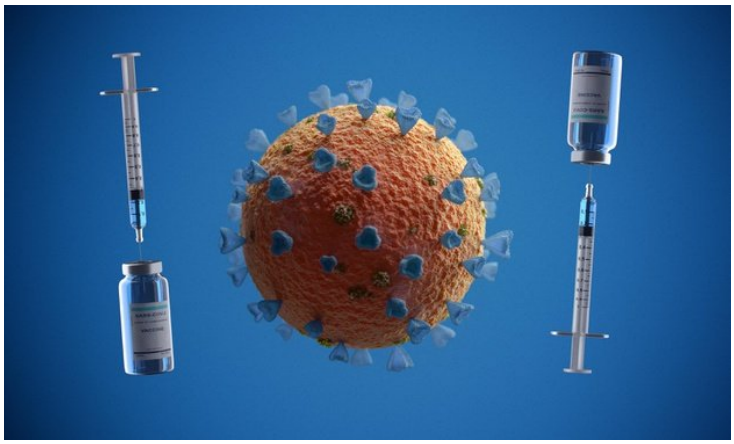
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COVID-19 Vaccines Test Safe & Effective by China & UK teams: the Lancet

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CanSinoBIO and AZD1222 vaccine candidates from CanSino Biologics (China) and the Oxford vaccine from AstraZeneca (UK) respectively are leading the race



The two leading vaccine candidates CanSinoBIO of China and AZD1222 of UK have proven the safety and efficacy at Phase 2 human clinical trial, making them ahead of other global vaccine candidates under the race.

On July 20th, *The Lancet* published results of clinical trials for two adenovirus vector COVID-19 vaccines at the same time. From the perspective of trial design, the two trials share the same mechanism, like inducing balanced humoral and cellular immune responses.

Chen Wei, an academician at China Academy of Engineering and researcher at the Academy of Military Medical Sciences, said that the Ad5-nCoV is the first COVID-19 vaccine around the globe to enter Phase II clinical trial. Eligible participants over 60 years old were also involved in the trial, consisting 13% of the 508 total participants.

CanSino Biologics Inc. (CanSinoBIO) :

CanSino Biologics who are progressing with CanSinoBIO vaccine candidate is in partnership with Chen's team regarding vaccine development. The clinical team is working on the potentials of the candidate to test whether a single-dose can be the effective and the fastest way to combat the Coronavirus. During the Phase II clinical trial, CanSinoBIO indicated that 95% of the participants in the high-dose group and 91% in the low-dose group showed either cellular or humoral immune responses at day 28 after vaccination, thus making it a one-shot potential vaccine.

Elderly are the most vulnerable group for COVID-19 infection. During the trial, elderly participants showed higher tolerability for the vaccine whereas they also displayed a lower level of immune response towards vaccine administration.

The Oxford vaccine from AstraZeneca (AZD1222):

The AZD1222 vaccine by Oxford and AstraZeneca combines a weakened version of a common cold virus (adenovirus) and the genetic material of the SARS-CoV-2 virus using Ad5-nCoV using adenovirus type 5 vector.

According to recent updates from Oxford Vaccine Group, AZD1222 has shown the strongest immune response in the 10 participants who received two doses of the vaccine, indicating that this might be a good strategy for vaccination. The Oxford team further working on "two-dose" protection.

The phase 2 randomized trial of single-dose immunization schedule of Ad5-vectored COVID-19 vaccine indicated that most injection site and systemic solicited reactions from the participants in China were mild or moderate. Adverse reactions that occurred in this study include fever, fatigue, headache, and injection site pain.

Currently, the two vaccines are almost equally safe in terms of "safety evaluation". Yet, the Oxford vaccine still lags behind CanSinoBIO regarding the level of adenovirus vaccine production line.

Experts say that overall, the results of both trials are broadly similar and promising, notwithstanding differences in the vector, in the geographical locations of the populations studied, and the neutralization assays used. Ethnic diversity in both these trials was very limited.

Once one of the vaccines is proven effective, the next challenge will be ensuring that there are enough doses to distribute globally. But, China and the UK are adhering to the common goal and commitment - "Equal Global Access to COVID-19 Vaccine".