NEWS RELEASE

Compugen Presents Initial Translational Data Supporting the Differentiation of PVRIG Compared to TIGIT and PD-1 as a Novel Checkpoint on the DNAM Axis at SITC 2021

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- Data presented further support Compugen's earlier findings that PVRIG plays a distinct role within the DNAM axis, with the potential to trigger robust immune responses in the tumor microenvironment
- Data demonstrate that PVRIG has a unique dominant expression in early memory (stem-like) T cells, in contrast to TIGIT and PD-1, and its ligand PVRL2 is highly expressed across dendritic cell subtypes, compared to PD-L1 and PVR, the ligand of TIGIT
- Translational data showing induction of activated dendritic cell markers in serum of two patients who clinically responded to treatment of COM701 in combination with nivolumab
- Data suggest that blockade of PVRIG/PVRL2 may enhance stem-like memory T cells - dendritic cells interaction potentially resulting in increased T cell expansion, differentiation, and infiltration in inflamed and in less 'inflamed' tumors
- Management will discuss the results as part of the Q3 earnings call, today at 8:30am ET

HOLON, Israel, Nov. 12, 2021 /PRNewswire/ -- **Compugen Ltd.** (Nasdaq: CGEN), a clinical-stage cancer immunotherapy company and a leader in predictive target discovery, today announced the presentation of new translational preliminary data detailing the differentiated profile of PVRIG compared to TIGIT and PD-1 as a novel checkpoint in the DNAM axis, supporting its potential role as a dominant checkpoint involved in stem-like memory T cells and dendritic cell (DCs) interaction at the 36th Annual Meeting of the Society for Immunotherapy of Cancer (SITC), being held on November 10-14, 2021.

"We believe evidence is growing to consistently demonstrate that PVRIG is a novel and differentiated checkpoint

with a potential unique role in cancer immunotherapy" said Eran Ophir, Ph.D., Vice President of Research and Drug Discovery at Compugen. "For cancer immunotherapy to work, T cells are needed at the tumor site and recent studies suggest that early-memory (stem-like) T cells and DCs play an important role in this process. Here we show for the first-time preliminary data demonstrating greater induction of activated DC markers in the serum of two patients responding to our potentially first in class anti-PVRIG antibody, COM701, in combination with nivolumab compared to non-responders, potentially because of DC- T cell interaction. This preliminary data is in line with our recent scientific finding showing that PVRL2, the ligand of PVRIG, is abundantly expressed across DCs types, while PVRIG, measured by both gene and protein expression, is uniquely and dominantly expressed on early memory cells in contrast to TIGIT and PD-1."

Anat Cohen-Dayag, Ph.D., President and CEO of Compugen, added, "These new preliminary data further support our earlier findings that PVRIG plays a distinct role within the DNAM axis which we believe is important for triggering robust immune responses in the tumor microenvironment. PVRIG blockade may lead to key mechanistic differences as compared to other DNAM axis members, namely TIGIT and PD-1, with the potential to enhance T cell proliferation and tumor infiltration to address both inflamed and less inflamed tumor types where current checkpoint inhibitors have not shown success. With our potentially first-in-class anti- PVRIG antibody, COM701, we are uniquely positioned to target the DNAM axis in combination with TIGIT and PD-1/L1 inhibitors and look forward to continued translation of these scientific learnings across our ongoing clinical programs."

Key findings from the poster presentation titled, "Novel DNAM-1 axis member, PVRIG, is potentially a dominant checkpoint involved in stem-like memory T cells – dendritic cell interaction," presented by Zoya Alteber PhD, Associate Director, Research and Drug Discovery at Compugen include:

- PVRIG is co-expressed with PD-1 and TIGIT on stem-like and exhausted T cells as measured by flow cytometry across multiple tumor types
- PVRIG has a unique dominant expression on early memory cells, clustering with markers of early memory T cells. In contrast, TIGIT is strongly associated with PD-1, CTLA-4, and other markers of exhausted T cells
- PVRIG protein expression is significantly higher on early memory, CD28+ T cells in contrast to TIGIT and PD-1 which have comparable expression on CD28+ and CD28- cells
- PVRL2, the ligand of PVRIG, is dominantly expressed on DC compared to PD-L1 and PVR, the ligand of TIGIT. This dominant expression is observed across DC1, DC2 and activated DC subtypes
- Immunohistochemistry across multiple tumor types identified PVRL2 expression in tertiary lymphoid structures, the site of T cell priming, further supporting the PVRIG-PVRL2 interaction as a potentially dominant interaction for T cell activation in the tumor microenvironment
- In 2 patients who responded clinically to treatment with the anti-PVRIG antibody COM701 in combination with nivolumab, early data show increased induction of activated DC markers, suggestive of an enhanced T cell –

DC interaction, with the potential to enhance T cell proliferation and tumor infiltration.

The poster is available to conference attendees for the duration of the SITC conference and will be archived on the Publications section of Compugen's website.

About Compugen

Compugen is a clinical-stage 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. Compugen's lead product candidate, COM701, a potentially first-in-class anti-PVRIG antibody, for the treatment of solid tumors, is undergoing Phase 1 studies as a single agent and in dual, and triple combinations. COM902, Compugen's second fully owned clinical antibody targeting TIGIT, for the treatment of solid and hematological tumors, is undergoing Phase 1 studies as a single agent and in dual combination. Partnered programs include bapotulimab, a therapeutic antibody in Phase 1 development targeting ILDR2 licensed to Bayer under a research and discovery collaboration and license agreement, and AZD2936, a TIGIT/PD-1 bispecific in Phase 1 development derived from COM902 through a license agreement with AstraZeneca for the development of bispecific and multi-specific antibodies. Compugen's therapeutic pipeline of early-stage immuno-oncology programs includes myeloid targets. 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. 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 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 relating to our belief that preliminary data suggests that blockade of PVRIG/PVRL2 may enhance stem-memory T cell - DC interaction potentially resulting in increased T cell expansion, differentiation, and infiltration in certain tumors; statements regarding PVRIG's potential role as a dominant checkpoint involved in stem-like memory T cell and DC interaction; statements regarding our belief that evidence is growing to consistently demonstrate that PVRIG is a novel and differentiated checkpoint with a potential unique role in cancer immunotherapy; statements regarding the impact of the DC – T cell interaction on the induction of activated DC markers in the serum of two patients responding to our anti-PVRIG antibody COM701 in combination with

nivolumab compared to non-responders; statements regarding our belief that PVRIG plays a distinct role within the DNAM axis, and our belief that it is important for triggering robust immune responses in the tumor microenvironment; and statements regarding our expectations for continued translation of scientific learnings across our ongoing clinical programs. 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 to negatively impact the global economy and may also adversely affect Compugen's business; 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; the success in proving PVRIG's ability to be a novel and differentiated checkpoint with a unique role in cancer immunotherapy, 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.

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