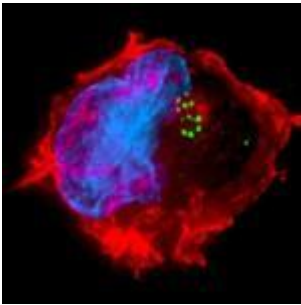


A new reservoir of HIV found within peripheral V δ 2 T cells



Conventional T cells (which have an alpha:beta T cell receptor) make up the majority of T cells in the peripheral circulation and lymphoid tissues. A minor population of T cells are the gamma-delta T cells, which have very low expression, or lack the CD4 receptor. Up until now, these cells have thus not been considered to harbour latent HIV, and serve as a reservoir, even though infection of these cells have been reported.

Successful elimination of HIV, leading to a cure, will need to identify all cellular reservoirs that harbour latent virus. In the October edition of PLoS Pathogens, Natalia Soriano-Sarabia et al have found that upregulation of the CD4 receptor may render primary V δ 2 cells target for HIV infection *in vitro* and they propose that HIV-induced immune activation may allow infection of $\gamma\delta$ T cells *in vivo*.

The authors assessed the presence of latent HIV infection by measurements of DNA and outgrowth assays within V δ 2 cells in 18 aviremic patients on long-standing antiretroviral therapy. They recovered latent but replication-competent HIV from highly purified V δ 2 cells from 14 HIV+ subjects. This demonstrated that “peripheral V δ 2 T cells are a previously unrecognized reservoir in which latent HIV infection is unexpectedly frequent”.

[Soriano-Sarabia, N. et al. 2015. Peripheral V \$\gamma\$ 9V \$\delta\$ 2 T Cells Are](#)

[a Novel Reservoir of Latent HIV Infection. *PLOS*.](#)