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China focuses on next-generation intranasal COVID-19 vaccines

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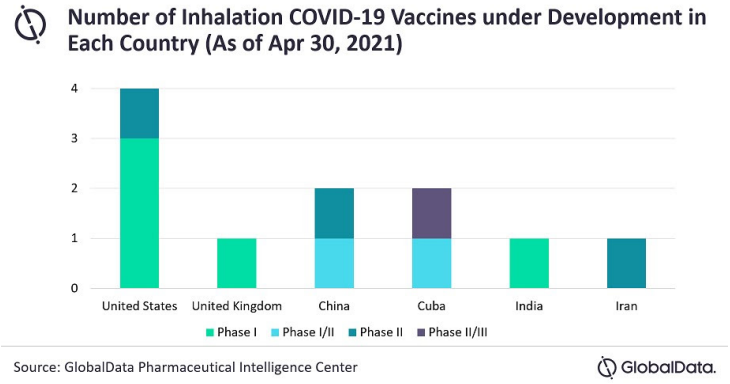

COVID-19 infections continue to rise with several countries facing second-and third-wave infections with the newly evolved mutant strains, thereby increasing the demand for effective vaccines. Several pharmaceutical companies across the world have started working on the inhaled vaccine formulations and China is also developing next generation intranasal COVID-19 vaccines, says GlobalData, a leading data and analytics company.

CanSino Biologics is about to start a Phase I/II trial using an inhaled COVID-19 vaccine and a Phase II trial is underway for the intranasal COVID-19 vaccine developed by the University of Hong Kong in collaboration with Beijing Wantai Biological Pharmacy Enterprise.

According to GlobalData's 'Coronavirus Disease 2019 (COVID-19) Pharma Executive Briefing – April 20, 2021', 13 COVID-19 injectable vaccines are available worldwide, and five of them are from the Chinese companies including Sinopharm Group, Sinovac Biotech, CanSino Biologics, and the Chinese Center for Disease Control and Prevention.

Currently, there is insufficient data on whether injectable vaccines can provide complete immunity against the new strains. However, inhaled vaccines are gaining attention owing to their potential to generate both systemic immunity and local immunity at the mucosal tissues in the lungs where the virus replicates.

According to GlobalData's 'Pharmaceutical Intelligence Center', there are 11 inhaled vaccines undergoing clinical trials in countries including the US, the UK, China, Cuba, India and Iran.

Mr. Vale concludes: "Since the efficacy rates of Chinese vaccines were found to be inferior to vaccines of Pfizer-BioNTech and Moderna, inhaled vaccines with their potential to induce stronger immunity can be more beneficial. Additionally, factors such as being non-invasive, easy to administer without the need for trained specialists, and not requiring storage and transportation at low temperature make them also suitable for mass immunization if adequately supported by manufacturing on a large scale."