



Efficacy of Rilpivirine-based Regimens as Switch Therapy in HIV-infected Patients with Complete Virological Suppression: A Randomized Controlled Trial

Mahidol University
Wisdom of the Land

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Background

- Once daily dose antiretroviral therapy (ART) regimens improve adherence and treatment satisfaction
- Nevirapine (NVP)-based ART remains to be used in some patients despite its twice daily dosing
- Switching to rilpivirine (RPV)-based regimens is an alternative but there has been limited experience with RPV

Objectives

- To compare efficacy of RPV-based regimens as switch therapy to NVP-based regimens continuation in HIV-infected patients with viral suppression
- To observe changes in CD4 cell counts and lipid profiles from the baseline

Patients and Methods

- A randomized controlled, non-inferiority study
- HIV-infected patients who visited the outpatient clinic at Ramathibodi Hospital
- December 2016 to October 2017
- Received NVP-based regimens for >6 months and had undetectable viral load
- Intention-to-treat and per-protocol analyses for primary analysis

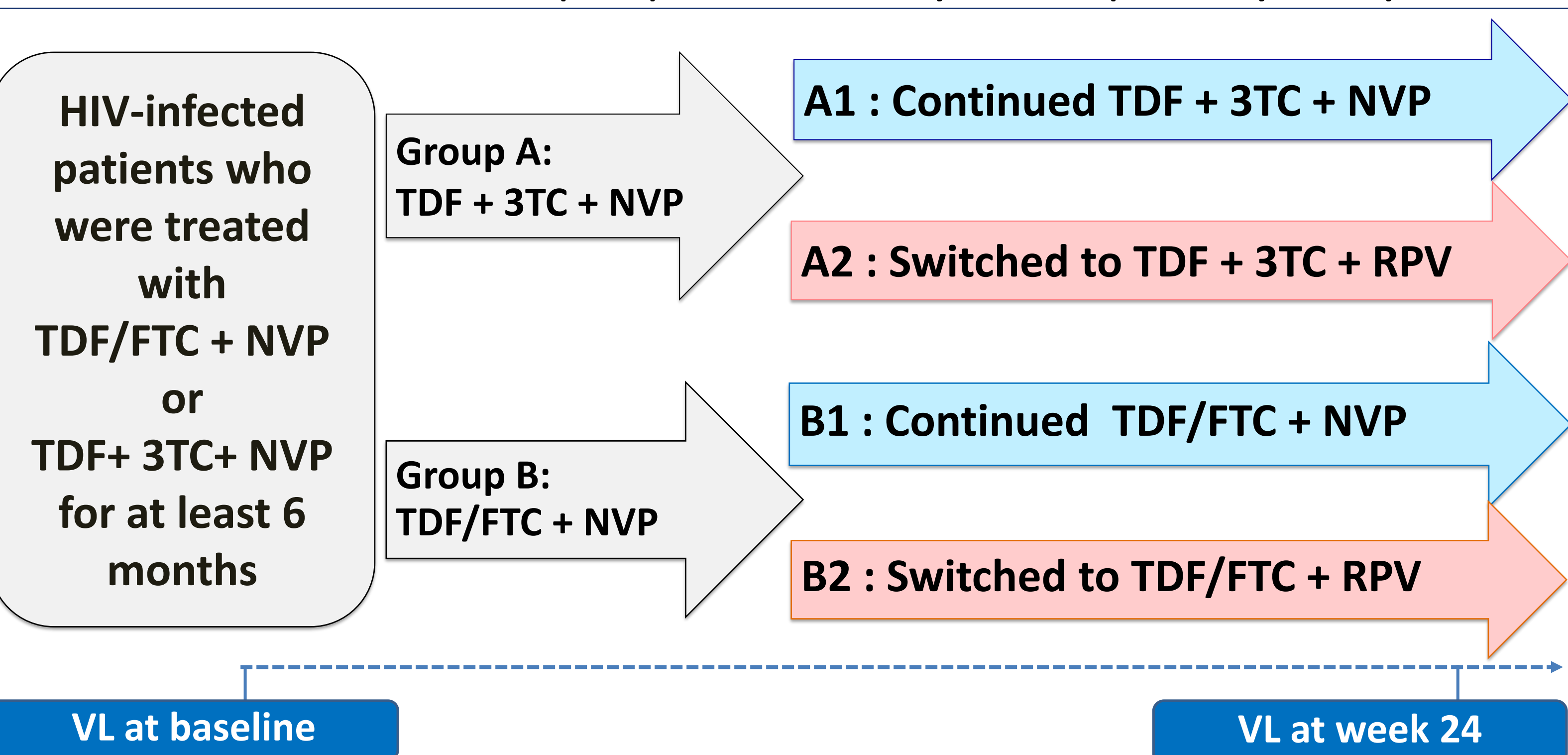


Table 1. Baseline characteristics

Characteristics	Continuation Arm (group A) N = 55	Switch Arm (group B) N = 51	P value
Female, n (%)	29 (52.7)	26 (47.3)	0.857
Mean (SD) age, years	50.0 (9.6)	48.2 (8.9)	0.325
Mean (SD) body weight, kg	58.4 (10.6)	58.8 (9.9)	0.849
Median (IQR) CD4 cell count, cells/mm ³	552 (434-733)	563 (457-727)	0.912
Mean (SD) duration of ART, years	10.8 (4.3)	11.0 (4.0)	0.877
Prior NRTI and NNRTI use, n (%)			0.662
Stavudine	26 (47.3)	23 (45.1)	
Zidovudine	19 (34.6)	22 (43.1)	
Efavirenz	7 (12.7)	5 (9.2)	
Underlying diseases, n (%)			0.053
No underlying diseases	35 (63.6)	41 (80.4)	
Diabetes mellitus	2 (3.6)	0 (0.0)	
Hypertension	11 (20.0)	2 (3.9)	
Dyslipidemia	2 (3.6)	4 (7.8)	
Others	5 (9.1)	4 (7.8)	

