

## **Safety of dengue vaccine (CYD-TDV) in Asia: A systematic review**

### **ABSTRACT**

Application Dengue fever vaccine (CYD-TDV) in Asia currently remains quite limited and controversial due to safety issues not yet adequately evaluated. Therefore, the purpose of our review was to assess the safety of the CYD-TDV vaccine based on an analysis of data on its effectiveness in Asia. A search for relevant keywords in electronic databases found 309 scientific articles, of which only four publications were included in the review. The baseline serotype prevalence among study participants was 50-80%. With regard to the safety of the CYD-TDV vaccine, it was shown that reactions at the injection site (pain, edema, erythema) were noted with a relative risk (RR) of 95% CI (0.46-1.76), and systemic reactions (fever, headache, myalgia) were also RR 95% CI (0.89-1.81). Of the four papers included in the review, three contain data on a number of severe adverse effects at RR 95% CI (0.92-2.11). With regard to immunity, it was shown that for DENV-2 there was a high geometric mean titer of 67.8 (95% CI 64.8-70.8), DENV-3 - in 73.1 (95% CI 69.9-76.3), and for DENV-4 - in 65 (95% CI 62-67.9), when even lower values are found, this is consistent with other published work on the immunogenicity of the CYD-TDV vaccine against DENV serotypes. Our review shows that the CYD-TDV vaccine may be considered for use in Asia, but subject to a number of conditions and following these safety guidelines. 3), and for DENV-4 - in 65 (95% CI 62-67.9), when, when even smaller values are found, this is consistent with other published works on the immunogenicity of the CYD-TDV vaccine against DENV serotypes. Our review shows that the CYD-TDV vaccine may be considered for use in Asia, but subject to a number of conditions and following these safety guidelines. 3), and for DENV-4 - in 65 (95% CI 62-67.9), when, when even smaller values are found, this is consistent with other published works on the immunogenicity of the CYD-TDV vaccine against DENV serotypes. Our review shows that the CYD-TDV vaccine may be considered for use in Asia, but subject to a number of conditions and following these safety guidelines.