



## Quick Mechanism Summary

### ?

### Vaccine class

#### Quick description

Outline color indicates the availability of the data :

- published (peer-reviewed),
- not published (not reviewed by independant scientists)

Broken down by severity (defined by each trial) :

- severe case (without hospitalisation)
- symptomatic: fever, cough etc... often confirmed by PCR test

### ⌚ Efficacy :



--% (vs severe cases)

--% (vs symptomatic cases)

The efficacy assessment is different for each trial/vaccine so try not to compared them too much..

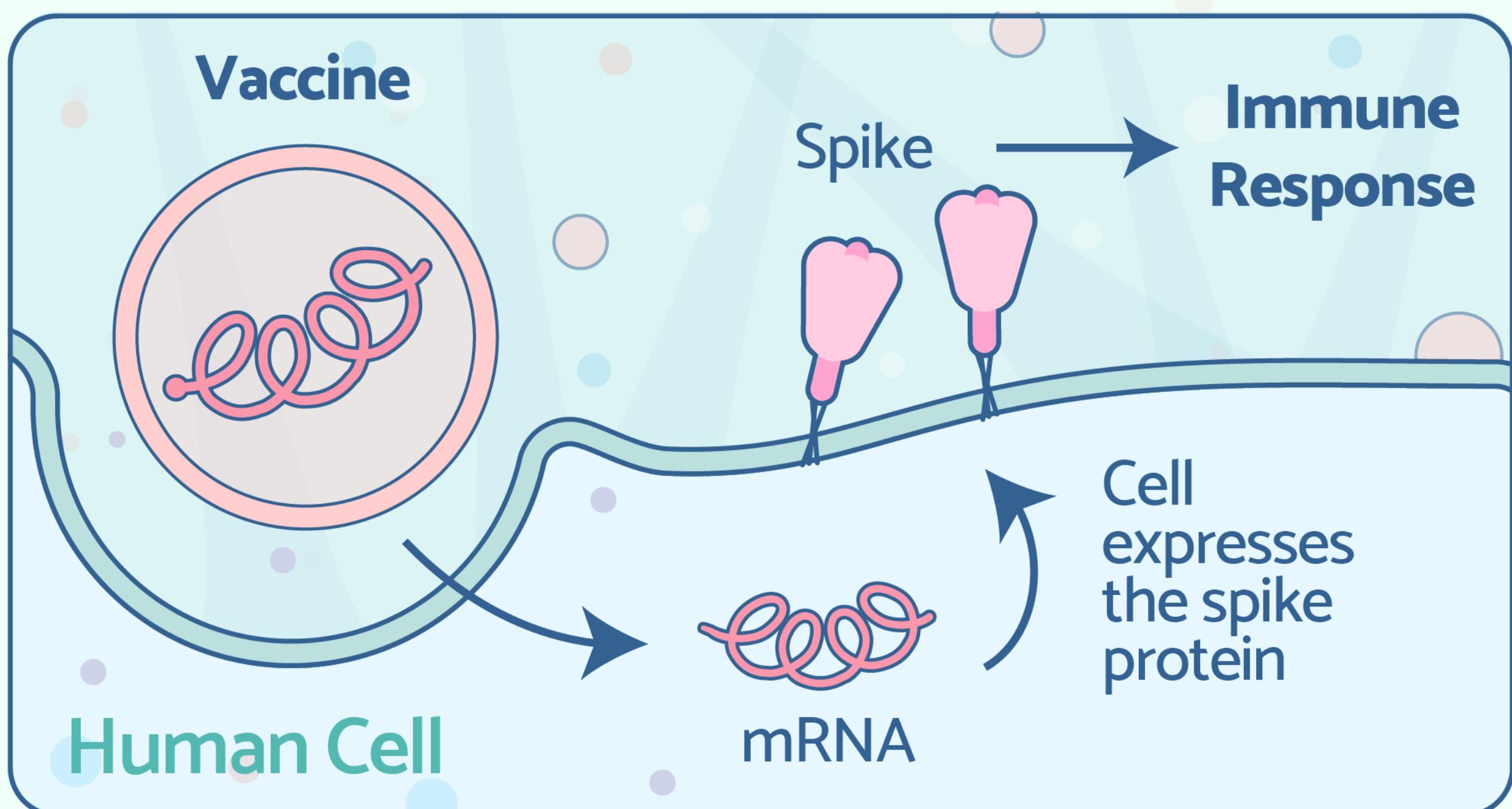
### ▢ Dosing : # of doses and how far apart

### ▢ Storage : conditions of storage

mRNA-1273

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# Moderna



## Encapsulated mRNA Vaccine

mRNA encoding for the Spike protein is protected in a lipid nanoparticle (like a soap bubble). Once absorbed, the cell expresses the Spike protein resulting in an immune response.

