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# Excision BioTherapeutics Announces Publication in Molecular Therapy Methods & Clinical Development Highlighting EBT-104 for the Treatment of HSV-1 Keratitis

*- Treatment with EBT-104 led to complete elimination of viral shedding in 92% eyes of treated rabbits*

*- Excision's proprietary gene editing technology holds unique, curative potential to address the leading cause of corneal blindness in the United States*

*- Global incidence of HSV keratitis is estimated at 1.5 million annually, including 40,000 new cases that result in severe visual impairment*

*- Technology may also be applicable to a range of HSV-1-related diseases*

SAN FRANCISCO, Aug. 14, 2024 (GLOBE NEWSWIRE) -- Excision BioTherapeutics, Inc. ("Excision", the "Company"), a clinical-stage biotechnology company developing CRISPR-based therapies to cure serious latent viral infectious diseases, today announced the *Molecular Therapy Methods & Clinical Development* publication of a preclinical study of EBT-104 in herpes simplex virus-1 keratitis (HSV-1 Keratitis).

EBT-104 is a CRISPR-based gene therapy that is being developed as a potential cure for HSV-1 Keratitis. EBT-104 utilizes a CRISPR/Cas gene editing system to inactivate the latent HSV-1 virus by co-targeting two essential HSV-1 genes, ICP0 and ICP27.

"Positive preclinical data published in *Molecular Therapy Methods & Clinical Development* demonstrate EBT-104's potential as a curative approach for HSV-1 keratitis," said Daniel Dornbusch, Chief Executive Officer of Excision. "HSV-1 keratitis remains a leading cause of corneal blindness globally, with almost no therapeutic advancements made over the last several decades. Using our CRISPR/Cas9 targeted approach, Excision is pioneering a potentially curative treatment modality for herpes keratitis that disrupts the production of two critical genes in the HSV-1 genome, ICP0 and ICP27. As the data from this study show, excising these two genes led to the safe and effective inhibition of the viral infection in 92% of the treated rabbits' eyes, providing us with a strong rationale for continuing to advance EBT-104 into human testing and further underscoring the unique potential of our gene editing technology. We look forward to generating additional data and addressing other HSV-associated diseases including herpes labialis, herpes simplex encephalitis, and genital herpes."

The article entitled, "*CRISPR/Cas9-mediated genome editing delivered by a single AAV9 vector inhibits HSV-1 reactivation in a latent rabbit keratitis model*" is available online.

**About Herpes Simplex Keratitis**

Herpes Simplex Keratitis (HSK) caused by the infection of herpes simplex virus type 1 (HSV-1) in the cornea is a major cause of blindness worldwide. Although current anti-HSV-1 therapies interfere with viral DNA replication, they do not eliminate latent HSV-1 reservoirs or prevent recurrence. CRISPR/Cas-mediated gene editing can potentially address the underlying causes of the disease by directly eliminating the latent HSV-1 reservoirs.

**About Excision BioTherapeutics, Inc.**
Excision BioTherapeutics, Inc. develops CRISPR-based medicines as potential cures for serious viral latent infectious diseases based on its proprietary multiplexed gene editing platform that unites next-generation CRISPR nucleases with a novel gene editing approach to develop curative therapies. The Company's pipeline targets large, underserved markets including herpes simplex virus-1 keratitis (HSV-1 keratitis), hepatitis B virus (HBV), and human immunodeficiency virus-1 (HIV-1). Excision's foundational technologies were developed in the laboratories of Dr. Kamel Khalili at Temple University and Dr. Jennifer Doudna at the University of California, Berkeley. For more information, please visit www.excision.bio.

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