in combination with nivolumab demonstrated encouraging 12% ORR in 3L+ MSS-CRC patients with liver metastases, compared to 0% ORR historically for other immunotherapies in a U.S. patient population
- Translational data showed potent immune activation in the tumor microenvironment (TME) in patients responding to treatment, atypical of immunotherapy in cold tumors like MSS-CRC
- Further clinical evaluation of COM701 + anti-PD-1 in combination with COM902 planned in MSS-CRC patients
- Management will discuss the preliminary data to be presented at SITC as part of the Q3 earnings call on Monday, November 14, 2022, at 8:30 am ET

HOLON, ISRAEL – November 7, 2022 – Compugen Ltd. (Nasdaq: CGEN), a clinical-stage cancer immunotherapy company and a pioneer in computational target discovery, announced today publication of an abstract on preliminary data showing anti-tumor activity and potent immune modulation with the combination of COM701 and nivolumab in metastatic MSS-CRC patients. The data will be presented as an oral presentation by Michael Overman, M.D., University of Texas MD Anderson Cancer Center at the annual meeting of the Society for Immunotherapy of Cancer (SITC) on November 10, 2022 in Boston, MA.

"MSS-CRC is a cold tumor that is typically not responsive to immunotherapy, especially in MSS-CRC patients with liver metastases representing about 70% of all CRC patients," said CRC expert and presenting author, Dr. Michael Overman. "The data we will present at SITC, are encouraging and address this non-immune responsive subset of CRC. Adding COM701 to nivolumab resulted in a response rate of 9% in 22 MSS-CRC patients with two partial responses occurring in 17 patients with liver metastases. This stands in contrast to other novel immunotherapy combinations where responses in MSS-CRC patients with liver metastases have been extremely rare to non-existent. I was particularly excited to see that the responses were supported by robust translational data, clearly showing immune activation that reflects the mechanism of action from the addition of COM701 to nivolumab. While the numbers of patients were small, the data are encouraging and warrant further evaluation. I look forward to investigating COM701 and an anti-PD-1 in triple combination with Compugen's anti-TIGIT, COM902 in a similar patient population."

Anat Cohen-Dayag, Ph.D., President, and CEO of Compugen, added, “This data increase our confidence that what we are seeing is a COM701 driven effect. We have shown that adding COM701 to nivolumab in patients with MSS-CRC, results in both anti-tumor activity and potent tumor microenvironment immune activation in a tumor type that typically does not respond to immunotherapy. Our data suggest that blocking PVRIG with COM701 is making the tumors more sensitive to anti-PD-1 alone. This is further exemplified by encouraging anti-tumor activity seen with COM701 in combination with nivolumab with or without BMS-986207 (anti-TIGIT) in another cold or checkpoint non-responsive tumor, platinum resistant ovarian cancer, which we are excited to be presenting this coming December at ESMO-IO.”

Dr. Cohen-Dayag, continued, “We are excited to be pursuing the further clinical evaluation of MSS-CRC patients blocking the full DNAM-1 axis with our fully owned COM701 and COM902 in combination with an anti-PD-1. Based on the suggested COM701 mechanism of action and the totality of our preclinical and clinical findings showing more potent immune activation with triple blockade of the DNAM-1 axis, we are hoping to further enhance the overall response rate already achieved with dual blockade.”

Key findings from the abstract, “COM701 plus nivolumab demonstrates preliminary antitumor activity and immune modulation of tumor microenvironment in patients with metastatic MSS-CRC and liver metastases” (NCT03667716), with a data cut-off date of June 17, 2022, include:

- COM701+ nivolumab combination is well tolerated with a favorable safety profile
- ORR 2/22 (9%) higher than ORR (1-2%) reported for SOC- regorafenib or TAS-102
- Encouraging preliminary antitumor activity in the subset of MSS-CRC patients with liver metastases, ORR 2/17 (12%), compared to 0% ORR historically for other immunotherapies in a U.S. patient population
- Translational data demonstrated potent TME immune activation, in the majority of patients based on 13 paired biopsies, most notable in responders and consistent with COM701 mechanism of action. Such modulation is not typical of checkpoint inhibitors in cold indications.

