The World Health Organization (WHO) and the government of Uganda plan to test three candidate Ebola vaccines in a clinical trial during the ongoing outbreak in the East African nation, Director-General Tedros Adhanom Ghebreyesus announced Wednesday.

Global health body announced that the first doses of vaccine should arrive in Uganda next week, Tedros said, though the WHO has not yet indicated a start date for the trial.

The outbreak, which has been underway since at least early August, has resulted so far in at least 163 confirmed and probable cases and 77 confirmed and probable deaths. Nine districts in Uganda have reported cases.

The two Ebola vaccines that have already been licensed — made by Merck and Janssen, the vaccine division of Johnson & Johnson — protect against the Zaire species of ebolavirus and are not effective against the Sudan species circulating in this outbreak.

A number of laboratories have designed Ebola Sudan vaccines over the past couple of decades but this type of Ebola crops up rarely — the last outbreak was in 2012 — providing no chances until now to test vaccines.

The three experimental vaccines that will be tested build off of existing vaccine experience. One is being produced by the not-for-profit group IAVI and uses the same vaccine platform as Merck’s Ebola Zaire vaccine.

It uses a livestock virus known as vesicular stomatitis virus that has been modified to carry a key protein from the Ebola Sudan virus.

The two other vaccines — one is being developed by the Sabin Vaccine Institute, a nonprofit, while the other is being developed by the University of Oxford’s Jenner Institute — use adenoviruses that normally infect chimpanzees to introduce the immune system to a surface protein from Ebola Sudan viruses.

The Jenner Institute used the same vaccine platform when it designed AstraZeneca’s Covid-19 vaccine.

Though the Ugandan outbreak appeared to be expanding rapidly a few weeks ago, the flow of new cases has slowed of late, creating questions about whether the outbreak could be brought under control before the clinical trial can generate

answers.

WHO officials acknowledged that is a possibility during a press conference Wednesday, but said planning will proceed regardless.

“What I don’t want to be doing in six weeks or eight weeks’ time, is looking back if there’s a deterioration of the situation and saying ‘God, we should have. We could have. And if only we had,’” said Mike Ryan, head of WHO’s Health Emergencies Program. “We don’t want ‘if onlys.’’’

The approach that will be used in Uganda is known as a ring trial and differs from standard randomized controlled trials where people are individually randomized to receive a vaccine or a placebo, and followed to see if the people in the vaccine group are less likely to develop the disease the product is meant to protect against.

In a ring vaccination trial, the contacts of some cases are randomly assigned to be vaccinated immediately whereas the contacts of others get vaccinated after a delay.

If fewer cases of disease develop among the contacts who were vaccinated without delay, the vaccine is deemed to have been protective.

IAVI’s CEO, Mark Feinberg, said the organization will conduct additional Phase 1 evaluation “as part of a broader integrated program to support regulatory evaluation and approval, if the vaccine is shown to be efficacious and safe.”

In addition to use to control future outbreaks, any Ebola Sudan vaccine that proves to be safe and effective will likely end up in the U.S. Strategic National Stockpile as a hedge against outbreaks — either triggered by an imported case or a bioterror event — in this country.

The WHO expert panel ranked the vaccines in order of which they thought were most likely to be successful, singling out the vaccine that is being developed by IAVI as the most likely to work.

The vaccine being developed by the Sabin Institute — which was designed at the National Institutes of Health’s Vaccine Research Center and for a time part of vaccine giant GSK’s development portfolio — was listed as the second most likely to succeed.

The experts ranked third the prospects of the vaccine being produced by the Oxford group, which actually targets both Ebola Zaire and Ebola Sudan. The experts noted this vaccine has not yet been tested in primates, only mice and guinea pigs.