

'Promising malaria, dengue vaccines alone will not defeat diseases'

21 May 2015 | Features | By BioSpectrum Bureau

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Despite the optimism surrounding two first-in-class products, Sanofi Pasteur's live-attenuated dengue vaccine, CYD-TDV, and GlaxoSmithKline's (GSK's) adjuvanted subunit malaria vaccine, RTS,S/AS01, vaccination alone is not a viable long-term solution for combatting these infectious diseases, says an analyst with research and consulting firm GlobalData.

According to Dr Christopher J Pace, GlobalData's managing analyst covering Infectious diseases, some industry pundits rightfully question the modest protective efficacies of CYD-TDV and RTS,S/AS01.

Immunization must therefore be leveraged alongside vector control strategies, national and international surveillance programs, and public awareness campaigns as part of integrated disease prevention and control initiatives.

Dr Pace explained: "Upon their anticipated approvals in late 2015, both Sanofi Pasteur's CYD-TDV and GSK's RTS,S/AS01 have the potential to begin providing long-awaited relief to billions of people living under the constant threat of dengue and malaria. At the very least, they represent landmark advances in the development of vaccines against these serious arthropod-borne illnesses.

"Nevertheless, we expect that while vaccines will be an essential component of future dengue and malaria prevention and control efforts, immunization cannot succeed as a 'silver bullet' solution for either disease."

The analyst added that renewed vector control efforts, from established methods such as mosquito nets and insecticides, to emerging microbiological and genetic techniques, are especially important to curtailing dengue and malaria transmission.

Dr Pace continued: "There are a number of novel tools on the horizon that will complement vaccines, most notably improved insecticides and innovative microbiological (Walbachia, *Chromobacterium* [Csp_P]) and genetic (sterile male) vector control technologies, as well as more potent antivirals for dengue and antiparasitics for malaria."

Ultimately, GSK and Sanofi Pasteur must work with other stakeholders to champion innovative pricing strategies and encourage vaccine uptake as part of integrated surveillance, prevention, and control programs to maximize each product's

public health benefit and commercial potential.