
**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 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 April 18, 2016, Compugen Ltd. (the “Company”) issued a press release announcing the achievement of the first preclinical milestone for CGEN-15022 in accordance with the Research and Development Collaboration and License Agreement entered into with Bayer Pharma AG (“Bayer”) dated August 5, 2013 (the “Agreement”), as amended. Under the terms of the amended Agreement, Compugen will receive a \$400,000 payment. A copy of the press release is filed as Exhibit 99.1 to this Form 6-K and incorporated by reference herein.

On April 17, 2016, the Company and Bayer entered into an amendment to the Agreement. This amendment amends certain provisions related to the first preclinical milestone for CGEN-15022, the second of two checkpoint protein candidates discovered by Compugen that are being developed pursuant to the Agreement.

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

<u>Exhibit Number</u>	<u>Description of Exhibit</u>
99.1	Press Release dated April 18, 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: April 18, 2016

By: /s/ Donna Gershowitz
Donna Gershowitz
General Counsel



For Immediate Release

**Compugen Achieves Preclinical Milestone
in Cancer Immunotherapy Collaboration with Bayer**

Holon, Israel, April 18, 2016 – Compugen Ltd. (NASDAQ: CGEN), a leading predictive drug discovery company, announced today that it has achieved a first preclinical milestone for CGEN-15022 pursuant to its cancer immunotherapy collaboration with Bayer. The collaboration provides for the research, development, and commercialization of antibody-based cancer therapeutics against two novel Compugen-discovered immune checkpoint regulators, CGEN-15001T and CGEN-15022.

In December 2015, the Company announced the achievement of the third preclinical milestone for CGEN-15001T, the more advanced of the two programs, which at that time was transferred to Bayer's full control for further preclinical and clinical development activities, and worldwide commercialization, under milestone and royalty bearing licenses from Compugen.

Pursuant to an amendment to the agreement, CGEN-15022's anti-cancer immune response continues to be evaluated under the joint preclinical research program.

For additional information, please refer to Compugen's recent Form 6-K filing.

About the Compugen/Bayer Agreement

In August 2013, Compugen and Bayer entered into a collaboration and license agreement for the development and commercialization of antibody-based cancer immune therapeutics against two novel Compugen-discovered immune checkpoint regulator candidates. Compugen received an upfront payment of \$10 million and is eligible to receive over \$500 million in potential milestone payments for both checkpoint programs, plus the remaining portion of an additional \$30 million of potential milestone payments associated with joint preclinical research for the two programs.

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 may not be successful in generating adequate revenues or commercializing aspects of our 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.

Company contact:

Tsipi Haitovsky
Global Media Liaison
Compugen Ltd.
Email: tsipih@cgen.com
Tel: +972-52-598-9892