Results

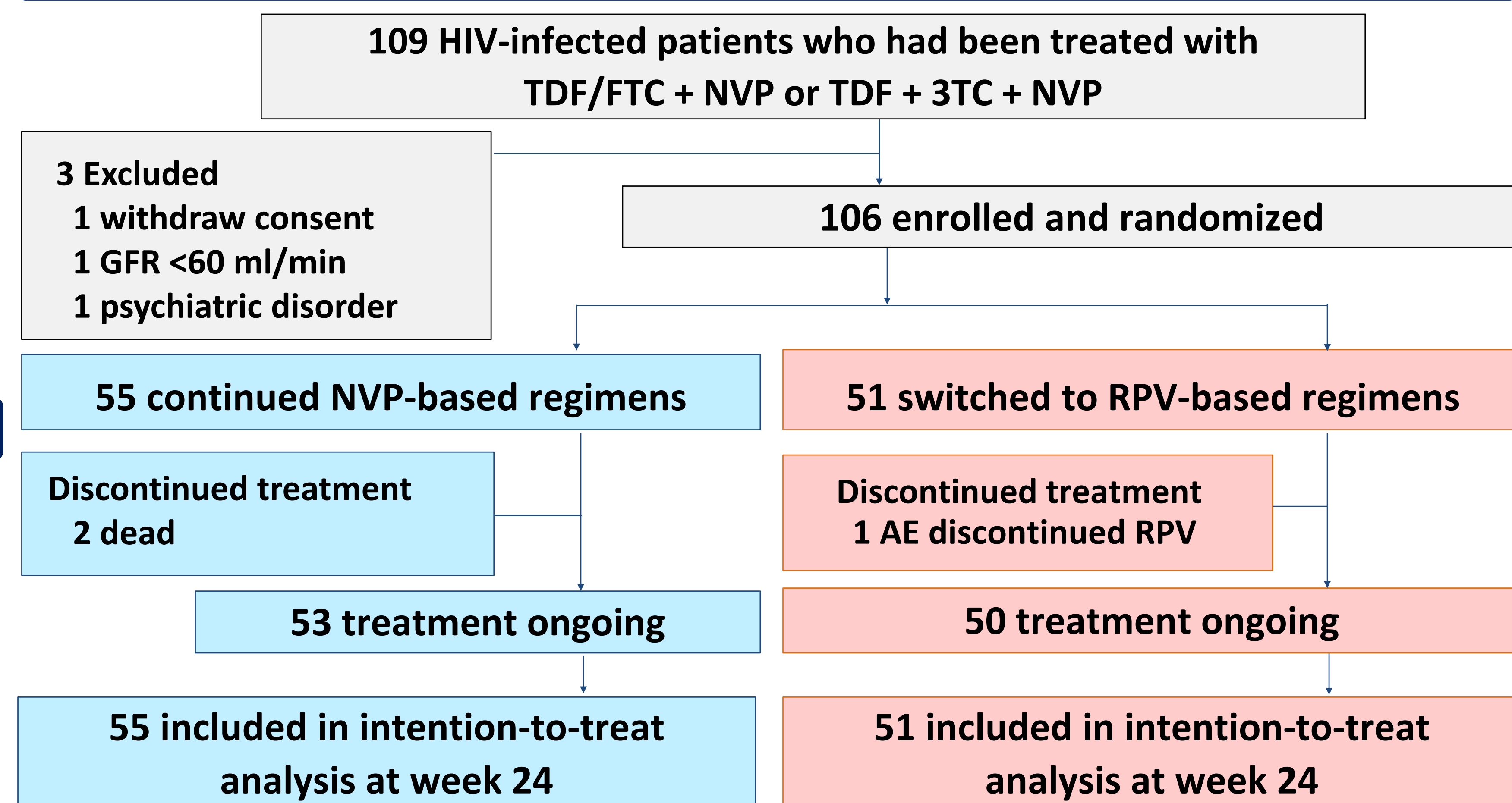


Figure 1. Study screening, enrollment, and follow-up through week 24

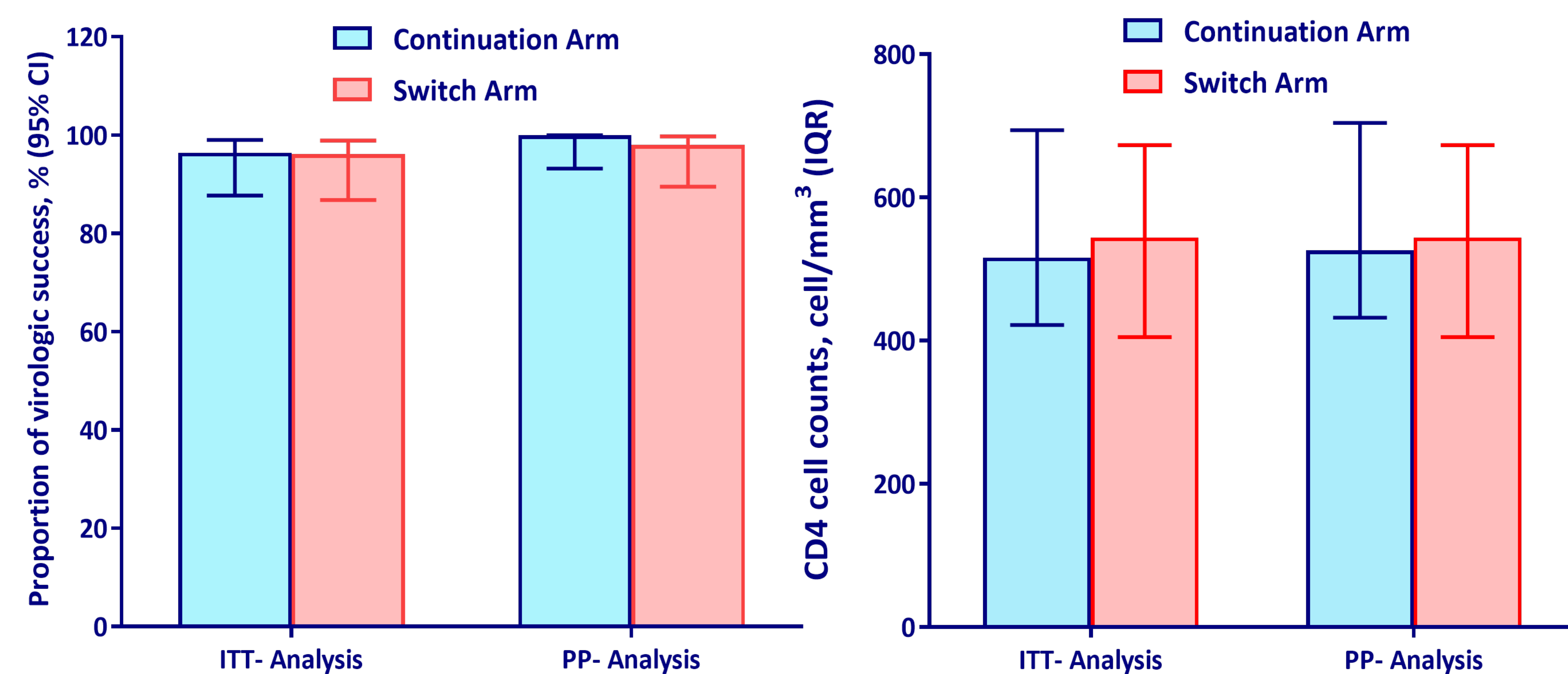


Figure 2. Proportion of virologic success and CD4 cell count outcomes at week 24

