

# Five things to know about landmark UK vaccine

3 January 2021



Credit: CC0 Public Domain

Cheap and easy to store, the AstraZeneca/Oxford vaccine which is to be rolled out in Britain on Monday has given a significant boost to the global fight against coronavirus.

Here are five facts about the much-anticipated vaccine.

## Practicality

The AstraZeneca/Oxford vaccine has the major advantages of being inexpensive, costing about £2.50 (\$3.40, 2.75 euros) per dose, and easy to store.

It can be kept at normal refrigerator temperatures of between two and eight degrees Celsius (36-46 Fahrenheit), making it ideal for large-scale vaccination programmes, with both India and Argentina recently approving its use.

Britain will start its mass rollout of the vaccine on Monday, with 530,000 doses ready for immediate use and the government hoping for "tens of millions" within three months.

By contrast, the Moderna vaccine needs to be stored at minus 20C, while the Pfizer/BioNTech product must be kept at minus 70C.

## New strain

The vaccine should be capable of fighting the new variant of the [coronavirus](#) responsible for a surge of cases in the United Kingdom, according to AstraZeneca chief executive Pascal Soriot.

"So far, we think the vaccine should remain effective. But we can't be sure, so we're going to test that," he told The Sunday Times.

New versions are being developed just in case, he revealed, adding: "You have to get prepared."

## British product

The vaccine developed by British firm AstraZeneca, working alongside Oxford University, is the second to be approved by the independent Medicines and Healthcare products Regulatory Agency (MHRA).

The Pfizer/BioNTech vaccine has been deployed in Britain since December 8, with around one million receiving their first dose, according to British Prime Minister Boris Johnson.

His government is battling one of the world's worst outbreaks, with more than 75,000 deaths so far of those testing positive for the disease.

Britain has ordered 100 million doses of the AstraZeneca/Oxford vaccine.

AstraZeneca said it expects to be able to manufacture about three billion doses of its vaccine worldwide in 2021.

## Chimpanzees

The vaccine is "virus-vectored", meaning it is a

version of a virus that normally infects chimpanzees and has been modified with a portion of the COVID-19 coronavirus called the "spike protein" to fire the immune system.

Once in human cells, the vaccine should help stimulate the production of antibodies that recognize the virus.

The vaccine is "safe and effective", according to data published by *The Lancet* medical journal on December 8, with only one of the of the 23,754 volunteers who participated in the trials experiencing "possibly-related severe side effects".

This was a case of a rare neurological condition, transverse myelitis, that forced the temporary suspension of trials.

### **Result confusion**

The British laboratory announced in interim findings in November that its vaccine was on average 70 percent effective, compared with more than 90 percent for Pfizer/BioNTech and Moderna.

The efficacy of the AstraZeneca/Oxford [vaccine](#) was 90 percent for volunteers who first received only a half dose and then a full dose one month later, but only 62 percent for those in another group who were vaccinated with two full doses one month apart.

The injection of a half dose was conducted by accident, raising criticism over the robustness of the results and prompting the company to announce on November 26 that an "additional study" would be held into the efficacy of the reduced dosage.

"We think we have figured out the winning formula and how to get efficacy that, after two doses, is up there with everybody else," Soriot told *The Sunday Times*.

© 2021 AFP

APA citation: Five things to know about landmark UK vaccine (2021, January 3) retrieved 6 November 2022 from <https://medicalxpress.com/news/2021-01-landmark-uk-vaccine.html>

*This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.*