THE VACCINE AGAINST DENGUE AND SEVERE DENGUE
DENGUE’S GROWING BURDEN

RECENT ESTIMATES SHOW THAT ABOUT HALF THE WORLD’S POPULATION LIVES IN AREAS WHERE DENGUE IS ENDEMIC. (2)

And incidence has increased 30-FOLD in the last 50 YEARS. (2)

It is present in 128 COUNTRIES WORLDWIDE and is the fastest growing mosquito-borne illness in the world today. (1,2)

• Globalization, increased mobility and climate change are contributing to the growth of emerging (and re-emerging) infectious diseases like dengue that are spread through a mosquito vector.

An estimated 390 MILLION DENGUE INFECTIONS total, 96 MILLION SYMPTOMATIC INFECTIONS, and 500,000 HOSPITALIZATIONS occur globally, each year. (2)

• Dengue can infect anyone regardless of age, sex, underlying health or socioeconomic status. (3)
  The greatest number of cases globally occurs in pre-adolescent to adult populations, the more mobile, social segment of the population. (4)

$9 BILLION USD: estimated direct and indirect medical costs associated with dengue globally each year. (5)

• One study demonstrated that dengue costs an estimated nearly $500 per ambulatory case and nearly $1500 per hospitalized case on average across 8 dengue-endemic countries. (6)

Known as "BREAKBONE FEVER," dengue can be a very painful disease and occasionally can lead to a potentially lethal complication called severe dengue that requires hospitalization. (7)

• Quality of life can be decreased by up to 67% during the acute phase of dengue illness, impacting patient well-being and productivity. (8)

There is no specific treatment for dengue. (9)

The WHO set 10-year global objectives to REDUCE DENGUE MORTALITY BY 50% AND MORBIDITY BY 25% BY 2020. (1)
The value of vaccination

The dengue vaccine is approved for the prevention of dengue for people living in endemic areas. The vaccine is effective against all four dengue virus types (serotypes).

It is a live, attenuated tetravalent vaccine. The indication is for people 9 - 45 years old.* The vaccination schedule is 3 doses, given 6 months apart (over a year at 0, 6 and 12 months).

Efficacy

The vaccine’s full clinical trial program included 25 studies in 15 countries around the world involving over 40,000 participants. (11,12)

This included two large-scale phase III efficacy studies in Asia Pacific and in Latin America.

Pooled Phase III clinical efficacy results among at-risk populations of 9 - 16 years old over a 25-month period showed that

The vaccine prevented:

- 2 out of 3 symptomatic cases caused by any of the four types of the virus (65.6%)
- 9 out of 10 severe dengue cases (93.2%)

Regulatory Approvals

The vaccine is approved for the prevention of dengue in several countries such as Mexico, Brazil, the Philippines, Malaysia and Australia, among others, that have geographic regions with high dengue burdens consistent with the WHO’s recommendation.

Public Vaccination Programs

In July 2016, the WHO issued its recommendation that countries with high dengue burdens consider introduction of the dengue vaccine to help better control the disease. (15) Public vaccination programs that are aligned with the WHO recommendation are under way in Brazil and the Philippines.

Estimated Impact

Modelling for the dengue vaccine has shown that broad vaccination against amongst people aged 9 and older in dengue endemic countries has the potential to reduce the disease burden by 50% over 5 years. (16)

Safety

An analysis of clinical trial data that included 26,000 vaccinated people from 15 countries and showed that the vaccine had a satisfactory safety profile, comparable to placebo in the indicated age population. (14)
“Sanofi pasteur is committed to bringing the vaccine to countries where dengue is a major public health priority. By vaccinating the population and preventing dengue in many people, governments can expect a significant impact on the growing human and economic burden of disease. It’s a unique contribution to public health and a continuation of our company’s heritage: more than a century of developing and delivering innovative vaccines for people around the world.”

David Loew, Executive Vice President, Sanofi and General Manager, Sanofi Pasteur.