ACIP Dengue Vaccine Workgroup

Wilbur Chen, MD, MSc ACIP Member and Workgroup Chair Advisory Committee on Immunization Practices ACIP Meeting February 23, 2023

Dengue Virus

- DENV-1, 2, 3, 4
 - Lifelong DENV type-specific immunity
 - Short-term cross-immunity (~1–2 years)
 - A second dengue infection is the most important risk factor for severe dengue
- Dengue is the most common mosquito-borne virus globally



Dengue 1



Dengue 3



Dengue 2



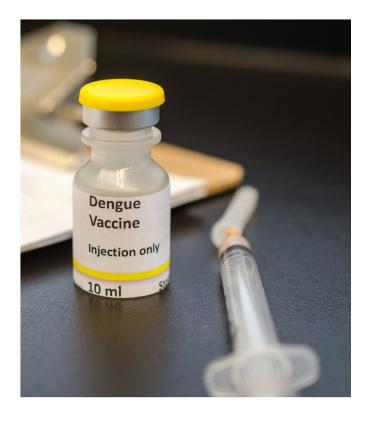
Dengue 4

Dengvaxia™ and previous dengue infection

Clinical trials found **different outcomes after Dengvaxia™ vaccination** among children with and without previous dengue infection.

- Children without previous dengue infection had a higher risk hospitalization and severe dengue if they were vaccinated and then had a DENV infection.
- Children with previous dengue infection were protected from hospitalization and severe dengue if they were vaccinated with Dengvaxia[™].

Dengvaxia™ ACIP Recommendation June 2021



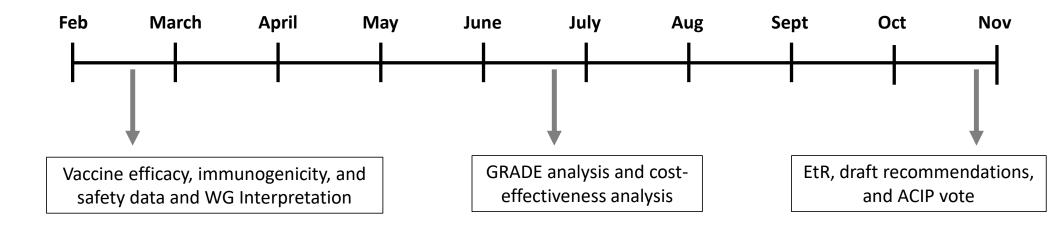
Three doses of Dengvaxia are indicated for the prevention of dengue disease caused by dengue virus serotypes 1, 2, 3, and 4 in people 9–16 years old with:

 laboratory confirmation of previous dengue virus infection

AND

• living in endemic areas.

Work group timeline 2023 for TAK003 Presentations to ACIP



Summary of work group plans and activities

- Review of efficacy, immunogenicity, and safety data (GRADE)
- Review of EtR domains and cost-effectiveness analysis
- Presentation of policy options and ACIP vote

Presentations today

TAK-003 Efficacy, Safety and Immunogenicity Data Dr. Shibadas Biswal, Takeda

Work Group Summary and Interpretation of TAK-003 Efficacy, Safety, and Immunogenicity Data Dr. Gabriela Paz-Bailey, CDC, NCEZID, DVBD

ACIP Dengue Vaccines Workgroup

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<u>CDC Co-Lead</u> Gabriela Paz-Bailey Laura Adams

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