

# Superior Outcome for Tenofovir DF, Emtricitabine and Efavirenz Compared to Fixed Dose Zidovudine/Lamivudine and EFV in Antiretroviral Naïve Patients

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Poster Number  
**WeOa0202**

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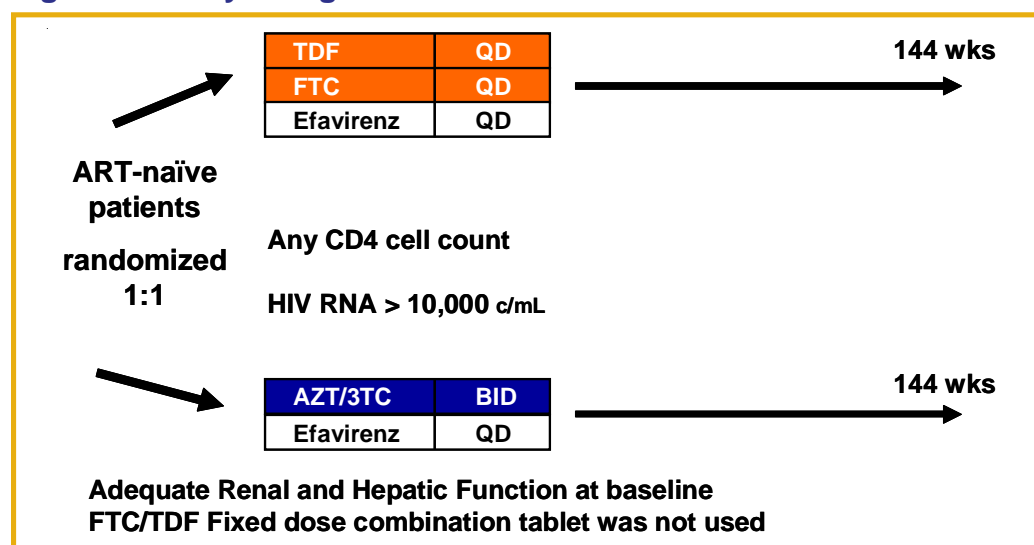
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## Methods

Figure 1. Study Design



## Statistical Analysis

- Non inferiority Trial
- Primary Endpoint < 400 c/mL at Week 48 -Time to Loss of Virologic Response (TLOVR)
  - FDA-required endpoint
  - Similar to ITT Missing = Failure, Switch = Failure
  - Requires confirmation for success
  - Used by FDA for presentation in U.S. Prescribing Information of newly approved antiretrovirals

## Results

Table 1. Baseline Characteristics (ITT)

	FTC/TDF (n = 255)	CBV (n = 254)
Age <sup>a</sup>	36	37
Female	14%	13%
White	56%	61%
Black	25%	20%
Hispanic	15%	16%
HIV RNA (log <sub>10</sub> copies/mL) <sup>a</sup>	5.0	5.0
HIV RNA > 100,000	52%	50%
CD4+ (cells/mm <sup>3</sup> ) <sup>a</sup>	233	241
< 200	41%	41%
< 50	15%	11%

a. Median values

## Baseline NNRTI Resistance (ITT)

- 22 patients (11 FTC/TDF vs. 11 CBV)
- Investigators notified if affected
- FDA recommended excluding these patients for Week 48 primary endpoint analysis (n = 487)
- Primary Efficacy Endpoint (HIV RNA < 400 c/mL) at Week 48 analyzed for both populations, excluding NNRTI-R (n = 487) and ITT (n = 509)

Table 2. Summary Outcomes at Week 48

Treatment Outcome	FTC/TDF (n = 244)	CBV (n = 243)
Responders	84%	73% <sup>a</sup>
Non-Responders	16%	27%
Virologic Failures	2%	4%
Rebound	1%	3%
Never Suppressed thru Wk 48	0	0
Suboptimal Virologic Response	1%	1%
Death	< 1%	< 1%
Discontinued due to AE	4%	9% <sup>b</sup>
Discontinued due to Other	10%	14%

a. p value = 0.002

b. p value = 0.016

Figure 2. Proportion with HIV-RNA < 400 c/mL (TLOVR) ITT (n = 509)

