FOR IMMEDIATE RELEASE

Compugen Reports Fourth Quarter and Full Year 2019 Results

Plans to initiate Phase 1/2 triple combination study to evaluate COM701 in combination with Opdivo® and BMS-986207, Bristol-Myers Squibb's TIGIT inhibitor

Initial data from Phase 1 dose escalation study of COM701 in combination with Opdivo® anticipated in 2H 2020

COM902 on-track to enter Phase 1 monotherapy study in patients with advanced malignancies in early 2020

HOLON, ISRAEL, February 20, 2020 — Compugen Ltd. (Nasdaq: CGEN), a clinical-stage cancer immunotherapy company and a leader in predictive target discovery, today reported financial results for the fourth quarter and full year ended December 31, 2019.

"2019 was a transformative year for Compugen and we are incredibly proud of the progress we have made in advancing COM701 and COM902," said Anat Cohen-Dayag, Ph.D., President and CEO of Compugen. "We are excited about our unique position in the immuno-oncology space as to our knowledge we are the only company with two clinical programs that address PVRIG and TIGIT, parallel inhibitory pathways of the DNAM axis. This differentiator is particularly important given the increasing excitement and growing recognition of the DNAM axis in cancer immunotherapy as evidenced by the development of other TIGIT antibodies in pharma. In addition, the encouraging initial signals of anti-tumor activity with COM701 monotherapy in an extremely challenging, refractory, all-comer population, has bolstered our conviction that targeting PVRIG as a newly discovered inhibitory pathway in the larger DNAM axis, has the potential to expand the reach of cancer immunotherapy."

Dr. Cohen-Dayag continued**,** "We are also thrilled to expand our clinical collaboration with Bristol-Myers Squibb and to initiate a Phase 1/2 study evaluating a triple combination of COM701 in combination with *Opdivo*® and BMS-986207, Bristol-Myers Squibb's TIGIT inhibitor. This will allow us to immediately move COM701 to a triple combination study

blocking three immune checkpoint pathways – PVRIG, TIGIT and PD-1 – and accelerate the evaluation of our hypothesis that simultaneous blockade of the DNAM axis in addition to PD-1 will enable robust activation of T cells, potentially leading to enhanced anti-tumor responses in certain patients who are not responsive to PD-1 blockers alone. We look forward to our continued evolution with important milestones in our clinical programs."

Recent and 2019 Corporate Highlights

- Announced plans to expand the Bristol-Myers Squibb collaboration with a Phase 1/2 triple combination study to evaluate COM701 in combination with *Opdivo*® and BMS-986207, Bristol-Myers Squibb's TIGIT inhibitor. The study is expected to begin in 2H 2020.
- Presented initial clinical findings from ongoing Phase 1 trial of COM701 in patients with advanced solid tumors at the annual meeting of the Society for Immunotherapy of Cancer (SITC 2019)
    - COM701 was well-tolerated with no dose-limiting toxicities observed.
    - Initial signals of anti-tumor activity were observed in the heavily pretreated, all-comers patient population enrolled in the study.
- Presented trial-in-progress data at ASCO-SITC Clinical Immuno-Oncology Symposium from the Phase 1 study evaluating COM701 as a monotherapy and in combination with *Opdivo*® (nivolumab)
    - Enrollment in the eighth dose level patient cohort of 20mg/kg at Q4 weekly dosing schedule is ongoing in the monotherapy dose escalation study.
    - Enrollment in the fourth dose level patient cohort at Q4 weekly dosing schedule in the combination dose escalation study of COM701 with *Opdivo*® has been completed. No dose-limiting toxicities have been reported.
- Announced Investigational New Drug application clearance by the U.S. Food and Drug Administration for COM902. A Phase 1 trial in patients with advanced malignancies is expected to begin in early 2020.
- Presented new preclinical data on COM902 at SITC 2019, supporting its potential best-in-class binding affinity and clinical use as a cancer immunotherapy treatment in combination with COM701 and PD-1 inhibitors.
- Strengthened intellectual property portfolio related to COM701 and COM902
    - Granted U.S. Patent No. 10,213,505, covering the composition of COM701 and backup antibodies.
    - Granted U.S. Patent No. 10,227,408, covering the composition of an anti-PVRIG antibody having complementarity-determining regions (CDRs) of COM701 and backup antibodies.
    - Granted U.S. Patent No. 10,351,625, covering the method of use of COM701 or backup antibody in combination with anti-PD-1 antibodies.

- Granted EPO Patent No. EP3347379, covering the composition of matter of COM902, alone or with second antibody that binds to a human checkpoint receptor protein, including PD-1 and its use.
- Granted EPO Patent No. EP3258951, covering the use of any anti-PVRIG antibody that activates T cells and/or NK cells, in the treatment of cancer.
- Granted U.S. Patent No. 10,550,173, covering methods of screening for anti-PVRIG antibodies that inhibit the binding of PVRIG with PVRL2.

Financial Results

Research and development expenses for the fourth quarter and year ended December 31, 2019, were $4.3 million, and $19.8 million, respectively, compared with $7.5 million and $30.3 million for the prior periods in 2018. The decrease in both cases is attributed mostly to the restructuring process we announced at the end of the first quarter of 2019, as well as preclinical activities related to COM902, most of which were concluded in 2018. This reduction was offset by an increase in expenses associated with clinical-related activities of the COM701 Phase 1 trial, which began in the second half of 2018.

