Switch from Efavirenz + ZDV-3TC to Efavirenz + TDF-FTC

SWEET Trial
Switch to Efavirenz + TDF-FTC
SWEET: Study Design

• **Background**: Randomized, controlled, open-label, phase 3 trial evaluating a simplification strategy for patients suppressed on efavirenz-based ART by switching from twice-daily zidovudine-lamivudine to once-daily tenofovir DF-emtricitabine in adults with HIV

• **Inclusion Criteria (n = 234)**
  - Age ≥18 years
  - On EFV + ZDV-3TC for >6 months
  - No resistance to study drugs
  - HIV RNA <400 copies/mL for ≥3 months and HIV RNA <50 copies/mL on 2 occasions

• **Treatment Arms**
  - Efavirenz + TDF-FTC
  - Efavirenz + ZDV-3TC

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**Switch arm**
Efavirenz + TDF-FTC QD
(n = 117)

**Maintain arm**
Efavirenz QD + ZDV-3TC BID
(n = 117)

Switch to Efavirenz + TDF-FTC
SWEET: Results

Week 48 Virologic Response (Intention-to-Treat Analysis, Missing=Failure)

Switch to Efavirenz + TDF-FTC
SWEET: Results

Week 48: Patients with Change in Absolute Hemoglobin from Baseline

Switch toEfavirenz + TDF-FTC
SWEET: Results

Week 24: Change in Limb Fat from Baseline

# Switch to Efavirenz + TDF-FTC

## SWEET: Results

### Week 24: Change in Plasma Lipids from Baseline

<table>
<thead>
<tr>
<th>Parameter</th>
<th>EFV + TDF-FTC (switch arm)</th>
<th>EFV + ZDV-3TC (maintain arm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Cholesterol</td>
<td>-0.39</td>
<td>-0.06</td>
</tr>
<tr>
<td>HDL</td>
<td>-0.03</td>
<td>-0.02</td>
</tr>
<tr>
<td>LDL</td>
<td>-0.10</td>
<td>-0.09</td>
</tr>
<tr>
<td>Triglycerides</td>
<td>-0.24</td>
<td>0.05</td>
</tr>
</tbody>
</table>

Switch to Efavirenz + TDF-FTC
SWEET: Results

Week 24: Change in Plasma Lipids, by Baseline Cholesterol

<table>
<thead>
<tr>
<th>Baseline Cholesterol Category (NCEP)</th>
<th>EFV + TDF-FTC (switch arm)</th>
<th>EFV + ZDV-3TC (maintain arm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 5.2 mmol/L (desirable)</td>
<td>-0.30</td>
<td>-0.44</td>
</tr>
<tr>
<td>5.2-6.3 mmol/L (borderline)</td>
<td>-0.35</td>
<td>-0.11</td>
</tr>
<tr>
<td>≥6.3 mmol/L (high)</td>
<td>-1.04</td>
<td></td>
</tr>
</tbody>
</table>

Switch to Efavirenz + TDF-FTC
SWEET: Results

Week 48: Change in Plasma Lipids from Baseline

Switch to Efavirenz + TDF-FTC  
SWEET: Results  

**Interpretation:** “Switching from zidovudine/lamivudine to tenofovir disoproxil fumarate/emtricitabine in persons on efavirenz therapy maintains virological control, establishes a once-daily regimen, results in improvements in hemoglobin and key lipid parameters, and preserves and restores limb fat relative to continuation of zidovudine/lamivudine.”

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