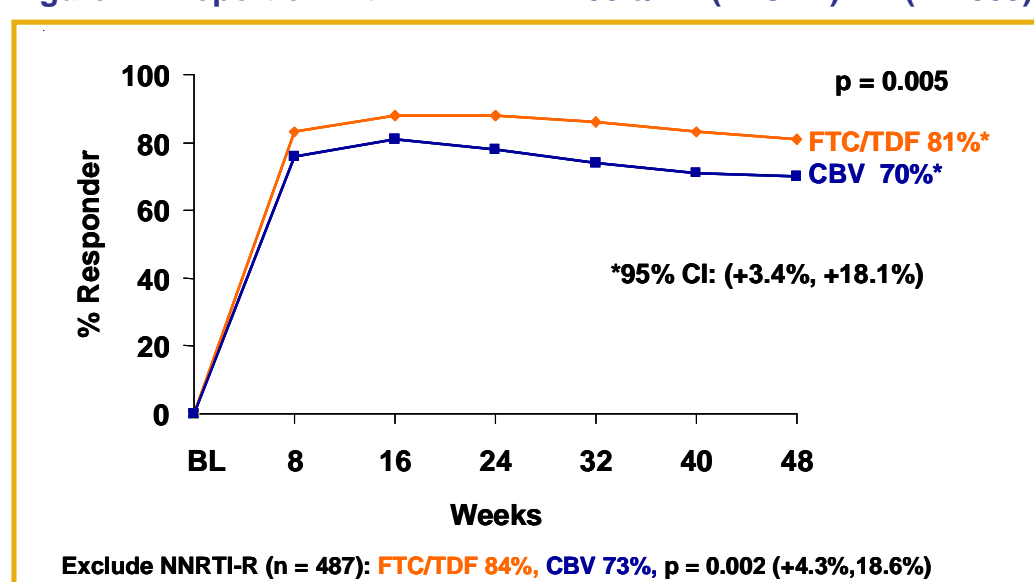
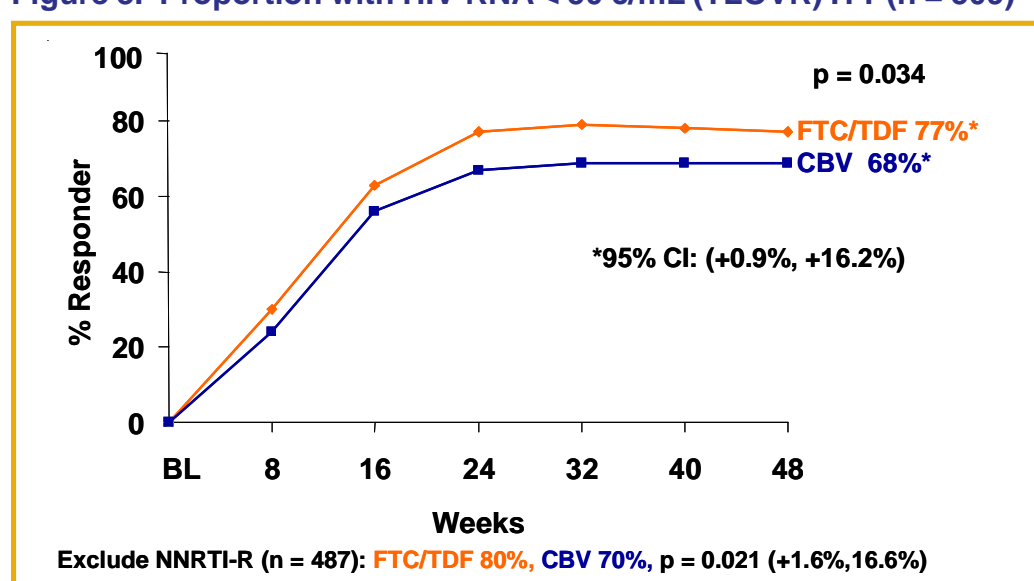


Figure 3. Proportion with HIV-RNA < 50 c/mL (TLOVR) ITT (n = 509)



