Rilpivirine + TDF-FTC versus Efavirenz + TDF-FTC

THRIVE Trial
Rilpivirine + TDF-FTC versus Efavirenz + TDF-FTC
THRIYE: Study Design

• **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 adult with HIV

• **Inclusion Criteria (n = 690)**
  - Antiretroviral-naïve adults
  - Age ≥18 years
  - HIV RNA ≥5,000 copies/mL
  - No resistance to any study drugs

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

Rilpivirine + TDF-FTC versus Efavirenz + TDF-FTC
THRIVE: Results

48 Week Virologic Response

HIV RNA <50 copies/mL (%)

Rilpivirine + TDF-FTC versus Efavirenz + TDF-FTC
THRIVE: Results

48 Week Virologic Failure and Discontinuations

Virologic Failure

- Rilpivirine + TDF-FTC: 7
- Efavirenz + TDF-FTC: 5

Adverse Event Leading to Discontinuation

- Rilpivirine + TDF-FTC: 3
- Efavirenz + TDF-FTC: 7

Rilpivirine + TDF-FTC versus Efavirenz + TDF-FTC
THRIVE: Resistance Results

Incidence of NNRTI Resistance Associated Mutations (RAMs)

The percentages represent the number of participants who developed each specific NNRTI RAM out of the number of participants who developed any NNRTI RAM in that arm of the trial (the n listed at the top of the graph).

Rilpivirine + TDF-FTC versus Efavirenz + TDF-FTC
THRIVE: Resistance Results

Incidence of NRTI Resistance Associated Mutations (RAMs)


The percentages represent the number of participants who developed each specific NRTI RAM out of the number of participants who developed any NRTI RAM in that arm of the trial (the n listed at the top of the graph).
Rilpivirine + TDF-FTC versus Efavirenz + TDF-FTC

THRIVE: 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.”

Acknowledgments

The **National HIV Curriculum** is supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) as part of a financial assistance award totaling $1,021,448 with 0% financed with non-governmental sources. The contents are those of the author(s) and do not necessarily represent the official views of, nor an endorsement, by HRSA, HHS, or the U.S. Government. For more information, please visit HRSA.gov. This project is led by the University of Washington’s Infectious Diseases Education and Assessment (IDEA) Program.