Rilpivirine versus Efavirenz, with 2 NRTIs

THRIVE Study
Rilpivirine versus Efavirenz, with 2 NRTIs

THRIVE: Study Design

**Study Design: THRIVE**

- **Background**: Randomized, double-blind, phase 3 trial comparing rilpivirine and efavirenz in combination with two nucleoside reverse transcriptase inhibitors in treatment-naïve adults with HIV infection.

- **Inclusion Criteria (n = 680)**
  - Antiretroviral-naïve patients
  - Age ≥18
  - HIV RNA ≥5000 copies/mL
  - No resistance to any study drugs

- **Treatment Arms**
  - Rilpivirine + 2 NRTIs*
  - Efavirenz + 2 NRTIs*

*Investigator-selected NRTIs: TDF + FTC, AZT + 3TC, or ABC + 3TC

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THRIVE: Result

48 Week Virologic Response (ITT-TLOVR)

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THRIVE: Result

48 Week Virologic Failure and Discontinuations

<table>
<thead>
<tr>
<th></th>
<th>Rilpivirine + 2 NRTIs</th>
<th>Efavirenz + 2 NRTIs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Virologic Failure*</td>
<td>8/27 (3.0%)</td>
<td>6/20 (3.0%)</td>
</tr>
<tr>
<td>Discontinuation due to Adverse Event or Death</td>
<td>3/9 (3.3%)</td>
<td>7/24 (2.9%)</td>
</tr>
</tbody>
</table>

*Virologic failure includes those without emerging mutation at failure

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THRIVE: Resistance Results

Incidence of NNRTI Resistance Associated Mutations (RAMs)

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## THRIVE: Result

<table>
<thead>
<tr>
<th>Resistance Associated Mutations (RAMs)</th>
<th>Rilpivirine (n = 340)</th>
<th>Efavirenz (n = 338)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Virologic Failure with Resistance Data</td>
<td>27 (8%)</td>
<td>20 (6%)</td>
</tr>
<tr>
<td>Emergent NNRTI RAMs</td>
<td>59%</td>
<td>47%</td>
</tr>
<tr>
<td>Most Frequent NNRTI RAMs</td>
<td>E138K</td>
<td>K103N</td>
</tr>
<tr>
<td>Emergent NRTI RAMs</td>
<td>64%</td>
<td>33%</td>
</tr>
<tr>
<td>Most Frequent NRTI RAMs</td>
<td>M184I/V</td>
<td>M184V</td>
</tr>
</tbody>
</table>

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THRI VE: Conclusions

Interpretation: “Despite a slightly increased incidence of virological failures, a favourable safety profile and non-inferior efficacy compared with efavirenz means that rilpivirine could be a new treatment option for treatment-naive patients infected with HIV-1.”

Acknowledgment

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*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.*