The use of dual maraviroc/ritonavir-boosted darunavir combination in clinical practice

Introduction

NRTI containing regimens are associated with long term side effects often attributed to mitochondrial toxicity, in particular lipoatrophy and fat redistribution.

We have reviewed our usage of maraviroc (MVC), darunavir (DRV) and ritonavir(RTV) in the clinical setting.

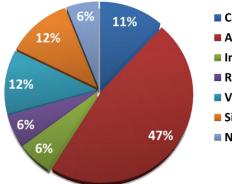
Methods

We retrospectively identified all patients prescribed MVC in combination with 800mg DRV boosted with 100 mg RTV between June 2008 and November 2011. Electronic patient records were used to identify CCR5 tropism results, reasons for switching to this drug regimen, HIV viral loads at the time of commencement, changes in CD4 count and lipid profiles over the course of 48 weeks.



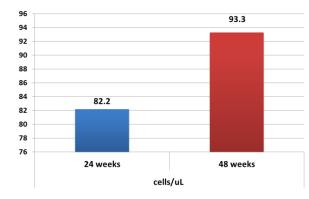
Chelsea and Westminster Hospital **NHS**

Reasons for switching from NRTI containing regimens



- Compliance
- ADR
- Intolerance
- Rationalisation
- Virological failure
- Simplification
- Not given

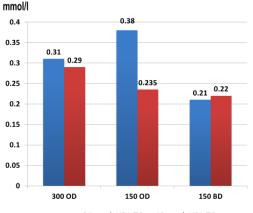
Change in CD4 count (cells/uL) over time



■ cells/uL 24 weeks ■ cells/uL 48 weeks

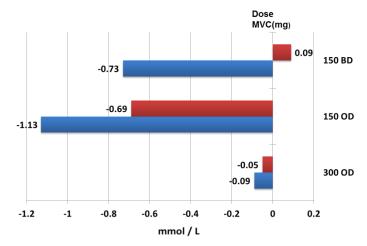


Mean change in HDL: total cholesterol against different dosing regimes



24 week HDL:TC 48 week HDL:TC

Mean change in triglycerides against different dosing regimes



TG 48 weeks TG 24 weeks

Chelsea and Westminster Hospital **NHS Foundation Trust**



Results & Conclusion

<u>Results</u>

- 21/24 patients were male [mean age of 54.6 years]. Eighteen patients switched with an undetectable viral load (VL). MVC 150mg (46%) and 300mg (54%) replaced the nucleoside backbone in 17 patients, 14 with an undetectable VL. DRV replaced other protease inhibitors in 10 patients (9 with undetectable VL).
- One patient with an undetectable HIV VL at time rebounded to 983 copies/ml more than 2 years after switching and has not re-attended six months later. Of those who switched with a detectable VL, 1 rebounded to 82 copies/ml. Six individuals stopped this regimen. [Four had virological failure, 1 adverse drug reaction and 1 unknown. Two (of those who virologically failed remained CCR5 tropic on repeat testing, 1(25%) switched to X4 tropic virus and one had no re-test performed]

Conclusion

• Overall the study suggests that MVC plus RTV-boosted DRV represents a successful approach for a nucleoside sparing strategy



Chelsea and Westminster Hospital