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# VistaGen Therapeutics Expands Stem Cell Patent Portfolio with New U.S. Patent on Methods for Producing Blood Cells, Platelets and Bone Marrow Stem Cells with Potential to Treat Autoimmune Disorders and Cancer

SOUTH SAN FRANCISCO, CA -- (Marketwired) -- 12/08/17 -- [VistaGen Therapeutics Inc.](#) (NASDAQ: VTGN), a clinical-stage biopharmaceutical company focused on developing new generation medicines for depression and other central nervous system (CNS) disorders, announced today that the U.S. Patent and Trademark Office (USPTO) has issued [U.S. Patent No. 9,834,754](#) related to methods for producing, from human pluripotent stem cells (hPSCs), hematopoietic precursor stem cells, which are stem cells that give rise to all of the blood cells and most of the bone marrow cells in the body. VistaGen holds an exclusive license to this patent from the University Health Network (UHN).

The technology covered by the issued U.S. patent has the potential to impact both direct and supportive therapy for autoimmune disorders and cancer, with CAR-T cell applications, and foundational technology which may provide approaches for producing bone marrow stem cells for bone marrow transfusions.

Dr. Gordon Keller, Director of the McEwen Centre for Regenerative Medicine in Toronto, one of the world's leading centers for stem cell and regenerative medicine research and part of the University Health Network (UHN), discovered the stem cell technology covered by this patent.

## **About VistaGen**

VistaGen Therapeutics, Inc. (NASDAQ: VTGN) is a clinical-stage biopharmaceutical company focused on developing new generation medicines for depression and other CNS disorders. VistaGen's lead CNS product candidate, AV-101, is in Phase 2 development, initially as a new generation oral antidepressant drug candidate for major depressive disorder (MDD). AV-101's [mechanism of action](#) is fundamentally different from all FDA-approved antidepressants and atypical antipsychotics used adjunctively to treat MDD, with potential to drive a paradigm shift towards a new generation of safer and faster-acting antidepressants. AV-101 is currently being evaluated by the National Institute of Mental

Health (NIMH) in a small Phase 2 monotherapy study in MDD being fully funded by the NIMH and conducted by Dr. Carlos Zarate Jr., Chief, Section on the Neurobiology and Treatment of Mood Disorders and Chief of Experimental Therapeutics and Pathophysiology Branch at the NIMH. VistaGen is preparing to launch a 180-patient Phase 2 study of AV-101 as an adjunctive treatment for MDD patients with an inadequate response to standard, FDA-approved antidepressants, with Dr. Maurizio Fava of Harvard University as Principal Investigator. AV-101 may also have the potential to treat multiple CNS disorders and neurodegenerative diseases in addition to MDD, including neuropathic pain, epilepsy, Huntington's disease, Parkinson's disease levodopa-induced dyskinesia and other disorders where modulation of the NMDA receptors, activation of the AMPA neurotransmitter pathways and/or key active metabolites of AV-101 may achieve therapeutic benefit.

For more information, please visit [www.vistagen.com](http://www.vistagen.com) and connect with VistaGen on [Twitter](#), [LinkedIn](#) and [Facebook](#).

### ***Forward-Looking Statements***

The statements in this press release that are not historical facts may constitute forward-looking statements that are based on current expectations and are subject to risks and uncertainties that could cause actual future results to differ materially from those expressed or implied by such statements. Those risks and uncertainties include, but are not limited to, risks related to securing sufficient funding for, and the launch, continuation and results of the NIMH's Phase 2 (monotherapy) and/or the Company's planned Phase 2 (adjunctive treatment) clinical studies of AV-101 in MDD, and other CNS diseases and disorders, including neuropathic pain and PD LID, allowance of patent applications and continued protection of its intellectual property, and the availability of substantial additional capital to support its operations, including the AV-101 Phase 2 adjunctive treatment study and other potential AV-101 clinical development activities described above. These and other risks and uncertainties are identified and described in more detail in VistaGen's filings with the Securities and Exchange Commission (SEC). These filings are available on the SEC's website at [www.sec.gov](http://www.sec.gov). VistaGen undertakes no obligation to publicly update or revise any forward-looking statements.

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