

ACTG 5202: Final Results of Abacavir/Lamivudine (ABC/3TC) or Tenofovir DF/Emtricitabine (TDF/FTC) with Either Efavirenz (EFV) or Atazanavir/Ritonavir (ATV/r) in Treatment-Naive HIV-Infected Patients.

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Background: A5202 was a randomized equivalence study of blinded ABC/3TC or TDF/FTC with EFV or ATV/r. A Data Safety Monitoring Board (DSMB) previously recommended unblinding those in high viral load (VL) stratum due to a shorter time to viral failure (VF) for ABC/3TC than TDF/FTC. Data by nucleoside reverse transcriptase inhibitors (NRTIs) for low VL stratum and for EFV vs ATV/r comparisons are presented.

Methods: Randomization was stratified by screening VL (< vs $\geq 10^5$ c/mL). Primary endpoints: **efficacy**, time to confirmed VF- VL ≥ 1000 c/mL at 16-24 wks or ≥ 200 c/mL at ≥ 24 wks; **safety**, time to Grade 3/4 sign/symptom or lab toxicity; and **tolerability**, time to change in regimen. Results for each NRTI with EFV or ATV/r and for ATV/r vs EFV by NRTIs are presented as estimated hazard ratio (HR) with 95% confidence intervals (CI) from Cox proportional hazards models and log rank test p-values. Equivalence boundary for VF HR 95% CI was pre-specified at 0.71, 1.40 assuming 32% VF by wk 96.

Results: Patients were 83% men, 33% Black, 23% Hispanic with median age 38 yrs, VL 4.7 log₁₀ c/mL, CD4 230 cells/uL, 138 wks follow-up. Comparison of NRTIs in low VL stratum and for 3rd drugs in all patients were not different for efficacy but did not reach pre-specified equivalence (Table). In the high VL stratum, time to VF censored at time of DSMB review was shorter for ABC/3TC than TDF/FTC with EFV (HR 2.46, 95% CI 1.20, 5.05) or ATV/r (HR 2.22, 95% CI 1.19, 4.14).

Safety and tolerability results for NRTI and 3rd drug comparisons in the low VL stratum and for all patients, respectively, are in Table.

Conclusions: NRTI comparisons in the low VL stratum and 3rd drug comparisons for all patients were not demonstrably different for time to VF but were not within pre-specified equivalence boundary; VF rates were lower than projected. For the NRTI and 3rd drug comparisons, there were significant differences in time to safety and tolerability events.

	Efficacy		Safety		Tolerability	
	HR (95% CI)	% VF free at wk 96	HR (95% CI)	p-value	HR (95% CI)	p-value
Screening VL < 10 ³ c/mL (n=1060)						
ATV/r with ABC/3TC vs TDF/FTC	1.25 (0.76, 2.05)	88 vs 90	1.13 (0.83, 1.54)	.44	1.43 (1.06, 1.92)	.018
EFV with ABC/3TC vs TDF/FTC	1.23 (0.77, 1.96)	87 vs 89	1.38 (1.03, 1.85)	.03	1.48 (1.12, 1.95)	.005
All patients (n=1857)						
ABC/3TC with ATV/r vs EFV	1.13 (0.82, 1.56)	83 vs 85	0.81 (0.66, 1.00)	.05	0.69 (0.55, 0.86)	.0008
TDF/FTC with ATV/r vs EFV	1.01 (0.70, 1.46)	89 vs 90	0.91 (0.72, 1.15)	.44	0.84 (0.66, 1.07)	.17