

## WHAT IS COVID-19?

COVID-19 is the infectious disease caused by the new coronavirus (SARS-CoV-2) identified in late 2019. COVID-19 is affecting many countries globally and has been declared a pandemic by the World Health Organization (WHO).<sup>1</sup> To date, there has been over 3.1 million COVID-19 related deaths reported worldwide.<sup>2</sup>

## SYMPTOMS & DIAGNOSIS

Most people infected with the COVID-19 virus will experience mild to moderate respiratory illness<sup>3</sup>. The most common symptoms of COVID-19 are fever, dry cough and tiredness. Other symptoms that are less common and may affect some patients include muscle or joint pain, nasal congestion, headache, conjunctivitis, sore throat, diarrhea, loss of taste and/or smell or different types of skin rash<sup>1</sup>.

Age accounts for most of the increase in risk of severe COVID-19. People over 60 years of age and those with multiple underlying health conditions (e.g. hypertension, diabetes, cardiovascular disease, chronic respiratory disease and immune suppression) are considered to be more at risk of developing severe symptoms. Men in these groups also appear to be at a slightly higher risk than women<sup>4</sup>.

## SPREAD OF INFECTION

People can contract COVID-19 from others who have the virus. The disease spreads primarily from person-to-person through small droplets from the nose or mouth, which are expelled when a person with COVID-19 coughs, sneezes or speaks. Droplets can be inhaled or can land on surfaces that others come into contact with and are then infected when they touch their nose, mouth or eyes. The virus can survive on surfaces from anything between a few hours (copper, cardboard) to a number of days (plastic and stainless steel).<sup>5</sup>

## TREATMENT & PREVENTION

There are currently several vaccines authorized in early or limited use, or approved for full use<sup>6</sup>. Deployment of the first-round of approved prophylactic vaccines worldwide could take months, possibly years to effectively protect enough people to achieve 'herd immunity.' The treatment for people who are hospitalized with severe COVID-19 disease is largely supportive (e.g. oxygen therapy, management of fluids), mostly using a symptomatic approach, targeting the symptoms rather than the virus<sup>4</sup>. For now, some protective measures remain important, such as covering coughs and sneezes, wearing protective face masks, cleaning hands frequently and thoroughly, avoiding touching your eyes, mouth and nose and practicing social or physical distancing<sup>3</sup>.

1. Q&A on coronaviruses (COVID-19). (n.d.). Retrieved March 23, 2021, from <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/question-and-answers-hub/q-a-detail/q-a-coronaviruses>  
2. Coronavirus Cases. (n.d.). Retrieved April 28, 2021, from <https://www.worldometers.info/coronavirus/>  
3. WHO Retrieved March 23, 2021 from [https://www.who.int/health-topics/coronavirus#tab-tab\\_1](https://www.who.int/health-topics/coronavirus#tab-tab_1)  
4. European Centre for Disease Prevention and Control, Retrieved March 23, 2021 from <https://www.ecdc.europa.eu/en/covid-19/questions-answers/questions-answers-medical-info>  
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6. NY Times, Retrieved on March 24, 2021 <https://www.nytimes.com/interactive/2020/science/coronavirus-vaccine-tracker.html>  
7. Valneva Initiates Phase 3 Clinical Trial for its Inactivated, Adjuvanted COVID-19 Vaccine Candidate VLA2001  
8. Valneva Announces Positive Phase 1/2 Results for its COVID-19 Vaccine Candidate VLA2001  
9. Valneva Confirms Participation in UK Government COVID-19 Vaccine Response Program  
10. Valneva in Advanced Discussions with European Commission to Supply up to 60 Million Doses of Inactivated, Adjuvanted COVID-19 Vaccine Candidate  
11. Valneva Switches Focus to Bilateral Discussions to Supply its Inactivated, Adjuvanted COVID-19 Vaccine Candidate VLA2001

## VALNEVA'S VACCINE CANDIDATE - VLA2001

- Inactivated
- Adjuvanted with Alum and CpG 1018
- Highly-purified
- Whole virus candidate
- Vero-cell based
- Using the manufacturing platform of Valneva's commercial Japanese encephalitis (JE) vaccine



## Phase 3 trial initiated

The Phase 3 trial "Cov-Compare" initiated in April 2021 will compare VLA2001 to the Vaxzevria vaccine, which has already received conditional marketing authorization, in an immunogenicity trial including approximately 4,000 participants<sup>7</sup>. Valneva reported positive Phase 1/2 trial data for VLA2001 at the beginning of April 2021<sup>8</sup>. VLA2001 was well tolerated with no safety concerns identified. In the high dose group, IgG seroconversion rate was 100%, and neutralizing antibody titers were at or above levels generally seen in convalescent sera. Based on the data assessed, the Company has decided to advance the high dose into the Phase 3 clinical trial.

## AGREEMENT WITH THE UK, DISCUSSIONS WITH THE EC AND OTHER COUNTRIES

In September 2020, Valneva announced a collaboration with the UK government, which has the option to purchase up to 190 million doses through 2025<sup>9</sup>. So far, the UK Government has ordered 100 million doses to be delivered in 2021 and 2022 and retains options over a further 90 million doses for supply between 2023 and 2025.

In January 2021, Valneva announced it is in advanced discussions with the European Commission (EC) for the supply of up to 60 million doses of VLA2001<sup>10</sup>. In April 2021, Valneva announced it is now focusing on bilateral discussions, on a country by country basis, to supply VLA2001 and is consequently deprioritizing the ongoing centralized discussions with the European Commission (EC)<sup>11</sup>.

## DESIGNED & MANUFACTURED IN-HOUSE IN EUROPE

VLA2001 was developed by Valneva's R&D teams in France & Austria. It is the only inactivated, adjuvanted whole virus COVID-19 vaccine in clinical trials in Europe.

### UK manufacturing facilities

The facility in Livingston, Scotland has been producing FDA/EMA/MHRA approved commercial-grade travel vaccines for more than a decade. It has been expanding its capacity and will be the production hub for Valneva's COVID-19 vaccine candidate.



### Fill & Finish Capacities in Sweden

Valneva's facility in Solna is dedicated to the production of the Company's cholera vaccine. It has been expanding its capacity in order to provide complete fill and finish operations for the VLA2001 vaccine.