



## **SURPRISING NEW DATA IMPLICATE COMPONENTS OF ADAPTIVE IMMUNITY IN TRAUMATIC BRAIN INJURY**

*SOURCE: VG Life Sciences, Inc.*

SANTA BARBARA, Calif., October 20, 2014 — VG Life Sciences Inc., (OTCQB: VGLS) a biotechnology company, announces today that one of its scientific advisors, Dr. Richard Tobin, PhD, published data demonstrating that when there is traumatic brain injury (TBI), the body inflicts additional neural damage via the immune system. The data generated by Dr. Tobin shows immune therapy using VG Life Sciences' patented drug VG1177 can improve the condition.

This was published in the peer-reviewed *Acta Neuropathologica Communications*, which publishes experimental and descriptive articles on the pathology of nervous system and skeletal muscle disorders. The title of the paper is "Traumatic brain injury causes selective, CD74-dependent, peripheral lymphocyte activation that exacerbates neurodegeneration," and can be found [\*here\*](#).

TBI can vary in severity from a mild concussion to lifelong debilitation; however, these complications are not entirely the direct result of trauma, but rather complications resulting from immune activation. Neurological complications, such as swelling, lack of oxygen, and inflammation also contribute to the damage sustained from an initial insult.

Using a fluid-percussion injury model in mice, Dr. Tobin and the team demonstrated increased numbers of peripheral splenic lymphocytes, including CD4+ and CD8+ T cells, regulatory T cells, and gamma delta T-cells 24 hours following moderate TBI.

However, in mice lacking the MHC Class II invariant chain (CD74), fluid percussion injury was not associated with lymphocyte expansion nor with the degree of neuro-degeneration that occurs in the wild type mice. Furthermore, wild type mice treated with VG1177 demonstrated similarly improved conditions as the CD74 deficient mice indicating a level of neuroprotection. VG1177 is targeted to remove displayed peptides from CD74.

"This research has important implications for contact sports involving all ages, military trauma, and accident victims," said Tobin. "We are encouraged that VG1177 may be an example of a new class of agents that affect the immune system to improve the outcome of traumatic brain injuries."

VG Life Sciences' patented drug, VG1177, is also undergoing pre-clinical animal safety trials at ITR Laboratories in Montreal, Canada.

Dr. Tobin is a post-doctoral fellow in the Texas A&M University laboratory of Dr. M. Karen Newell-Rogers, PhD, VG Life Sciences Inc.'s Chief Scientific Advisor and inventor of VG1177. The contributors to this paper include Sanjib Mukherjee, M.D., Ph.D., Jessica M. Kain, Susannah K. Rogers, Stephanie K. Henderson, Heather L. Motal, Lee A. Shapiro, Ph.D., and Dr. M. Karen. Newell Rogers.

### **About VG Life Sciences Inc.**

Santa Barbara, California-based VG Life Sciences, Inc., formerly known as Viral Genetics, is a biotechnology company focused on discovering and developing drug therapies for cancer, infectious disease, and



inflammatory, autoimmune disorders. VGLS controls over 45 US and international patents and pending patents protecting its exclusive biotech platform technologies. For more information and upcoming events, visit [www.vglifesciences.com](http://www.vglifesciences.com) or find VG Life Sciences, Inc. on Facebook, Twitter, and LinkedIn.

**Safe Harbor Statement and Forward-Looking Statements**

This news release may contain forward-looking statements that involve risks and uncertainties associated with financial projections, milestone timelines, clinical development, regulatory approvals and other risks described by VG Life Sciences from time to time in its periodic reports. None of VG Life Sciences' drug compounds are approved by the US FDA or by any comparable regulatory agencies elsewhere in the world. Therefore, there can be no assurance that the forward-looking statements included in this release will prove to be accurate. In light of the significant uncertainties inherent in the forward-looking statements included herein, the forward-looking statements should not be regarded as a representation by VG Life Sciences Inc. or any other person that the objectives and plans of VG Life Sciences will be achieved.

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