

Clinical Coordinating Center
Massachusetts General Hospital
50 Staniford Street Suite 750
Boston, MA 02114

Data Coordinating Center
Massachusetts General Hospital
165 Cambridge Street Suite 400
Boston, MA 02114

No evidence of a detrimental effect of pitavastatin on neurocognitive function among people with HIV

Kristine Erlandson, Ashley McKhann, Pamela Douglas, Heather Ribaldo, Steven Grinspoon, and colleagues

[Published in AIDS, 2025](#)

Background

Some studies from several years ago suggested a potential harm of statins on brain (neurocognitive) function. Later studies have not shown this and have instead suggested a benefit. However, some patients and providers may still have concerns about potential statin side effects on brain function, and this may limit statin use in clinical practice.

Goals of the Study

Our goal was to look at statin effects on brain function in The Randomized Trial to Prevent Vascular Events in HIV (REPRIEVE), among participants who were also enrolled in the Long-Term Follow-up of Older HIV-infected Adults in the ACTG: Addressing Issues of Aging, HIV Infection and Inflammation (HAILO) study.

REPRIEVE enrolled people with HIV (PWH) between ages 40-75 with low-to-moderate traditional heart disease risk, randomized these participants to a statin medication called pitavastatin or to placebo (a pill that contains no medication), and followed these participants for, on average, 5 years, to see if they developed heart disease events like a heart attack or stroke. Main findings from REPRIEVE were that [statin therapy reduced heart disease events among PWH by 36%](#), prompting guideline changes recommending statin use in PWH aged ≥ 40 years.

HAILO evaluated aging outcomes (including changes in brain function) among 1035 PWH aged ≥ 40 years. HAILO participants were enrolled in 2013-2014 and completed follow-up in 2021, overlapping with REPRIEVE study visits.

➤ The participants:

- 187 participants co-enrolled in both REPRIEVE and HAILO, with at least 1 measure of brain function before and after enrollment into REPRIEVE
 - 88 participants taking pitavastatin, 93 taking placebo
 - Median age at enrollment: 50 years
 - 19% female

The Findings:

- 38% of participants in the pitavastatin and 33% in the placebo group had brain function impairment prior to entry in the study
- Participants had up to 6 years of brain function testing before and 6.5 years of follow-up after entry in the study
- Changes in brain function after entry in the study were small and did not differ between those receiving pitavastatin or placebo

In Summary: Among people with HIV in the REPRIEVE and HAILO studies, we did not see an effect of statins on brain function. These results are reassuring for people with HIV and providers who may have concerns about statin-related side effects for brain function.

REPRIEVE Trial Website: reprievetrial.org

The findings shared in this summary are from the REPRIEVE population at a specific point in time. These findings are descriptive and not intended to change clinical care. If you have questions about what you've read, please talk to members of the REPRIEVE study team at your local site or a health care provider