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Health-related quality of life among people with HIV at low-to-moderate risk for atherosclerotic cardiovascular disease in the REPRIEVE Trial

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[Published in AIDS, 2025](#)

Background

People with HIV (PWH) have a higher risk of heart disease. The REPRIEVE study showed that the cholesterol-lowering drug pitavastatin helped lower the risk of major heart disease events, like heart attack or stroke, in PWH who were already on HIV treatment with low-to-moderate heart disease risk. However, the impact of cardiometabolic factors and statin therapy on health-related quality of life (HRQoL) in PWH is unclear.

Goals of the Study

The goal of the study was to see how pitavastatin could affect HRQoL and determine how different cardiometabolic factors relate to HRQoL in a subset of people with HIV enrolled in the REPRIEVE Mechanistic Substudy.

REPRIEVE enrolled PWH between ages 40-75 with low-to-moderate traditional heart disease risk, randomized these participants to pitavastatin or to placebo (a pill that contains no medication). Participants were followed for, on average 5 years, for 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. Participants in the REPRIEVE Mechanistic Substudy underwent computed tomography (CT) scans of the blood vessels surrounding the heart and blood tests measuring levels of inflammation markers and proteins.

➤ The participants:

- 733 REPRIEVE Substudy participants all enrolled from the US who completed the Short Form-36-Item Health Survey Version 2 (SF-36v2) HRQoL survey
 - Low-to-moderate traditional heart disease risk
 - Median age at enrollment: 51 years
 - 16% women and 84% men
 - Median duration of HIV: 15 years

The Findings:

- At study entry, the median physical component score (a measure of physical health, higher is better) was 54.5 vs 54.1 in participants taking pitavastatin vs placebo
- At study entry, the median mental component score (a measure of psychological health, higher is better) was 52.9 vs 52.8 in participants taking pitavastatin vs placebo
- Older age, non-white non-Hispanic origin, anti-retroviral therapy regimen class, elevated BMI, and cigarette smoking were associated with lower physical component score
- Between study entry and two years into the study, there were no differences between physical and mental component scores in participants taking pitavastatin vs placebo.

In Summary: Among 733 participants, factors like older age, non-white non-Hispanic origin, certain ART regimens, high BMI, and smoking were linked to lower physical HRQoL scores. However, statin therapy (pitavastatin) did not significantly affect HRQoL

REPRIEVE Trial Website: reprivetrial.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



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scores over 24 months. This suggests that while cardiometabolic risks impact physical HRQoL, statin therapy may not improve it in this population.

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