

## TARGETING HIV AT ITS SOURCE: A NOVEL LENTIVIRAL VECTOR TO SUPPRESS VIRAL REBOUND AND TARGET RESEVOIRS

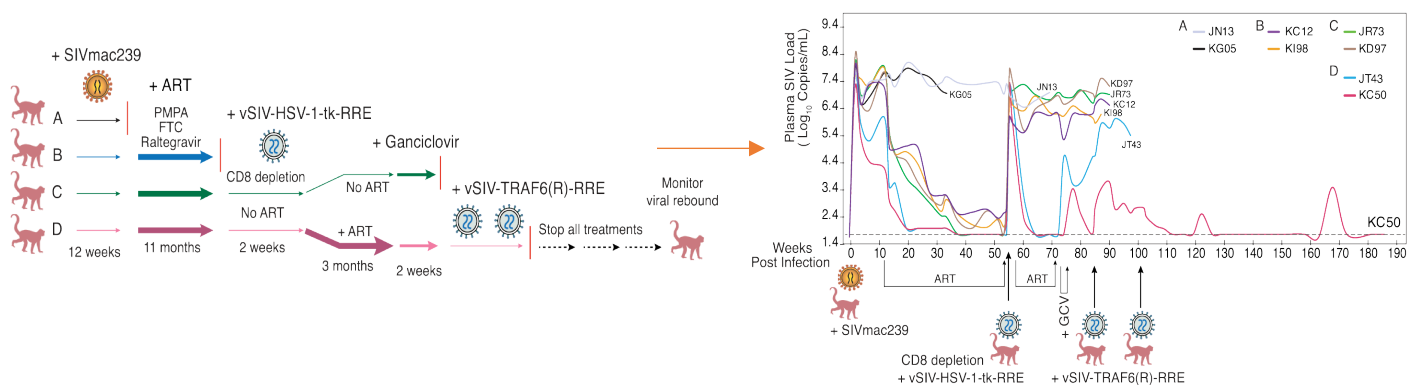
This prototyped lentiviral technology consists of a Rev-dependent lentiviral vector that targets and reduces viral reservoirs in HIV-infected cells. It demonstrates significant potential in suppressing viral rebound, offering a novel approach to HIV treatment that could reduce or eliminate the need for lifelong antiretroviral therapy.

### Description

- **Novel Approach:** Utilizes a Rev-dependent lentiviral vector that targets and activates therapeutic genes in HIV-infected cells, offering an innovative method to reduce viral reservoirs
- **Mechanism:** The lentiviral particle leverages a rev-dependent mechanism, which targets the viral replication process, offering a novel means to control SIV and, by extension, has potential applications in HIV research
- **Preclinical Success:** Demonstrated significant suppression of viral rebound in SIV-infected rhesus macaques, with long-term reductions in viral levels in both blood and brain

### Ideal Applications

- **HIV Treatment:** Adaptation for use in HIV-infected humans as a novel therapeutic approach
- **Gene Therapy:** Potential for development in other viral or gene therapy contexts where suppression of viral replication is crucial



**For More Information contact:**

**George Mason University, Office of Technology Transfer**  
**703-993-8933 ott@gmu.edu <https://ott.gmu.edu/>**