**Efficacy :** Phase III **100%** (vs severe cases\*)  
Phase III **94%** (vs symptomatic cases\*)

**Dosing :** 0.5mL - 2 doses - 28 days apart

**Storage :** **-20°C - 6 months**  
**+2-8°C - 30 days**

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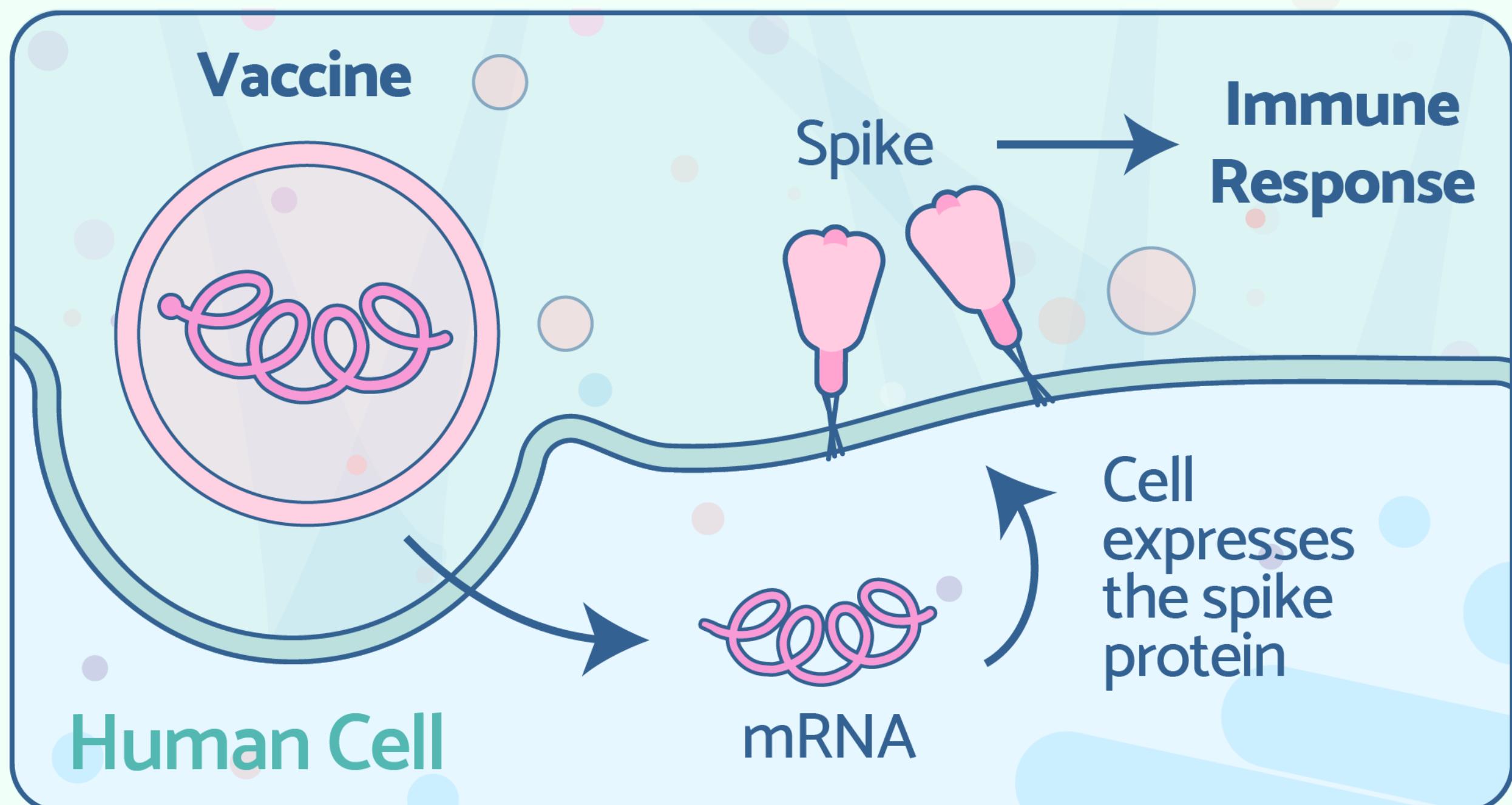
Last updated on 16/04/21

\*US trial - 28 days after vaccination

BNT162b2 / Comirnaty

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**BioNTech/Pfizer**



## ⌚ Encapsulated mRNA Vaccine

mRNA encoding for the Spike protein is protected in a lipid nanoparticle (like a soap bubble). Once absorbed, the cell expresses the Spike protein resulting in an immune response.

⌚ **Efficacy :** Phase III **100%** (vs severe cases\*)  
Phase III **95%** (vs symptomatic cases\*)

