

LONG-TERM EFFICACY AND SAFETY OF MAINTENANCE 3-DAY-PER-WEEK SCHEDULE WITH THE SINGLE TABLET REGIMEN EMTRICITABINE/EFAVIRENZ/TENOFOVIR

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Background: Due to the long half-life of its components, we hypothesized that a maintenance schedule of 3-day-per-week efavirenz/emtricitabine/tenofovir-disoproxil-fumarate would maintain virological efficacy while reduce toxicity in the long-term.

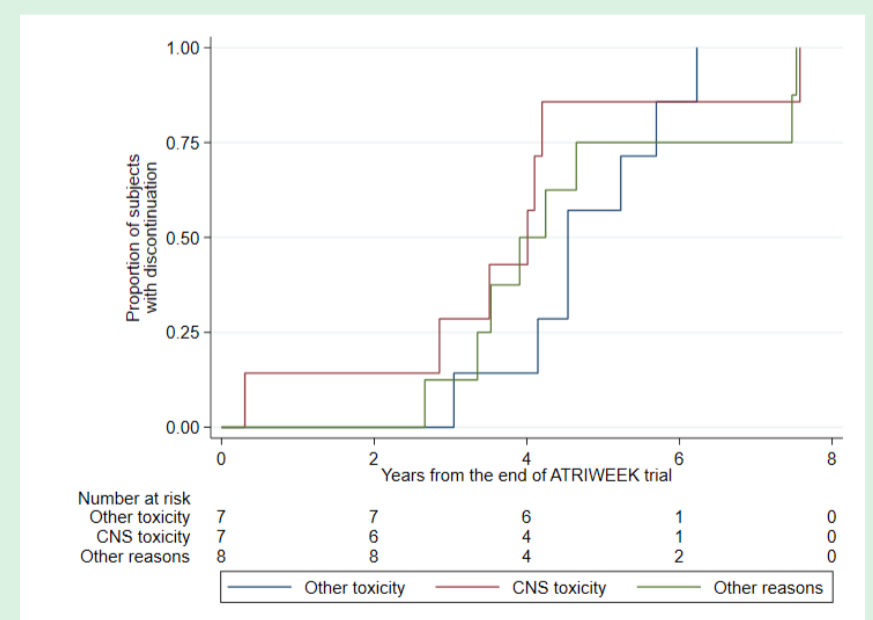
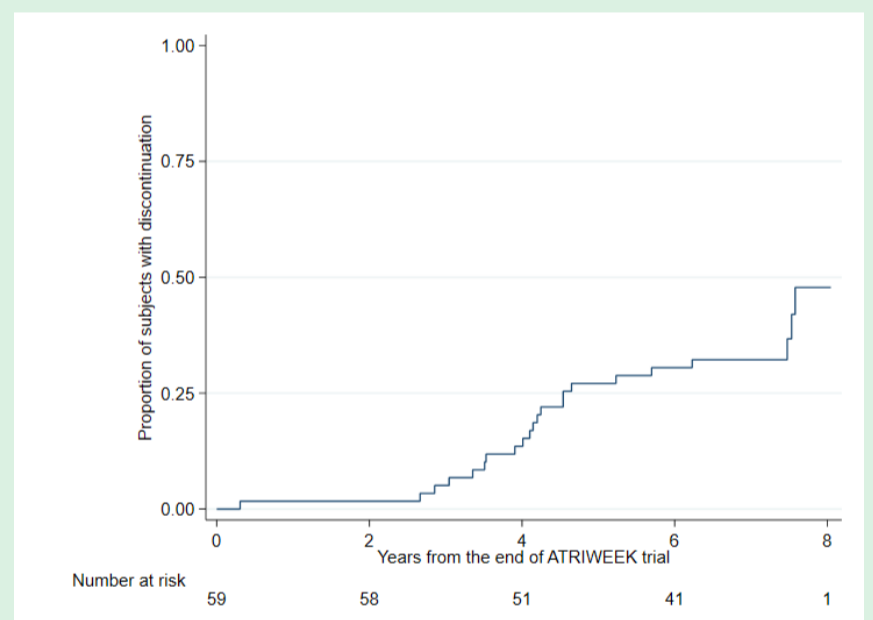
METHODS

After an initial 24-week randomized phase (1), all A-TRI-WEEK trial (ClinicalTrials.gov, NCT01778413) participants were offered to switch to the 3-day-per-week strategy. HIV-RNA, CD4/CD8 cells, and blood and urine chemistries were collected every six months. Lumbar/hip bone mineral densities (BMD) were screened once a year. Treatment failure was defined as virological failure (confirmed HIV RNA ≥ 50 copies/mL), therapy discontinuation for any reason, or lost to follow-up. Secondary outcomes were changes in CD4/CD8 cells, plasma lipids, estimated glomerular filtration rate (eGFR, CKD-EPI), urine protein/creatinine, and lumbar/femur BMD.

RESULTS

Of 61 persons initially enrolled, 59 (97%) accepted to participate in the extension phase. Most of participants were men (n=53, 90%). Median (IQR) baseline values were: age 56 years (IQR 46-60); CD4 563 (457-697) and CD8 569 (447-703) cells/mm³; total, LDL, and HDL cholesterol 194 (168-218), 124 (117-131), and 47 (40-55) mg/dL; eGFR 94 (92-97) ml/min/1.73m² and urine protein/creatinine 80 (59-100) mg/g; lumbar and hip BMD were 0.93 (0.90-0.96) and 0.96 (0.93-0.99) g/cm², respectively.

After a median of seven years of follow-up, 37 persons (62%) remained free of treatment failure. Twenty-two (37%) persons discontinued antiretroviral regimen due to: persistent CNS symptoms (n=7), decreasing bone mineral density (n=7), risk of interactions (n=2), preference for other regimens (n=2) and neoplasia, virological failure, non-availability of medication due to travel, and death (end-stage liver disease, unrelated to antiretroviral therapy). Median (IQR) CD4 and CD8 changes at 7 years were +91 (31-151) and +125 (53-197) cells/mm³. Total, LDL, and HDL cholesterol remained stable over time. Triglycerides, eGFR, urine protein/creatinine, and lumbar and hip BMD showed a bimodal curve with stable values in the first half of follow-up, and increases (triglycerides, urine protein/creatinine) or decreases (eGFR and BMD) in the second half of follow-up. Seventy-five percent of discontinuations occurred in the second half of follow-up.



CONCLUSIONS

3-day-per-week efavirenz/emtricitabine/tenofovir-disoproxil-fumarate as a maintenance therapeutic strategy was effective in the long-term and deferred toxicity.