US tycoon opens Africa's first start-to-finish COVID-19 jab plant

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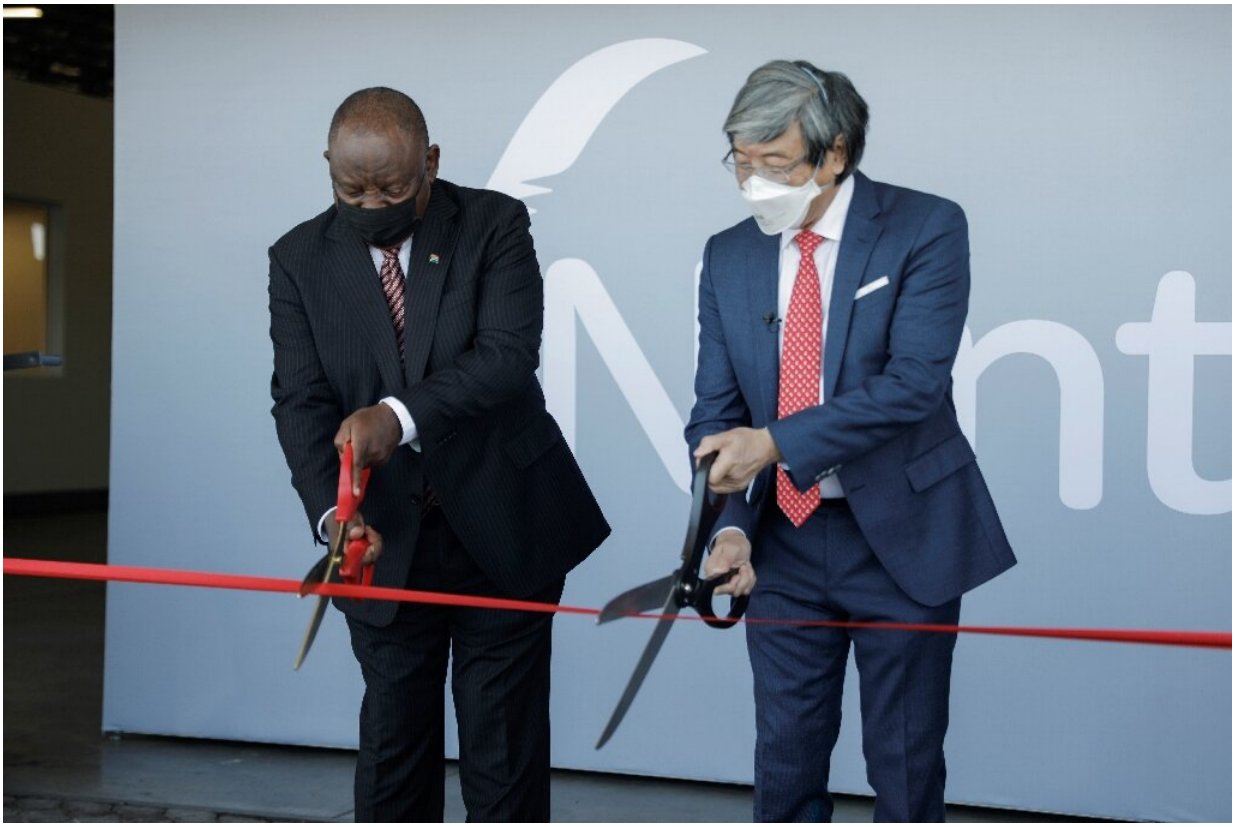

Scissor ceremony: President Cyril Ramaphosa, left, joins biotech tycoon Patrick Soon-Shiong in launching the vaccine hub.

US biotech billionaire Patrick Soon-Shiong on Wednesday opened a plant in Cape Town that will be the first in Africa to produce COVID-19

vaccines from start to finish.

The factory should churn out its first vials of second-generation coronavirus vaccine "within the year" and produce a billion doses annually by 2025, Soon-Shiong said.

The plant will be South Africa's third COVID vaccine-manufacturing facility but the first in the continent to make the formula across every stage, rather than producing it from semi-finished batches.

With just 10.9 percent of the 1.3 billion people fully vaccinated, Africa is the least vaccinated continent in the world. This compares with approximately 63 percent in the US and around 70 percent in Europe.

Africa currently manufactures less than one percent of all vaccines administered on the continent, according to the World Health Organization (WHO).

South African President Cyril Ramaphosa, speaking at the inaugural event, hailed the plant as a sign of African self-reliance.

"Africa should no longer be the last in line to access vaccines against pandemics, Africa should no longer go cap in hand to the Western world begging and begging for vaccines," Ramaphosa said.

"We will stand on our own," he vowed, "without the shackles of colonial thinking."

He thanked Soon-Shiong, a South African-born and now United States-based doctor-turned-entrepreneur—for returning "home" to invest in vaccine production.

Born in South Africa to Chinese parents and now a US citizen, the

billionaire said the launch was "one of the momentous moments of my life—this is a homecoming."

T-cell vaccine

After making a fortune by inventing a cancer drug, he founded NantWorks, a California-based startup in healthcare, biotech and artificial intelligence, in 2007.

Production at the state-of-the-art vaccine-manufacturing campus in Cape Town's Brackengate industrial area will be a collaborative effort between NantWorks, South African research institutions and four local universities.

"We have now developed this SN (spike nucleic) T-cell vaccine, a second-generation vaccine, and we want to manufacture this in Africa, for Africa, and export it to the world," Soon-Shiong said.

The vaccine is being developed "all the way from scratch", with self-amplifying RNA (ribonucleic acid) drug substance, to "full finish", the doctor said.

Johnson & Johnson has an operational "fill-and-finish" plant in South Africa, and Pfizer/BioNTech have partnered with Biovac to bottle their mRNA vaccine starting this year.

"We want to migrate from just doing 'fill and finish', to wanting to manufacture the drug substance ourselves," Ramaphosa said.

Meantime, a South African biotech consortium is working on a pilot project to tweak Moderna's mRNA formula, and prototype shots could be available for trial this year.

South Africa and India have been lobbying the World Trade Organization to temporarily suspend intellectual property rights so that COVID-19 vaccines are accessible to poorer countries.

The billionaire's family foundation, along with the Rockefeller Foundation, the US National Institutes of Health, the European Commission and the Bill & Melinda Gates Foundation, have raised more than one billion rand ($65 million, 57 million euros) to fund the project.

Soon-Shiong says that another $195 million will need to be raised to develop the new plant, which will also produce cancer vaccines.

The NantWorks project will also work on cell-based immunotherapies that could lead to new cancer vaccines and treatments.