▣ **Dosing :** 0.3mL - 2 doses - 21 days apart

▣ **Storage :** **-70°C - 6 months (-20°C - 2 weeks)**  
**+2-8°C - 5 days**

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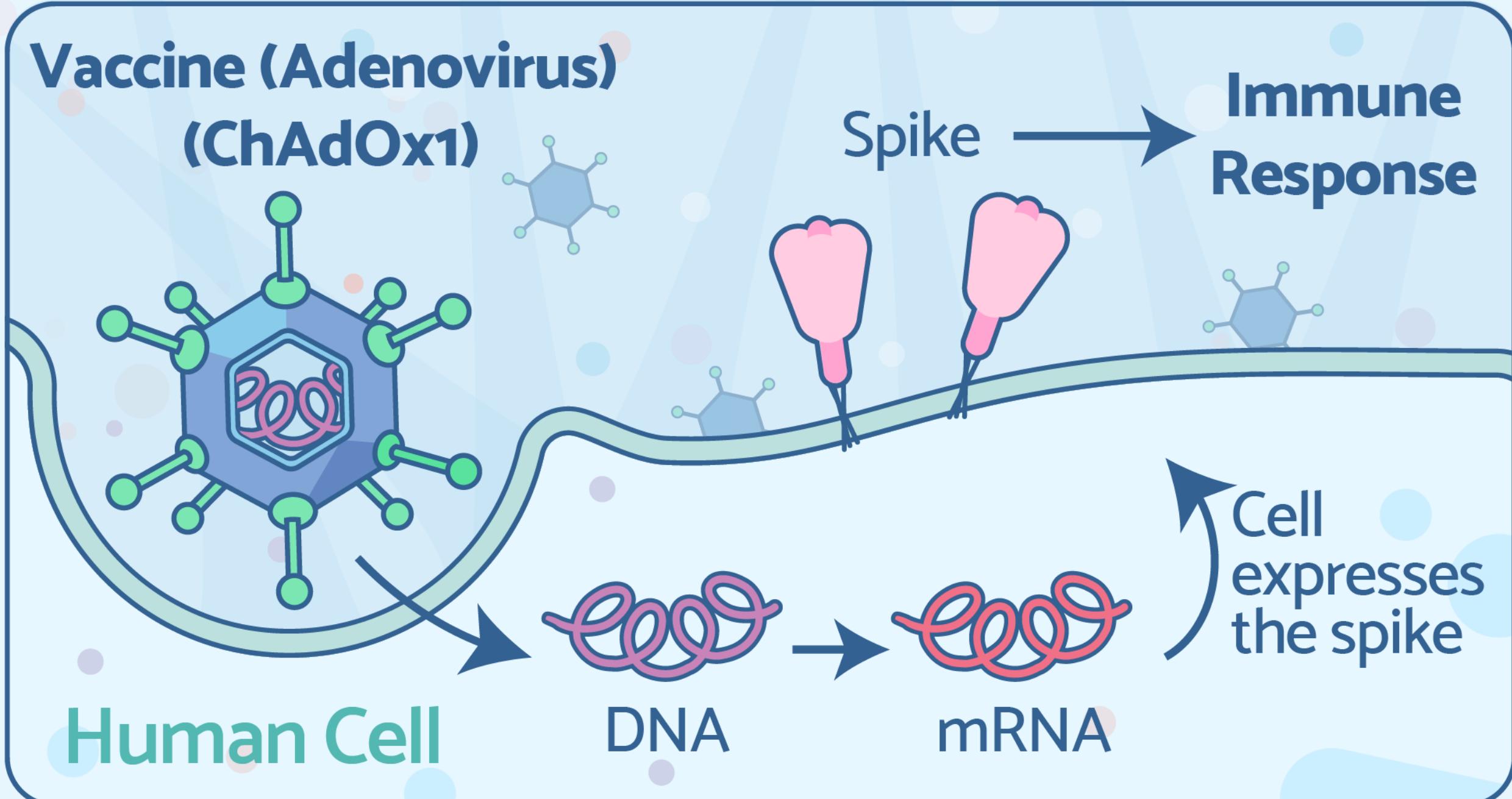
Last updated on 16/04/21

\*international trial - 21 days after vaccination

AZD1222 / Vaxzevria (Covishield - India)

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# Oxford/AstraZeneca



## Viral Vector Vaccine

dsDNA encoding for the Spike protein is protected in a safe virus. The infected cell expresses the Spike protein which leads to an immune response.

⌚ Efficacy :	Phase III	100% (vs severe cases*)
	Phase III	82*% (vs symptomatic cases*)
	Phase II	10% (vs B.1.351 "SA" variant*)

⌚ Dosing : 0.5mL - 2 doses - \*12 weeks apart

⌚ Storage : +2-8°C - 6 months

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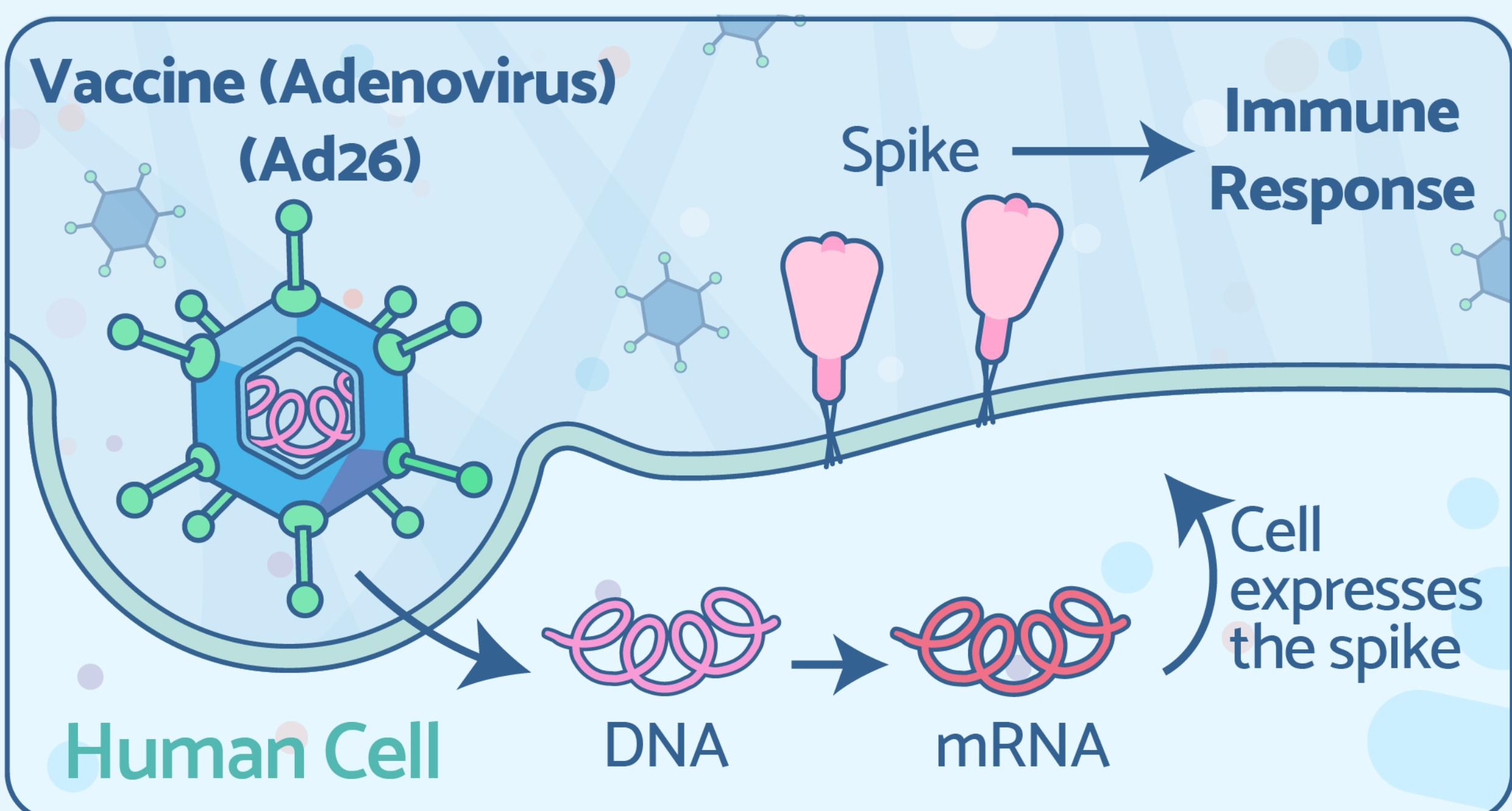
Last updated on 16/04/21

