



BILLING CODE 4167-05-P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

Government-Owned Inventions; Availability for Licensing

AGENCY: National Institutes of Health, HHS.

ACTION: Notice.

SUMMARY: The National Institute of Allergy and Infectious Diseases (NIAID), an institute of the National Institutes of Health (NIH), Department of Health and Human Services (HHS), is giving notice of the invention listed below, which is owned by an agency of the U.S. Government and is available for licensing to achieve expeditious commercialization of results of federally funded research and development. Foreign patent applications are filed on selected inventions to extend market coverage for companies and may also be available for licensing.

FOR FURTHER INFORMATION CONTACT: Inquiries related to this licensing opportunity should be directed to: Terrence Joyce at 301-761-7235, or terrence.joyce@nih.gov. Licensing information may be obtained by communicating with the Technology Transfer and Intellectual Property Office, National Institute of Allergy and Infectious Diseases, 5601 Fishers Lane, Rockville, MD 20852: tel. 301-496-2644. A signed Confidential Disclosure Agreement will be required to receive copies of unpublished information related to the invention.

SUPPLEMENTARY INFORMATION: Technology description follows:

Replication-Competent VSV-BDBV Vaccine for Rapid Prevention and Post-Exposure Protection Against Bundibugyo Virus.

Description of Technology:

Bundibugyo virus (BDBV) is one of several ebolaviruses that cause Ebola virus disease (EVD). Sporadic outbreaks continue to occur in Central Africa, highlighting the need for effective vaccines that provide rapid protection.

Researchers at NIAID's Laboratory of Virology developed a vaccine against BDBV using vesicular stomatitis virus (VSV) to carry the BDBV surface glycoprotein (GP), a key target of the immune response, to BDBV. The team also created the DNA plasmid pATX-VSVΔG-BDBV GP, a circular DNA molecule used to produce the vaccine virus in cell culture. Subsequent laboratory studies confirmed that the vaccine could be produced in cells and express the BDBV glycoprotein as intended. This design stimulates both early immune defenses and longer-lasting immune responses against BDBV. The BDBV glycoprotein may also facilitate delivery of the vaccine to antigen-presenting cells, including monocytes, macrophages, and dendritic cells, which play a central role in initiating antiviral immune responses.

In nonhuman primate studies, a single intramuscular dose of the vaccine protected animals from disease within 3 days of vaccination, supporting further development of the vaccine for rapid protection and post-exposure use. The licensable materials include both the recombinant rVSV-BDBV vaccine and the corresponding DNA plasmid to support further development, manufacturing, and outbreak response.

This technology is available for licensing for commercial development in accordance with 35 U.S.C. § 209 and 37 CFR part 404, as well as for further development and evaluation under a research collaboration.

Potential Commercial Applications:

- Leverages existing rVSV platforms, potentially reducing development and scale-up risk in manufacturing.
- Emergency vaccination programs, including vaccination of close contacts and surrounding communities during BDBV outbreaks.
- Pre-exposure vaccination for healthcare workers, laboratory personnel, outbreak-response teams, and others at increased risk of BDBV exposure.
- Post-exposure use and related development programs for BDBV and other filovirus countermeasures.

Competitive Advantages:

- VSV vectors replicate transiently, producing rapid strong innate immune activation and early antibody responses. Recent nonhuman primate studies showed complete protection within 3 days after a single vaccination, which is exceptionally rapid for an Ebola vaccine platform.
- Proven viral platform built on the same rVSV technology as the licensed Ebola vaccine Ervebo, providing clinical and regulatory familiarity.
- Designed to provide rapid protection with a single intramuscular dose, simplifying use during outbreak response.
- May stimulate both early immune defenses and longer-lasting immune responses against BDBV.
- Ideal for ring vaccinations by supporting rapid immunization of contacts and contacts-of-contacts to help contain outbreaks.
- Includes the BDBV glycoprotein, which may direct the vaccine to immune cells like monocytes, macrophages, and dendritic cells involved in activating antiviral responses.

- Available for licensing as both the recombinant rVSV-BDBV vaccine and the DNA plasmid construct used to produce it.

Development Stage:

- Pre-Clinical

Inventors: Dr. Andrea Marzi and Dr. Heinrich (Heinz) Feldmann, all of NIAID.

Publications: O'Donnell KL, Haase JA, Henderson CW, et al. A single-dose Bundibugyo virus vaccine protects macaques within 3 days. bioRxiv. Published online June 15, 2026. doi:10.64898/2026.06.14.732188.

Intellectual Property: HHS Reference No. E-122-2026-0.

Licensing Contact: To license this technology, please contact Terrence Joyce at 301-761-7235, or terrence.joyce@nih.gov, and reference E-122-2026-0.

Collaborative Research Opportunity: The National Institute of Allergy and Infectious Diseases is seeking statements of capability or interest from parties interested in collaborative research to further develop, evaluate, or commercialize this technology. For collaboration opportunities, please contact Terrence Joyce at 301-761-7235, or terrence.joyce@nih.gov.

Dated: July 21, 2026.

Surekha Vathyam,

Director,

Technology Transfer and Intellectual Property Office,

National Institute of Allergy and Infectious Diseases.