



FOR IMMEDIATE RELEASE

Compugen Discloses New Results Supporting CGEN-15052 as Novel Immune Checkpoint Target Candidate for Treatment of Cancer

Data presented at the Inaugural International Cancer Immunotherapy Conference in New York City

Tel Aviv, September 16, 2015 – In a poster presentation today at [The Inaugural International Cancer Immunotherapy Conference: Translating Science into Survival](#), being held in New York City, Arthur Machlenkin, Ph.D., Head of Immuno-Oncology Research at Compugen Ltd. ([NASDAQ: CGEN](#)), presented the predictive discovery and experimental validation of certain Compugen-discovered novel drug targets for cancer immunotherapy, and disclosed new target validation results for one of these candidates, CGEN-15052.

Certain immune checkpoints present in the tumor microenvironment have been shown to inhibit T cells, which are a critical component of the anti-tumor immune response, and therefore suppress the immune system's ability to destroy malignant cells, thus allowing tumor growth. The new target validation data presented at the conference demonstrate, as expected from an immune checkpoint target candidate, that the expression of CGEN-15052 on cancer cells in a syngeneic mouse animal model enhances tumor growth compared with control cancer cells. In addition, CGEN-15052 was previously shown to bind to activated T cells and inhibit human and mouse T cell activation. Combined with the high expression of CGEN-15052 found in the tumor microenvironment of multiple cancers, such as lung and breast cancers, these results suggest that this Compugen-discovered protein has the potential to serve as a highly promising immunotherapeutic target for multiple cancer types.

“We are very pleased to report further progress in validating CGEN-15052 as a novel immune checkpoint target candidate for the treatment of cancer,” said Anat Cohen-Dayag, Ph.D., Compugen's President and Chief Executive Officer. “The validation results to date, both *in vitro* and in an animal setting, support the therapeutic potential of inhibiting CGEN-15052 and thus restoring immune response against cancer.”

Dr. Cohen-Dayag added, “The excitement being generated by the clinical results of the few cancer immunotherapy drugs now available highlights the need for additional immuno-oncology drugs to treat the majority of cancer patients for whom these current therapies are of little, if any, benefit. Therefore, the continuing demonstration of the potential of the large number of novel immune checkpoint target candidates discovered by the Company in a variety of cancers and immune cell sub-types is very exciting from both a medical and commercial standpoint.”

About Immune Checkpoints

Immune checkpoints are inhibitory receptors and their ligands, which are crucial for the maintenance of self-tolerance (that is, the prevention of autoimmunity) and for the protection of tissues from damage when the immune system is responding to pathogenic infection or other injuries. These immune checkpoints, which are "hijacked" by tumors to block the ability of the immune system to destroy the tumor (immune resistance), have emerged as promising targets for cancer immunotherapy, and have shifted the treatment paradigms for several major cancer types. Therapeutic blockade of immune checkpoints boosts anti-tumor immunity, enabling the patient's immune system to recognize and attack the tumor cells, and mount durable anti-tumor responses and tumor destruction. Although to date the blockade of immune checkpoints has proven effective for only a minority of patients in a limited, but growing number of cancer types, it has provided impressive clinical benefits, enabling long-term survival, even for end-stage patients, and is transforming cancer therapeutics.

About Compugen

Compugen is a leading drug discovery company utilizing its broadly applicable predictive discovery infrastructure to identify novel drug targets and develop first-in-class biologics. The Company's current pipeline focus 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 targets and drug product candidates at various stages of research and development under revenue-sharing agreements. The Company is headquartered in Tel Aviv, Israel, with R&D facilities in Tel Aviv 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 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. Some of these risks include: that Compugen's business model is substantially dependent on entering into collaboration agreements with third parties and may not be successful in generating revenues, and that the development and commercialization of therapeutic products include 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.

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