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Valneva Reports Further Positive Phase 3 Immunogenicity and the First Heterologous Booster Results for its Inactivated, Adjuvanted COVID-19 Vaccine VLA2001

Saint-Herblain (France), August 29, 2022 – Valneva SE (Nasdaq: VALN; Euronext Paris: VLA), a specialty vaccine company, today reported further positive Phase 3 results for its inactivated, adjuvanted COVID-19 vaccine VLA2001. Additional readouts from the Company's pivotal VLA2001-301 "Cov-Compare" trial showed persistent immunogenicity and first positive heterologous booster results following primary vaccination with ChAdOx1-S (AstraZeneca).

The Company previously reported immunogenicity data at Day 43 post primary vaccination[1] and has now evaluated immunogenicity in VLA2001-301 trial participants approximately two months following primary immunization ("Day 71"), as part of the prespecified analysis of secondary endpoints. At Day 71, neutralizing antibody titers induced by VLA2001 were non-inferior to ChAdOx1-S: VLA2001 GMT was 444.0 (95% CI: 414.0, 476.2), ChAdOx1-S GMT was 411.8 (95% CI: 389.7, 435.0). Seroconversion rates remained constant at Day 71 (above 92% in both treatment groups). Additionally, T-cell responses analyzed in a sub-set of the 3,560 trial participants followed for approximately six months after primary vaccination ("Day 208") showed that VLA2001 induced broad antigen-specific IFN-gamma producing T-cells reactive against the S-protein, as well as the N- and M-proteins up to Day 208. The safety profile of VLA2001 continues to be favorable and the vaccine was well tolerated up to Day 208.

The occurrence of COVID-19 cases (exploratory endpoint) was similar between the VLA2001 and ChAdOx1-S groups, supporting earlier findings[2]. There were no severe COVID-19 cases up to Day 208 in the direct comparative groups (above 30 years of age), which may suggest that both vaccines provided similar protection against severe COVID-19 disease caused by the circulating variant(s) (predominantly Delta). There was one severe COVID-19 case in the 18-29 years of age cohort (n=1040 participants) in a participant with a BMI >40 and history of asthma.

A total of 958 participants from the VLA2001-301 trial received a single dose of VLA2001 approximately eight months after priming with either VLA2001 or ChAdOx1-S (AstraZeneca) to evaluate the booster effect in both homologous and heterologous ("mix and match") settings. Previously, VLA2001 showed an excellent immune response after a third dose administered seven to eight months in participants who received VLA2001 as a primary vaccination in a Phase 1/2 study[3].

In both the homologous and heterologous setting, VLA2001 was able to boost immunity to higher neutralizing antibody titers than following priming, and to levels reported to be highly efficacious (90%) against SARS-CoV-2[4]. Neutralizing antibody titers following a VLA2001 booster dose administered approximately eight months after primary vaccination were between 3-fold (heterologous) to 28-fold (homologous) higher compared to pre-boost levels, in line with previous VLA2001 Phase 1/2 homologous booster results[5]. A booster dose of VLA2001 was well tolerated by both VLA2001- and

[1] *Valneva Reports Positive Phase 3 Results for Inactivated, Adjuvanted COVID-19 Vaccine Candidate VLA2001*
[2] *Valneva Reports Positive Phase 3 Results for Inactivated, Adjuvanted COVID-19 Vaccine Candidate VLA2001*
[3] *Valneva Announces Positive Homologous Booster Data for Inactivated, Adjuvanted COVID-19 Vaccine Candidate VLA2001*
[4] *P. B. Gilbert et al., Science (2021) Immune correlates analysis of the mRNA-1273 COVID-19 vaccine efficacy clinical trial*
[5] *Valneva Announces Positive Homologous Booster Data for Inactivated, Adjuvanted COVID-19 Vaccine Candidate VLA2001*

ChAdOx1-S-primed participants. The tolerability profile of a booster dose with VLA2001 was similar to the favorable profile observed after the first and second vaccination with VLA2001 in the Phase 1/2 and initial Phase 3 trial results.

Juan Carlos Jaramillo, MD, Chief Medical Officer of Valneva, commented**,** "We are pleased to report the first positive heterologous booster results for VLA2001, which successfully boosted immunity in participants primed with AstraZeneca's ChAdOx1-S. This complements the positive homologous booster data we've generated in our Phase 1/2 and this Phase 3. We believe the robust immunogenicity and safety profile of our differentiated whole virus, inactivated vaccine remains compelling, and we look forward to providing further booster and durability results from ongoing studies with the hope of maximizing the potential for our vaccine to make a meaningful impact on public health."

The Company's dedicated heterologous booster trial of VLA2001, VLA2001-307, which aims to provide booster data following primary vaccination with an mRNA vaccine or natural infection caused by COVID-19, remains ongoing with results expected in Q4 2022. If positive, we believe these data from VLA2001-307, combined with these initial heterologous booster results from VLA2001-301, may support potential use of VLA2001 as a heterologous booster, subject to applicable regulatory and national scientific recommendations and approvals.