\* when prime - boost doses injected at +12 weeks

\*international trials

JNJ-78436735 / Ad26.COV2.S

**Janssen / J&J**



## Viral Vector Vaccine

dsDNA encoding for the Spike protein is protected in a safe virus. The infected cell expresses the Spike protein which leads to an immune response.

**Efficacy :** Phase III **100%** (vs hospitalisation\*)  
Phase III **74%** (vs symptomatic to severe\*)

**Dosing :** 0.5mL - 1 dose

**Storage :** +2-8°C - 3 months  
-20°C - 2 years

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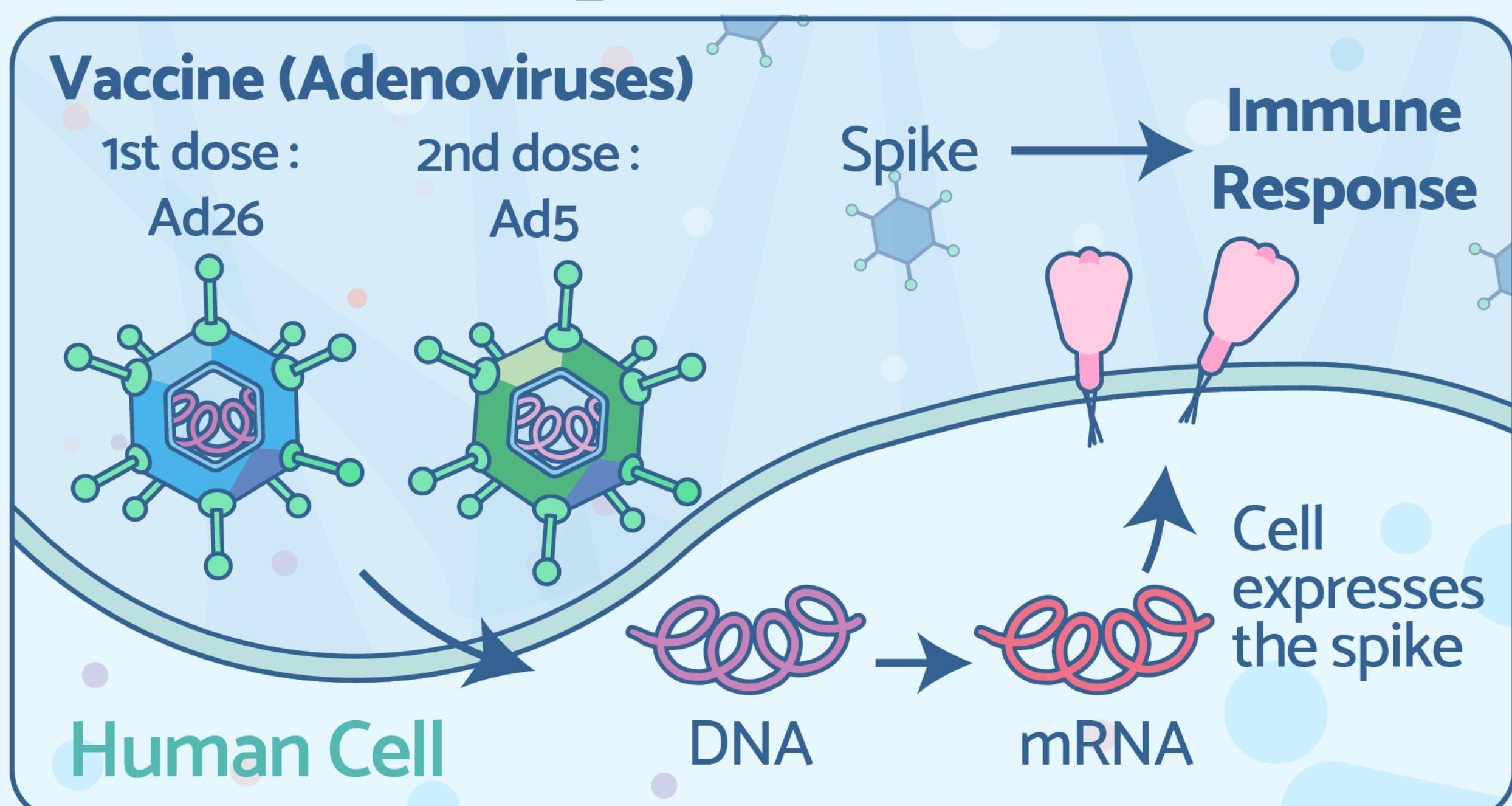
Last updated on 16/04/21

\*US trial - 28 days after vaccination - CDC report

# Sputnik V /Gam-Covid-Vac



# Gamaleya



## Viral Vector Vaccine

dsDNA encoding for the Spike protein is protected in a safe virus. The infected cell expresses the Spike protein which leads to an immune response.

