

HIV-1 vaccine development: Pinning down a moving target

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HIV-1 is a genetically diverse collection of viruses, making it a moving target in vaccine development.

In a study published in the [Journal of Clinical Investigation](#), researchers led by Brad Jones at the University of Toronto investigated the feasibility of eliminating HIV-infected cells by targeting cellular immune responses against a human endogenous retrovirus (HERV).

HERVs are the DNA remnants of ancient infectious retroviruses that became part of the germ line cells of our ancestors.

Jones and colleagues found that [HIV infection](#) stimulated the expression of HERV proteins, effectively tagging HIV-infected cells.

[Immune cells](#) targeted to these proteins specifically eliminated cells infected with several different strains of HIV in vitro. This study suggests that HERV-targeted immune responses should be considered in the development of HIV vaccines.

More information: HERV-K-targeted T-cells eliminate diverse HIV-1/2 and SIV primary isolates, *Journal of Clinical Investigation*, 2012.

Provided by Journal of Clinical Investigation

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