Planned Next Steps

- Further clinical investigation of COM701 and anti-PD-1, triple combination with COM902 in MSS-CRC patients
- ESMO-IO presentation on December 8, 2022, of new encouraging clinical data from the fully enrolled dual and triple combination cohorts of COM701+nivolumab ± BMS-986207 in platinum resistant ovarian cancer patients

The abstract is published today in a supplement of the Journal for Immunotherapy of Cancer (JITC). The presentation and poster will be available on the publications section of Compugen's website following presentation at SITC on November 10, 2022.

About Compugen

Compugen is a clinical-stage therapeutic discovery and development company utilizing its broadly applicable predictive computational discovery capabilities to identify new drug targets and biological pathways for developing cancer immunotherapies. Compugen has developed two proprietary product candidates: COM701, a potential first-in-class anti-PVRIG antibody and COM902, a potential best-in-class antibody targeting TIGIT for the treatment of solid tumors. Partnered programs include bapotulimab, an antibody targeting ILDR2, in Phase 1 development, licensed to Bayer under a research and discovery collaboration and license agreement, and a TIGIT/PD-1 bispecific derived from COM902 (AZD2936) in Phase 1/2 development by AstraZeneca through a license agreement for the development of bispecific and multi-specific antibodies. In addition, the Company's therapeutic pipeline of early-stage immuno-oncology programs consists of programs aiming to address various mechanisms of immune resistance, including myeloid targets. The most advanced program, COM503 is about to enter pre-IND enabling studies. COM503 is a potential first-in-class, high affinity antibody targeting cytokine biology to enhance anti-tumor immunity in a differentiated manner. Compugen is headquartered in Israel, with offices in South San Francisco, CA. Compugen's shares are listed on Nasdaq and the Tel Aviv Stock Exchange under the ticker symbol CGEN.

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. Such forward-looking statements are based on the current beliefs, expectations, and assumptions of Compugen. Forward-looking statements can be identified using 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 outlining the potential next steps that Compugen may take with respect to the preliminary data shared in this press release; statements that suggest that blocking PVRIG with COM701 is making the tumors more sensitive to anti-PD-1 alone, which is further exemplified by encouraging anti-tumor activity seen with COM701 in combination with nivolumab with or without BMS-986207 (anti-TIGIT) in another cold or checkpoint non-responsive tumor, platinum resistant ovarian cancer; statements regarding Compugen's plans to pursue the further clinical evaluation of MSS-CRC patients blocking the full DNAM axis with COM701 and COM902 in combination with an anti-PD-1; and statements regarding Compugen's hope to enhance the overall response rate already achieved with dual blockade. 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: the effect of the global COVID-19 pandemic may negatively impact the global economy and may also adversely affect Compugen's business and operations; Clinical trials of any product candidates that Compugen, or any current or future collaborators, may develop may fail to satisfactorily demonstrate safety and efficacy to the FDA, and Compugen, or any collaborators, may incur additional costs or experience delays in completing, or ultimately be unable to complete, the development and commercialization of these product candidates; 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. Compugen's approach to the discovery of therapeutic products is based on its proprietary computational target discovery infrastructure, which is unproven clinically; and Compugen does not know whether it will be able to discover and develop additional potential product candidates or products of commercial value. These risks and other risks 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.

