MOAB0107LB - Oral Abstract

TITLE

ACTG A5353: a pilot study of dolutegravir (DTG) + lamivudine (3TC) for initial treatment of HIV-1-infected participants with HIV-1 RNA < 500,000 copies/mL

PRESENTER

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Background: DTG+3TC has attractive attributes for initial HIV-1 treatment, but limited data exist particularly in individuals with high pre-treatment plasma viral load (VL).
Methods: A5353 is a phase II, single-arm, pilot study of once-daily DTG (50mg) + 3TC (300 mg) in treatment-naïve HIV-1-infected participants with VL 1000 and < 500,000 copies/mL (cpm). Active hepatitis B or integrase, reverse transcriptase or major protease resistance mutations were exclusions. Primary outcome of virologic efficacy (VL < 50 cpm by FDA snapshot algorithm) was estimated using a two-sided exact 95% confidence interval (CI). Secondary as-treated analysis focused on participants who remained on DTG+3TC. Comparisons between entry VL (100,000 versus >100,000 cpm) used Fisher"s exact tests. Virologic failure (VF) was defined as confirmed VL >400 cpm at week 16 or 20, or confirmed VL >200 cpm at/after week 24. DTG plasma levels and resistance testing were performed at VF.
Results: Of 120 participants who initiated study treatment, 37 (31%) had VL > 100,000 cpm. Majority were male (87%); median age 30 (IQR: 24, 41) years; 40% Black, 28% White, 27% Hispanic. Median entry VL and CD4 count were 4.61 (3.94, 5.05) log₁₀cpm and 387 (288,596) cells/mm^3. Virologic efficacy at week 24 was 108/120 (90%, CI [83%, 95%]) with no significant difference between the low and high VL strata: 90% [82%, 96%] and 89% [75%, 97%], respectively (p>0.99). In the as-treated population, 108/112 (96% [91%, 99%]) had VL < 50 cpm, with no difference between the VL strata (99% [93%, 100%] vs. 92% [78%, 98%], p=0.10). Median CD4 change from entry to week 24 was +167 (86, 275) cells/mm^3. The three participants (2 in low, 1 in high VL strata) with VF had plasma DTG levels below the limit-of-quantification around the time of VF. There were no integrase mutations; M184V was detected in one participant at VF off study treatment. Two participants experienced Grade 3 possibly/probably treatment-related adverse events, however no Grade 4 adverse events or discontinuations occurred.
Conclusions: In this pilot study of treatment-naïve HIV-1-infected participants with VL < 500,000 cpm, once-daily DTG+3TC was effective and well tolerated. Randomized trials of this regimen versus standard-of-care are warranted.

More information