COVID-19 Conversations

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SARS-CoV-2 Vaccine Strategies

• Whole, killed virus (like IPV, HAV, rabies)
• Live, attenuated virus (like measles, mumps, rubella)
• Purified viral protein (like HPV, HBV)
• Vectored vaccine (like dengue, Ebola)
• Replication defective adenovirus (no existing platform)
• mRNA (no existing platform)
• DNA (no existing platform)
Typical vaccine development

- Animal model studies to prove concept.
- Safety, immunogenicity, and dose-ranging studies in hundreds to thousands of people (Phase 1, 2).
- Phase 3, pre-FDA licensure safety/efficacy study.
  - RotaTeq—70,000
  - RotaRix—60,000
  - HPV—30,000
  - PCV-7—35,000