## Russia develops new mRNA vaccine against cancer: Report

Russian news agency claims the country has developed an mRNA vaccine against cancer. It is set to be available free of charge to patients by 2025.

The vaccine was developed in partnership with several research centers and is expected to be released for public use by early 2025.

## In Short

- Russia has developed a new cancer vaccine, the country's news agency has reported
- It is an mRNA vaccine that creates precise immune response
- The vaccine will be free of charge to patients by early 2025

Russia has developed its own cancer vaccine, the country's news agency TASS has reported.

It is an mRNA vaccine against cancer and will be distributed to patients free of charge, General Director of the Radiology Medical Research Centre of the Russian Ministry of Health, Andrey Kaprin, told Radio Rossiya.

The vaccine was developed in partnership with several research centres and is expected to be released for public use by early 2025.

Previously, Alexander Gintsburg, Director of the Gamaleya National Research Centre for Epidemiology and Microbiology, shared with TASS that pre-clinical trials showed the vaccine can suppress tumor growth and prevent potential metastases.

"The vaccine's pre-clinical trials had shown that it suppresses tumor development and potential metastases," Andrey Kaprin told TASS.

Earlier this year, Russian President Vladimir Putin said in televised comments that "we have come very close to the creation of so-called cancer vaccines and immunomodulatory drugs of a new generation".

"I hope that soon they will be effectively used as methods of individual therapy," he added, speaking at a Moscow forum on future technologies.

## **HOW DOES AN MRNA VACCINE WORK AGAINST CANCER?**

An mRNA vaccine uses a small fragment of messenger RNA (a molecule that carries specific instructions from DNA) to instruct the body's cells to produce a specific protein associated with cancer cells.

This triggers the immune system to recognise and attack those cancer cells, effectively teaching the body to target the disease.

Unlike traditional vaccines, which often use weakened or inactivated pathogens, mRNA vaccines leverage the body's own cellular machinery to create a precise immune response tailored to the cancer being treated.

## **News Source:**

https://www.indiatoday.in/health/story/russia-develops-new-mrna-vaccine-against-cancer-report-2651555-2024-12-18