Astra/Oxford seek coronavirus vaccine approval after 'effective' trials

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British drugs group AstraZeneca and the University of Oxford said on Monday they will seek regulatory approval for their coronavirus vaccine after "effective" trials, in the latest potential boost to curbing the global outbreak.

The partners announced that while the vaccine showed an average 70-percent effectiveness, the level jumped to 90 percent depending on dosage.

Manufacturers Pfizer/BioNTech and Moderna last week said trials of their vaccines showed effectiveness above 90 percent in what was hailed as a breakthrough in stopping the spread of the virus.

Britain's Prime Minister Boris Johnson called the announcement "incredibly exciting".

"There are still further safety checks ahead but these are fantastic results," he said.

Despite varying outcomes, AstraZeneca chief executive Pascal Soriot insisted his firm's vaccine would have an "immediate impact".

"AstraZeneca will now immediately prepare regulatory submission of the data to authorities around the world that have a framework in place for conditional or early approval," he said.

The firm said it would look to develop up to three billion doses of the vaccine in 2021 after passing regulatory hurdles.

Pfizer/BioNTech's vaccine has to be stored at -70 degrees Celsius (-94 degrees Fahrenheit)—much colder than temperatures of a standard freezer.

That has prompted questions about distribution and storage, as well as higher costs, particularly for lower-income countries.

But the AstraZeneca/Oxford vaccine could be stored, transported and handled "at normal refrigerated conditions" of between two and eight degrees Celsius for at least six months.

The vaccine showed 90 percent efficacy when given as a half-dose followed by a full-dose at least one month apart. The result was 62 percent as two full doses in the same period.

"We think that by giving a smaller first dose that we're priming the immune system differently, we're setting it up better to respond," Andrew Pollard, chief investigator of the Oxford Vaccine Trial, told an online press conference.

Peter Openshaw, professor of experimental medicine at Imperial College London, said a combination of half and full doses "is great news, potentially increasing the number of people that can be vaccinated and reducing costs".

'Save many lives'

More than 23,000 adults in the UK and Brazil have taken part in the Astra/Oxford trials, with the number expected to rise to up to 60,000 thanks to testing also in other countries.

Early results suggested there were 131 cases of COVID-19 among the participants but none was serious.

Pollard said the latest findings suggested the drug was "an effective vaccine that will save many lives".

"Excitingly, we've found that one of our dosing regimens may be around 90 percent effective and if this dosing regime is used, more people could be vaccinated with planned vaccine supply," he added.

"Today's announcement is only possible thanks to the many volunteers in our trial, and the hard-working and talented team of researchers based around the world."

US biotech giant Pfizer and German partner BioNTech have already sought approval to roll out their coronavirus vaccine early.

The move has been seen as a welcome first step towards relief as surging infections prompt a return to shutdowns that traumatised nations and the global economy earlier this year.

G20 leaders on Sunday said they would "spare no effort" to ensure the fair distribution of coronavirus vaccines worldwide and support poor countries, whose economies have been ravaged by the crisis.

But although the club of the world's richest nations adopted a unified tone, German Chancellor Angela Merkel said she was concerned that no major vaccine agreements had yet been struck for poorer nations.

Gillies O'Bryan-Tear, from the UK Faculty of Pharmaceutical Medicine, said the AstraZeneca/Oxford vaccine had a "great advantage" over Pfizer/BioNTech and Moderna.

"It can be manufactured easily and transported at ordinary fridge (not freezer) temperatures, so can be transported and stored using the existing vaccine cold chain infrastructure.

"The group has promised to provide the vaccine not-for-profit to developing nations," he said.