### Pharmacokinetics of Once-Daily Etravirine (ETR) Without and With Once-Daily Darunavir/Ritonavir (DRV/r) in Antiretroviral-Naïve HIV-1 Infected Adults

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### Introduction

- With a terminal half-life of 36–40 hours, and formulation improvements leading to a reduced pill burden, etravirine (BMS-352700, ETR) is a candidate for once daily (QD) dosing.
- In previous studies in healthy volunteers:
  - ETR AUC was similar, Cmax was 44% higher and Cmin was 25% lower for qd versus twice-daily dosing (Figure 1).
- Co-administration of darunavir (PREZONTM, DRV) with low-dose ritonavir (RTV) is 600/100mg bid decreased AUC of ETR 100mg bid by 37%.

### Methods

- In this phase 4 open-label, single arm study, 23 patients enrolled and 20 completed through Day 42.
- Key eligibility criteria:
  - ARV-naïve adults with HIV-1 infection.
  - HBV/HCV co-infection not allowed.
  - No evidence of resistance to study drug based on screening or historical resistance assays.
  - Once-daily DRV has been shown to be effective and well-tolerated in antiretroviral-naïve HIV-infected patients.

### Results

- Twenty-three patients enrolled (Table 1) and 20 completed Day 42 of the study.

### Table 1. Patient baseline demographics and laboratory abnormalities

<table>
<thead>
<tr>
<th>Parameter</th>
<th>n = 23</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age, years</td>
<td>35.7 (13.6)</td>
</tr>
<tr>
<td>Race</td>
<td>95.7% (n = 22)</td>
</tr>
<tr>
<td>Sex</td>
<td>95.7% (n = 22)</td>
</tr>
<tr>
<td>BMI</td>
<td>29 (7)</td>
</tr>
<tr>
<td>Baseline CD4 cell count, median (range)</td>
<td>382 (164–690)</td>
</tr>
<tr>
<td>Baseline viral load change from baseline</td>
<td>2.7 (1.1)</td>
</tr>
</tbody>
</table>

### Conclusions

- The mean viral load (VL) decrease at Day 14, 1.70 log, at Day 28 and 2.0 log, copies/mL at Day 42 (Figure 5).
- Most common treatment-emergent AEs were nausea, headache, rash, and flatulence (Table 5).
- Of the 3 cases of rash, none were considered serious or were grade 4 or 5.
- No serious or grade 3 or 4 AEs were reported.
- No AEs led to discontinuation.
- There were no grade 3 or 4 AST, ALT or lipid abnormalities.
- One case of grade 3 neutropenia was reported during Treatment A.

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  - James Wink

### References