

# [Aids vaccine by merck and company](https://assignbuster.com/aids-vaccine-by-merck-and-company/)

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### What kind of vaccine was this, and how was it supposed to work?

The vaccine known as V520 that was used in these studies cannot cause HIV infection because it contains only of viral materials which has synthetically produced snippets. Such vaccine is composed of adenovirus a common virus which normally causes upper respiratory infection these groups of virus infect the membranes tissue linings of the respiratory tract very common in adult and children, this infection include fever the most frequent symptoms is the inflammation of the pharynx or sore throat which is the sign of pharyngitis, inflammation of the nasal membranes, or a congested runny nose cough and swollen lymph nodes (gland). This infection sometimes leads to otitis media.

It was first discovered as an agent causing upper respiratory infection in man, the human adenovirus comprise 41 distinct serotypes which cause a variety of ailments such as acute respiratory, ocular, gastrointestinal and urinary tract diseases ( Lattime et al, 2002). The adenovirus serotypes have an oncogenic possibility and are able to stimulate tumors in rodents cause a remarkable surge of interest in the study of the molecular biology of human adenoviruses.

How did the researchers deal with the dilemma of working with “ control” human subjects? That is, did they warn the volunteers to protect themselves but obtain no significant data to test the vaccine? Or did they try to detect the vaccine’s efficacy while their participants were at risk of getting HIV infection? Did they find a solution?

Scientist has made the vaccine by crafting the vaccine by genetically making alterations the common adenovirus which consist the part of HIV. They had hope that it will activate an immune response that would make recipients less to catch HIV or interrupt the inception of full-blown AIDS. It is expected from the vaccine by the scientist that the vaccine should not cause infection but to produce results that would make on the immunity of the recipients to made it easier for the to seize through a later exposure. Those volunteers who have received the least two doses of the said vaccine nineteen volunteers constricted HIV compared with the eleven persons which are given placebos.

The dilemma of working with “ control” human subjects is that they are more uncontrollable regarding theirenvironmentpromptness for this long tow will never be achieved on a short p of time continued by eagerness for a precise invention. It requires enthusiastic and prepared society and numerous places which are both well continued and supple to acclimatize changes in procedure. This is one of the criteria that the mentioned experiment has lacked, in using large scale trials to be short of associates with fine characterized incidence and frequency rates of HIV infection

Without the consistent of how much infection takes place in a community in a particular year, there will be no means of knowing whether an entrant vaccine will help lessen the pace of new infections. All this information must be collected sooner before large-scale test can start. It is also significant to know the dynamics of viral load and CD4 cell counts in HIV-infected people in the community where the tryout takes place.

How would the scientists determine efficacy? That is, when comparing the vaccinated volunteers with those who received a placebo, how big a difference between the vaccinated versus control groups would have been necessary to call the trial a success (say, at the 95% confidence level)?

The AIDS vaccine trials moving headed for large trials are not probable to defend people from infection. In its place the vaccines are more likely to improve the series of HIV to AIDS if a vaccinated individual becomes infected. To resolve the vaccine’s impact, volunteers will necessitate to be followed over an extended period of time possibly their life p. This represents an important model shift which requires substantial learning of trial participants and communities in which test take place.

AIDS vaccine researchers require making it certain that systems are in position to confirm that a constructive test stems from vaccine-induced antibodies, rather a definite illness. Moreover, looked-for are programs to fight bias against anyone enrolled in an AIDS vaccine test whether test HIV seropositive or not.

The vaccine developed by Merck and Co. did not prevent HIV infection nor did it limit the severity of the disease, in those who become infected with HIV as a result of their own behaviors that exposed them to virus. The trial could have been a success and be effective if the researchers has been more cautious on recording who are the patients who get placebo and the real vaccine, and after the vaccine they should still monitor the activities of the volunteers especially if ever they still indulge in actions that will make them more prone to the mentioned disease.

### In your opinion, what went wrong? Why did the trial fail?

The project fails because most of the volunteers are heterosexual; they were not informed after the test if they have been given the placebo or the vaccine. Unexpected results from other AIDS studies had also happen, just like the trials of two vaginal microbicide gels to avoid HIV but have led to more infections for those who have really used the product than those who has received the placebos.

Because of the long time and test done to perfect the test we can always expectfailure, in a certain experiment the controlhuman beingis very important because this will serve as the basis on the experimental side which include the numerous amount of volunteers unmonitored after the vaccine like their extra curricular activities and the way they have their sexual relationship with the other sex, a closeobservationon their itinerary’s in their everyday living in the longer period of time.

## Work Cited

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