About Phase 3 Cov-Compare Study VLA2001-301

Cov-Compare is a randomized, observer-blind, controlled, comparative immunogenicity study in 4012 adults for which Valneva has reported meeting all primary endpoints including superiority with regards to GMT of neutralizing antibodies at two weeks after the second dose of VLA2001 compared to ChAdOx1-S (AstraZeneca). Participants have been followed up for safety and immunogenicity up to Month 6. As part of the trial's booster extension, 958 participants have received a third vaccination approximately eight months after priming with either VLA2001 or ChAdOx1-S. Participants who had already received a licensed COVID-19 vaccine outside of the study or had a COVID-19 infection prior to the booster dose have not been included in the immunogenicity analysis of the booster response. Participants who did not receive a VLA2001 booster vaccination will continue with their scheduled Month 12 follow up visit, and participants who received a booster dose will be followed up to six months after booster dose administration.

About VLA2001

VLA2001 is produced on Valneva's established Vero-cell platform, leveraging the manufacturing technology for Valneva's licensed Japanese encephalitis vaccine, IXIARO®. VLA2001 consists of inactivated whole virus particles of SARS-CoV-2 with high S-protein density, in combination with two adjuvants, alum and CpG 1018. This adjuvant combination has consistently induced higher antibody levels in preclinical experiments than alum-only formulations and shown a shift of the immune response towards Th1. CpG 1018 adjuvant, supplied by Dynavax Technologies Corporation (Nasdaq: DVAX), is a component of the US FDA- and EMA-approved HEPLISAV-B® vaccine. VLA2001's manufacturing process, which has already been upscaled to final industrial scale, includes chemical inactivation to preserve the native structure of the S-protein. VLA2001 is expected to conform with standard cold chain requirements (2 to 8 degrees Celsius).

VLA2001 is the first COVID-19 vaccine to receive a standard marketing authorization in Europe[6] and the only whole virus, inactivated, adjuvanted COVID-19 vaccine to receive marketing authorization in

[6] *Valneva Receives Marketing Authorization in Europe for Inactivated Whole-Virus COVID-19 Vaccine VLA2001*

Europe for use as primary vaccination in people from 18 to 50 years of age. The vaccine was also granted conditional marketing authorization in the United Kingdom[7] and emergency use authorization in the United Arab Emirates[8] and Kingdom of Bahrain[9]. Valneva currently has agreements to supply VLA2001 to certain EU Member States[10] and the Kingdom of Bahrain[11]. In August 2022, the World Health Organization (WHO) issued recommendations for use of VLA2001[12]. In light of current order levels and existing inventories, Valneva has suspended manufacturing of the vaccine[13]. Valneva is retaining inventory for potential additional supply to these EU Member States should demand increase. In parallel, the Company is continuing discussions with various other governments around the world, with the aim to deploy approximately eight to ten million doses of remaining inventory into international markets in the next six to twelve months.

About Valneva SE

Valneva is a specialty vaccine company focused on the development and commercialization of prophylactic vaccines for infectious diseases with significant unmet medical need. The Company takes a highly specialized and targeted approach to vaccine development and then applies its deep understanding of vaccine science to develop prophylactic vaccines addressing these diseases. Valneva has leveraged its expertise and capabilities both to successfully commercialize two vaccines and to rapidly advance a broad range of vaccine candidates into and through the clinic, including candidates against Lyme disease, the chikungunya virus and COVID-19.

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Forward-Looking Statements

This press release contains certain forward-looking statements relating to the business of Valneva, including with respect to timing and nature of clinical trial results and possible purchase agreements and regulatory approval of VLA2001. 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 indicative of future results. 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 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, the

[7] *Valneva Receives Conditional Marketing Authorization from UK MHRA for its Inactivated COVID-19 Vaccine*
[8] *Valneva Receives Emergency Use Authorization from the United Arab Emirates for its Inactivated COVID-19 Vaccine*
[9] *Valneva Receives Emergency Use Authorization from Bahrain for its Inactivated COVID-19 Vaccine VLA2001*
[10] *European Commission Approves Purchase Agreement Amendment for Valneva's Inactivated COVID-19 Vaccine*
[11] *Valneva Signs Advance Purchase Agreement with Bahrain for Inactivated COVID-19 Vaccine VLA2001*
[12] *Valneva Confirms WHO Recommendations for its Inactivated COVID-19 Vaccine*
[13] *European Commission Approves Purchase Agreement Amendment for Valneva's Inactivated COVID-19 Vaccine*

ability to obtain or maintain patent or other proprietary intellectual property protection and the impact of the COVID-19 pandemic. 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 the information in this press release as of the date hereof 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.