Chikungunya vaccine trial underway

June 6 2017

The National Institutes of Health-funded Vaccine and Treatment Evaluation Unit at Baylor College of Medicine will be one of the sites for a clinical trial testing the safety and immune responses to a vaccine against chikungunya virus.

Chikungunya is a virus that is transmitted to humans from mosquitoes and has recently caused large outbreaks of infection in the Caribbean and much of Central and South America, as well as Mexico. Illness from chikungunya virus can be debilitating, causing muscle and joint pain and joint swelling. For a small fraction of people infected with chikungunya virus, joint swelling and pain can last longer than a few weeks, sometimes even months. Chikungunya is carried by the same mosquito that carries dengue virus and Zika virus, which partially explains why Chikungunya occurs in the same places as these two diseases.

The vaccine that is being studied in the new trial uses a modified measles vaccine that produces chikungunya proteins in the body. This is expected to stimulate an immune response to chikungunya virus that may protect against infection. The candidate vaccine was developed by Themis Bioscience of Vienna, Austria.

The vaccine was tested in a small number of people in Vienna a few years ago and was found to have no unexpected side effects. It was found to stimulate strong immune responses after two doses.

"Given the outbreaks of chikungunya in the Americas, we want to initiate testing of this vaccine in the U.S. to determine the safety of the

vaccine and the immune responses to it in a larger number of people," said Dr. Hana El Sahly, associate professor of molecular virology and microbiology at Baylor and principal investigator of the Baylor Vaccine and Treatment Evaluation Unit. The two other participating sites are University of Iowa and Emory University.

Participants will receive two injections of either low-dose or high-dose experimental vaccine or placebo. Neither the participants nor the investigators will know whether a volunteer is receiving the placebo or the vaccine. The volunteers will be assigned randomly to receive the two injections on different schedules (29, 85, or 169 days after the initial injection) in order to help the researchers determine which schedule is most effective.

Baylor is currently recruiting healthy adults between the ages of 18 to 49 years living in the Houston area who do not plan on traveling to the areas where chikungunya currently is being transmitted during the time period of the study, which will take place over the next six to nine months.

For more information or to enroll, contact the Vaccine and Treatment Evaluation Unit at Baylor College of Medicine at 713-798-4912 and mention the CHIK vaccine trial. You can also visit www.clinicaltrials.gov/ using the identifier NCT03028441 for more information on the study.

Provided by Baylor College of Medicine