Tipranavir/ritonavir (TPV/r) Demonstrates Superior Treatment Response to Lopinavir/ritonavir (LPV/r), Amprenavir/ritonavir (APV/r), and Saquinavir/ritonavir (SQV/r) in PI-experienced Patients From the TPV RESIST-1 and RESIST-2 Trials

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ABSTRACT

OBJECTIVES: The RESIST Trials are phase 3, prospective, parallel-group, open-label, clinical trials demonstrating the statistical superiority of TPV/r over efavirenz-standard of care therapy in PI-naive H1V+ patients. The objectives of the planned analysis was to compare the efficacy of TPV/r to that of LPV/r, APV/r, and SQV/r.

METHODS: Patients with a ≥2 class antiretroviral experience including ≥2 PIs (resistance), a primary PI mutation and at ≥4 antiviral drug classes (NNRTI, NNRTI, RTI, ARV, and others) and viral load (≥1000 copies/mL) were eligible. Before randomization, an optimized DRTI-based regimen was selected; the selected PI could be new or from the current regimen.

RESULTS: 465 patients with ≥2 baseline VL ≥100 copies/mL were selected. Pre-selected PIs were LPV (52%), APV (26%), SQV (20%), and RT (10%). The results of the response at 24 weeks with TPV/r and CPI/r, respectively, was -1.02 to -0.16 log10 with enfuvirtide. By contrast, the median VL response in the DRTI with enfuvirtide was -0.29 (±0.45 log10), with enfuvirtide 0.14 to 0.26 log10. TPV/r was consistently associated with a greater response than APV when combined with 0.05 to 0.72 log10 (0.07 to 0.63 log10) to 0.77 (±1.13) log10 in ≥0.41 to 1.42 log10, respectively.

CONCLUSION: TPV/r provides a statistically superior virologic response compared with LPV/r, APV/r, and SQV/r in a cohort of ≥2 PI-experienced HIV patients.

INTRODUCTION

Tipranavir (TPV) is a non-peptidic protease inhibitor (NPI) that was recently approved by the US Food and Drug Administration. The combination phase 3 RESIST-1 and RESIST-2 trials demonstrated that TPV was superior to a standard-of-care PI-based regimen.

METHODS

RESIST studies were conducted in HIV+, triple-class, 2 PI-experienced male and female patients who satisfied the following criteria:

- ≥18 years old
- ≥20 consecutive months’ experience with ≥3 classes of ARV
- ≥2 PI-based regimens for at least 3 months at screening, 1 of which was the current treatment regimen
- Any ARV could be carboxypeptidase
- Virus isolation at ≤0.400 copies/mL
- ≥2 primary protease inhibitors at 300, 480, 690, 780, and 960 MCD
- ≥1 mutations at codons 33, 82, 84, 90

RESIST STUDY DESIGN

Figure 1. Screening and Randomization

BASELINE DEMOGRAPHICS

Table 1. RESIST Patient Demographics

REFERENCEs

1. Hicks C, for the RESIST-1 study team. Presented at: 44th ICAAC; September 14–16, 2004; Washington, DC, Abstract T1313.