**Efficacy :** Phase III **100%** (vs severe cases\*)  
Phase III **92%** (vs confirmed cases\*)

**Dosing :** 0.5mL - 2 doses - 21 days apart

**Storage :** +2-8°C - 6 months  
-20°C - 2 years

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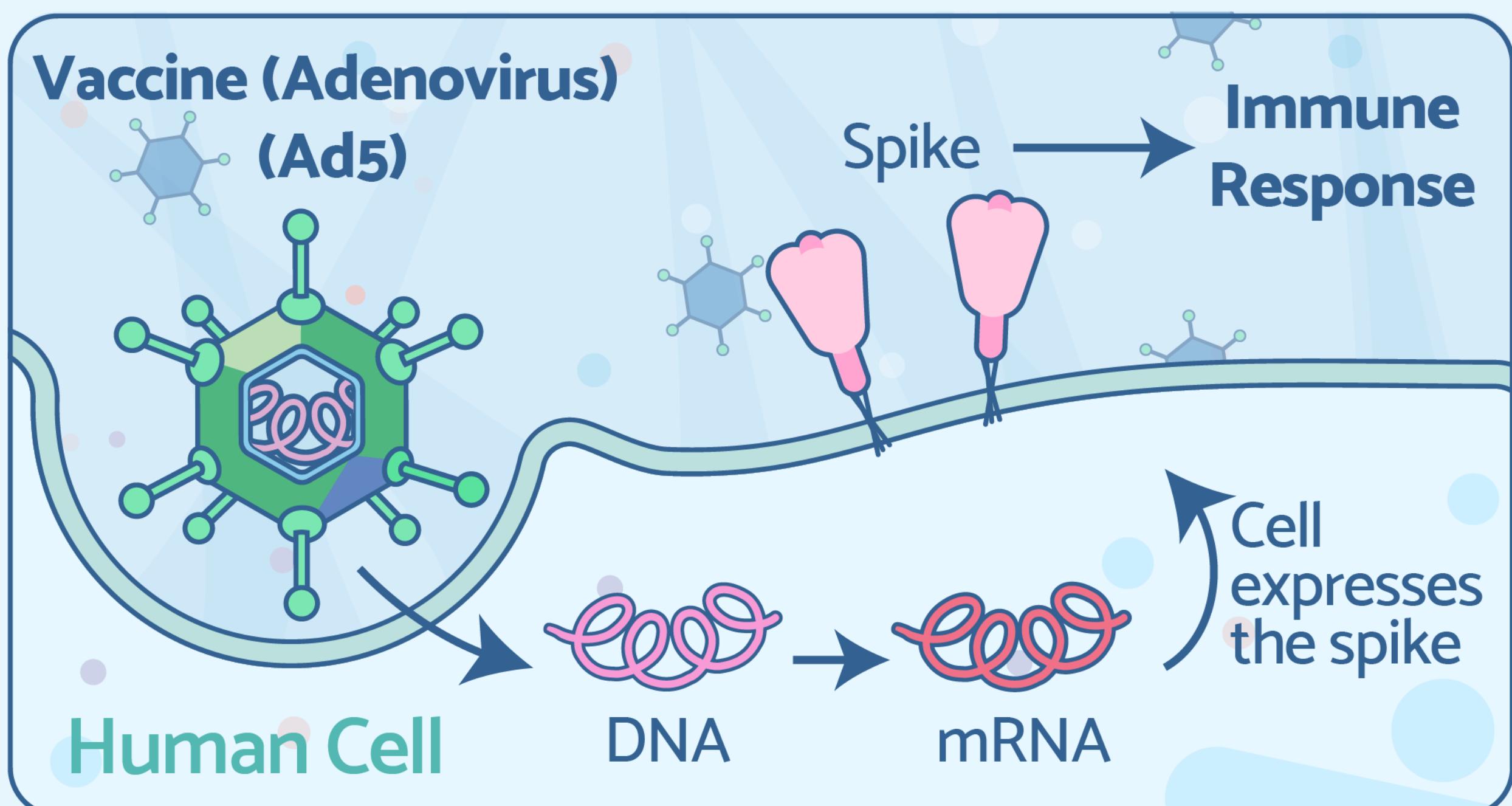
Last updated on 16/04/21

\* Russian trial - 21 days after vaccination

Convidencia / Ad5-nCoV

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# CanSino Bio



## Viral Vector Vaccine

dsDNA encoding for the Spike protein is protected in a safe virus. The infected cell expresses the Spike protein which leads to an immune response.