Company contact:

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FOR IMMEDIATE RELEASE

**Compugen's COM701 (anti-PVRIG) Induces Potent Immune
Activation in MSS-CRC Patients**

- Anti-tumor activity following blockade of PVRIG with COM701 when added to nivolumab is supported by potent tumor microenvironment (TME) immune activation in MSS-CRC patients typically not responding to approved checkpoint inhibitors
- PVRIG unique dominant expression on early differentiated stem-like memory T cells in tertiary lymphoid structures, suggests its role in inhibiting T cell expansion in tumors
- Findings support the differentiation of PVRIG from other immune checkpoints
- Management to discuss findings presented at SITC as part of the Q3 earnings call on Monday, November 14, 2022, at 8:30 am ET

HOLON, ISRAEL – November 07, 2022 – Compugen Ltd. (Nasdaq: CGEN), a clinical-stage cancer immunotherapy company and a pioneer in computational target discovery, announced today, publication of the abstract on data demonstrating that anti-tumor activity following blockade of PVRIG with COM701 is supported by potent tumor microenvironment (TME) immune activation in MSS-CRC patients. The data will be presented as an oral presentation by Eran Ophir, Ph.D., SVP, Research and Drug Discovery, Compugen, at the annual meeting of the Society for Immunotherapy of Cancer (SITC) on Friday November 11, 2022 in Boston, MA. In addition to the data in the abstract, the Friday oral presentation will include new translational data from a number of platinum resistant ovarian cancer patients treated with COM701 monotherapy and from the fully enrolled MSS-CRC COM701 and nivolumab cohort.

"I believe the data we will present at SITC support the potential of PVRIG to open new possibilities in cancer immunotherapy," said Dr. Eran Ophir. "The translational data are exciting because they support the anti-tumor activity we have shown with COM701 in combination with nivolumab in patients with MSS-CRC typically not responsive to approved checkpoint inhibitors. Historically nivolumab monotherapy has shown limited response in this patient population. The data to be presented at SITC show that blocking PVRIG and PD-1 with COM701 and nivolumab resulted in increased clonal expansion and T cell infiltration in the two MSS-CRC patients with partial responses. Peripheral immune modulation was also seen with COM701 alone in a platinum resistant ovarian cancer patient with a partial response."

Dr. Ophir further elaborated, “The differentiated attributes of PVRIG, with its unique dominant expression on early differentiated stem-like memory T cells in tertiary lymphoid structures, suggests that its blockade could induce potent T cell expansion in the tumor microenvironment potentially turning cold tumors into immune responsive tumors. In addition to the COM701 monotherapy platinum resistant ovarian cancer translational data we will present at SITC, we are excited to be presenting further encouraging clinical data in this patient population following both the dual and triple blockade of the DNAM-1 axis at ESMO-IO in December. We believe that the totality of the data lends further support to blocking PVRIG as a differentiated approach to treatment of cancer.”

Key findings from the abstract “PVRIG, a novel T cell checkpoint, is preferentially expressed in TLS on stem-like memory T cells, potentially inhibiting their expansion” (NCT03667716) include:

- COM701 in combination with nivolumab induced preliminary anti-tumor activity and TME immune-modulation in patients with MSS-CRC typically not responsive to approved checkpoint inhibitors
- PVRIG has a unique dominant expression on early differentiated T like stem cells (Tscm) and its ligand, PVRL2, is expressed on dendritic cells (DCs)
- Spatial transcriptomic analysis showed that Tscm and DCs preferentially localize to Tertiary Lymphoid Structures (TLS) regions while exhausted T cells localize to the tumor
- PVRIG is dominantly expressed on CD8+ T cells in TLS region
- PVRIG blockade may enhance Tscm activation by DCs in lymph-nodes and TLS, a mechanism which potentially could lead to increased T cell expansion and infiltration into cold tumors

Planned Next Steps

- Translational data analysis of immune modulation following triple blockade of the DNAM-1 axis targeting PVRIG, TIGIT and PD-1 is ongoing
- ESMO-IO presentation on December 8, 2022, of new encouraging clinical data from the fully enrolled dual and triple combination cohorts of COM701+nivolumab ± BMS-986207 in platinum resistant ovarian cancer patients

The abstract is published today in a supplement of the Journal for Immunotherapy of Cancer (JITC). The presentation and poster will be available on the publications section of Compugen’s website following presentation at SITC on November 11, 2022.

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