# **GENERAL ARTICLE**

# **DENGUE VACCINES UPDATE**

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Abstract: Dengue is a widely prevalent arbovirus infection with a large number of symptomatic infections occurring every year across the world. Severe dengue can contribute to significant morbidity and mortality and has no specific treatment. With the non-availability of an effective vaccine, the only known preventive measure was mosquito control which was difficult to achieve. The first vaccine that was licensed, Dengvaxia, brought many safety issues to the fore, on account of antibody dependent enhancement. Many newer vaccines are currently being developed, keeping these issues in mind - some in phase III and phase I trials, some in the pre-clinical stage. It is a matter of time before a safe and effective dengue vaccine becomes available.

**Keywords:** *Dengue, Vaccine, Safety, Pre-clinical, Antibody dependent enhancement, Dengvaxia, TAK 003, Virus like* particles.

### **Points to Remember**

- Dengvaxia was the first dengue vaccine to be licensed. Though the response was good in the first 2 years, it was mired in controversy after many deaths were noted among vaccinated children in the Philippines.
- No dengue vaccine is yet approved for widespread use.
- Several vaccines live attenuated, inactivated, DNA vaccines, subunit vaccines are in advanced stages of trial and many in pre clinical trials.
- Burgeoning vaccine technology in recent times may help develop an effective vaccine against all serotypes of dengue with minimal side effects in the near future.

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