**Efficacy :** **90%** (vs severe cases\*)  
 **65%** (vs symptomatic cases\*)

**Dosing :** 1 dose

**Storage :** +2-8°C

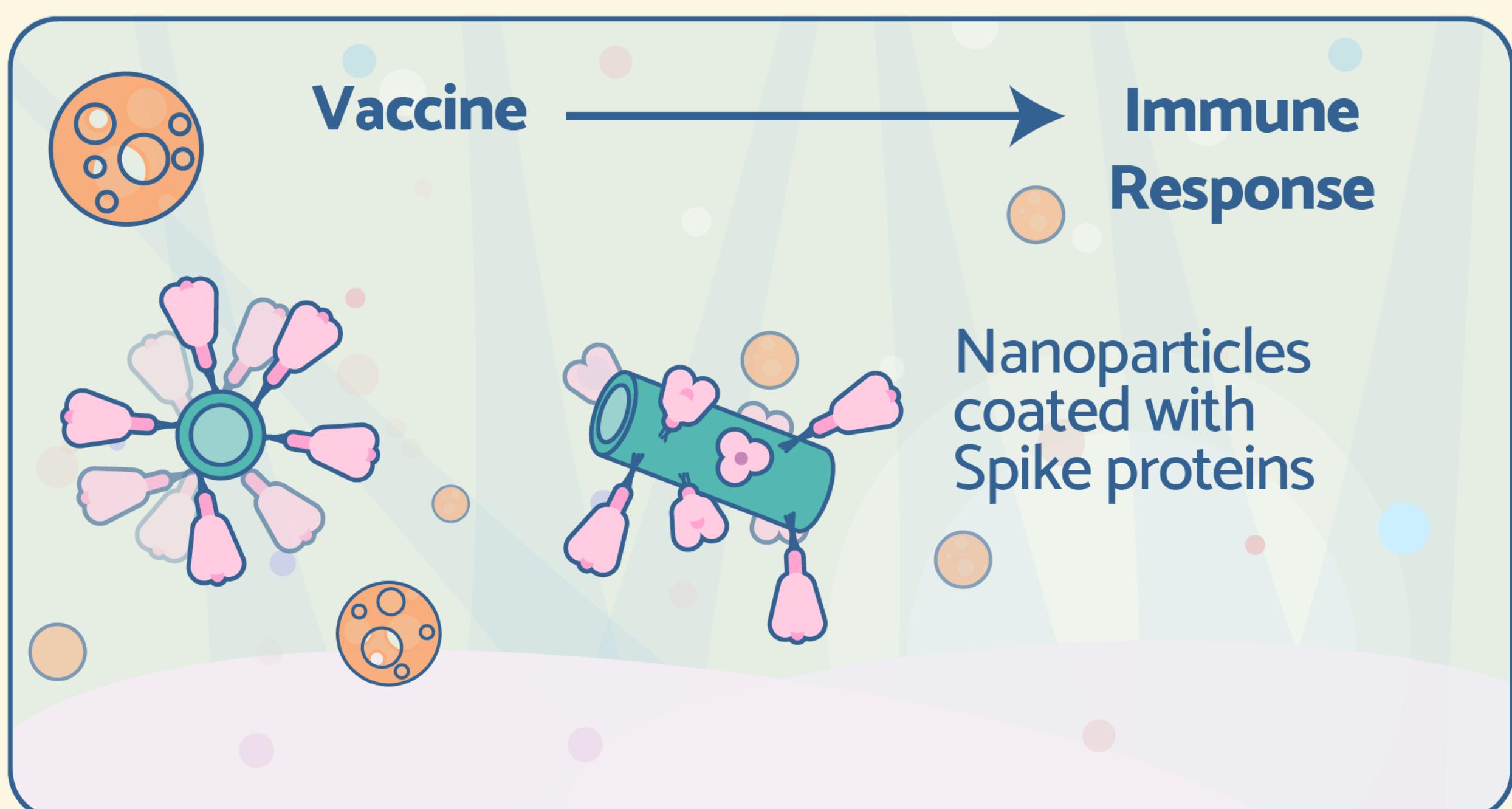
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Last updated on 16/04/21

\* International trial - not published data

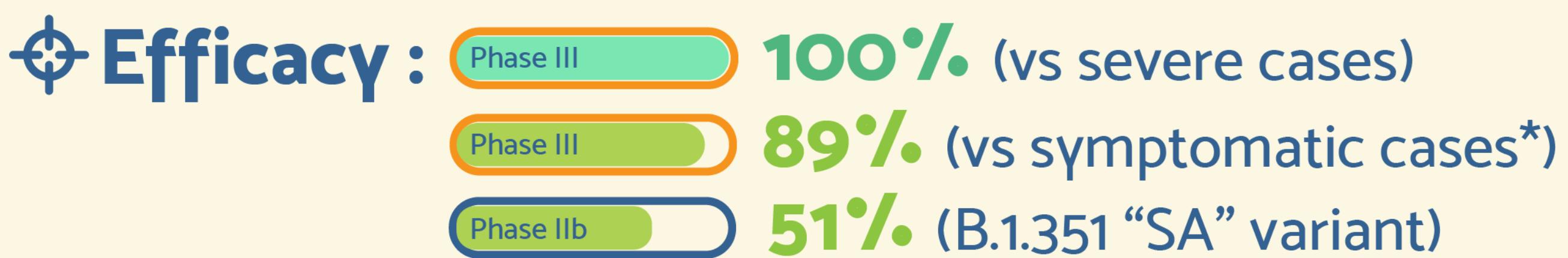
NVX-CoV2373

# Novavax



## Subunit Vaccine

Nanoparticles are coated with synthetic spike proteins. An additional element called adjuvant is added which allows to boost the immune reaction.



