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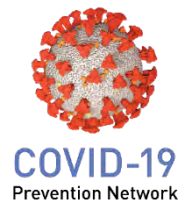
NY-Presbyterian/Columbia University Irving
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COVID-19 Vaccines in the pipeline

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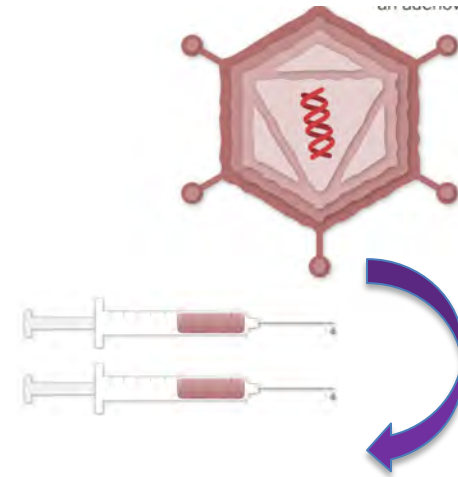


Virus Vector vaccines

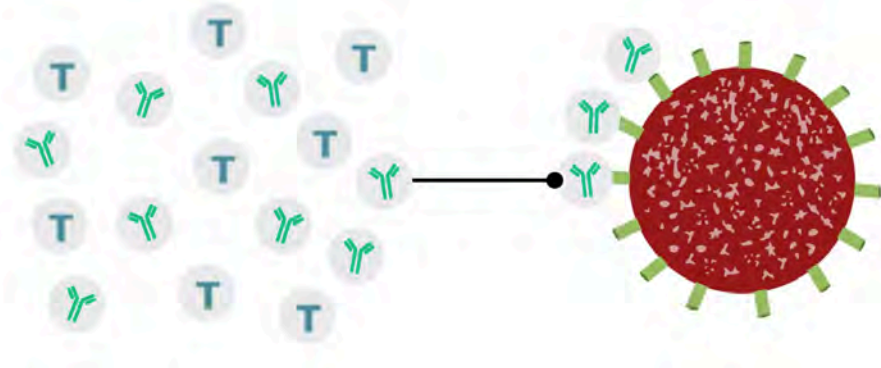
AstraZeneca AZD122 vaccine & J&J/Janssen vaccine

- AZD1222: developed by AstraZeneca and their partners at the University of Oxford (England).
- AZD1222 vaccine uses the Chimpanzee version of a **common cold virus called Adenovirus** as the vector (carrier).
- The Adenovirus is inactivated and “silent” → cannot cause common cold.
- Virus vector carries a **copy of the spike protein** found on the surface of the SARS-CoV-2 virus
- Virus Vector vaccines can be **stored in refrigerators**
 - **Both Janssen/J&J and AZ vaccines**