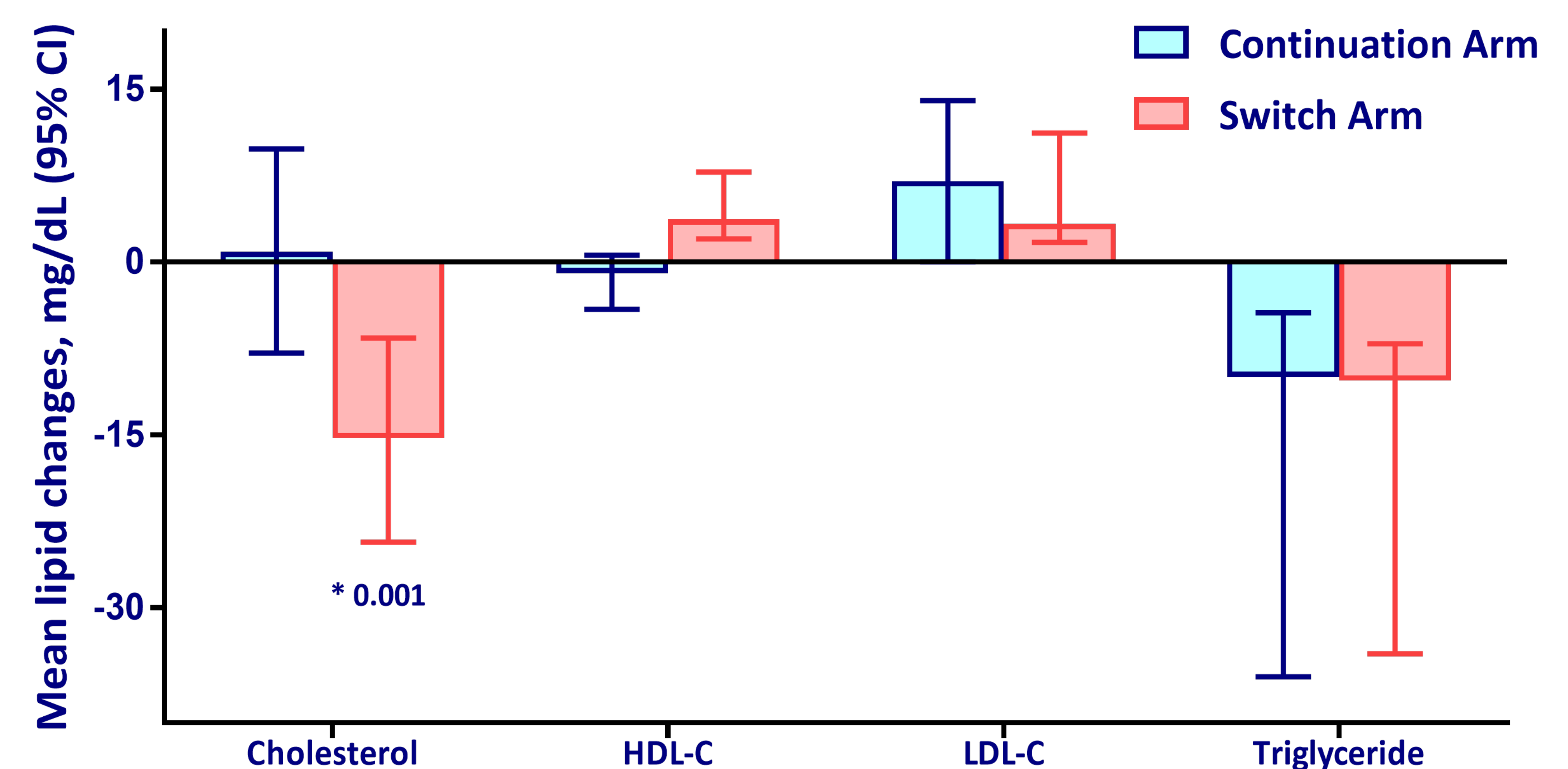


Figure 3. Mean lipid changes at week 24

Conclusions

- Switching from NVP to RPV can maintain virological suppression and decreases total cholesterol at week 24
- In virologically suppressed HIV-infected patients on treatment with NVP-based regimens, once daily RPV-based regimens are an alternative switch option

Acknowledgement

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