

# Very Early HIV Treatment in Monkeys Limits Viral Reservoir

March 20, 2014

---

✖ The initial days of infection with a virulent version of SIV, the simian cousin of HIV, represent a crucial window during which starting antiretrovirals (ARVs) can greatly limit the future size of the viral reservoir in monkeys, the National AIDS Treatment Advocacy Project (NATAP) reports.

Researchers intravenously infected 22 macaque monkeys with SIVmag239 and then began them on ARVs after graduated periods of time had passed: Two monkeys began treatment after seven days, two monkeys started after 10 days, and 18 monkeys started after 42 days. The researchers presented their findings at the Conference on Retroviruses and Opportunistic Infections (CROI) in Boston.

After 32 weeks, the average amount of SIV DNA in the peripheral blood mononuclear cells (PBMCs—an indication of the size of the viral reservoir) in the two monkeys who started treatment after seven days was about 300 copies per 100 million cells. The two monkeys who started treatment after 10 days had an average measurement of about 3,000 copies per 100 million cells. The remaining monkeys had an average measurement of about 25,000 copies per 100 million cells.

There was a positive correlation between these PBMC reads at the 32-week mark and the monkeys' peak viral loads. The two monkeys that received ARVs earliest had lower SIV DNA at 32 weeks in their lymph nodes, bone marrow and small intestine when compared with the other 20 monkeys.

To read the NATAP report, [click here](#).

To watch the CROI webcast, [click here](#).

---