Billing Code 4140-01-P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

Government-Owned Inventions; Availability for Licensing

AGENCY: National Institutes of Health.

ACTION: Notice.

SUMMARY: The invention listed below 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.

FOR FURTHER INFORMATION CONTACT: Licensing information may be obtained by communicating with Vidita Choudhry, Ph.D., National Heart, Lung, and Blood, Office of Technology Transfer and Development, 31 Center Drive Room 4A29, MSC2479, Bethesda, MD 20892-2479; telephone: 301-594-4095; email: vidita.choudhry@nih.gov. A signed Confidential Disclosure Agreement may be required to receive any unpublished information.

SUPPLEMENTARY INFORMATION: Technology description follows.

Therapeutic and Diagnostic Targets for Severe RSV Infection

Respiratory Syncytial Virus (RSV) infects nearly all children by their second birthday. RSV usually causes mild respiratory illness, however, a subset of patients experience severe infection that require hospitalization. Successful host defense against viral pathogens requires rapid recognition of the virus and activation of both innate and adaptive immunity. Toll-Like Receptors (TLRs) are responsible for mounting an innate immune response and genetic variations within TLRs modulate severity of infection. Researchers at NIEHS have identified a single nucleotide polymorphism (SNP) in TLR8 that is associated with RSV disease severity. The SNP is p53-responsive allele, indicating that p53, a master cell cycle regulator, can strongly influence TLR8 mediated immune responses. Identification of this SNP can inform diagnosis and prognosis of RSV disease and serve as a therapeutic target for severe RSV infection.

Potential Commercial Applications:

- Development of therapeutics against severe RSV infection
- Diagnostic biomarker

Competitive Advantages:

- Enhance the innate immune response to respiratory infection
- Improve clinical trial outcome in patients with TLR8 mediated RSV infection

Development Stage:

- Early stage
- *In vitro* data available

Inventors: Michael Resnick (NIEHS), Daniel Menendez (NIEHS), Steven Kleeberger (NIEHS), and Fernando Polack (Infant Foundation)

Intellectual Property: HHS Reference No. E-072-2019-0; US Application No. 62/881,656

Licensing Contact: Vidita Choudhry, Ph.D.; 301-594-4095; vidita.choudhry@nih.gov.

This notice is made in accordance with 35 U.S.C. 209 and 37 CFR Part 404.

Dated: December 26, 2019.

Vidita Choudhry,

Technology Development Specialist,

National Heart, Lung, and Blood Institute,

Office of Technology Transfer and Development.

[FR Doc. 2019-28358 Filed: 1/2/2020 8:45 am; Publication Date: 1/3/2020]