

COVID-19 vaccine administered by nasal spray receives Phase I study approval in China

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Pharma companies around the world are exploring innovative approaches to develop therapeutics and vaccines against COVID-19. One of these innovations is using a nasal spray to deliver the vaccine and the intranasal spray vaccine being co-developed by Beijing Wantai Biological Pharmacy Enterprise with researchers from Xiamen University and Hong Kong University is the first of its kind to receive authorization from the China National Medical Products Administration. Leading data and analytics company GlobalData expects this spray vaccine will be easier to mass-produce and distribute because it will utilize the same production technology as the influenza vaccine.

According to GlobalData's drugs database, there are currently five vaccines in development for COVID-19 with intranasal routes of administration, all of which contain the COVID-19 spike protein in their formulations.

Scotty Chung-Siu, MPH, Senior Analyst at GlobalData, comments: "Nasal sprays are far less invasive for the recipient than the intramuscular injection alternative, as the drug can be rapidly absorbed through the nasal mucosa since it is supplied by many blood vessels."

The intranasal spray, which consists of weakened flu viruses such as H1N1, H3N2, and B with genetic segments of COVID-19's spike protein, mimics the infection of respiratory viruses and stimulates the immune response. The Phase I clinical trial is expected to begin in November 2020, enroll 100 patients and will take at least a year to complete.

Chung-Siu concludes: "There are currently 375 vaccine candidates currently in development against COVID-19 and the latest approval just shows how every approach and option is being considered to fight this ongoing pandemic. As the number of cases and deaths continue to rise, so do the research and efforts to find a vaccine."