For Immediate Release

Compugen Ltd. Reports 2nd Quarter 2015 Financial Results

TEL AVIV, ISRAEL – August 4, 2015 – Compugen Ltd. (NASDAQ: CGEN), a leading predictive drug discovery company, today reported financial results for the second quarter ending June 30, 2015.

Anat Cohen-Dayag, Ph.D., President and Chief Executive Officer of Compugen, stated, "The use of our powerful predictive discovery infrastructure has given rise to a novel immune checkpoint based target portfolio, which we believe provides the basis for a next wave of immuno-oncology drugs. Furthermore, we believe that the data to date from our five highest priority checkpoint programs, in addition to our two partnered programs, indicate that these programs potentially address multiple cancer types and different modes of action."

Dr. Cohen-Dayag, continued, "Our highest priority programs include myeloid specific novel immune checkpoint candidates identified within the tumor microenvironment of multiple cancers. Although in recent years there has been growing recognition of the importance of myeloid cells in cancer immunology, this area still represents an unexplored frontier of cancer immunotherapy. Therefore, we believe our programs could have a significant impact upon the cancer immunology field."

Dr. Cohen-Dayag concluded, "We believe that our current portfolio of programs, supported by our broadly applicable predictive target discovery infrastructure, has the potential to result in a sustainable and growing pipeline of first-in-class product candidates sequentially reaching the clinic, both by internal development and through early stage collaborations. In this regard, we remain on target to meet our previously stated objective of having at least one IND relating to a Compugen-discovered checkpoint filed during the first half of 2017."

Revenues for the second quarter of 2015 and six months ending June 30, 2015 were $0.2 million and $0.7 million respectively, compared with $2.0 million and $4.1 million for the comparable periods in 2014. The decrease in revenues is attributable mainly to the milestone payment in the amount of $1.2 million received in the second quarter of 2014 and a reduction in the recognition of the non-refundable upfront payment for the second quarter of 2015 and six months ending June 30, 2015, both under the August 2013 collaboration and license agreement with Bayer.

Net loss for the second quarter of 2015 was $6.8 million, or $0.14 per diluted share, compared with a net loss of $2.3 million, or $0.07 per diluted share, for the comparable

period in 2014. Net loss for the six months ending June 30, 2015 was $13.0 million, or $0.26 per diluted share, compared with a net loss of $4.2 million, or $0.09 per diluted share, for the comparable period in 2014. The significant increase in net loss for the comparable periods, largely relates to a decrease in revenues as noted above, and an increase in the Company's discovery and development activities relating to its Pipeline Program candidates.

As of June 30, 2015, cash, cash related accounts, short-term and long-term bank deposits totaled $95.7 million with no debt compared with $108.4 million as of December 31, 2014. The Company previously estimated gross cash expenditures in 2015 to be in the range of $31 million to $33 million.

Conference Call and Webcast Information
Compugen will hold a conference call to discuss its second quarter 2015 results today, August 4, 2015 at 10:00 a.m. ET. To access the conference call, please dial 1-888-668-9141 from the US or +972-3-918-0609 internationally. The call will also be available via live webcast located at the following link. A replay of the conference call will be available approximately two hours after the completion of the live conference call. To access the replay, please dial 1-888-326-9310 from the US or +972-3-925-5925 internationally. The replay will be available through August 6, 2015.

(Tables to follow)

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, which if occur may not be successful in generating revenues, and that the development and commercialization of therapeutic products includes many inherent risks, including failure to progress to clinic or, if progressed, 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.

Company contact:
Tsipi Haitovsky
Global Media Liaison
Compugen Ltd.
Email: tsipih@cgen.com
Tel: +972-52-598-9892