## DAILY tribune

# **Pre-orders of COVID-19** vaccine top five billion

**AFP News** 

lthough none of the coronavirus vaccines under development has proved its efficacy yet in clinical trials, at least 5.7 billion doses have been pre-ordered around the world.

First shipments of a COVID-19 vaccine created by Western laboratories have often been snapped up by the United States. Five vaccines -- three Western and two Chinese -- are in Phase 3 efficacy trials involving thousands of people.

In a surprise announcement, Russian President Vladimir Putin claimed Tuesday that a vaccine dubbed "Sputnik V" -- after the Soviet satellite -- conferred "sustainable immunity" against the novel coronavirus.

As research laboratories around the world race to develop a vaccine, manufacturers have received financing to help them prepare to have millions of doses ready to administer in 2021 or even before the end of the year.

Oxford University, working with the Swedish-British pharmaceutical group AstraZeneca, hopes to have results by September while the US biotech company Moderna, partnering with the US National Institutes of Health (NIH), is aiming for the end of the year, possibly November.

#### US: 700 million doses

 $\mathbf{P}^{ ext{resident Donald Trump}}$  has launched "Operation Warp Speed" in a bid to develop, manufacture and distribute a COVID-19 vaccine to all Americans by January 2021

Hundreds of millions of dollars have been directed to vaccine developers including nearly \$500 million to Johnson & Johnson at the end of March.

The United States has allocated funding to more companies than other nation in the hope that one of them will come up with the vaccine to counter the highly contagious virus.

So far, Washington has handed out at a total of least 9.4 billion dollars to seven vaccine developers and signed manufacturing contracts with five of them to provide 700 million doses.

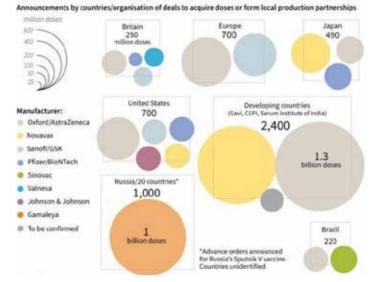
The companies involved are: Johnson & Johnson, Moderna, Oxford/AztraZeneca, Novavax, Pfizer/BioNTech, Sanofi/GSK, Merck Sharp and Dohme.

#### Europe: 700 million doses

Two vaccine developers -- Oxford/AztraZeneca and Sanofi/ GSK -- have signed or are in advanced negotiations with the European Commission to provide a combined 700 million vaccine doses



5.76 billion doses of coronavirus vaccines reserved



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#### Britain, Japan, Brazil

Britain, because of Brexit, is negotiating a separate pre-order of 250 million doses from four developers.

Japan is counting on 490 million doses from three suppliers including 250 million from Novavax of the United States.

Japanese pharmaceutical giant Takeda bought the rights to a Novavax vaccine for Japan, which has funded the research. It would be produced locally.

Brazil chose a similar model, ordering 100 million doses from AstraZeneca, and partnering with China's Sinovac to produce 120 millions of "CoronaVac," which is already undergoing testing with Brazilians.

## Bus stop newest front in South Korea's coronavirus battle



Inside the shelters, a panel displays estimated arrival times while a screen live-streams the traffic outside

AFP

**S** outh Korea has opened a high-tech new front in the battle against coronavirus, fortifying bus shelters with temperature-checking doors and ultraviolet disinfection lamps.

Ten advanced facilities have been installed in a northeastern district of Seoul, offering protection from monsoon rains, summer heat, and the novel coronavirus.

To enter, passengers must stand in front of an automated thermal-imaging camera, and the door will only slide open if their temperature is below 37.5 degrees Celsius (99.5 Fahrenheit).

A separate camera is installed lower down to test children. Inside the glass-walled booths -- which cost about 100 million won (\$84,000) each -- the air-conditioning systems have ultraviolet lamps installed to kill viruses at the same time as cooling the air.

A dispenser provides hand sanitiser, and users are advised to wear face masks at all times, while keeping at least one metre apart from others.

"We have installed all the available anti-coronavirus measures we can think of into this booth," Kim Hwang-yun, a district official in charge of the Smart Shelter project, told AFP. Free Wi-Fi is also included.

Since they were installed last week each booth has been used by about 300 to 400 people a day, Kim said.

To ensure passengers do not miss their bus, a panel displays estimated arrival times while a screen live-streams the traffic outside.

South Korea endured one of the worst early coronavirus outbreaks outside China but brought it broadly under control with an extensive "trace, test and treat" programme while never imposing a compulsory lockdown.

Kim Ju-li, a 49-year-old housewife using the new bus stop for the first time, said: "I feel really safe in here because I know others around me had their temperatures checked as well as me."



## Fauci doubts safety of Russia's Coronavirus vaccine

AFP

Dr. Anthony Fauci, the na-tion's top infectious disease expert, expressed serious doubt about the safety of a Russian-created vaccine for the coronavirus.

"Having a vaccine" and Dr Anthony Fauci



"proving that a vaccine is safe tional Institute of Allergy and and effective are two different Infectious Diseases told ABC "next week" if "we wanted to continued. "I seriously doubt things," the director of the Na- News' Deborah Roberts in a take the chance of hurting a that they've done that."

preview clip of an interview for lot of people, or giving them released Tuesday.

Fauci explained in the inter- works," he said. view that National Geographic will broadcast in full online heard any evidence to make Thursday that the U.S. has "half me feel that's the case, I hope a dozen or more vaccines" in that the Russians have actually,

administering them as soon as cine is safe and effective," Fauci

National Geographic that was something that doesn't work." "But, that's not the way it

"So, I hope, but I haven't development and could start definitively proven that the vac-

China, Russia

► linical tests of two Chinese ✓ vaccine candidates -- Sinovac and Sinopharm -- are well underway but only a few international partnerships have been announced, the one with Brazil and a possible one with Indonesia.

Russia said 20 nations have pre-ordered one billion doses of Sputnik V and that with foreign partners it would be able to produce 500 million doses a year in five countries.

#### **Developing countries**

The Coalition for Epidemic Preparedness Innovations (CEPI), launched in 2017 by Norway, India, the Bill and Melinda Gates Foundation and the Wellcome Trust, seeks to ensure that there is "equitable access" to future vaccines.

It has pre-ordered 300 million doses from AstraZeneca for dozens of developing countries in a partnership with The Vaccine Alliance (Gavi).

Billions of doses would be produced for Asia and elsewhere by the giant Serum Institute of India (SII), the largest vaccine producer in the world.

Novavax and AstraZeneca have separately signed agreements with SII to produce a billion doses each for India and low- and middle-income countries on the condition, of course, that they prove their efficacy in clinical trials.



A man checks his temperature before entering the bus shelter

### Duterte says will be Russia vaccine 'guinea pig' as talks begin AFP

Philippine President Rodrigo Duterte will be a guinea pig for a controversial Russian coronavirus vaccine, his spokesman said on Wednesday, as the Southeast Asian nation emerged as a frontrunner for overseas clinical trials.

Manila has accepted Russia's offer to participate in clinical trials, vaccine supply and production of the drug, and Phil- experimented on," he said on ippine health authorities said Monday. they are meeting the Russian drug developer Gamaleya on Roque said that the president Wednesday.

"huge trust" in Russia's efforts joking. to stop the contagion.

"I believe the vaccine that his life for the Filipino people," you have produced is really Roque said.



good for humanity," Duterte said, praising Putin.

"I will be the first one to be

Duterte's spokesman Harry -- known for making contro-Duterte has also expressed versial remarks -- was not

"He's old. He can sacrifice