



COVID-19 Vaccine Candidates in Phase 3 Trials (USA)

Last updated 10/17/2020

| Sponsor | Vaccine Type | # Doses needed | Storage Requirements/Stability | Notes <i>("Purchase" dependent on FDA approval)</i> |
|--|------------------------|-------------------------|---|--|
| Moderna <i>mRNA-1273</i> 30,000 volunteers in 89 US sites (Phase 3 Start: July 27) | mRNA | Two doses 0, 28 days | Deep Freeze: -20C (-4F); 7 days in refrig after thawing | US: 100 million doses purchased, option to buy an additional 400 million doses No mRNA vaccines currently on market for any use Advantage: fast development |
| BioNTech/Pfizer/Fosun Pharma <i>BNT162b2</i> 30,000 volunteers in US, Brazil, Argentina, Germany (Phase 3 Start: July 27) | mRNA | Two doses 0, 28 days | Deep Freeze: -70C(-94F); 24 hours after thaw, 2 hours at room temp | US: 100 million doses purchased, option to buy an additional 400 million doses No mRNA vaccines currently on market for any use Advantage: fast development Per Mfr: Likely to apply for EUA by late Nov 2020 |
| AstraZeneca/Oxford University <i>AZD1222</i> Trials underway in England, India, Brazil, S Africa, USA (Phase 3 Start Aug 31) | Modified Adenovirus | Single dose | <i>"expected to require refrigeration"</i> | US: 300 million doses purchased 1 serious ADR reported: Transverse Myelitis, trial briefly halted then restarted in September. (Trial currently on HOLD in USA) |
| Janssen <i>JNJ78436735</i> <i>(formerly Ad26.COV2-S)</i> 60,000 volunteers/3 continents (Phase 3 Start Sept 21) | Modified Adenovirus | Single Dose | <i>"can be stored in refrigerator at least 3 months"</i> | US: 100 million doses purchased, option to buy an additional 200 million doses (Trial currently on HOLD in USA) |

6/30/2020: FDA Industry COVID-19 Vaccine Development Guidance released: <https://www.fda.gov/media/139638/download>

Per above, Study Endpoints: "...prevent disease or decrease its severity in at least 50% of people who are vaccinated"

9/23/2020: The FDA proposed additional guidance that would require vaccine candidates to have **at least 2 months follow up tracking** after final dose before an emergency use authorization EUA would be considered.