

# HIV Treatment During Primary Infection Raises CD4s—and Further Questions

January 22, 2013

---

Two new studies, each published in *The New England Journal of Medicine* (NEJM), suggest that treating HIV with antiretrovirals (ARVs) within four to six months after infection helps raise CD4 counts, but neither study was able to make an overwhelming argument for starting therapy so early, *JournalWATCH* reports.

One study looked at acute or early HIV infections over a 48-month period in two cohorts of somewhat overlapping study participants: one group of 384 that was not receiving ARVs and a second group of 312 that began ARVs shortly after entering the study.

The researchers found that, among those not taking HIV medications, CD4 levels tended to increase, from a median of 495 CD4 cells to 763, until about four months had passed following their estimated date of infection. Thereafter, CD4 levels declined steadily.

Among those who began ARVs four months or earlier after infection, 64 percent reached 900 CD4 cells, compared with 34 percent of those who began medications more than four months after infection. The study also found that those who began ARVs after the four-month cutoff were 65 percent less likely to reach 900 CD4 cells and that their rate of CD4 cell recovery was 56 percent slower.

The researchers concluded that CD4 cells drop after a four-month window following HIV infection and that beginning ARV therapy during this period “is associated with an enhanced likelihood of recovery of CD4 counts.”

A second study of adults living with HIV for less than six months randomly divided 366 participants into three groups: 123 took ARVs for 48 weeks then stopped, 120 for 12 weeks and stopped, and 123 took no ARVs. The study’s “primary end point” was the percentage of participants who reached a CD4 count of less than 350 or began ARVs (or started again, in the case of those who were in the active arms of the study).

With an average 4.2 years of follow-up, only those in the 48-week period cohort had a reduced likelihood of reaching the primary end point—with 29 percent reaching 350 CD4 cells, compared with about 40 percent for both other groups—although the researchers could not connect this

difference to immune function. For those in the 48-week group, beginning treatment sooner after infection appeared more beneficial.

An accompanying editorial in NEJM by Bruce D. Walker, MD, and Martin S. Hirsch, MD, of Harvard Medical School states that both studies “provide evidence that greater CD4+ cell recovery is achieved with earlier initiation of therapy during primary infection, but both fall short of defining clear clinical benefit for such early treatment.”

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

To read the study on enhanced CD4 recovery with earlier ARV therapy, [click here](#).

To read the study on short-course ARV therapy in primary HIV infection, [click here](#).

To read the accompanying editorial, [click here](#).

---

© 2026 Smart + Strong All Rights Reserved.

<http://beta.docker.poz.com/article/treat-early-23386-7731>