Effects of Maraviroc versus Tenofovir DF on Bone Loss

A5303 Trial
Bone Effects of Maraviroc vs. Tenofovir DF, with DRV + RTV + FTC

A5303: Study Design

**Study Design: A5303 Study**

- **Background**: Phase 2b, prospective, double-blind, placebo-controlled study evaluating the effects of maraviroc versus tenofovir DF on bone loss in HIV-infected, treatment-naïve patients.

- **Inclusion Criteria (n = 262)**
  - Age ≥18
  - Antiretroviral-naïve patients
  - R-5 tropic virus
  - HIV RNA >1000 copies/mL

- **Treatment Arms**
  - MVC + DRV + RTV + FTC
  - TDF + DRV + RTV + FTC

Bone Effects of Maraviroc vs. Tenofovir DF, with DRV + RTV + FTC

A5303: Results

Week 48: Changes in Bone Mineral Density from Baseline

<table>
<thead>
<tr>
<th></th>
<th>MVC + DRV + RTV + FTC</th>
<th>TDF + DRV + RTV + FTC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Hip</td>
<td>-1.51</td>
<td>-2.40</td>
</tr>
<tr>
<td>Lumbar Spine</td>
<td>-2.5</td>
<td>-2.35</td>
</tr>
</tbody>
</table>

Bone Effects of Maraviroc vs. Tenofovir DF, with DRV + RTV + FTC
A5303: Results

Week 48: Virologic Response

Conclusions: “Maraviroc was associated with less bone loss at the hip and lumbar spine compared with tenofovir DF. Maraviroc may be an option to attenuate ART-associated bone loss.”
Acknowledgment

The National HIV Curriculum is an AIDS Education and Training Center (AETC) Program resource funded by the United States Health Resources and Services Administration. The project is led by the University of Washington and the AETC National Coordinating Resource Center.

The content in this slide set does not represent the official views of the U.S. Department of Health and Human Services, Health Resources & Services Administration.