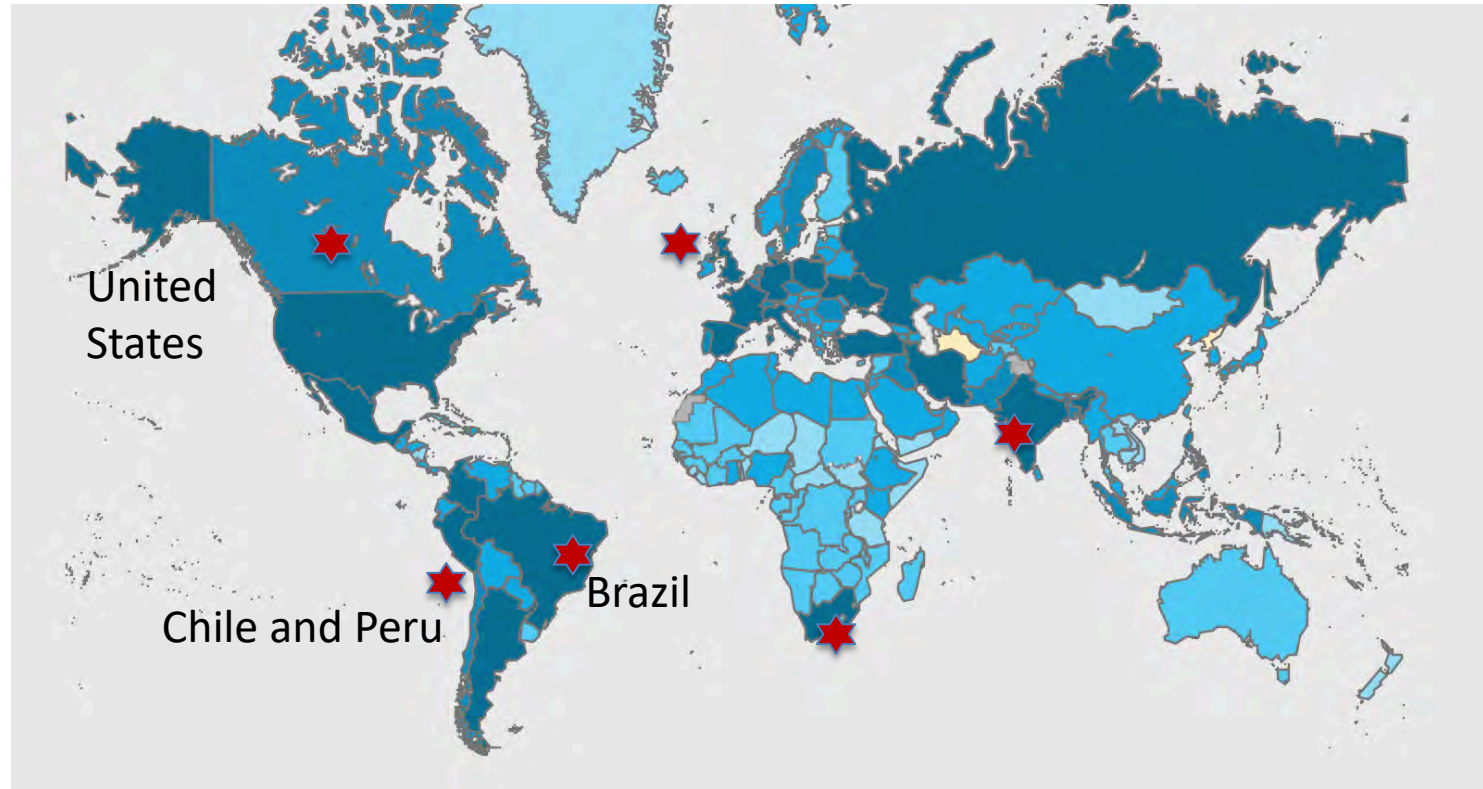
Genetic information about Spike protein



Immune system reacts and makes antibodies and activates T-cells to destroy cells infected with coronavirus



Global Clinical Development of AZD122 Vaccine



Phase 3 study of AZD vaccine in the United States, Peru, and Chile

- Conducted at >90 sites
- 2 doses: 28 days

What do we know about AZD1222 vaccines from studies outside of United States

- Combined analyses from UK/Brazil showed that 2 doses of AZD1222 given at least 4 weeks apart decreased symptomatic COVID-19 disease by 70.42% (90% CI 58.84, 80.63)
 - Highly effective in preventing severe COVID and death
 - Remaining questions about intervals (#weeks between doses) and dose level (amount per dose)
- Authorization for emergency supply/use in selected countries
 - United Kingdom ,India, Argentina, Mexico
- **What does this mean for the United states**
 - **awaiting results of the phase 3 study and full review by the FDA**

Voysey et al Lancet 2020; (397); p 99-111

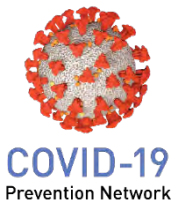




Mobile Unit

NYC_based Sites conducting
Different Phase 3 Vaccine
Efficacy studies:

- Moderna
- Janssen/J&J
- AstraZeneca
- Pfizer/BioNTech



Thank you!



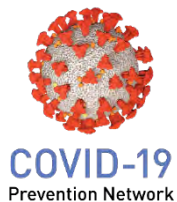
COME TOGETHER

10 New Yorkers a day are diagnosed with HIV.

Help us end the HIV epidemic. Be part of a study that could lead to developing a vaccine for HIV.

Visit JoinUsNYC.org for more information and to see if you qualify.

#JoinUsNYC



Columbiaresearchunit.org

Masks are still needed to stop the spread of coronavirus.

Masks are the best way to stop the spread of droplets from your mouth and nose to others.

Help end the uncertainty. PreventCOVID.org