

MINUTES OF THE EXTRAORDINARY MEETING OF THE NATIONAL IMMUNIZATION COMMISSION

(CoNaiN) Vaccine against dengue

Autonomous City of Buenos Aires, 4th February, 2016

Participants:

Authorities of the Ministry of Health of the Nation

- Dr. Jorge Lemus, Minister of Health of the Nation
- Dr. Marina Kosacoff, Subsecretary for Prevention and Risk Control

Members of the main body of CoNaiN (in alphabetical order)

- Dr. Pablo Bonvehí (President)
- Dr. Ángela Gentile
- Dr. Silvia González Ayala
- Dr. Eduardo López
- Dr. Pablo Yedlin

Invited experts

- Dr. Gustavo Lopardo
- Dr. Daniel Stambouliau

Invited representatives of the Ministry of Health

- Dr. Jorge San Juan, National Director of Epidemiology and Risks
- Dr. Raúl Forlenza, on behalf of the Directorate of Epidemiology
- Mr. Héctor Coto, Director of Communicable Diseases by Vectors

Pan-American Health Organization (PAHO)

- Dr. José Moya
- Dr. Mirta Magariños

National Administration for Drugs, Food and Medical Technology (ANMAT)

- Dr. Carlos Chiale
- Dr. Patricia Aprea
- Dr. Mariana Vila

CoNaiN Secretariat

- Dr. Carla Vizzotti, National Director for the Control of Immunopreventable Diseases

The National Directorate for the Control of Immunopreventable Diseases (DiNaCEI) of the Ministry of Health of the Nation presented a bibliographical review of the scientific evidence published on the efficacy and safety of the vaccine against dengue (CYD-TDV). The following results are the most noteworthy, based on the phase III studies carried out in endemic countries that included the population of 2 to 16 years of age:

- CYD-TDV was shown to have a global efficacy against dengue of 60.8%.
- The efficacy varies depending on the dengue serotypes (DENV): adequate against infections from DENV3 and 4; less effective against DENV1 and practically no protection against DENV2.
- Efficacy was proven in dengue seropositive individuals at the start of the vaccination. In seronegatives it did not prove effective (43.2% - CI 95%: -61-80).
- CYD-TDV proved to be 95% effective in preventing serious dengue.
- An increase was detected in hospital admittances due to dengue in vaccinated children under 9 years of age, as of the third year of monitoring.

The available bibliography regarding the use of this vaccine for travelers and for controlling outbreaks was analyzed. Given the information available at the time and taking into account the vaccination schedule (0-6-12 months), the scarce efficacy in seronegative people, and the lack of data about the adult population and the low incidence of serious dengue in travelers, vaccination in these situations would not be recommended.

The Directorate of Epidemiology presented the epidemiological situation of dengue in the region and in Argentina. The current magnitude of the outbreaks occurring was described, as well as the information available on the mortality rate from dengue, the serotypes in circulation and the towns affected per year, the incidence rates by age groups and the stratification of towns according to the environmental risk of transmission provided by the Directorate of Communicable Diseases by Vectors. The following is most noteworthy in our country:

- Predominant circulation of DENV1 and DENV2 (DENV1 circulated in 11 of the 17 years in which the dengue virus was recorded in Argentina since its reemergence in 1998, followed by DENV2 in 9/17, DENV3 in 5/17 and DENV4 in 4/17). In the current year, circulation of DENV1 is predominant, which is also the predominant serotype in the bordering countries (Brazil and Paraguay).
- No cases of serious dengue reported by the date of the meeting.
- Since 2009 there have been no notifications of deaths due to dengue (this information was confirmed by the provincial directors of epidemiology).
- The highest notification rates and the greatest absolute number of cases is found in the population between 10 and 44 years of age (rate: 8.57/100,000), followed by those over 45 years of age. In 2009 and 2013, 62% and 70% of the cases respectively corresponded to adults of between 10 and 44 years of age.

- To date there is no proof of sustained transmission throughout the year anywhere in the country. Notification of suspicious cases studied in the laboratory in all of the weeks of the year, with no autochthonous cases recorded in winter and the heterogeneous nature of the towns in which outbreaks appear every year, all reinforces the hypothesis of interruption of the transmission.
- Nevertheless, the situation of endemicity in the neighboring countries, as well as the situation in the province of Formosa in 2015 (for which there is partial information available on febrile cases in winter but without laboratory correlation that would enable dengue infection to be confirmed or discarded), calls for an investigation on the ground and a comprehensive report on the provincial data to be able to elucidate the matter.
- The Map of Environmental Risk for Dengue was also presented, drawn up by the Directorate of Communicable Diseases by Vectors and the National Commission of Spatial Activities (CONAE). This map is the result of combining environmental data estimated using satellite images provided by CONAE, and the specific data gathered in the field by the Di-rETVs. It covers 2,279 towns at medium and high risk in the entire country for 2014/2015.

The PAHO reaffirmed the position of the Technical Advisory Group (TAG) 2015 and the need to have more data on safety and efficacy. It mentioned the poor efficacy against the DENV1 and 2 predominant in the region. It also underlined the importance of the quality of the healthcare services and access to them with respect to the dengue mortality rate. It reported that the vaccine is not yet prequalified by the WHO.

Based on the above, it was stated that at this date this body does not recommend introducing it into the immunization programs.

ANMAT stated that the body requested adding to the information available in the laboratory producing it in order to continue with the evaluation. The recommendation it makes is aimed at people from 9 to 60 years of age resident in endemic areas.

Based on the above, CoNaln

- Reaffirmed the recommendations from the 1st and 2nd Meetings of the Commission held in March and August, 2015, regarding the need to have more data on the long-term efficacy and safety.
- Pointed out the importance of intensifying the active epidemiological surveillance and activities to control the vector.

- Recommended studying the national epidemiology further and specifying the existence of eventual endemic areas and risk zones. Furthermore, it suggested carrying out local studies on seroprevalence, which is essential to estimate the eventual benefit from the vaccine in the context of our country.
- Suggested waiting for the results of after-market registration (phase IV) in countries where CYD-TDV has already been approved.
- Considered a future review of the data to be very useful, as well as the resulting document on the posture of international bodies such as the WHO in its meeting in April, 2016, and the PAHO in July, 2016.
- Stressed the relevance of continuing with a dynamic evaluation of the data on the vaccine in order to issue future recommendations about it.

The next ordinary meeting, the 1st Meeting of the National Commission on Immunizations, shall take place on Tuesday, 8th March this year.