

# Adaptive trial designs could accelerate HIV vaccine development

April 20 2011

---

In the past 12 years, four large-scale efficacy trials of HIV vaccines have been conducted in various populations. Results from the most recent trial—the RV144 trial in Thailand, which found a 31 percent reduction in the rate of HIV acquisition among vaccinated heterosexual men and women—have given scientists reason for cautious optimism. Yet building on these findings could take years, given that traditional HIV vaccine clinical trials are lengthy, and that it is still not known which immune system responses a vaccine needs to trigger to protect an individual from HIV infection.

To accelerate [HIV vaccine](#) development, scientists working at and funded by the National Institute of Allergy and Infectious Diseases (NIAID), part of the National Institutes of Health, propose using adaptive clinical trial designs. These designs allow a trial to be modified in response to data acquired during the study. Such trials would rapidly screen out poor vaccine candidates, enable extended evaluation of promising candidates and provide key information on the immunological basis for HIV prevention.

In a paper appearing this week in *Science Translational Medicine*, the scientists review the four major HIV vaccine trials undertaken thus far and the scientific questions and challenges that remain. They describe what is needed to advance HIV vaccines through clinical trials and how adaptive clinical trial designs may accelerate identification of an effective HIV vaccine.

**More information:** L Corey et al. HIV-1 vaccines and adaptive trial designs. Science Translational Medicine [DOI: 10.1126/scitranslmed.3001863](https://doi.org/10.1126/scitranslmed.3001863) (2011).

Provided by National Institutes of Health

Citation: Adaptive trial designs could accelerate HIV vaccine development (2011, April 20)  
retrieved 24 April 2024 from <https://medicalxpress.com/news/2011-04-trial-hiv-vaccine.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.