Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

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News

Vaccination with CanSinoBIO's inhaled COVID-19 vaccine has begun in China

Jiaxuan Gao

State Key Laboratory for Infectious Disease Prevention and Control, National Institute for Communicable Disease Control and Prevention, China CDC, Beijing, China

On October 25, 2022, the Information Office of Shanghai Municipal People's Government announced on its official WeChat account "Shanghai Release" that the city had opened reservation registrations for booster immunizations with the CanSinoBIO recombinant COVID-19 vaccine (adenovirus type 5 vector) and stated that this inhaled COVID-19 vaccine was officially being used for immunizations.

The inhaled vaccine employs an adenovirus vector to deliver genetic material encoding the S protein of SARS-CoV-2 into the human body. A nebulizer is used to nebulize the vaccine into tiny particles, which are inhaled and reach the lung tissue through the oral cavity to stimulate cellular, mucosal, and humoral immune responses.

This adenovirus vector vaccine for COVID-19 was developed by CanSinoBIO and has been certified by the World Health Organization for emergency use. A clinical trial of sequential booster immunizations with this inhaled vaccine and other types of vaccines was carried out in healthy adults aged 18 years and older in China. The results showed that sequential booster immunization with the inhaled vaccine and an inactivated virus vaccine significantly increased the immune response. The level of neutralizing antibodies against the Omicron variant was 14 times greater than that of homologous booster with the inactivated virus vaccine. Furthermore, the protection was shown to be maintained for at least 6 months, suggesting that the inhaled vaccine is a better choice as a vaccine booster.

After receiving emergency use authorization in China, this inhaled adenovirus vector vaccine is now being offered in Shanghai, Jiangsu, Tianjin, Zhejiang, and Beijing. A CanSinoBIO official recently stated that the inhaled vaccine will gradually become used as a sequential booster in all provinces and regions in China in the near future.

Conflict of interest

The author declared that he has no conflicts of interest to this work.

E-mail address: gaojiaxuan@icdc.cn

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