

Valneva Announces Peer-Reviewed Publication on the Global Health and Economic Burden of Chikungunya in *The British Medical Journal*

Saint-Herblain (France), December 4, 2024 – Valneva SE (Nasdaq: VALN; Euronext Paris: VLA), a specialty vaccine company, today announces the publication of an article on the global health and economic burden of mosquito-borne disease chikungunya in *The British Medical Journal (BMJ)*, one of the world’s leading peer-reviewed medical journals.

[The article](#), titled, “The Global Health and Economic Burden of Chikungunya from 2011 to 2020: A Model-Driven Analysis on the Impact of an Emerging Vector-Borne Disease,” shows that chikungunya has a higher disease burden than was previously estimated, and costs related to the disease are substantial. According to the BMJ article, chikungunya could significantly impact local health systems due to its unpredictable and explosive nature.

Juan Carlos Jaramillo M.D., Chief Medical Officer of Valneva, said, “Understanding the global burden of chikungunya is critical for informing decision makers and designing effective prevention and control strategies. This landmark analysis is very informative as it provides a comprehensive overview of the chikungunya burden worldwide and until now, estimates of chikungunya’s economic and health impact were limited and potentially underestimated. Due to climate change, mosquito-borne diseases have become a year-round menace and continue spreading, increasing the potential for outbreaks.”

According to the article, a total of 18.7 million chikungunya cases were reported in 110 countries between 2011 and 2020, causing 1.95 million disability-adjusted life years (DALY)¹ lost. Long-term chronic illness was the source of most costs and DALYs lost. The total economic burden caused by chikungunya over these ten years was estimated at \$2.8 billion in direct costs and \$47.1 billion in indirect costs worldwide, primarily in Latin American and the Caribbean.

About Chikungunya

Chikungunya virus (CHIKV) is a mosquito-borne viral disease spread by the bites of infected *Aedes* mosquitoes which causes fever, severe joint and muscle pain, headache, nausea, fatigue and rash. Joint pain is often debilitating and can persist for weeks to years.²

In 2004, the disease began to spread quickly, causing large-scale outbreaks around the world. Since the re-emergence of the virus, CHIKV has now been identified in over 110 countries in Asia, Africa, Europe and the Americas.³ Between 2013 and 2023, more than 3.7 million cases were reported in the Americas⁴ and the economic impact is considered to be significant. The medical and economic burden is expected to grow with climate change as the mosquito vectors that transmit the disease continue to

¹ [Disability-adjusted life years \(DALYs\)](#)

² <https://jvi.asm.org/content/jvi/88/20/11644.full.pdf>

³ <https://cmr.asm.org/content/31/1/e00104-16>

⁴ PAHO/WHO data: Number of reported cases of chikungunya fever in the Americas (Cumulative Cases 2018-2023 and Cases per year 2013-2017). <https://www.paho.org/data/index.php/en/mnu-topics/chikv-en/550-chikv-weekly-en.html>. Last accessed 01 Aug 2023.



spread geographically. As such, the World Health Organization (WHO) has highlighted chikungunya as a major public health problem.⁵

About Valneva SE

We are a specialty vaccine company that develops, manufactures, and commercializes prophylactic vaccines for infectious diseases addressing unmet medical needs. We take a highly specialized and targeted approach, applying our deep expertise across multiple vaccine modalities, focused on providing either first-, best- or only-in-class vaccine solutions.

We have a strong track record, having advanced multiple vaccines from early R&D to approvals, and currently market three proprietary travel vaccines, including the world's first and only chikungunya vaccine, as well as certain third-party vaccines.

Revenues from our growing commercial business help fuel the continued advancement of our vaccine pipeline. This includes the only Lyme disease vaccine candidate in advanced clinical development, which is partnered with Pfizer, the world's most clinically advanced Shigella vaccine candidate, as well as vaccine candidates against the Zika virus and other global public health threats. More information is available at www.valneva.com.

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Forward-Looking Statements

This press release contains certain forward-looking statements relating to the business of Valneva. In addition, even if the actual results or development of Valneva are consistent with the forward-looking statements contained in this press release, those results or developments of Valneva may not be sustained in the future. In some cases, you can identify forward-looking statements by words such as "could," "should," "may," "expects," "anticipates," "believes," "intends," "estimates," "aims," "targets," or similar words. These forward-looking statements are based largely on the current expectations of Valneva as of the date of this press release and are subject to a number of known and unknown risks and uncertainties and other factors that may cause actual results, performance or achievements to be materially different from any future results, performance or achievement expressed or implied by these forward-looking statements. In particular, the expectations of Valneva could be affected by, among other things, uncertainties and delays involved in the development and manufacture of vaccines, unexpected clinical trial results, unexpected regulatory actions or delays, competition in general, currency fluctuations, the impact of the global and European credit crisis, and the ability to obtain or maintain patent or other proprietary intellectual property protection. Success in preclinical studies or earlier clinical trials may not be indicative of results in future clinical trials. In light of these risks and uncertainties, there can be no assurance that the forward-looking statements made in this press release will in fact be realized. Valneva is providing this information as of the date of this press release and disclaims any intention or obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events, or otherwise.

⁵ [Geographical expansion of cases of dengue and chikungunya beyond the historical areas of transmission in the Region of the Americas \(who.int\)](http://www.who.int)