FOR IMMEDIATE RELEASE

Compugen Obtains Rights to Use Biological Systems and Materials from the US National Institutes of Health

Additional capabilities anticipated to enhance research and development of Compugen's immuno-oncology programs

Tel Aviv, April 14, 2015 – Compugen Ltd. (NASDAQ: CGEN), a leading predictive drug discovery company, today announced that it has obtained rights to use in-house certain biological systems and materials, developed by the U.S. National Institutes of Health (NIH), for purposes of advancing the research and development of the Company's multiple immuno-oncology programs toward future clinical evaluation.

The experimental systems and biological materials obtained from the NIH enable the engineering of human T cells to specifically recognize tumor antigens on cancer cells. Utilizing this system, with the expression of specific Compugen-discovered immune checkpoint candidates on the surface of human cancer cells, or immune T cells, will strengthen Compugen's evaluation abilities of the effect of such immune checkpoints on anti-tumor immune response. The NIH biological systems and materials are expected to facilitate robust and reproducible validation of Compugen's multiple immune checkpoint target candidates and to enhance the identification of functional therapeutic antibodies and selection of lead antibodies for future clinical evaluation.

Dr. Anat Cohen-Dayag, President and Chief Executive Officer of Compugen, stated, "We are pleased to have access to these robust experimental systems and materials developed by NIH scientists, which will enhance our immuno-oncology capabilities and enable extensive testing of human antibodies. In addition, Compugen has obtained the right from the NIH to utilize a cell line that will allow the use of tumor syngeneic models that will also serve as part of Compugen's suite of preclinical studies. Together with our recent collaboration with Johns Hopkins University, these new capabilities provide us with a broader base to swiftly advance in parallel multiple immune checkpoint programs toward the development of first-in-class biologics."

About Compugen
Compugen is a leading predictive drug discovery company focused on monoclonal antibodies and therapeutic proteins to address important unmet needs in the fields of oncology and immunology. The Company utilizes a broad and continuously growing integrated infrastructure of proprietary scientific understandings and predictive platforms, algorithms, machine learning systems and other computational biology capabilities for

the *in silico* (by computer) prediction and selection of novel drug target candidates, which are then advanced in its Pipeline Program. The discovery and development of monoclonal antibody therapeutic candidates against selected Compugen-discovered novel target candidates is performed by Compugen's wholly-owned US subsidiary located in South San Francisco. The Company's business model includes collaborations covering the further development and commercialization of product candidates at various stages from its Pipeline Program and various forms of research and discovery agreements, in both cases providing Compugen with potential milestone payments and royalties on product sales or other forms of revenue sharing. 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 includes many inherent risks, including 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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