NEWS RELEASE

Omeros' Newly Presented GPR174 Immuno-oncology Data at ESMO Immuno-Oncology Congress Show Inhibition of Both Checkpoint and Tumor-Promoting Factors

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SEATTLE--(BUSINESS WIRE)--Dec. 16, 2019-- Omeros Corporation (Nasdaq: OMER) last week presented new data directed to its novel cancer immunotherapy target GPR174 at the European Society for Medical Oncology (ESMO) 2019 Immuno-Oncology Congress in Geneva, Switzerland. In addition to previously reported findings, which revealed enhanced anti-tumor immune responses in GPR174-deficient mice and synergism between adenosine receptor antagonists and GPR174 antagonists in promoting interleukin-2 (IL-2) and interferon-γ (IFN-γ) production from human T cells, this presentation included new data from human ex vivo studies demonstrating that GPR174 inhibition results in downregulation of checkpoint and tumor-promoting factors.

The findings, presented by Marc Gavin, Ph.D., Omeros' Director of Immunology, show that GPR174 suppresses T lymphocytes through the cyclic adenosine monophosphate (cAMP) signaling pathway. In addition to suppressing T-cell function, cAMP signaling is known to enhance production of both cytotoxic T-lymphocyte-associated protein 4 (CTLA-4) and amphiregulin (AREG), both important drivers of tumor development. CTLA-4 is an immune checkpoint molecule targeted by FDA-approved drugs such as Yervoy® (ipilimumab), and AREG is a cell growth factor involved in promoting tumor growth. The data demonstrate that, using either GPR174 small-molecule inhibitors or in GPR174-deficient mice, the T cell-suppressing effect of cAMP is blocked, resulting in enhanced "tumor-killing" T-cell

activation. In addition, the new data show that GPR174 inhibitors reduce both CTLA-4 and AREG levels in T cells, suggesting that multiple pathways – including checkpoint and tumor-promoting factors – downstream of GPR174 inhibition may be inactivated, further augmenting anti-tumor immunity and blocking tumor growth.

“The data show that GPR174 inhibitors enhance anti-tumor immune responses through multiple pathways, including increased production of tumor-fighting cytokines IL-2, IFN-γ, and TNF while suppressing expression of CTLA-4 and AREG,” said Gregory A. Demopulos, M.D., Omeros’ chairman and chief executive officer. “Among our ongoing activities, we are exploring the effect of GPR174 inhibition on other checkpoints, including PD-1, and their inhibitors. We are increasingly confident in the role of GPR174 in immuno-oncology and look forward to moving our GPR174 inhibitors into the clinic as quickly as possible with the hope of improving survival for cancer patients.”

Dr. Gavin’s recent presentation at ESMO can be accessed on the company’s website at **https://investor.omeros.com/presentations**.

About Omeros Corporation

Omeros is an innovative biopharmaceutical company committed to discovering, developing and commercializing small-molecule and protein therapeutics for large-market as well as orphan indications targeting complement-mediated diseases, disorders of the central nervous system and immune-related diseases, including cancers. In addition to its commercial product **OMIDRIA® (phenylephrine and ketorolac intraocular solution) 1%/0.3%**, Omeros has multiple Phase 3 and Phase 2 clinical-stage development programs focused on complement-mediated disorders and substance abuse, as well as a diverse group of preclinical programs including GPR174, a novel target in immuno-oncology that modulates a new cancer immunity axis recently discovered by Omeros. Small-molecule inhibitors of GPR174 are part of Omeros’ proprietary G protein-coupled receptor (GPCR) platform through which it controls 54 new GPCR drug targets and their corresponding compounds. The company also exclusively possesses a novel antibody-generating platform.

Forward-Looking Statements

This press release contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934, which are subject to the “safe harbor” created by those sections for such statements. All statements other than statements of historical fact are forward-looking statements, which are often indicated by terms such as “anticipate,” “believe,” “could,” “estimate,” “expect,” “goal,” “intend,” “likely”, “look forward to,” “may,” “plan,” “potential,” “predict,” “project,” “prospects,” “should,” “slated,” “targeting,” “will,” “would” and similar expressions and variations thereof. Forward-looking statements, including statements regarding Omeros’ research and development programs and the therapeutic application of Omeros’ research findings, are based on management’s beliefs and assumptions and on information available to

management only as of the date of this press release. Omeros' actual results could differ materially from those anticipated in these forward-looking statements for many reasons, including, without limitation, unproven preclinical and clinical development activities, availability and timing of data from preclinical or clinical studies and the results of such studies, risks associated with product commercialization and commercial operations, regulatory actions and oversight, intellectual property claims, competitive developments, litigation, and the risks, uncertainties and other factors described under the heading "Risk Factors" in the company's Annual Report on Form 10-K filed with the Securities and Exchange Commission on March 1, 2019. Given these risks, uncertainties and other factors, you should not place undue reliance on these forward-looking statements, and the company assumes no obligation to update these forward-looking statements, even if new information becomes available in the future.

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