## Results (cont'd)

Figure 4. CD4 Mean Absolute Change from Baseline

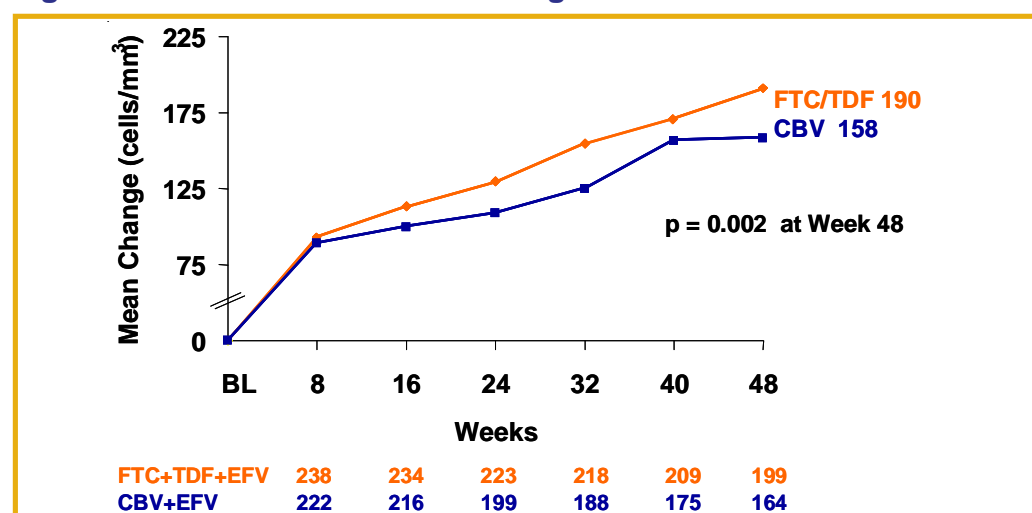


Table 3. Resistance Development in all Patients with > 400 HIV RNA copies/mL (without baseline NNRTI-R)

	FTC/TDF, n = 244 N (%)	CBV, n = 243 N (%)
Genotyping Population <sup>a</sup>	12 (5%)	23 (10%)
Any EFV-R <sup>b</sup>	9 (4%)	16 (7%)
Any M184V/I	2 (1%)	7 (3%)
Any TAMs	0	1 (<1%)
K65R <sup>c</sup>	0	0
Wild-type	3 (1%)	5 (2%)

a. All patients (after wk 8) with confirmed > 400 copies/mL of HIV RNA at Week 48 or early discontinuation analyzed. Genotyping of 1 Combivir patient failed.  
b. K103N developed in 21/25 patients  
c. No K65R developed in patients with baseline NNRTI-R

Table 4. Adverse Events Leading to Study Drug Discontinuation Through Week 48

Safety Population	FTC/TDF (n = 257)	CBV (n = 254)
No. w/ any Adverse Event <sup>a</sup>	10 (4%)	23 (9%) <sup>b</sup>
Adverse Event		
Anemia/ ↓ Hgb	0	14 (6%)
Nausea	1 (1%)	4 (2%)
Fatigue	0	3 (1%)
Vomiting	0	2 (1%)
Dermatitis (NNRTI)	2 (1%)	0
Neutropenia	0	2 (1%)

a. Occurring in more than 1 patient in either arm; patients may have > 1 event  
b. p = 0.016

Table 5. Serum Creatinine

Maximum Confirmed Toxicity Grade (mg/dL) <sup>a</sup>	FTC/TDF (n = 257)	CBV (n = 254)
1 (> 1.5 - 2.0)	0	1 (< 1%)
2 (2.1 - 3.0)	0	1 (< 1%)
3 (3.1 - 6.0)	0	0
4 (> 6.0)	0	0

a. Confirmed toxicity grade = two consecutive visits

Table 6. Glomerular Filtration Rate (Cockcroft-Gault)

	FTC/TDF (n = 257)	CBV (n = 254)
Median Baseline GFR (mL/min)	121	121
Median Change to Week 48 (mL/min)	-1.3 <sup>a</sup>	+6.2 <sup>b</sup>

a. p = 0.660 for difference between baseline and week 48  
b. p < 0.001 for difference between baseline and week 48

