FOR IMMEDIATE RELEASE

Compugen Welcomes FDA Clearance of Bayer’s IND Application for BAY 1905254

*First-in-class therapeutic antibody targets ILDR2, a novel immune checkpoint discovered by Compugen*

*First patient dosing in Bayer-sponsored clinical trial expected in 2018, will trigger milestone payment to Compugen*

HOLON, ISRAEL – July 2, 2018 – Compugen Ltd. (Nasdaq: CGEN), a clinical-stage cancer immunotherapy company and a leader in predictive target discovery, was informed that the U.S. Food and Drug Administration (FDA) has cleared Bayer AG’s investigational new drug (IND) application for BAY 1905254, a first-in-class immuno-oncology therapeutic antibody targeting the ILDR2 protein in patients with advanced solid tumors. ILDR2 is a novel immune checkpoint discovered by Compugen through its predictive computational capabilities, which enable the discovery of new drug targets and biological pathways. Under a collaboration and license agreement, Compugen and Bayer jointly pursued preclinical research advancing BAY 1905254 while Bayer is now responsible for conducting clinical development of this candidate.

“Clearance of a second IND for a therapeutic antibody against a novel Compugen-discovered target provides substantial validation of our powerful computational platform,” stated Anat Cohen-Dayag, PhD, President and CEO of Compugen. “Bayer has been an excellent partner for us, and we are delighted to see their commitment to advance this promising program. Together with COM701, our anti-PVRIG therapeutic antibody, there are now two new first-in-class programs, discovered by our unique computational platform, in the clinic.”

In accordance with the agreement signed between Compugen and Bayer, Compugen is entitled to receive a milestone payment upon the first patient dosing with BAY 1905254 in the Phase 1 clinical trial expected in 2018.
About ILDR2 and BAY 1905254
ILDR2 is a novel B7/CD28-like immune checkpoint target candidate discovered computationally by Compugen. Studies testing the immune function of ILDR2, demonstrated inhibitory effects on T cells consistent with it being an immune checkpoint ligand. Additional expression and functional studies suggest that ILDR2 acts as an inhibitor of the priming step of T cell activation, thereby muting T cell response to cancer.

BAY 1905254 is a novel immune checkpoint inhibitor for cancer immunotherapy targeting ILDR2. BAY 1905254 is a human/mouse cross-reactive antibody blocking the immunosuppressive activity of ILDR2. BAY 1905254 has exhibited anti-tumor activity as a monotherapy in various mouse models, and was also shown to have additive anti-tumor effects in combination with other cancer therapy approaches in those models, indicating the possibility for multiple combination uses in cancer immunotherapy.

About Compugen
Compugen is a clinical-stage, 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,” “believes,” “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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