☐ **Dosing :** 0.5mL - 2 doses - 21 days apart

☒ **Storage :** +2-8°C - 6 months  
-20°C for 2 years

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Last updated on 06/05/21

\* average. 96% against the “original” strain (D614G)

BBIBP-CorV

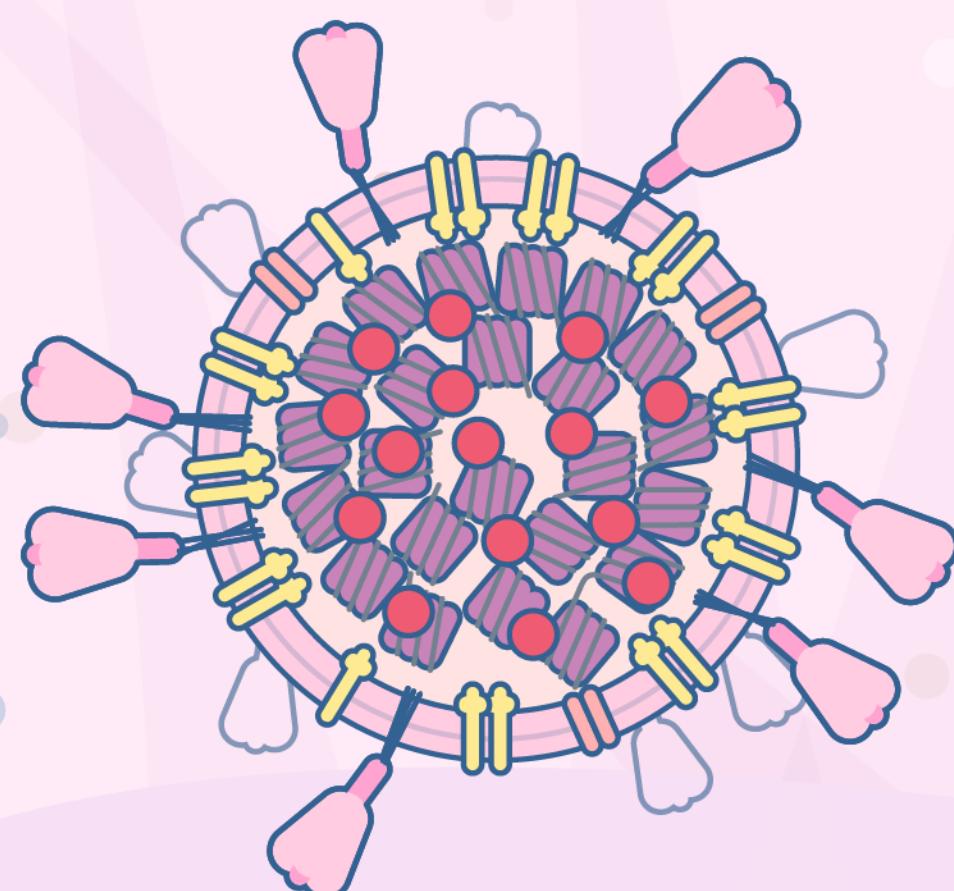
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# Sinopharm



Vaccine

Immune Response



Inactivated Coronavirus



## Inactivated Virus Vaccine

SARS-CoV2 is chemically inactivated (with a chemical called beta-propiolactone) so it cannot replicate but all the proteins remain intact.

🎯 **Efficacy :** Phase III **79%.** (overall efficacy\*)

☐ **Dosing :** 2 doses - 21 days apart

☒ **Storage :** +2-8°C

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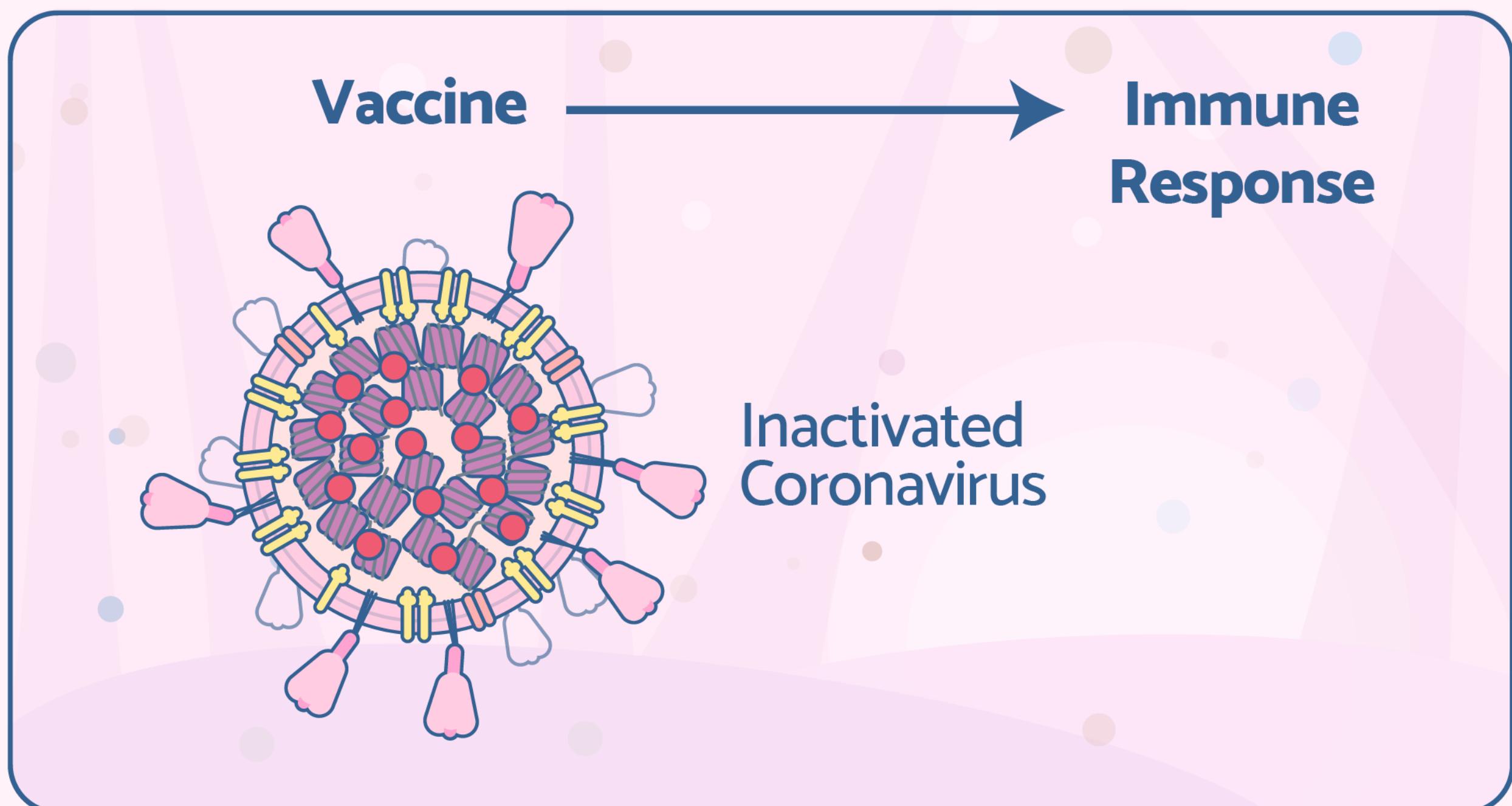
Last updated on 16/04/21

