

# Study Examines Failure of Merck Vaccine Trial

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Testing of an experimental HIV vaccine developed by U.S. pharmaceutical company Merck was halted in September 2007 because results showed the drug may increase the risk of contracting HIV rather than prevent it. In a recent study, researchers at France's Montpellier Institute of Molecular Genetics examined just why that vaccine trial failed; the results were published November 3 in the *Journal of Experimental Medicine*, [Agence France-Presse](#) reports.

According to the article, second stage of trials of the HIV-1 vaccine relied on Adenovirus 5 (Ad5)—a modified form of the common cold—to carry elements of HIV into the body, which would trigger the immune system to fight the virus and develop a natural response.

But three years after the first trial, researchers found that the HIV infection spread three times faster in those who had developed long-lasting antibodies to the common cold, which altered the response to the vaccine. In these cases, the virus came into contact with, and was able to infect, more CD4 cells because the vaccine prompted more CD4 cells to grow.

Researchers say that the faulty vaccine reached the second phase of trials because first-phase testing of the vaccine used primates, which do not naturally come into contact with the human common cold.