



KaliVir Immunotherapeutics Announces New In Vivo Data Demonstrating Superior Therapeutic Efficacy of VET3-TGI at the American Society of Gene & Cell Therapy (ASGCT) Annual Meeting

PITTSBURGH, PA (May 19, 2023) – [KaliVir Immunotherapeutics, Inc.](https://www.kalivir.com), a biotech company developing cutting-edge, multi-mechanistic oncolytic viral immunotherapy programs, today announced the presentation of new data on its lead pre-clinical candidate VET3-TGI at the American Society of Gene & Cell Therapy (ASGCT) 26th Annual Meeting.

VET3-TGI is based on KaliVir's unique Vaccinia Enhanced Template (VET™) platform, capable of generating potent novel oncolytic vaccinia viruses with modifications to maximize viral replication and enhance intravenous delivery and spread. Modifications grant VET3-TGI the expression of CXCR3, IL-12 and a TGF- β inhibitor, allowing for efficient trafficking to the tumor, activation of anti-tumor immune responses and the overcoming of local immunosuppressive activity.

The functionality and therapeutic activity of VET3-TGI were tested in multiple models, and the mechanism of action and toxicity profile were assessed. VET3-TGI was compared to control virus in three pre-clinical in vivo tumor models, and demonstrated potent therapeutic activity, including 100% complete responses, even at several logs below equivalent clinical doses and in the presence of pre-existing anti-viral immunity. Profound changes in the tumor microenvironment (TME) were observed in VET3-TGI treated mice, including polarization to a type-1 immune response and recruitment of cytotoxic T cells. Analysis of gene expression profiles revealed that VET3-TGI treatment was associated with a dramatic increase in type-1 inflammatory chemokines, and a concomitant decrease in the expression of TGF β 1-associated genes that are involved with immuno-suppression. Compared to control virus-treated mice, VET3-TGI showed improved delivery to tumors following systemic administration, as well as reduced systemic toxicity.

"This new in vivo data is very encouraging and is a further validation of VET3-TGI as our lead pre-clinical candidate," said Stephen Thorne, PhD, CSO and co-founder of KaliVir. "These results build upon our already robust in vitro data as we expand into the next phase to develop a human version of the virus for efficacy and toxicology testing."

Presentation details

Date: Friday, May 19th 5:15 PM – 5:30 PM PT
Title: Novel Oncolytic therapy VET3-TGI restricts TGF β 1 and augments Type-1 immune response in TME, leading to superior therapeutic efficacy in multiple preclinical tumor models.
Presented by: Ravikumar Muthuswamy, Ph.D. Director of Immunology, KaliVir Immunotherapeutics
Location: Los Angeles Convention Center, West Hall, Room 501 ABC

About KaliVir Immunotherapeutics, Inc.

KaliVir Immunotherapeutics is a privately held biotech company developing cutting-edge, multi-mechanistic oncolytic viral immunotherapy programs. The company has developed a unique vaccinia

virus-based platform, Vaccinia Enhanced Template “VET” Platform, that can generate potent novel oncolytic vaccinia viruses with modifications to maximize viral replication and to enhance intravenous delivery and spread. VET™ platform utilizes the large transgene capacity of the vaccinia virus to deliver therapeutics matched to tumor immunophenotypes to stimulate patients’ immune systems and modify the tumor microenvironment. KaliVir’s oncolytic virus candidates are designed to be safe, potent and systemically deliverable to treat cancer patients across multiple tumor types. KaliVir has separate collaborations with Roche and Astellas Pharma to design and generate novel oncolytic vaccinia viruses derived from the VET™ platform. In addition, Astellas entered into a world-wide exclusive license to develop and commercialize KaliVir’s initial lead clinical candidate VET2-L2 oncolytic vaccinia virus. KaliVir is currently advancing multiple therapeutic candidates toward the clinic. For more information, please visit www.kalivir.com.

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