FOR IMMEDIATE RELEASE

Compugen Doses First Patient in COM701 Phase 1 Monotherapy Expansion Cohort

*Biomarker-informed strategy targets non-small cell lung, ovarian, breast, endometrial and colorectal cancers*

*Initial data expected in H1 2021*

HOLON, ISRAEL, May 27, 2020 – Compugen Ltd, (Nasdaq: CGEN), a clinical-stage cancer immunotherapy company and a leader in predictive target discovery, today announced that the first patient has been dosed in the monotherapy expansion cohort of its ongoing Phase 1 clinical trial of COM701, a first-in-class anti-PVRIG antibody. The selected indications for the monotherapy expansion cohort focus on those more likely to respond to treatment with COM701 based on biomarker expression studies and clinical data collected to date. As such, the trial will enrol patients with non-small cell lung, ovarian, breast, endometrial and colorectal cancers.

Erika Hamilton, M.D., Director of Breast Cancer and Gynecologic Cancer Research Program at Sarah Cannon Research Institute and principal investigator in the COM701 Phase 1 study, said, “There is a significant need to develop novel treatments for patients with advanced cancer who are unresponsive to or relapse following treatment with the currently available standard of care immune checkpoint inhibitors. The preliminary signs of anti-tumor activity observed in the heavily pretreated, all-comer patient population included two confirmed partial responses in patients with microsatellite stable colon and platinum resistant primary peritoneal cancer which are tumor types typically unresponsive to immune checkpoint inhibitors. We are excited to advance to the monotherapy expansion stage of the study potentially offering patients a new effective cancer immunotherapy treatment.”

Anat Cohen-Dayag, Ph.D., Compugen’s President and Chief Executive Officer, added, “While this monotherapy expansion cohort targets tumor types that are typically unresponsive to cancer immunotherapy, we believe that they are more likely to respond to treatment with COM701 based on our expression studies and initial clinical results. Furthermore, in this study we will be collecting biopsies before and during COM701 treatment to allow retrospective analyses of our biomarker approach and to help inform our future clinical development plan for COM701. We are encouraged by the progress across our clinical programs and the data we have presented on PVRIG and COM701 to date, as well as the possible clinical validation of the TIGIT pathway published by others, which we
believe supports our long-standing hypothesis concerning the potential role of the DNAM axis as a foundational axis for cancer immunotherapy.

The monotherapy expansion cohort of the ongoing Phase 1 open-label COM701 clinical trial (NCT03667716) is designed to assess the safety, tolerability and preliminary anti-tumor activity of 20 mg/kg IV Q4 weeks COM701 monotherapy in approximately 20 patients with advanced non-small cell lung, ovarian, breast, endometrial and colorectal cancers who have progressed on standard of care treatment. Expansion cohorts were selected based on preclinical biomarker expression and clinical data.

About COM701
COM701 is a humanized antibody that binds with high affinity to PVRIG, a novel immune checkpoint discovered computationally by Compugen, and blocks the interaction with its ligand, PVRL2. TIGIT, an immune checkpoint discovered computationally by Compugen in 2009, and PVRIG constitute parallel immune checkpoint pathways that counteract DNAM, a costimulatory molecule on T cells and NK cells. Preclinical data suggest that the blockade of PVRIG induces a robust anti-tumor immune response and demonstrates synergistic activity when used in combination with inhibitors of TIGIT and/or PD-1. Currently, COM701 is being evaluated in a Phase 1 clinical study. Data from the ongoing study have shown that COM701 is well-tolerated and demonstrated preliminary signals of anti-tumor activity in a heavily pretreated patient population.

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 in a Phase 1 clinical study. 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. Such forward-looking statements are based on the current beliefs, expectations and assumptions of Compugen. 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, the expectation that initial data will be available in H1 2021, and the likeliness that the monotherapy expansion cohorts will respond to treatment with COM701 and the corresponding focus on the selected indications for the monotherapy expansion cohorts. 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 operations could be affected by the outbreak and spread of COVID-19, clinical development involves a lengthy and expensive process, with an uncertain outcome and Compugen may encounter substantial delays or even an inability to begin clinical trials for any specific product, or may not be able to conduct or complete its trials on the timelines it expects; Compugen relies, and expects to continue to rely, on third parties to conduct its clinical trials and if these third parties do not successfully carry out their contractual duties, comply with regulatory requirements or meet expected deadlines (including as a result of the effect of the COVID-19), Compugen may experience significant delays in the conduct of its clinical trials; Compugen’s ability to present data derived from collaborations with its partners is dependent in some cases on the agreement of its partners to present such data, and in any event is dependent on our acceptance to present data in relevant conferences; Compugen’s approach to the discovery of therapeutic products is based on its proprietary computational target discovery infrastructure, which is unproven clinically; Compugen does not know whether it will be able to discover and develop additional potential product candidates or products of commercial value; 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. These risks and other risks are more fully described in the “Risk Factors” section of Compugen’s most recent Annual Report on Form 20-F 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:**
Elana Holzman  
Director, Investor Relations and Corporate Communications  
Compugen Ltd.  
Email: elanah@cgen.com  
Tel: +972 (3) 765-8124

**Investor Relations contact:**
Bob Yedid  
LifeSci Advisors, LLC  
Email: bob@lifesciadvisors.com  
Tel: +1 (646) 597-6989
**Media contact:**
Josephine Belluardo, Ph.D.
LifeSci Communications
Email: jo@lifescicomms.com
Tel: +1 (646) 751-4361