

Viral Escape from CD8+ T Cells: Evidence for a Lytic Effector Mechanism?

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Recent evidence suggests that, in SIV and HIV-1 infection, CD8+ T cells mediate anti]viral control predominantly via non]cytolytic mechanisms. This is in apparent conflict with the observation that SIV and HIV-1 variants that escape CD8+ T cell surveillance are frequently and reproducibly selected. We use a cellular automata model that describes spatial and temporal HIV-1 dynamics to address the question "is the observation of escape variants evidence that CD8+ T cells kill HIV-1 infected cells?"