

Title: STRATEGY-NNRTI: Week 48 results of a randomized, open label trial - Switching to coformulated elvitegravir/cobicistat/emtricitabine/tenofovir DF versus continuation of non-nucleoside reverse transcriptase inhibitor plus emtricitabine/tenofovir disoproxil fumarate in virologically suppressed HIV subjects

Abstract

Background Co-formulated elvitegravir, cobicistat, emtricitabine, and tenofovir disoproxil fumarate (EVG/COBI/FTC/TDF) may be a safe and efficacious switch option for virologically suppressed HIV-infected patients who have neuropsychiatric side effects on a non-nucleoside reverse transcriptase inhibitor (NNRTI) or who are on a multi-tablet NNRTI-containing regimen and desire a regimen simplification.

Methods STRATEGY-NNRTI is a 96-week, international, multicenter, randomized, open-label, phase 3b, noninferiority trial in which HIV-infected adults with HIV-1 RNA <50 copies/mL for at least six months on NNRTI+FTC/TDF were randomized (2:1) to switch to EVG/COBI/FTC/TDF or continue the NNRTI+FTC/TDF regimen. Key eligibility criteria included no history of virologic failure and CrCl \geq 70 mL/min. The primary endpoint was the proportion of subjects with HIV-1 RNA <50 copies/mL at week 48 based on FDA snapshot algorithm with a noninferiority margin of 12%. This trial is registered at ClinicalTrials.gov, number NCT01495702.

Findings A total of 434 subjects were randomized and treated. At week 48, 93.4% (271/290) of subjects switching to EVG/COBI/FTC/TDF maintained HIV-1 RNA <50 copies/mL versus 88.1% (126/143) of subjects continuing NNRTI+FTC/TDF (difference 5.3%, 95% CI -0.5 to 12.0%). There was no treatment-emergent resistance in either group. Safety events leading to discontinuation were uncommon in both groups (EVG/COBI/FTC/TDF, 2.1% [6] of subjects; NNRTI+FTC/TDF, 0.7% [1] of subjects). Switching to EVG/COBI/FTC/TDF was associated with a small increase from baseline in serum creatinine concentration by week 4, which remained stable through week 48. In addition, subjects switching to EVG/COBI/FTC/TDF from an efavirenz-containing regimen reported lower rates of neuropsychiatric symptoms at week 4 through week 48 post-switch compared with no changes from baseline for these symptoms in the group continuing an efavirenz-containing regimen.

Interpretation Switching to EVG/COBI/FTC/TDF from an NNRTI+FTC/TDF regimen in virologically suppressed subjects maintains virologic suppression and is well-tolerated.

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