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## Pitavastatin to Prevent Cardiovascular Disease in People with HIV

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### Background

The risk of heart disease is higher among people with HIV (PWH), including among younger individuals with lower predicted heart disease risk. Researchers do not fully understand why this risk is higher, but they believe it could be related to both traditional heart disease risk factors, like smoking, and to HIV-related factors, like inflammation. Though having HIV has been considered to increase the risk of heart disease, until now there has been no proven treatment to prevent heart disease in PWH.

### Goals of the Study

The Randomized Trial to Prevent Vascular Events in HIV (REPRIEVE) trial was designed to address the increased risk of heart disease experienced by PWH. REPRIEVE tested pitavastatin calcium (“pitavastatin”), a statin medication that can lower LDL (“bad”) cholesterol and reduce inflammation in the body. Participants in the study were PWH between ages 40-75 who had low-to-moderate traditional risk for heart disease. All participants were randomly assigned to take either pitavastatin or placebo (a pill that contains no medication). Participants were then followed to determine whether they experienced the primary endpoint (major heart disease events, such as death due to heart disease, heart attacks and strokes) or any secondary endpoints (other heart disease events, death from any cause, and safety events).

#### ➤ The participants:

- 7,769 participants
  - 3,888 taking pitavastatin; 3,881 taking placebo
  - 2,419 (31%) women
  - 5,065 (65%) non-white
- Median duration of follow-up: 5.1 years
- Median age at enrollment: 50 years

#### ➤ The findings:

- The incidence rate of major heart disease events was lowered by 35% for participants taking pitavastatin compared to placebo.
- The incidence rate of major heart disease events or death from any cause was lowered by 21% for participants taking pitavastatin compared to placebo.
- Pitavastatin was effective in both men and women.
- Pitavastatin was well tolerated by most trial participants, and very few participants stopped the study early due to adverse events.

**In Summary:** Pitavastatin was effective at lowering the rate of heart disease events for PWH at low-to-moderate traditional risk for heart disease. REPRIEVE is the first large-scale trial to test a heart disease prevention strategy in this population. Trial results will inform guidelines to prevent heart disease and will help clinicians better support the heart health needs of PWH.

REPRIEVE Trial Website: [reprivetrial.org](http://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*