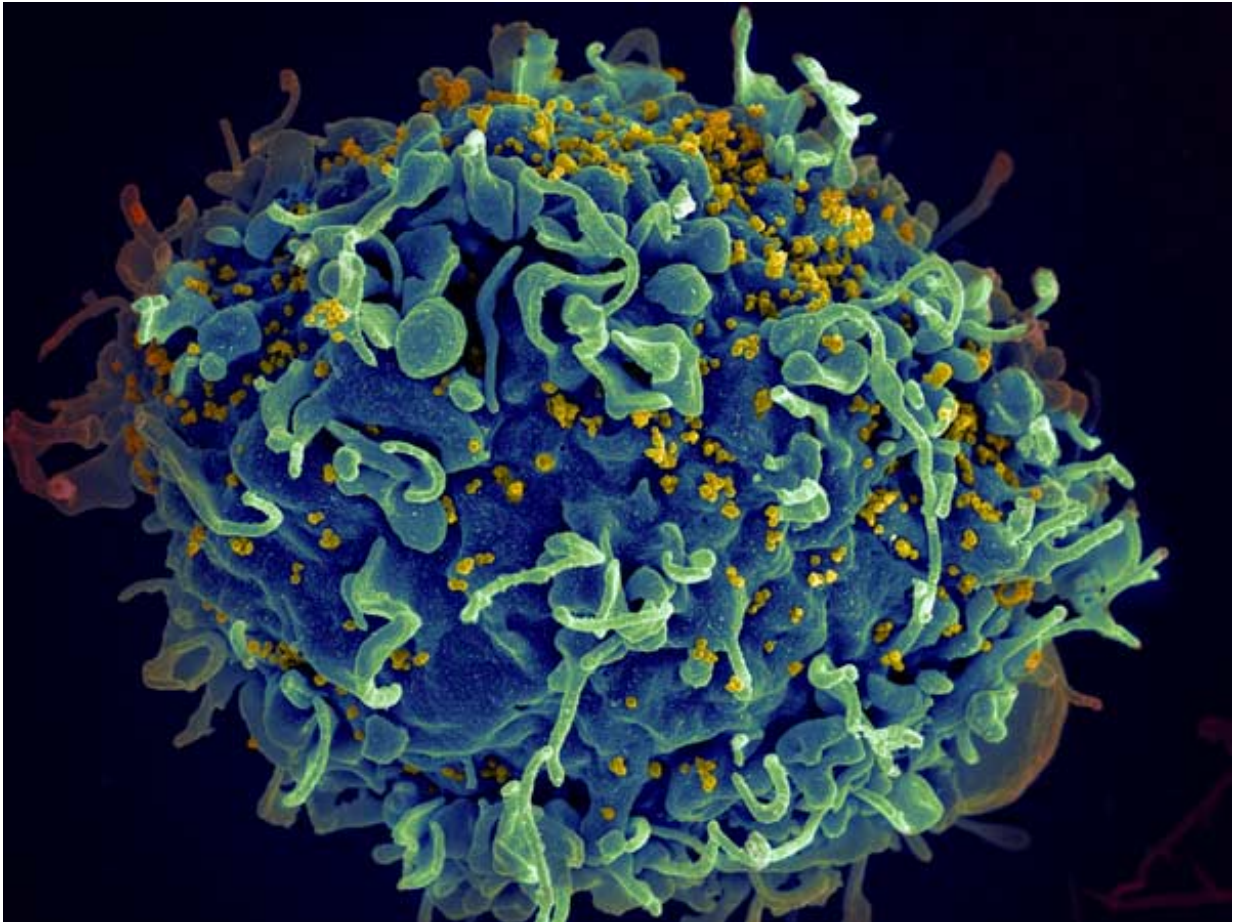


Candidate AIDS vaccine passes early test

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HIV infecting a human cell. Credit: NIH

The three-decade-old quest for an AIDS vaccine received a shot of hope Monday when developers announced that a prototype triggered the immune system in an early phase of human trials.

Tested in 393 people in the United States, Rwanda, Uganda, South Africa and Thailand, the drug "raised antibody responses in 100 percent of vaccine recipients," Dan Barouch, a member of the research team, said in Paris.

"These promising... data, together with advances from many other investigators in the field, support a new sense of optimism that development of an HIV vaccine might in fact be possible," he told journalists at an HIV science conference organised by the International AIDS Society (IAS).

A vaccine is widely considered the best way of ending an epidemic that has seen 76.1 million people infected with HIV, the virus that causes AIDS, since the early 1980s.

Some 35 million have died.

Last year alone, 1.8 million people around the world were newly infected, according to UNAIDS, and there were 36.7 million people living with the virus.

Of those, 19.5 million had access to virus-suppressing anti-retroviral treatment (ART).

"The ultimate control of the worldwide HIV epidemic will likely require the development of a safe and effective vaccine," said Barouch, director of the Center for Virology and Vaccine Research at the Beth Israel Deaconess Medical Center in Massachusetts.

"But to date, only four vaccine concepts have been tested for clinical efficacy in the 35-year history of the epidemic."

The team hopes their prototype will get approval for the next trial phase.

The vaccine uses a common cold virus to deliver antigens—foreign substances that induce the recipient's immune system to produce intruder-fighting antibodies. The vaccine is boosted with a protein that raises antibody levels.

'Important news'

In an earlier trial, the prototype prevented infection in 66 percent of rhesus lab monkeys, said Barouch.

In humans, it has now been shown to be safe and to generate an immune response.

"Of course, we don't know yet whether this vaccine will protect humans," the researcher said.

"However, these data to date support the advancement of this [vaccine candidate](#) into a larger... efficacy trial, which we hope will start before the end of this calendar year."

That will depend on additional data to be gathered in the coming months.

IAS president Linda-Gail Bekker described the results as "important news".

Condoms are still at the frontline of efforts to prevent infection—mainly through sex and blood contact.

Anthony Fauci, director of the National Institute of Allergy and Infectious Diseases (NIAID) in Maryland, told AFP that developing a vaccine was "going to be very difficult" but "would be really a game changer".

"If in fact we get a very moderately-effective, a 50-60 percent effective vaccine, that will go a long way when you combine it together with other prevention modalities... to really having a major impact on the pandemic," he said ahead of the conference.

Another [vaccine](#) candidate, dubbed HVTN 702, is being tested in a major clinical trial in South Africa.

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