

# Alere HIV Combo Rapid Test



Alere HIV  
Combo  
(Alere.com)

Rapid HIV tests are essential in providing quick and easy diagnoses. These types of tests have been available from the late '90s however, most of these tests are unable to detect HIV in early infection. This tends to be the stage at which people are most likely to transmit virus. This led researchers from [Alere](http://Alere.com) to develop a fourth-generation rapid test that can detect HIV-1 p24 antigen and both antibodies to HIV-1 and HIV-2 with increased sensitivity and specificity.

Most HIV rapid tests on the market rely on the detection of anti-HIV antibodies in the blood. Unfortunately, it takes up to 3 months for these antibodies to be at detectable titers. This leads to a “window period” where a tested individual may

think they are HIV-negative whilst they are actually positive. Some rapid tests are also only able to detect one form of HIV; either HIV-1 or HIV-2. This results in higher false negative rates.

The team of researchers from Alere developed a Combo Rapid Test was designed to address these issues. Firstly, the [Alere HIV Combo Rapid Test](#) is also able to detect both HIV-1 and HIV-2 infection. The researchers have been working hard to optimize the test and have found that this 4th generation version is able to detect HIV infection up to 5 days earlier than the 3rd generation model (Ottiger and Huber, 2015).

Secondly, the rapid test they designed has been optimized to detect both p24 and HIV-specific antibodies. Since p24 can be detected much earlier in infection, this could potentially result in earlier detection of the virus as compared to other rapid tests.

After testing 120 samples from participants, the researchers found that the Alere HIV Combo Rapid Test had 91% sensitivity and 100% specificity for p24 antigen detection (Fitzgerald et al., 2016). In another study using plasma studies from the VOICE trial, the researchers found that the Alere HIV Combo Rapid Test could detect 28% of infections missed by current 3rd generation rapid tests.

In summary, the Alere HIV Combo Rapid test is a reliable method to detect early infection of HIV-1 and HIV-2 infection. It has high specificity and sensitivity which is important for an [acute-detection HIV](#) test. Early detection of the virus may lead to earlier intervention and improve the outcomes of HIV-infected individuals.

Learn more about Alere – [Alere.com](http://Alere.com)

Learn more about the Alere HIV Combo Rapid Test – [Diagnostic Tests](#)

Journal articles:

[Ottiger and Huber, 2015. Comparison of the New Alere HIV Combo with Alere Determine HIV- 1/2 Ag/Ab Combo in Acute Primo and Established HIV Infections. \*Annals of Clinical and Laboratory Research\*](#)

[Fitzgerald et al., 2016. Diagnosing acute HIV infection at point of care: a retrospective analysis of the sensitivity and specificity of a fourth-generation point-of-care test for detection of HIV core protein p24. \*Sex Transm Infect\*](#)

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