\* International trial - not published data

# CoronaVac

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# SinoVac



## Inactivated Virus Vaccine

SARS-CoV2 is chemically inactivated (with a chemical called beta-propiolactone) so it cannot replicate but all the proteins remain intact.

**Efficacy :** 100% (vs severe cases\*)  
 83% (vs symptomatic cases\*)

**Dosing :** 2 doses - 14 days apart

**Storage :** +2-8°C

@LaPipette.labs

Last updated on 16/04/21

\* Unpublished Phase III results from Turkey

BBV152 / Covaxin

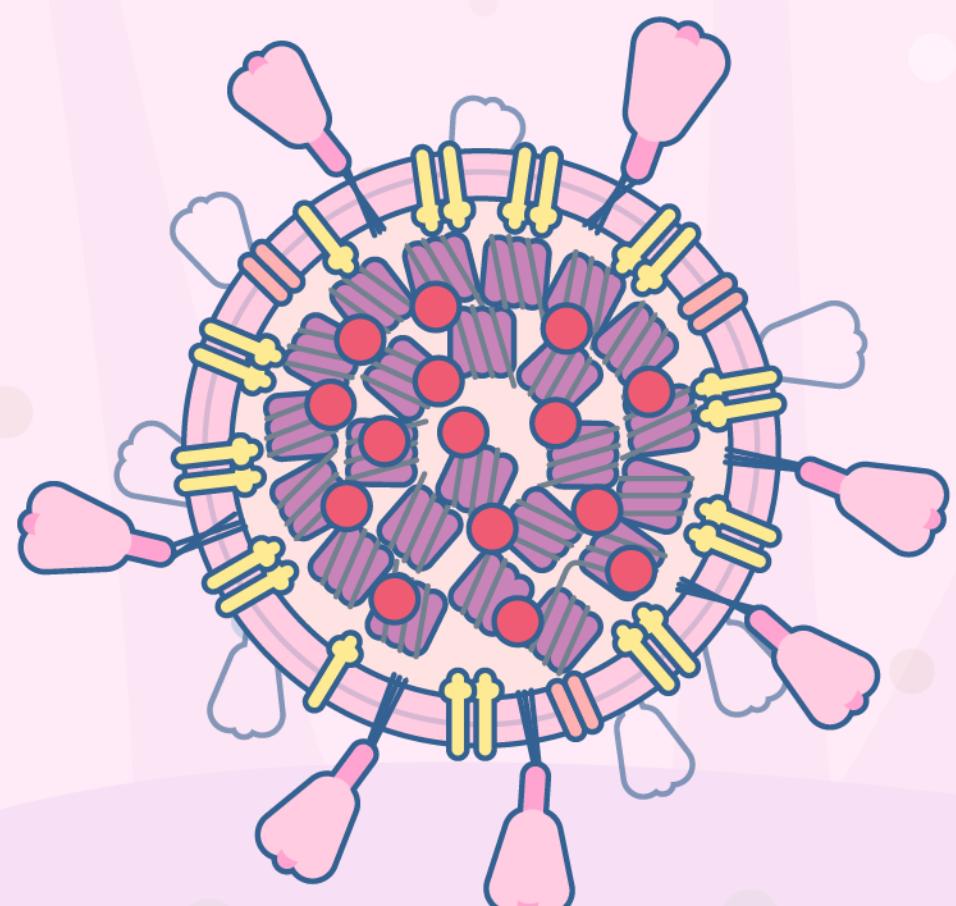
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# Bharat Biotech



Vaccine

Immune Response



Inactivated Coronavirus



## Inactivated Virus Vaccine

SARS-CoV2 is chemically inactivated (with a chemical called beta-propiolactone) so it cannot replicate but all the proteins remain intact.

🎯 **Efficacy :** Phase III **81%.** (vs symptomatic cases\*)

▢ **Dosing :** 2 doses - 28 days apart

▢ **Storage :** +2-8°C

@LaPipette.labs

Last updated on 16/04/21

\* Indian trial - not published data