

# Russia two-shot Covid-19 vaccine

Russia's "Sputnik-V" vaccine produced an antibody response in all 76 participants in two small phase 1/2 trials. The so-called viral vector vaccine has now started a 40,000-strong phase 3 trial

**Adenovirus**

**Vector:** Harmless virus that lacks gene responsible for replication in human host cell. Vaccine uses two **adenovirus** vectors – **AD26** and **AD5** – to carry coronavirus gene to trigger immune response

**Spike protein gene:** Cut from Sars-CoV-2 genome...

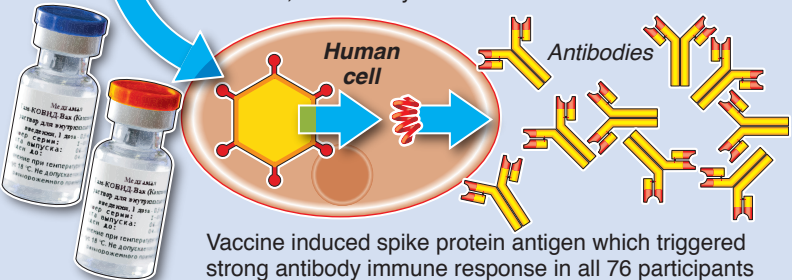
...and inserted into each vector

**Sars-CoV-2 coronavirus**

**Spike glycoprotein:** Virus uses protein to enter human cell to replicate

**Genome**

**Phase 1/2 trials:** Between June 18 and August 3, two groups of 38 healthy volunteers were injected with vector 1, followed by vector 2 three weeks later



Vaccine induced spike protein antigen which triggered strong antibody immune response in all 76 participants