VALNEVA SE
Campus Bio-Ouest | 6, Rue Alain Bombard
44800 Saint-Herblain, *France*

Valneva Reports Positive End-of-Phase 2 Chikungunya Meeting with the U.S. FDA; Sets Stage for Phase 3 Study

- Development plan towards licensure endorsed with FDA
  - Approval through Accelerated Approval Pathway[1] (immunological surrogate)
- Main Phase 3 trial planned as double-blind, placebo-controlled, multi-center study
- Dose Selection for Phase 3, manufacturing and industrialization strategy accepted
- Study initiation as soon as COVID-19 situation permits
  - Currently anticipated for the fourth quarter 2020
  - Primary endpoint analysis is expected six months thereafter
- Seamless fit with Valneva's existing commercial and manufacturing capabilities as a plug and play asset

Saint-Herblain (France), March 25, 2020 – Valneva SE ("Valneva" or "the Company") announced today that it has successfully completed an End-of-Phase 2 meeting with the U.S. Food and Drug Administration (FDA) and agreed on the clinical development plan towards licensure for its unique, single-shot chikungunya vaccine, VLA1553.

Regulatory approval will be based on an immunological surrogate (Accelerated Approval Pathway).

The main Phase 3 pivotal trial will be, subject to detailed protocol review, a double-blinded, placebo-controlled, multi-center study in approximately 4,000 healthy adults. Subjects will be randomized into two study groups to receive either vaccine or placebo; a subset will be tested for seroprotection. The primary endpoint of the study will be to demonstrate safety and immunogenicity after a single-shot vaccination with VLA1553 at Day 29 (one month after immunization). The final analysis will be conducted at Day 180 (six months after immunization). The total duration of the study is expected to be nine months.

As previously announced, the chikungunya vaccine represents a seamless fit with Valneva's existing commercial and manufacturing capabilities as a plug-and play asset.

Wolfgang Bender, M.D., Ph.D., Chief Medical Officer of Valneva, commented, "We would like to thank the U.S. FDA for a productive End of Phase 2 meeting. We look forward to further demonstrating the best-in class potential of our single-shot chikungunya vaccine VLA1553 in our Phase 3 program. Providing a vaccine against chikungunya is critical as the virus is considered a major public health threat and there are currently no preventive vaccines or effective treatments available. We are thrilled about the prospect to potentially have a vaccine available by the end of 2022."

[1] *https://www.fda.gov/patients/learn-about-drug-and-device-approvals/fast-track-breakthrough-therapy-accelerated-approval-priority-review*

The Company is preparing for Phase 3 initiation as soon as the COVID-19 situation permits. Currently, the company assumes that Phase 3 can be initiated in the fourth quarter of this year.

Valneva's chikungunya vaccine candidate was granted Fast Track designation by the FDA in December 2018 and received confirmation for the Accelerated Approval Pathway at the end of February 2020 during the EOP2 meeting with the FDA[2].

The sponsor of the first chikungunya vaccine Biologics License Application (BLA) to be approved in the U.S. will be eligible to receive a Priority Review Voucher (PRV) [3].

About the Phase 1 Clinical Study VLA1553-101

This study was a randomized, observer-blinded, multicenter, dose-escalation Phase 1 clinical study investigating three dose levels of VLA1553, administered as a single immunization. It enrolled 120 healthy volunteers, 18 to 45 years of age, in the United States. Subjects were randomized into three different study groups to receive one of three dose levels (30 subjects in the low and medium and 60 subjects in the high dose group). The protocol included a re-vaccination with the live-attenuated vaccine candidate VLA1553 at Month 6 (for 30 subjects in the high dose group) or Month 12 (for all others) to confirm that a single vaccination would be sufficient to induce high titer neutralizing antibodies and protect subjects from vaccine-induced viremia (intrinsic viral challenge). Study participants were followed until 13 months after initial vaccination. An independent Drug Safety Monitoring Board (DSMB) continuously oversaw the study and reviewed safety data. The vaccine candidate showed an excellent immunogenicity profile in all vaccinated dose groups after a single vaccination, with a 100% seroconversion[4] achieved at Day 14. Titers were sustained at 100% at Month 12. VLA1553 was generally safe and well-tolerated with a superior safety profile in low and medium dose groups compared to the high dose group, and showed an excellent local tolerability.
Additional information, including a detailed description of the study design, eligibility criteria and investigator sites, is available at ClinicalTrials.gov (NCT03382964).

