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## Press Release

Adding Four More, Omeros Has Now Unlocked 46 Orphan GPCRs

**-- Equals Number of GPCRs Targeted by over 30 Percent of Marketed Drugs --**

SEATTLE, Oct. 24, 2012 /PRNewswire/ -- Omeros Corporation (NASDAQ: OMER) today announced that it has identified compounds that functionally interact with each of four additional orphan G protein-coupled receptors (GPCRs). Without compounds that functionally interact with orphan GPCRs, developing drugs targeting those receptors is extremely difficult. Omeros has now unlocked 46 Class A orphan GPCRs, representing almost 60 percent of these targets and equaling the number of GPCRs that are targeted by over 30 percent of all marketed drugs. There are approximately 120 orphan GPCRs and Omeros expects to unlock an even larger percentage of them, focusing first on Class A orphans.

The four additional orphan GPCRs unlocked by Omeros are GPR65/TDAG8, GPR82, MRGE and MRGF. GPR65/TDAG8 has been linked to several types of cancer and to inflammatory disorders, such as asthma. GPR82 is linked to appetite and body weight. MRGE has been linked to pain, and MRGF, which like MRGE is expressed in dorsal root ganglia, is also likely associated with pain. Omeros is in the process of filing broad patent applications around the orphan GPCRs that it has unlocked and compound optimization efforts are in progress.

"Using our proprietary high-throughput assay, we continue to unlock orphan GPCRs – finding functionally active and structurally diverse compounds – and, for a number of those receptors, generating compelling preclinical data," said Gregory A. Demopoulos, M.D., chairman and chief executive officer of Omeros. "Through medicinal chemistry, we are selectively optimizing some of these compounds. The results of these collective efforts further expand our intellectual property estate, and we expect that we will exclusively control the commercial rights to each of the GPCRs that we unlock."

### Ongoing GPCR Program

Omeros is screening orphan GPCRs against its small-molecule chemical libraries using its proprietary, high-throughput cellular redistribution assay (CRA). The CRA detects receptor antagonists, agonists and inverse agonists. Omeros has announced that it has identified and confirmed sets of compounds that interact selectively with 46 orphan receptors linked to metastatic melanoma (GPR19), esophageal squamous cell carcinoma and obesity-related type-2 diabetes (GPR39), hepatocellular carcinoma (GPR80), several types of cancer (GPR65/TDAG8), squamous cell carcinoma (GPR87), ovarian cancer (GPR150), pancreatic cancer (GPR182), acute lymphoblastic leukemia (P2Y8/P2RY8), ovarian and prostate cancer (OGR1), arterial stiffness (GPR25), sleep disorders (OPN4), cognitive disorders (GPR12),

torpor or "suspended animation" and bipolar disorder (GPR50), anxiety disorders (GPR31), schizophrenia (GPR52, GPR153), autism (GPR63), bipolar disorder and schizophrenia (GPR78), memory and inflammatory conditions (GPR83), psychotic and metabolic disorders (GPR27, GPR85, GPR173), cognition (GPR151), cognitive impairments (MAS1), inflammatory responses (GPR32), obesity and diabetes (GPR21), appetite control (GPR82, GPR101), immunological disorders (CCRL2), rheumatoid arthritis and HIV-mediated enteropathy (GPR15), respiratory and immune disorders (GPR141), humoral immunity (GPR183), multiple sclerosis (GPR17), osteoarthritis (GPR22), motor control (GPR139), congenital cataracts and birth defects of the brain and spinal cord (GPR161), regulation of hematopoietic stem cell differentiation (GPR171), cancer stem cells and the self-renewal and maintenance of adult stem cells (LGR4), long-term wound repair, including the formation of new hair follicles (LGR6) and pain (MRGE). In addition, Omeros has unlocked GPR20, GPR45, GPR135, GPR162, MRGF and OPN5, which have not yet been definitively tied to any specific indications but are expressed preferentially in the gastrointestinal tract (GPR20), brain (GPR45, GPR135 and GPR162) and eye, brain, testes, spinal cord (OPN5) and dorsal root ganglia (MRGF).

### **About G Protein-Coupled Receptors**

GPCRs, which mediate key physiological processes in the body, are one of the most valuable families of drug targets. According to Insight Pharma Reports, GPCR-targeting drugs represent 30 to 40 percent of marketed pharmaceuticals. Examples include Claritin® (allergy), Zantac® (ulcers and reflux), OxyContin® (pain), Lopressor® (high blood pressure), Imitrex® (migraine headache), Reglan® (nausea) and Abilify® (schizophrenia, bipolar disease and depression) as well as all other antihistamines, opioids, alpha and beta blockers, serotonergics and dopaminergics.

The industry focuses its GPCR drug discovery efforts mostly on non-sensory GPCRs. Of the 363 total non-sensory GPCRs, approximately 240 have known ligands (molecules that bind the receptors) with nearly half of those targeted either by marketed drugs (46 GPCRs) or by drugs in development (about 82 GPCRs). There are approximately 120 GPCRs with no known ligands, which are termed "orphan GPCRs." Without a known ligand, drug development for a given receptor is extremely difficult.

Omeros uses its proprietary high-throughput CRA to identify small-molecule agonists and antagonists for orphan GPCRs, unlocking them to drug development. Omeros believes that it is the first to possess the capability to unlock orphan GPCRs in high-throughput, and that currently there is no other comparable technology. Unlocking these receptors could lead to the development of drugs that act at these new targets. There is a broad range of indications linked to orphan GPCRs including cardiovascular disease, asthma, diabetes, pain, obesity, Alzheimer's disease, Parkinson's disease, multiple sclerosis, schizophrenia, learning and cognitive disorders, autism, osteoporosis, osteoarthritis and several forms of cancer.

### **About Omeros Corporation**

Omeros is a clinical-stage biopharmaceutical company committed to discovering, developing and commercializing products targeting inflammation, coagulopathies and disorders of the central nervous system. The Company's most clinically advanced product candidates are derived from its proprietary PharmacoSurgery™ platform designed to improve clinical outcomes of patients undergoing a wide range of surgical and medical procedures. Omeros has four ongoing clinical development programs. Omeros may also have the near-term

capability, through its GPCR program, to add a large number of new drug targets and their corresponding compounds to the market. Behind its clinical candidates and GPCR platform, Omeros is building a diverse pipeline of protein and small-molecule preclinical programs targeting inflammation, coagulopathies and central nervous system disorders.

### **Forward-Looking Statements**

This press release contains forward-looking statements as defined within the Private Securities Litigation Reform Act of 1995, which are subject to the "safe harbor" created by those sections. These statements include, but are not limited to, the number of orphan GPCRs that Omeros expects to unlock; the potential indications of the orphans GPCRs unlocked by Omeros; Omeros' potential commercial rights for each unlocked orphan GPCR; and that Omeros may have capability, through its GPCR program, to add a large number of new drug targets and their corresponding compounds to the market. Forward-looking statements 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, the risks, uncertainties and other factors described under the heading "Risk Factors" in the Company's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on August 7, 2012. 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 publicly, even if new information becomes available in the future.

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