

## **Modified vaccinia Ankara expressing HIVA antigen stimulates HIV-1-specific CD8 T cells in ELISpot assays of HIV-1 exposed infants[star]**

Slyker, Jennifer A; Lohman, Barbara L; Mbori-Ngacha, DA; Reilly, Marie; Wee, Edmund G T; Dong, Tao; McMichael, Andrew J; Rowland-Jones, Sarah L; Hanke, Tomas; John-Stewart, Grace

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### **Abstract:**

Recombinant modified vaccinia virus Ankara expressing HIV-1 antigens (MVA.HIVA) was used in ELISpot assays to monitor HIV-1-specific T cell responses in infants. Responses to MVA.HIVA and HIV-1 peptides were examined in 13 infected and 81 exposed uninfected infants in Nairobi, Kenya. Responses to MVA.HIVA (38%) and peptide stimulation (38%) were similar in frequency ( $p = 1.0$ ) and magnitude (mean 176 versus 385 HIVSFU/106,  $p = 0.96$ ) in HIV-1 infected infants. In exposed uninfected infants, MVA.HIVA detected more positive responses and higher magnitude responses as compared to peptide. MVA.HIVA ELISpot is a sensitive method for quantification of HIV-1-specific CD8+ T cell responses in HIV-1 exposed infants. These results demonstrate the relevance of HIV-1 clade A consensus-derived immunogen HIVA for the viruses currently circulating in Nairobi.