

- Vaccination / Virus

DIFFERENT NASAL VACCINES

Gulf News · 22 Sep 2021 · 2

What about storage?

Nasal vaccines are easy to store, only standard household refrigeration.

What's the status of human trials of nasal vaccines?

The WHO vaccine landscape lists several such nasal candidate shots against Covid-19, some of which are listed below:

(1) DelNS1

One of the most advanced in terms of clinical trials is DelNS1-2019-nCoV-RBD-OPT1. This nasal vaccine uses a flu-based receptor binding domain co-developed University of Hong Kong, Xiamen University and Beijing Wantai Biological Pharmacy, currently in Phase 2 trials, according to the WHO.

(2) NONS/Enovid

Israeli-Canadian biotech firm SaNOtize Research and Development, based in Vancouver, Canada, has rolled out its Nitric Oxide Nasal Spray (NONS) earlier this year against the Covid-19 virus. It is manufactured under the brand name Enovid in Israel with SaNOtize's partner Nextar Chempharma Solutions Ltd.

(3) Bharat Biotech Intl Ltd.

In July, Bharat Biotech sent a proposal to the Drugs Controller General of India (DCGI) for conducting the Phase 1 trials of a nasal vaccine against Covid-19.

(4) Washington University

Its School of Medicine scientists showed their intranasal vaccine, which uses an adenoviral spray, can kick up immune response in the mucosa of chimpanzees in a study published in Cell on August 19, 2020. Using the ChAd-SARS-CoV-2 "vector" (carrier), the shot generated robust mucosal B- and T-cell responses in chimps. It also prevented upper and lower respiratory tract infection.

(5) Finland's nasal shot

This candidate nasal vaccine uses the viral vector (non-replicating) platform developed University of Helsinki & University of Eastern Finland.

(6) NanoSTING

US Biotech firm AuraVax Therapeutics is working on manufacturing its own intranasal subunit vaccine against Covid-19, known as NanoSTING. The company will coordinate with the FDA with the goal of starting Phase 1 human trials as soon as May or June 2022.

(7) CanSino

On July 26, 2021, China's CanSino published results of its early clinical trial (Phase 1) using its aerosol version of its Ad5-nCoV, already approved as an intramuscular injectable vaccine.

(8) Codagenix's Covi-Vax

Codagenix, from the lab at Stony Brook University, started a Phase I clinical trial of a single-dose inhaled Covi-Vax, which uses an attenuated live virus.