Net loss for the fourth quarter of 2019 was $6.5 million, or $0.10 per basic and diluted share, compared with a net loss of $9.4 million, or $0.16 per basic and diluted share, in the comparable period of 2018. Net loss for the year ended December 31, 2019 was $27.3 million, or $0.43 per basic and diluted share, compared with a net loss of $22.6 million, or $0.41 per basic and diluted share, for the year ended December 31, 2018.

As of December 31, 2019, cash, cash related accounts, short-term and long-term bank deposits totaled approximately $43.9 million, compared with approximately $45.7 million as of December 31, 2018. The Company has no debt.

Conference Call and Webcast Information

The Company will hold a conference call today, February 20, 2020, at 8:30 AM ET to review its fourth quarter and full year 2019 results. To access the conference call by telephone, please dial 1-888-407-2553 from the United States, or +972-3-918-0610 internationally. The call will also be available via live webcast through Compugen's website, located at the following link. Following the live audio webcast, a replay will be available on the Company's website.

(Tables to follow)

About Compugen

Compugen is a clinical-stage therapeutic 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. The Company's lead product candidate, COM701, a first-in-class anti-PVRIG antibody, for the treatment of solid tumors, is undergoing a Phase 1 clinical study. In addition, COM902, Compugen's antibody targeting TIGIT, is expected to enter the clinic in early 2020. The Company's therapeutic pipeline also includes early stage immuno-oncology programs focused largely on myeloid targets. Compugen's business model is to selectively enter into collaborations for its novel targets and related drug product candidates at various stages of research and development. The Company is headquartered in Israel, with offices in South San Francisco, CA. Compugen's shares are listed on the 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 by the use of 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 regarding our plans to begin a Phase 1/2 triple combination study to evaluate COM701 in combination with *Opdivo*® and BMS-986207 in 2H 2020, our anticipation to present initial data from Phase 1 dose escalation study of COM701 in combination with *Opdivo*® in 2H 2020, our expectation to begin COM902 Phase 1 monotherapy study in patients with advanced malignancies in early 2020 and our conviction that targeting PVRIG as a newly discovered inhibitory pathway in the larger DNAM axis, has the potential to expand the reach of cancer immunotherapy. 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: Clinical development involves a lengthy and expensive process, with an uncertain outcome and Compugen may encounter substantial delays or even an inability to begin clinical trials for any specific product, or may not be able to conduct or complete its trials on the timelines it expects; Compugen relies, and expects to continue to rely, on third parties to conduct its clinical trials and if these third parties do not successfully carry out their contractual duties, comply with regulatory requirements or meet expected deadlines (including as a result of the

effect of the Coronavirus), Compugen may experience significant delays in the conduct of its clinical trials; Compugen's ability to present data derived from collaborations with its partners is dependent in some cases on the agreement of our partners to present such data, and in any event is dependent on our acceptance to present data in relevant conferences; Compugen's approach to the discovery of therapeutic products is based on its proprietary computational target discovery infrastructure, which is unproven clinically; Compugen does not know whether it will be able to discover and develop additional potential product candidates or products of commercial value; 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. These risks and other risks are more fully described in the "Risk Factors" section of Compugen's most recent Annual Report on Form 20-F 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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COMPUGEN LTD.

CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS

(U.S. dollars in thousands, except for share and per share amounts)

	Three Months Ended December 31,		Year Ended, December 31,	
	2019	**2018**	**2019**	**2018**
	Unaudited	**Unaudited**		
Revenues	-	-	-	17,800
Cost of revenues	-	-	-	1,034
Gross profit	**-**	**-**	**-**	**16,766**
Operating expenses				
Research and development expenses	4,314	7,464	19,816	30,318
Marketing and business development expenses	159	245	651	1,634
General and administrative expenses	2,220	1,967	8,412	8,041
Total operating expenses	**6,693**	**9,676**	**28,879**	**39,993**
Operating loss	**(6,693)**	**(9,676)**	**(28,879)**	**(23,227)**
Financial and other income, net	232	277	820	628
Loss before taxes on income	**(6,461)**	**(9,399)**	**(28,059)**	**(22,599)**
Taxes on income	-	-	722	-
Net loss	**(6,461)**	**(9,399)**	**(27,337)**	**(22,599)**
Basic and diluted net loss per ordinary share	(0.10)	(0.16)	(0.43)	(0.41)
Weighted average number of ordinary shares used in computing basic and diluted net loss per share	67,644,946	59,542,963	63,636,673	55,277,428

COMPUGEN LTD.
CONDENSED CONSOLIDATED BALANCE SHEETS DATA
(U.S. dollars, in thousands)

	December 31, 2019	December 31, 2018
ASSETS		
Current assets		
Cash, cash equivalents, short-term bank deposits and restricted cash	43,879	45,675
Other accounts receivable and prepaid expenses	1,121	903
Total current assets	45,000	46,578
Non-current assets		
Long-term prepaid expenses	693	776
Severance pay fund	2,485	2,454
Operating lease right to use asset	3,247	-
Property and equipment, net	2,338	3,372
Total non-current assets	8,763	6,602
Total assets	**53,763**	**53,180**
LIABILITIES AND SHAREHOLDERS EQUITY		
Current liabilities		
Other accounts payable, accrued expenses and trade payables	5,445	8,900
Current maturity of operating lease liability	600	-
Short-term deferred participation in R&D expenses	774	1,089
Total current liabilities	6,819	9,989
Non-current liabilities		
Long-term deferred participation in R&D expenses	2,691	3,003
Long-term operating lease liability	2,978	-
Accrued severance pay	2,954	2,945
Total non-current liabilities	8,623	5,948
Total shareholders' equity	38,321	37,243
Total liabilities and shareholders' equity	**53,763**	**53,180**