Figure 5. Mean Change Fasting Triglycerides

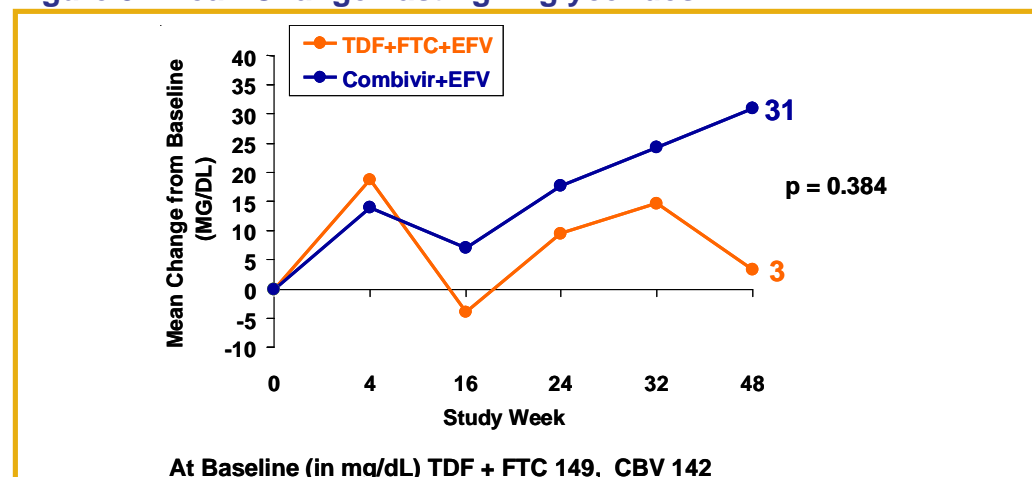


Figure 6. Mean Change Fasting Total Cholesterol

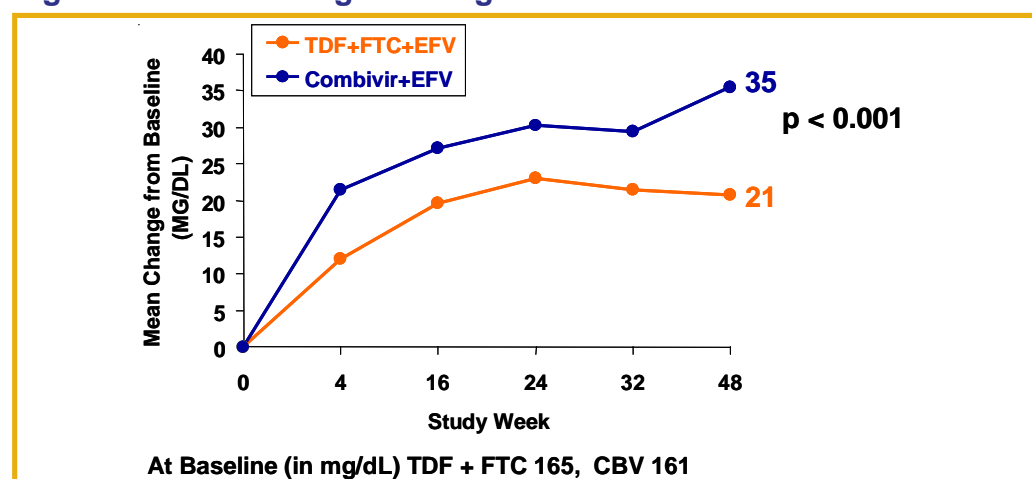


Table 7. Total Limb Fat at Week 48

	FTC/TDF (n = 50)	CBV (n = 46)	p value
Mean (± SD)	8.9 ± 5.4	6.8 ± 3.8	0.031
Median	7.2	5.8	

## Conclusions

- Superior overall response in the FTC/TDF arm compared to CBV arm
- No patient developed K65R
- Significantly more CBV patients discontinued due to adverse events
- Lower limb fat in CBV patients
- Less lipid profile disturbances