SYMTUZA® (darunavir, cobicistat, emtricitabine, and tenofovir alafenamide) SYMTUZA - Resistance

SUMMARY

A summary of this response is provided as an interactive PDF (iPDF) that can be accessed by clicking the following link:

- SYMTUZA® (darunavir, cobicistat, emtricitabine, and tenofovir alafenamide) Resistance
 - o Minimum requirement to access interactive content: Adobe Acrobat Reader
- The executive summary infographic of the iPDF content is provided below

Prevalence of DRV RAMs over time¹

 In a study evaluating trends in DRV resistance in the United States over time, the proportion of isolates with no DRV RAMs increased from 91.7% in 2010 to 95.8% in 2017.

Company-sponsored clinical trials

- In the AMBER study, there was no development of DRV, primary PI, or TFV RAMs in either arm.²⁻⁶
 After week 96, 3 patients developed mutations at RT position 184 (resistance to FTC and 3TC).⁶
- In the **DIAMOND** study, no patient had PDVF.7
- In the GS-US-299-0102 study, among patients with VF, none developed resistance.8
- In the EMERALD study, no emerging DRV or TFV RAMs were observed. 4,6,9,10
 - The presence of baseline archived DRV, FTC, and TFV RAMs had no effect on virologic response through 96 weeks.⁵
- In a pooled resistance analysis of DRV QD regimens and formulations across 10 clinical studies of treatmentnaïve and treatment-experienced patients with HIV-1 infection, loss of phenotypic susceptibility to DRV was observed in 1 PI-experienced patient, and was not observed in treatment-naïve, treatment-experienced PI-naïve, or treatment-experienced virologically suppressed patients.¹¹

Retrospective studies

- A retrospective study described the efficacy, safety, and tolerability of switching to DRV/r or DRV/COBI QD in treatment-experienced patients with DRV RAMs.¹²
 - Resistance testing conducted in the 2 patients who were VFs showed no evidence of treatment-emergent resistance.
- A retrospective study assessed the efficacy of boosted DRV plus RAL as a treatment-simplification strategy in virologically suppressed patients with HIV-1 and PI RAMs.¹³
 - $\circ~$ Efficacy at week 96 was 67.7% in the ITT analysis and 96.8% in the per-protocol analysis.

Note: 3TC, lamivudine; COBI, cobicistat; DRV, darunavir; FTC, emtricitabine; HIV, human immunodeficiency virus; ITT, intention-to-treat; PDVF, protocol-defined virologic failure; PI, protease inhibitor; QD, once daily; r, ritonavir; RAL, raltegravir; RAM, resistance-associated mutation; RT, reverse transcriptases: TFV, tenofovir; VF, virologic failure.