

## **First patient dosed in Phase I study of mRNA-based vaccine against COVID-19**

The US National Institutes of Health (NIH) said Monday that the first participant has been dosed in a Phase I study of the experimental COVID-19 vaccine mRNA-1273. The study is being conducted at Kaiser Permanente Washington Health Research Institute (KPWHRI) in Seattle, with funding from the National Institute of Allergy and Infectious Diseases (NIAID).

The trial aims to enrol 45 healthy adults ages 18 to 55 years over approximately six weeks, with each subject receiving two doses of the vaccine via intramuscular injection in the upper arm approximately 28 days apart. Each participant will be assigned to receive either a 25 mcg, 100 mcg or 250 mcg dose at both vaccinations, with 15 people in each dose cohort.

The study will evaluate mRNA-1273's safety and its ability to induce an immune response in participants. The NIH noted that subjects will be asked to return to the clinic for follow-up visits between vaccinations and for additional visits across the span of a year after the second dose.

The lipid nanoparticle (LNP)-encapsulated mRNA-based vaccine was developed by NIAID and collaborators at Moderna, while manufacturing support was provided by the Coalition for Epidemic Preparedness Innovations (CEPI). The NIH said that mRNA-1273, which has shown promise in animal models, encodes for a full-length, prefusion stabilised spike (S) protein of the SARS-CoV-2.

"Finding a safe and effective vaccine to prevent infection with SARS-CoV-2 is an urgent public health priority," remarked NIAID Director Anthony Fauci, adding "this Phase I study, launched in record speed, is an important first step toward achieving that goal."

The trial is being led by KPWHRI senior investigator Lisa Jackson with further details available at [ClinicalTrials.gov](https://clinicaltrials.gov) under the identifier NCT04283461.

Reference: <https://www.nih.gov/news-events/news-releases/nih-clinical-trial-investigational-vaccine-covid-19-begins>