Rilpivirine + TDF-FTC versus Efavirenz + TDF-FTC

ECHO Trial
Rilpivirine + TDF-FTC versus Efavirenz + TDF-FTC

**ECHO: Study Design**

**Study Design: ECHO Study**

- **Background:** Randomized, double-blind, phase 3 trial comparing rilpivirine and efavirenz in combination with a fixed background regimen consisting of tenofovir DF-emtricitabine in treatment-naïve adults with HIV.

- **Inclusion Criteria (n = 690)**
  - Antiretroviral-naïve adults
  - Age ≥18 years
  - HIV RNA ≥5000 copies/mL
  - No resistance to any study drugs

- **Treatment Arms**
  - Rilpivirine + Tenofovir DF-Emtricitabine
  - Efavirenz + Tenofovir DF-Emtricitabine

Rilpivirine + TDF-FTC versus Efavirenz + TDF-FTC

ECHO: Result

48 Week Virologic Response (ITT-TLOVR)

<table>
<thead>
<tr>
<th>Baseline HIV RNA (copies/mL)</th>
<th>Rilpivirine + TDF-FTC</th>
<th>Efavirenz + TDF-FTC</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>83/83</td>
<td>287/285</td>
</tr>
<tr>
<td>≤100,000</td>
<td>90/83</td>
<td>162/136</td>
</tr>
<tr>
<td>100,000-500,000</td>
<td>83/79</td>
<td>136/111</td>
</tr>
<tr>
<td>&gt;500,000</td>
<td>83/62</td>
<td>111/38</td>
</tr>
</tbody>
</table>

Rilpivirine + TDF-FTC versus Efavirenz + TDF-FTC

ECHO: Result

48 Week Virologic Failure and Discontinuations (ITT-TLOVR)

Rilpivirine + TDF-FTC versus Efavirenz + TDF-FTC

ECHO: Resistance Results

Incidence of NNRTI Resistance Associated Mutations (RAMs)

Interpretation: “Rilpivirine showed non-inferior efficacy compared with efavirenz, with a higher virological-failure rate, but a more favourable safety and tolerability profile.”
Acknowledgment

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