

<https://blog.en.erste-am.com/covid19-update-sputnik-v/>

COVID19 Update: Sputnik V - the vaccine that came in from the cold

Markus Auer



© (c) unsplash

When Russian President Vladimir Putin celebrated his “Mission Accomplished” moment on August 11th with the announcement of Sputnik V, the world’s first SARS-CoV-2 vaccine, the global scientific community reacted with a mix of skepticism and condemnation. Is this warranted or a result of russophobia?

What is Sputnik V?

Gam-COVID-Vak, better known under its politicized name Sputnik V, is an adenovirus-vector vaccine developed by the Gamaleya Institute in the Moscow under the purview of the Russian Ministry of Health. The vaccine uses two different vectors to train the human body for the SARS-CoV-2 spike protein. Ad26 (same as the J&J vaccine) for the “primer” shot and Ad5 (same as the CanSino vaccine) as the “booster” 21 days after the first shot.

Does it work?

We do not know. Although the vaccine has two completed FDA phase I/II trials NCT04436471 and NCT04437875 with 38 participants each, no data on the results was published thus far beyond a press-release about the purported effectiveness. Equally absent are the data on trials conducted on rodents and non-human primates. This follows an established pattern of the Gamaleya Institute of not adhering to international research standards.

Although the Gamaleya Institute is the highest authority for vaccine development in Russia with a history reaching back into the 19th century, the institute has no proven track record. It developed an Ebola vaccine that is thus far only approved in Russia, a country not very prone to Ebola outbreaks, and has not undergone the standard FDA clinical trial process.

The secrecy notwithstanding, there is no reason to believe that the developed vaccine does not elicit some immunity to SARS-CoV-2. The used vectors have shown to be effective in the CanSino (at least somewhat) and J&J vaccines. The big unknowns are the effectiveness given that the vectors are human adenoviruses for which a certain percentage of the populace has at least some immunity, rendering them ineffective, and the duration of the immunity, which in the case of the CanSino vaccine appeared to be short-lived.

Is it safe?

Probably yes. Not considering any potential contaminations during the production, the risk of serious adverse side effects from human adenovirus vector vaccines appears to be low. The vectors are unable to replicate in the human body and even if they could the elicited symptoms would be benign (common cold). Possible side effects include fever, fatigue, and muscle pain. Nevertheless, subjecting the population to vaccine with unknown rare side effects is unethical. Even if an extreme side effect appears for 1 in 2000 people, this would affect 50.000 people in Russia alone if the entire susceptible population is vaccinated.

Who will get it?

Medical personnel will be the first to receive the vaccine. According to press releases, the vaccination will be voluntary. Children will not be vaccinated, as the researchers claim that have to find a lower tolerable dose first. Russia aims to produce 5 million doses per month in December and January. At this rate, assuming that a dose refers to an entire vaccination course (primer & booster), it would take Russia 20 months to vaccinate enough of its people. The fact that the vaccine has two different components increases the monitoring requirements during distribution and will pose an administrative burden on the stretched Russian health apparatus.

Summary

Sputnik V is a publicity stunt that will at best generate some immunity for frontline health care workers with tolerable safety risks and at worst an ineffective vaccine

with extreme but rare side effects. My guess is, given the low production capacity, that Russia, like most countries, will source many different vaccines to inoculate the entire susceptible population.

Legal note:

Prognoses are no reliable indicator for future performance.

Legal disclaimer

This document is an advertisement. All data is sourced from Erste Asset Management GmbH, unless indicated otherwise. Our languages of communication are German and English.

The prospectus for UCITS (including any amendments) is published in Amtsblatt zur Wiener Zeitung in accordance with the provisions of the InvFG 2011 in the currently amended version. Information for Investors pursuant to § 21 AIFMG is prepared for the alternative investment funds (AIF) administered by Erste Asset Management GmbH, pursuant to the provisions of the AIFMG in connection with the InvFG 2011.

The fund prospectus, Information for Investors pursuant to § 21 AIFMG, and the key investor document/KID can be viewed in their latest versions at the web site www.erste-am.com within the section mandatory publications or obtained in their latest versions free of charge from the domicile of the management company and the domicile of the custodian bank. The exact date of the most recent publication of the fund prospectus, the languages in which the key investor document is available, and any additional locations where the documents can be obtained can be viewed on the web site www.erste-am.com. A summary of investor rights is available in German and English on the website www.erste-am.com/investor-rights as well as at the domicile of the management company.

The management company can decide to revoke the arrangements it has made for the distribution of unit certificates abroad, taking into account the regulatory requirements.

This document serves as additional information for our investors and is based on the knowledge of the staff responsible for preparing it at the time of preparation. Our analyses and conclusions are general in nature and do not take into account the individual needs of our investors in terms of earnings, taxation, and risk appetite. Past performance is not a reliable indicator of the future performance of a fund. Please note that investments in securities entail risks in addition to the opportunities presented here. The value of shares and their earnings can rise and fall. Changes in exchange rates can also have a positive or negative effect on the value of an investment. For this reason, you may receive less than your originally invested amount when you redeem your shares. Persons who are interested in purchasing shares in investment funds are advised to read the current fund prospectus(es) and the Information for Investors pursuant to § 21 AIFMG, especially the risk notices they contain, before making an investment decision. If the fund currency is a currency other than the investor's home currency, changes in the corresponding exchange rate may have a positive or negative impact on the value of his investment and the amount of the costs incurred in the fund - converted into his home currency.

Please consult the corresponding information in the fund prospectus and the Information for Investors pursuant to § 21 AIFMG for restrictions on the sale of fund shares to American citizens. Misprints and errors excepted.



Markus Auer

Discretionary Portfolio Management