

Anti-COVID-19 Vaccine Candidates: Qs and As from Cuba

By: Mariley García Quintana / CNA 29/03/2021



When the world is torn between political confrontations for the presidency of several nations, the struggles against racial discrimination in major U.S. cities, and the eternal war in the Middle East, the strongest fight is fought against a microscopic enemy that after a year keeps the planet in slow motion: The COVID-19.

In the heart of this combat of more than 365 days, several first world countries already have some vaccine candidates that, with a greater or lesser degree of effectiveness, seek to immunize the highest possible percent of their population.

However, inequality also walks two steps ahead of health and only Cuba and its science, a country blocked and choked by the U.S. government for almost six decades, raise their voices for the poorest from the shadow of the capitalist power, with five anti-COVID-19 vaccine candidates: Soberana 01, Soberana 02, Soberana Plus, Mambisa, and Abdala.

But how are vaccines made? What do they need to be effective? In this regard, the World Health Organization (WHO) explained on its official website that, like all medicines, each vaccine must pass extensive and rigorous tests during its three clinical trial phases that guarantee its safety before introducing it in a national vaccination program.

Vaccines contain tiny fragments of the organism that causes the disease, and other ingredients such as the antigen or active component, preservatives to prevent contamination, stabilizers that prevent chemical reactions within the vaccine, the diluent, among others, intended to keep the safety and efficacy of the drug.

In the case of the Cuban candidates Soberana 02 and Abdala began their clinical trial phase III last Monday, March 22<sup>nd</sup>, with the application to nearly 150 thousand volunteers in Havana and Santiago de Cuba, respectively, placing Cuba one step further close to total immunization of its population before the end of this year.

## What puts Cuba alongside the great nations in this race against time to stop the pandemic?



The Cuban government has been working for the development of science and technology in favor of the people since the triumph of the revolution in January 1959, Cubans, and especially young people, have trained to become men of science, as requested by the Commander in Chief, Fidel Castro, the main supporter of scientific institutions such as the Center for Genetic Engineering and Biotechnology (CIGB for its acronym in Spanish), the Finlay Vaccine Institute, and the Center for Molecular Immunology, just to mention a few.

The Cuban President, Miguel Díaz Canel Bermúdez, wrote about this on Wednesday on his Twitter account. On Wednesday began the new phase of the candidate vaccine, Cuba is advancing on the path to mass vaccination.

"Dreaming and keep building a country: This year we will advance in immunization with our vaccines! Between clinical trials and controlled intervention study, thousands join immunization with # Soberana02 and #Abdala, on the way to mass vaccination. #CubaViva", tweeted the President of the Republic of Cuba.

### How is Phase III of Abdala and Soberana 02 Doing?

Around 22 thousand people had been immunized in this capital until yesterday, as part of the phase III of the clinical trial of the vaccine candidate Soberana 02, almost half of the population expected in that study, said Vicente Vérez Bencomo, general director of the Finlay Institute in the television space of the Round Table last Tuesday.

However, he stressed that they are still working on the pediatric solution against COVID-19, in view of which they are working on a vaccine candidate; likewise, they don't neglect the application of Soberana Plus for patients and the tests of Soberana 01, scheduled to be carried out in Cienfuegos.

In the case of Abdala, Marta Ayala Ávila, general director of CIGB, clarified that phase III will continue to evaluate its safety, efficacy, and immunogenicity from the start, this Monday, of a multicenter, placebo-controlled, randomized and double-blind clinical trial. Ayala Ávila pointed out that the Phase I / II clinical trial began in December 2020 and is now in Phase III, but even with the reduced times, regulatory transits have been strictly respected, and the population planned to participate in the trial, in Havana and the intervention study with 120 thousand health workers from Guantánamo, Granma, and Santiago de Cuba, which will have similar characteristics to the one currently being carried out in the Cuban capital.

## Does Cuba Have Enough Doses to Protect its Entire Population?

Authorities of the Ministry of Public Health (MINSAP) of Cuba assured that the country is in technological conditions to guarantee the doses necessary for the vaccination strategy against COVID-19 that progressive population immunization pursues.

The productive, industrial, and technological strategy of the proposed antidote against the new coronavirus was designed in such a way that the Soberanas would not interfere in the Abdala and Mambisa route, as they use different industrial facilities, anchored to independent biotechnological centers, he said. Eulogio Pimentel Vázquez, vice president of the Business Group of the Biotechnology and Pharmaceutical Industries, BioCubaFarma, at the television program.

## When Would the Vast Majority of the Population Be Vaccinated?

By late August, it's expected that nearly six million Cubans have been vaccinated against COVID-19, based on a comprehensive strategy that advances by levels following regulatory protocols and that considers vulnerability and risk until reaching a coverage that guarantees sufficient immunity of the population against the virus.

This was stated by Dr. Ileana Morales Suárez, MINSAP head for the Science and Technological Innovation during her intervention in television.

Morales Suárez explained that progress on the issue of vaccine candidates will be progressive, but with very solid steps, seeking safety at all times and with extreme respect for the Cuban people, aware of the challenge that COVID-19 poses, just one year away after entering the country.

## And What Will Happen Once Vaccinated?



About this, Dr. Francisco Durán, National Director for Epidemiology of MINSAP, assured last Tuesday in his daily press conference that even after being vaccinated, biosecurity measures must continue, like wearing masks, physical distancing, and disinfection of hands and surfaces, among others.

The epidemiologist replied that although these protection measures are necessary for the entire population, in the case of health personnel they are more important, because they are directly exposed.

The fact of being immunized prevents complications and the evolution towards gravity, but it doesn't prevent you from getting infected and transmitting the disease, warned Dr. Durán.

People who have been infected with COVID-19 are at risk of being reinfected because 20% of them don't leave permanent immunity, and those are the reasons for wearing the mask and other established measures, he advised.

# Translated by Amilkal Labañino / CubaSí Translation Staff