

A question of potency? Reasons for switching from Atazanavir to Darunavir in a London HIV cohort

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Introduction

Studies conducted with atazanavir (ATV) and darunavir (DRV) have demonstrated superior virologic efficacy against lopinavir at 96 weeks in their pivotal trials^{1,2}. In London atazanavir is currently the Protease Inhibitor (PI) of choice, with darunavir a common second option for patients in our cohort. In our analysis we looked at the reasons for switching away from our first choice PI, namely ATV to DRV, as well as the effect on viral load, regimen tolerability and adherence.

Methods

All patients with a prescription for DRV in December 2012 in a London HIV cohort of 600 were identified. Those who had previously been on ATV and who were subsequently directly switched to DRV were selected for our analysis. Data was collected from our electronic database and clinical notes. Data pertaining to adherence and tolerability was collected based on documentation by clinician in notes and GP correspondence letters.

Results

Cohort Characteristics	
No. of switches from ATV to DRV	50
Female	54%
Average Age	41.6 yrs
Heterosexual	80%
MSM	15%
IVDU	4%
African Ethnicity	60%

Table 1: Cohort Characteristics

- 10% had ATV as part of their initial HAART regimen. The average length of time on ATV was 24.4 months (range 0.5 -70). At switch 44% had a undetectable viral load.
- Improved virological suppression was seen in 82.1% who had detectable viral load prior to switch, with a mean log drop in viral load of 2.63 after switching.
- Improved tolerability was noted only in those switched for scleral icterus and gastrointestinal side effects. No Improved adherence was noted post switch.

Reasons for Switch		Average Time on ATV prior to Switch
Failure of Virological Suppression/need for potency	42%	21.1 months
Hyperbilirubinaemia	22%	31 months
PPI Interaction	12%	42.3 Months
Monotherapy Switch	10%	25.8 months
Side Effects	8%	10.2 months
Drug Reaction	2%	
Other	4%	

Table 2: Reasons for switching from ATV to DRV and time on ATV

Conclusions

- Our data suggests that changes from ATV to DRV were most commonly due to the need for a more potent PI as opposed to switching for side effects or drug interactions.
- An improvement in viral suppression was seen in the majority. Switching to DRV may be appropriate when concerns regarding potency are an issue.
- Upcoming RCTs comparing ATV to DRV will be welcomed

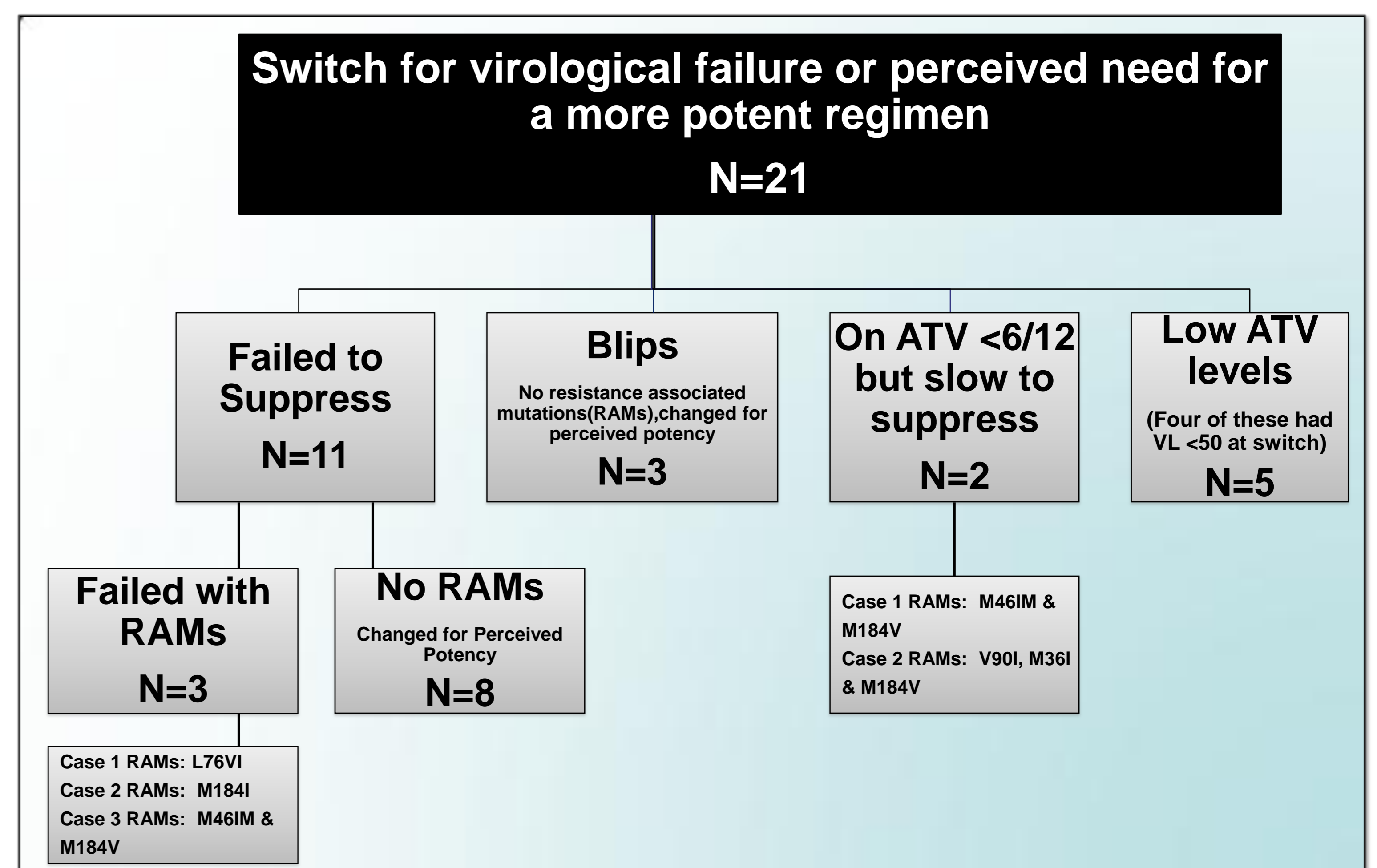


Table 3: Analysis of those switched for virological failure or perceived need for a more potent regimen

References

1. Molina J et al. Once-daily atazanavir/ritonavir compared with twice-daily lopinavir/ritonavir, each in combination with tenofovir and emtricitabine, for management of antiretroviral-naïve HIV-1-infected patients: 96-week efficacy and safety results of the CASTLE study. *J Acquir Immune Defic Syndr* 2010; 53:323-332.

2. Mills M, Nelson M et al. Once-daily darunavir/ritonavir vs. lopinavir/ritonavir in treatment-naïve, HIV-1-infected patients: 96-week analysis. *AIDS* 2009; 23: 1679-1688.