Unexpected drug-drug interaction between Tipranavir/ritonavir (TPV/RTV) and Enfuvirtide (T20).


Department of Infectious Diseases, University of Torino, Torino, Italy

RESULTS

A total of 321 sparse samples were considered for modelling.

Population characteristics

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<tr>
<th>Subject</th>
<th>Total</th>
<th>T20</th>
<th>T20 vs Total</th>
<th>P value</th>
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Conclusions

- Significantly higher TPV and RTV Ctrough were found in patients administered with T20 as compared to values observed in subjects with no concomitant T20 intake.
- In 3 representative case reports, discontinuation or addition of T20 to a TPV/r based regimen led to TPV plasma levels modification according to this trend.
- Mechanism of such interaction is unknown, but it seems to potentially affect volume of distribution (higher with T20) and elimination half-life (higher in T20 group) of both TPV and RTV.
- Further studies are warranted to define the clinical significance of this finding, given that both efficacy and, to a lesser extent, tolerability of TPV have been supposed to be concentration-related.

PATIENTS AND METHODS

- Patients placed in a TPV/RTV-based regimen (500/200 mg BID) at our department underwent TPV and RTV concentrations measurement by HPLC. Record of last dose intake and sampling timing and no modification of drug regimen were performed.
- Consensus of sparse plasma samples was made by using a first order absorption and elimination monocompartmental model without Tlag. Time averaged plasma concentrations from each patient were averaged in every point according to T20 administration. T-Student Test was used to study differences between groups. Values were given as ng/ml.
- Modelling of sparse plasma samples was made by using a first order absorption and elimination monocompartmental model without Tlag.
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