Following the news (25 February 2019) that the FDA has granted a Fast Track designation to Themis Bioscience's lead Phase II experimental vaccine (MV-CHIK) for prevention of Chikungunya,

Paul Jeng, PhD, Pharma Analyst at GlobalData, a leading data and analytics company, offers his view on the unmet needs and vaccine development for Chikungunya:

"There are no marketed therapeutic or prophylactic products for Chikungunya, and over 75% of current pipeline products are still in early preclinical or discovery phase. Key opinion leaders interviewed by GlobalData believe that Chikungunya poses an important potential global threat in the current era of unprecedented population growth, urbanization, and mass tourism. The need for a licensed vaccine is compounded by inadequate vector control for Aedes aegypti and growing rates of infection in the Western Hemisphere among immunologically naïve populations.

"Themis' measles-vectored MV-CHIK has successfully completed Phase II clinical development, and is among the most advanced candidates for prevention of Chikungunya along with PaxVax's Phase II virus-like particle (VLP) vaccine (VRC-CHKVLP059-00-VP). In a randomized, placebo-controlled trial of 263 individuals, all participants who received one or two doses of MV-CHIK produced neutralizing antibodies, with seroconversion rates ranging from 50-96%. GlobalData expects a pivotal Phase III clinical trial for MV-CHIK to be initiated in the next year.

"The unpredictable pattern of Chikungunya's outbreaks has been a major barrier to epidemiological studies and therapeutics development. A recent global strategic shift has been towards early funding of vaccine development through public-private partnerships as a means to prevent future epidemics. In this context, Chikungunya vaccine development has benefited from discussions around the WHO's blueprint list of priority diseases, and from public health alliances like CEPI."