



REPRIEVE



MASSACHUSETTS GENERAL HOSPITAL

Clinical Coordinating Center
Massachusetts General Hospital
55 Fruit Street, 5LON207
Boston, MA 02114

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

Assessment of Obesity and Cardiometabolic Status by Integrase Inhibitor Use in REPRIEVE: A Propensity Weighted Analysis of a Multinational Primary Cardiovascular Prevention Cohort of People with HIV

Emma Kileel, Janet Lo, Heather Ribaud, Steve Grinspoon and colleagues

<https://academic.oup.com/ofid/article/8/12/ofab537/6432304>

Integrase inhibitors – or INSTIs – are antiretroviral therapy (ART) regimens that have been linked with significant weight gain, but the health consequences of this weight gain are still largely unknown. The purpose of this investigation was to study the effects of INSTI-based regimens on BMI (a measure relating a person’s weight to their height), waist circumference, and other key markers of heart health, such as blood sugar, low density lipoprotein cholesterol (bad cholesterol), metabolic syndrome, and high blood pressure, among participants in REPRIEVE who had been on their entry ART regimen for at least 6 months.

- **The participants:**
 - 4500 REPRIEVE participants
 - Average age, 51 years
 - 23% female
 - 40% Black or African American
- **The investigators found that INSTI-based regimens were associated with:**
 - Higher BMI
 - Higher waist circumference
 - Higher odds of obesity
- **The investigators found that INSTI-based regimens were not associated with:**
 - Higher fasting blood sugar
 - Higher fasting LDL cholesterol
 - Higher odds of metabolic syndrome
 - Higher odds of high blood pressure

In Summary: Among 4500 REPRIEVE participants, INSTI-based regimens were associated with higher BMI, higher odds of obesity, and higher waist circumference, but not with higher blood sugar, LDL cholesterol, or higher odds of metabolic syndrome or high blood pressure. The biggest differences in BMI and waist circumference were among females on INSTI-based regimens. These findings provide some reassurance that, in general, higher weight associated with INSTIs is not associated with increased cardiometabolic risk, for most

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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participants, but identifies subgroups at potential risk for cardiometabolic disease that should be followed carefully over time.

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