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Sputnik V combatting Omicron better than Pfizer vaccine: Study

20 January 2022 | News

Heterologous boosting with Sputnik Light has proven to be one of the best solutions to prolong the protection period of other vaccines



A unique comparative study conducted at the Italian Spallanzani Institute, the leading Italian research institute for infectious diseases, by a joint Italian-Russian team of researchers representing the Institute and the Gamaleya Center shows that the Sputnik V coronavirus vaccine demonstrates more than 2 times higher titers of virus neutralizing antibodies to Omicron (B.1.1.529) variant than 2 doses of Pfizer vaccine (2.1 times higher in total and 2.6 times higher 3 months after vaccination).

The study was conducted in the equal laboratory conditions in the Spallanzani Institute in Italy on comparable sera samples from individuals vaccinated with Sputnik V and Pfizer with a similar level of IgG antibodies and virus neutralizing activity (VNA) against Wuhan variant.

Sputnik V shows significantly smaller (2.6 times) reduction of virus neutralizing activity against Omicron as compared to reference Wuhan variant than Pfizer vaccine (8.1-fold reduction for Sputnik V in contrast to 21.4-fold reduction for Pfizer vaccine).

The study demonstrates that Sputnik V neutralizes the Omicron variant by inducing robust antibody response associated with high levels of protection.

Sputnik V develops a wider pool of antibodies to different epitopes in contrast to Pfizer vaccine, which utilizes the spike protein in a proline-stabilized form directed mainly to the specific epitopes, which were highly affected by the mutations in the Omicron variant.

Kirill Dmitriev, CEO of the Russian Direct Investment Fund, commented, “Partnership of different platforms is the key and heterologous (“mix & match”) boosting with Sputnik Light will help strengthen efficacy of other vaccines in light of combined Delta and Omicron challenge.”