Effects of Switching ZDV-3TC to TDF-FTC or ABC-3TC

SWAP
Effects of Switching ZDV-3TC to TDF-FTC or ABC-3TC SWAP (Cardiovascular Biomarkers): Study Design

Background: Open-label, randomized trial examining cardiovascular biomarkers in virologically suppressed patients switching from ZDV-3TC to TDF-FTC or ABC-3TC

Inclusion Criteria:
- Adults with HIV infection
- Receiving cART that includes ZDV-3TC
- Undetectable HIV RNA for >12 weeks
- No previous use of ABC or TDF
- HLA-B*5701-negative
- No diabetes mellitus or untreated HTN

Treatment Arms:
- Switch ZDV-FTC to TDF-FTC (n = 20)
- Switch ZDV-FTC to ABC-3TC (n = 20)

Effects of Switching ZDV-3TC to TDF-FTC or ABC-3TC SWAP (Cardiovascular Biomarkers): Results

Week 48: Change in Cardiovascular Biomarkers from Baseline

Effects of Switching ZDV-3TC to TDF-FTC or ABC-3TC SWAP (Cardiovascular Biomarkers): Results

Week 48: Change in Plasma Lipids from Baseline

Conclusion: “In patients randomized to abacavir-based HIV-treatment transient increases were seen in the plasma levels of E-selectin and sVCAM-1 compared with treatment with tenofovir, but no difference between study arms was found in other biomarkers associated with endothelial dysfunction, inflammation, or coagulation. The clinical significance of these findings is uncertain.”

Effects of Switching ZDV-3TC to TDF-FTC or ABC-3TC

SWAP (Bone and Renal Effects): Study Design

**Study Design: SWAP (Bone and Renal)**

- **Background:** Open-label, randomized trial examining bone and renal effects of switching ZDV-3TC to TDF-FTC- or ABC-3TC in virologically suppressed patients

- **Inclusion Criteria:**
  - Adults with HIV infection
  - Receiving cART that includes ZDV-3TC
  - Undetectable HIV RNA for ≥12 weeks
  - No previous use of ABC or TDF
  - HLA-B*5701-negative
  - No diabetes mellitus or untreated HTN

- **Treatment Arms:**
  - Switch ZDV-FTC to TDF-FTC (n = 20)
  - Switch ZDV-FTC to ABC-3TC (n = 20)

Effects of Switching ZDV-3TC to TDF-FTC or ABC-3TC SWAP (Bone and Renal Effects): Study Design

Week 48: Change in Bone Mineral Density from Baseline

Conclusion: “Switching to TDF/FTC-based therapy led to decreases in BMD and increases in bone turnover markers compared with ABC/3TC-based treatment. No major difference in renal function was observed.”
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