Durability of virologic response to etravirine is not affected by time to reach virologic response

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Abstract

Background

Etravirine (ETR, TMC125), a next-generation NNRTI provided durable and statistically superior efficacy versus placebo over 48 weeks in treatment-experienced patients in the DUET trials. This pooled DUET analysis investigates whether time to reach virologic response impacts durability of response.

Methods

The primary endpoint was the percentage of patients with viral load <50 copies/mL (time-to-loss of virologic response [TLOVR]) analysis). The intent-to-treat (ITT) population included all patients; the as-treated population excluded patients who discontinued for non-virologic reasons.

Results

Five hundred and ninety-nine and 604 patients received ETR and placebo, respectively. Baseline characteristics were comparable between treatment groups with regards to median baseline viral load (4.8 log10 copies/mL), CD4 cell count (59 vs 109 cells/mm3), overall enfuvirtide (ENF) use (45.4% vs 46.7%), darunavir (DRV) and NRTI sensitivity, and median number of sensitive antiretrovirals (ARVs) at baseline. At Weeks 12, 24 and 48, virologic response (viral load <50 copies/mL) in ETR-treated patients was 47%, 61% and 61%, respectively. The number of responders at Week 48 on the first timepoint on which virologic response was seen is presented below.

Baseline demographics and background ARVs

In the ETR group, early responders generally had lower baseline viral load (median 4.6 log10 copies/mL) and higher CD4 cell count (median 152 cells/mm3) than late responders (median viral load: 5.0 log10 copies/mL, CD4 cell count: 127 cells/mm3).

Conclusion

Durable, high virologic response rates were observed up to Week 48 in ETR-treated patients. Virologic response at Week 12 does not fully predict response at Week 48; full suppression of HIV RNA by Week 48 can occur in patients who have not yet suppressed viral load at Week 12.

Conclusions

• In DUET, durable, high virologic response rates (<50 copies/mL) were observed up to Week 48 in patients receiving ETR plus BR.

• Virologic responses obtained at Week 48 were comparable to those observed at Week 24.

• Patients in the ETR plus BR group reached virologic response significantly earlier than those in the placebo plus BR group (p<0.0001).

• The proportion of ETR patients achieving virologic response was 47%, 61% and 61% at 12, 24 and 48 weeks, respectively.

• Durability of response is not affected by time to reach first virologic response.

• Patients with viral load >400 copies/mL at Week 24 were unlikely to be virologic responders at Week 48.

• Virologic response by Week 24 was highly predictive of durability of response through Week 48, but not fully predictable.

• Full suppression of viral load (<50 copies/mL) by Week 48 can occur in patients who have not yet achieved a virologic response (viral load <50 copies/mL) at Week 12.

References


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