Amid Paraguay Chikungunya Outbreak, Vaccine Candidate Safe, Immunogenic

Paraguay is currently experiencing a large chikungunya outbreak, with more than 81,000 suspected, probable, or confirmed cases recorded from October 1, 2022, to March 11, 2023, researchers reported in MMWR in early June. There are currently no approved vaccines or treatments for the mosquito-borne virus, which is transmitted in parts of Africa, the Americas, and Asia, with occasional outbreaks in other areas.

That could soon change. A dose of VLA1553, a live-attenuated vaccine candidate, generated levels of antibodies high enough to likely protect against disease caused by the chikungunya virus in 98.9% of 266 participants after about 1 month, with no difference by age, based on results from a phase 3 trial. Seroprotection endured through at least 6 months in about 96% of participants.

In a safety analysis of 4,115 participants, adverse events occurred in 1.5% of those receiving the vaccine and 0.8% of those receiving the placebo, the researchers reported in The Lancet. Two participants who experienced serious adverse events considered related to VLA1553—mild myalgia and inappropriate antidiuretic hormone secretion—fully recovered. The author of an editorial noted that studies of VLA1553 in endemic regions and in other populations, such as adolescents, will help establish the vaccine’s value.

− Emily Harris

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Note: Source references are available through embedded hyperlinks in the article text online.