Journal of the International AIDS Society

Oral presentation

O414 48-week data from Study AVX-201 – a randomised phase IIb study of apricitabine in treatment-experienced patients with M184V and NRTI resistance

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from Ninth International Congress on Drug Therapy in HIV Infection
Glasgow, UK. 9–13 November 2008

Published: 10 November 2008

Journal of the International AIDS Society 2008, **11**(Suppl 1):O41 doi:10.1186/1758-2652-11-S1-O41

This abstract is available from: http://www.jiasociety.org/content/11/S1/O41

Purpose of the study

Apricitabine (ATC) is a novel cytidine analogue NRTI with promising activity and safety in the treatment of HIV-1 infected patients with resistance to other NRTIs. AVX-201 is a 48-week Phase IIb study of ATC compared to lamivudine (3TC) in treatment-experienced patients with M184V. Previously reported data at 24 weeks showed a greater proportion of patients reaching an undetectable viral load and greater increases in CD4 cells with ATC compared to 3TC. At 24 weeks, patients in the 3TC arm switched to ATC; final week 48 data are presented here.

Methods

HIV-1 infected patients with M184V were randomised to receive twice daily 600 mg ATC, 800 mg ATC or 150 mg 3TC for 24 weeks, with background antiretroviral therapy (ART) optimised according to genotype on Day 21. From week 24, all patients received open-label ATC (800 mg BID).

Summary of results

At baseline, 52% of patients had ≥3 TAMs and 76% had ≥1 non-NRTI mutation. At week 24, 71.4%, 73.3% and 58.3% of patients had HIV-RNA <50 copies/mL in the 600 mg ATC, 800 mg ATC and 150 mg 3TC groups, respectively, with a mean increase in CD4 cells of 145, 211 and 113 cells/μL, respectively, as previously reported. At week 24, all patients switched to open-label ATC. At week 48, the final results for the three original treatment groups are shown in Table 1.

There were more ART re-optimisations between day 21 and week 48 in the 3TC arm (7/16) than the 600 mg (2/17) and 800 mg (2/17) ATC arms. Few changes in HIV genotype were detected over the 48-week study period, with no evidence of development of resistance to ATC. There were no serious adverse events (AEs) related to ATC. ATC-related AEs were mild or moderate in severity.

Conclusion

ATC provided significant and durable antiviral activity over the 48-week treatment period, with a favourable safety profile and no evidence of resistance development. Sustained and improved responses in viral load and CD4 cells were seen from week 24 to week 48. The greatest improvements were seen in the 3TC arm: patients switching from 3TC to ATC at week 24 nearly doubled their CD4 cell increase from week 24 to 48, but still lagged behind those receiving ATC for the full 48 weeks. Patients receiving 3TC for the first 24 weeks underwent a greater number of ART re-optimisations than those receiving ATC. ATC has the potential to provide significant, very well tolerated antiviral activity and to enable construction of a potent, durable regimen in treatment-experienced patients.

Table 1:

	600 mg BID ATC	**800 mg BID ATC**	**150 mg BID 3TC**
W48 PP Population	n = 13	n = 14	n = 11
% <50 copies/mL	69.2	85.7	90.9
% <400 copies/mL	84.6	92.9	90.9
ΔCD4 cells/μL	261	277	200
% ≥1 log reduction in viral load	84.6	92.9	90.9
Safety Population	n = 17	n = 18	n = 16
No. severe AEs	10	13	17
No. SAEs	1	3	5
No. related AEs	3	6	5