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Excision BioTherapeutics Presents Data to Support HIV Cure Using CRISPR Gene Editing Technology

Presentations at the Society for Personalized Nanomedicine Conference included presentations titled “Toward HIV Cure: The CRISPR Story,” and “Gene Editing Strategies toward HIV Cure using Non-Human Primates”

Oakland, CA, Nov. 21, 2019 (GLOBE NEWSWIRE) -- On November 20 at the 6th Annual Personalized Nanomedicine Symposium, researchers working with Excision BioTherapeutics, a gene therapy company focusing on curing viral infectious diseases, delivered two oral presentations to review the multiple years of preclinical development, as well as emerging primate data on EBT-101, Excision’s lead program to eradicate viral HIV genomes and possibly cure the disease. Presentations included “*Toward HIV Cure: The CRISPR Story*,” and “*Gene Editing Strategies toward HIV Cure using Non-Human Primates*,” presented by Drs. Jennifer Gordon and Tricia Burdo, respectively.

There are no current effective curative therapies for HIV. Researchers at the Lewis Katz School of Medicine at Temple University (LKSOM) demonstrated the ability to remove HIV genomes from cell lines as well as transgenic mice using CRISPR, a powerful gene editing technology. The teams are now completing non-human primate studies using the same approach. The teams combined multiple guide RNAs (gRNAs) to cut multiple locations to deactivate the viral genomes. The team used AAV9, AAV6 and AAV2 mediated delivery of CRISPR/Cas9, which led to viral suppression.

The scientists at LKSOM, who are associated with Excision BioTherapeutics, were the first to demonstrate a functional cure for HIV in animals. This research was first published in ***Nature Communications*** in July 2019 in collaboration with Dr. Howard Gendelman and his team at the University of Nebraska Medical Center.

“These presentations summarize an incredible amount of work, research, and coordination over the past decade,” commented Daniel Dornbusch, CEO of Excision BioTherapeutics. He continued, “This new data, and the data which will be presented in the next few months, will be foundational for the candidate program and the plan to file the company’s first IND this coming year.”

Excision is developing CRISPR-based gene therapies delivered by a single intravenous infusion to cure viral infectious diseases. The company’s lead compound, EBT-101, a treatment for HIV, will enter human clinical trials in 2020.

About Excision BioTherapeutics

Excision BioTherapeutics, Inc. is a biotechnology company developing CRISPR-based therapies to cure viral infectious diseases. Excision is focused on improving the lives of chronically ill patients by eliminating viral genomes from infected individuals. By using CRISPR in unique ways, the company has already demonstrated the first functional cure for HIV in animals. Excision is developing technologies and IP developed at Temple University and U.C. Berkeley. Excision is located in Oakland, California and is supported by **ARTIS Ventures**, **Norwest Venture Partners**, **SilverRidge Venture Partners**, **Oakhouse Ventures**, and **Gaingels**. For more information, please visit **www.excisionbio.com**.

Editor's Note: Dr. Kamel Khalili is a co-founder and scientific advisor of Excision BioTherapeutics and has received equity and monetary compensation from the company. Excision BioTherapeutics has licensed the viral gene editing technology from Temple University, where Dr. Khalili is also employed, for commercial development and clinical trials. Dr. Khalili is a named inventor on patents that cover the CRISPR/CAS9 system viral gene editing technology.

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