



FOR IMMEDIATE RELEASE

## **Compugen Presents Translational Study Results Supporting CGEN-15001 for the Treatment of Rheumatoid Arthritis**

*Results of research collaboration with Prof. Iain B. McInnes from Glasgow University presented at the American College of Rheumatology Annual Meeting*

Tel Aviv, November 9, 2015 – Compugen Ltd. ([NASDAQ: CGEN](#)), a leading predictive drug discovery company, announced that in an oral presentation at [the 2015 ACR/ARHP Annual Meeting](#) now being held in San Francisco, CA, the Company has disclosed recent results from a translational study supporting the potential treatment of rheumatoid arthritis (RA) with CGEN-15001. CGEN-15001 is an Fc fusion protein based on one of the multiple novel immune checkpoint candidates discovered by the Company.

The translational study, conducted in collaboration with Prof. Iain B. McInnes from the University of Glasgow, was designed to evaluate the potential to translate the efficacy of CGEN-15001, previously observed in animal models of the disease, to human patients. Prof. McInnes is a world renowned clinician and scientist in the field of rheumatology and a member of Compugen's scientific advisory board.

The study's experimental design utilizes co-cultures of immune cells from individual RA patients that mimic the deleterious interaction of these cells within the joints of RA patients. This interaction drives secretion of pro-inflammatory proteins known as cytokines that have a major role in RA pathology, leading to chronic progressive joint inflammation and damage. Thus, these co-cultures provide a translational tool to evaluate the effect of potential drugs for treatment of RA.

In the reported results, CGEN-15001 was shown to inhibit the secretion of various RA-related inflammatory cytokines in these co-cultures, including for example TNF $\alpha$ , IFN $\gamma$  and GM-CSF, pointing to the mechanism by which this drug can potentially treat RA. The anti-inflammatory effect was observed initially in healthy donors' cells and was then successfully reproduced in cells from RA patients, thereby confirming that the CGEN-15001 pathway is functional and responsive in these autoimmune patients.

“We are very excited to collaborate with Compugen on this promising drug candidate for autoimmune diseases,” said Professor Iain B. McInnes, Muirhead Chair of Medicine and Director of Institute of Infection, Immunity and Inflammation at the University of Glasgow. “The results for CGEN-15001 obtained in my laboratory using a translational experimental system that capitalises on near patient immune analysis of samples from RA patient cells show that CGEN-15001 is capable of

modulating the underlying immune processes that promote inflammation in joints of people with RA. CGEN-15001's unique mode of action has a potential to induce long-term responses in patients and thus to become an important addition to the armamentarium of autoimmune disease therapeutics, allowing patients to live healthier and more productive lives."

"Inhibiting immune checkpoints using antibodies to unleash the power of the immune system is already transforming cancer therapy, and Compugen is a clear leader in the discovery of novel immune checkpoint drug targets," said Anat Cohen-Dayag, Ph.D., Compugen's President and Chief Executive Officer. "Furthermore, the potential for an additional major pharmaceutical opportunity exists for immune checkpoints in the treatment of autoimmune diseases through the use of fusion proteins based on them to inhibit immune system activity. These important recent results for CGEN-15001, from this patient-based translational assay performed at a world leading center, demonstrate that CGEN-15001 has the potential to provide relief to autoimmune patients, thus presenting a promising therapeutic approach for RA and other autoimmune diseases. Therefore, while maintaining our current commitment to focus our internal R&D operations on immuno-oncology, we are now examining various alternatives to advance CGEN-15001 as an autoimmune product candidate."

### **About CGEN-15001**

CGEN-15001 is a novel Fc fusion protein drug candidate for autoimmune diseases, consisting of the fusion of the extracellular region of CGEN-15001T to an IgG Fc domain. CGEN-15001T is a novel immune checkpoint discovered by Compugen through its predictive discovery infrastructure. CGEN-15001 was shown to be effective in treating several autoimmune diseases in animal models, including models of multiple sclerosis, rheumatoid arthritis, psoriasis and type 1 diabetes. In these models, CGEN-15001 treatment has been shown to induce a durable long-term response suggestive of immune tolerance restoration and has also promoted graft survival in a model of bone marrow transplantation. Further research demonstrated that CGEN-15001 has an immune modulatory function attenuating inflammatory responses and promoting regulatory anti-inflammatory activity, including the promotion of regulatory T cells.

### **About rheumatoid arthritis**

Rheumatoid arthritis (RA) is a chronic autoimmune disease in which the immune system attacks the joints. Autoimmune diseases are illnesses that occur when the body's tissues are mistakenly attacked by its own immune system. Rheumatoid arthritis is a common rheumatic disease, affecting ~1% of the population and approximately 1.3 million people in the United States. This disease is three times more common in women than in men and can begin at any age, but it most often starts between 40 and 60 years of age. The disease causes chronic inflammation of the joints and can lead to the destruction of the cartilage, bone and ligaments, causing deformity of the joints. Such long-term joint damage results in chronic pain, loss of function and disability. Rheumatoid arthritis can also cause inflammation of the tissue around the joints, as well as in other organs in the body. Because it can affect multiple organs of the body, rheumatoid arthritis is referred to as a systemic illness and is also known as rheumatoid disease. Therapeutic fusion proteins and antibodies over the past decade have revolutionized the treatment of rheumatoid arthritis. However, many patients still do not respond or stop therapy because of side effects.

## **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 primary 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](http://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. Among these risks: Compugen's business model is substantially dependent on entering into collaboration agreements with third parties and may not be successful in generating revenues, and 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 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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