About Chikungunya

Chikungunya is a mosquito-borne viral disease caused by the chikungunya virus (CHIKV), a *Togaviridae* virus, transmitted by *Aedes* mosquitoes. Clinical symptoms include acute onset of fever, debilitating joint and muscle pain, headache, nausea and rash, potentially developing into long-term, serious health impairments. Chikungunya virus causes clinical illness in 72-92% of infected humans around 4 to 7 days after an infected mosquito bite. Complications resulting from the disease include visual, neurological, heart and gastrointestinal manifestations; fatalities have been reported (case fatality rates of 0.1% to 4.9% from epidemics)[5] in elderly patients at higher risk. Chikungunya outbreaks have been reported in Asia, Africa, the Americas and recently (2017) in Europe. As of 2017, there have been more than one million reported cases in the Americas[6] and the economic impact is considered to be significant (e.g. Colombia outbreak 2014: $73.6 million[7]). The medical and economic burden is expected to grow as the CHIKV

[2] *Valneva press release: Valneva Awarded FDA Fast Track Designation for Chikungunya Vaccine Candidate*
[3] *https://priorityreviewvoucher.org/*
[4] *Seroconversion is defined as the proportion of subjects achieving a CHIKV-specific neutralizing antibody titer of NT50 ≥20.*
[5] *WHO, PAHO*
[6] *PAHO/WHO data: Number of reported cases of Chikungunya Fever in the Americas – EW 51 (December 22, 2017)*
[7] *Cardona-Ospina et al. 2015, Trans R Soc Trip Med Hyg 109:793-802.*

primary mosquito vectors continue to further spread geographically. There are no preventive vaccines or effective treatments available and, as such, chikungunya is considered to be a major public health threat.

About VLA1553

VLA1553 is a monovalent, single dose, live-attenuated vaccine candidate for protection against chikungunya and was granted Fast Track designation by the U.S. Food and Drug Administration (FDA) in December 2018[8].

The vaccine candidate is designed for prophylactic, active, single-dose immunization against chikungunya in humans over one year old. The vaccine targets long-lasting protection and an anticipated safety profile similar to licensed vaccines for active immunization in adults and children. The target population segments are travelers, military personnel and individuals at risk living in endemic regions. The global market for vaccines against chikungunya is estimated to exceed $500 million annually[9], including a traveler vaccine market potential of ~$250 million. VLA1553 is based on an infectious clone (CHIKV LR2006-OPY1) attenuated by deleting a major part of the gene encoding the non-structural replicase complex protein nsP3, aiming for protection against various chikungunya virus outbreak phylogroups and strains[10].

About Valneva SE

Valneva is a specialty vaccine company focused on prevention against diseases with major unmet needs. Valneva's portfolio includes two commercial vaccines for travelers: IXIARO®/JESPECT® indicated for the prevention of Japanese encephalitis and DUKORAL® indicated for the prevention of cholera and, in some countries, prevention of diarrhea caused by ETEC. The Company has various vaccines in development including unique vaccines against Lyme disease and chikungunya. Valneva has operations in Austria, Sweden, the United Kingdom, France, Canada and the US with over 500 employees. More information is available at www.valneva.com.

Valneva Investor and Media Contacts

Laetitia Bachelot-Fontaine
Global Head of Investor Relations &
Corporate Communications
M +33 (0)6 4516 7099
investors@valneva.com

Teresa Pinzolits
Corporate Communications Specialist
T +43 (0)1 20620 1116
communications@valneva.com

Forward-Looking Statements

This press release contains certain forward-looking statements relating to the business of Valneva, including with respect to the progress, timing and completion of research, development and clinical trials for product candidates, the ability to manufacture, market, commercialize and achieve market acceptance for product candidates, the ability to protect intellectual property and operate the business without infringing on the intellectual property rights of others, estimates for future performance and estimates regarding anticipated operating losses, future revenues, capital requirements and needs for additional financing. In addition, even if the actual results or development of Valneva are consistent with the forward-looking statements contained in this

[8] *Valneva PR: Valneva Awarded FDA Fast Track Designation for Chikungunya vaccine candidate*
[9] *Company estimate supported by an independent market study*
[10] *Hallengärd et al. 2013, J. Virology 88:2858-2866.*

press release, those results or developments of Valneva may not be indicative of their 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 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. In light of these risks and uncertainties, there can be no assurance that the forward-looking statements made during this presentation will in fact be realized. Valneva is providing the information in these materials as of this press release, and disclaim any intention or obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events, or otherwise.