



FOR IMMEDIATE RELEASE

Compugen Announces Publication of Two Peer-Reviewed Papers Demonstrating the Role of PVRIG as a Novel Immune Checkpoint for Cancer Immunotherapy

Data published in Cancer Immunology Research indicate monotherapy and combination opportunities for COM701, a first-in-class cancer immunotherapy antibody targeting PVRIG

HOLON, ISRAEL – January 22, 2019 – Compugen Ltd. (NASDAQ: CGEN), a clinical-stage cancer immunotherapy company and leader in predictive target discovery, today announced the online publication of preclinical data demonstrating the role of PVRIG as a novel immune checkpoint and the potential of COM701, Compugen’s first-in-class inhibitory antibody targeting PVRIG, to serve as an effective cancer immunotherapy. The findings were published in two peer-reviewed papers in *Cancer Immunology Research*, an American Association for Cancer Research publication. Both papers were co-authored by Compugen’s scientists in collaboration with scientists from Johns Hopkins University School of Medicine, headed by Drew Pardoll, M.D., Ph.D., Abeloff Professor of Oncology, Medicine, Pathology, and Molecular Biology and Genetics at Johns Hopkins University, School of Medicine, and Director of the Bloomberg~Kimmel Institute for Cancer Immunotherapy and Co-Director of the Cancer Immunology Program at the Sidney Kimmel Comprehensive Cancer Center, Johns Hopkins, and Chairman of Compugen's Scientific Advisory Board.

“These are our first scientific publications discussing PVRIG, a new immune checkpoint we discovered computationally, and its inhibitory role within what we have termed the DNAM axis,” stated Anat Cohen-Dayag, Ph.D., President and CEO of Compugen.

“The publication of these two peer-reviewed papers further validates our understanding of the PVRIG pathway and its importance in cancer immunotherapy. These preclinical data strongly support the rationale underlying our clinical development plan for COM701 and reinforces our expectation that targeting the PVRIG pathway will be foundational in expanding options for cancer patients non-

responsive to other immunotherapies. The distinct position we hold in the immuno-oncology field as our Phase 1 study of COM701 in patients with advanced solid tumors continues to progress and the potential of COM701 as a treatment solution for cancer immunotherapy are strengthened by the recent clinical collaboration we announced with Bristol-Myers Squibb,” Dr. Cohen-Dayag added.

The paper entitled “[PVRIG and PVRL2 are induced in cancer and inhibit CD8+ T cell function](#)” demonstrates increased expression of PVRIG and its ligand, PVRL2, in multiple tumor types, including in tumors that are PD-L1 negative and therefore less likely to respond to PD-1 pathway inhibition. In particular, PVRIG pathway expression appears to be dominant in ovarian, endometrial, and breast cancers. The study further demonstrates the parallel inhibitory roles of PVRIG and TIGIT in the DNAM signaling axis, and that dual targeting of the two results in synergistic activation of CD8+ effector T cells, suggesting an opportunity for effective clinical combinations of COM701 with anti-TIGIT antibodies. In addition, the findings also show the combination potential of COM701 with PD-1 inhibitors, which served as a key component in designing our ongoing Phase 1 study combination of COM701 with Opdivo®.

These results were further supported by mouse data published in the paper entitled “[Mouse PVRIG has CD8+ T-cell-specific co-inhibitory functions](#),” showing that mice lacking PVRIG have increased anti-tumor T cell activity, and that tumor growth in these mice is reduced relative to wild-type mice. This tumor growth reduction is further enhanced in combination with TIGIT blockade, demonstrating in vivo the parallel inhibitory roles of PVRIG and TIGIT in the DNAM signaling axis. Consistent with the finding in human systems, blocking both the PVRIG and the PD-1 pathways in mice also reduces tumor growth, providing an additional line of evidence for the therapeutic potential of the clinical combination of COM701 with Opdivo®.

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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