Real life experience of Doravirine in a large multi-centre HIV service

P Saleh, A Woodruff, A Scott, C Pritchard, A Ramchandani, H Baker, O McQuillan, A Tomkins, C Ward, V Lee, C Wood

The Northern Contraception, Sexual Health & HIV Service

Manchester University NHS Foundation Trust

Background

Doravirine (DOR) was approved for use in England in December 2019. It was heralded as the new preferred drug of its class; with high tolerability, low interactions, few restrictions for use, and a competitive price[1]. We review our experience of DOR in our multi-centre HIV service.

Methods

All patients prescribed DOR in our service from its availability until November 2021 were identified using pharmacy records. We reviewed the electronic patient records of these patients, capturing demographic, clinical, and laboratory data.

Results

Demographics

Total number of patients: 214 (approximately 6% of our total **cohort)**

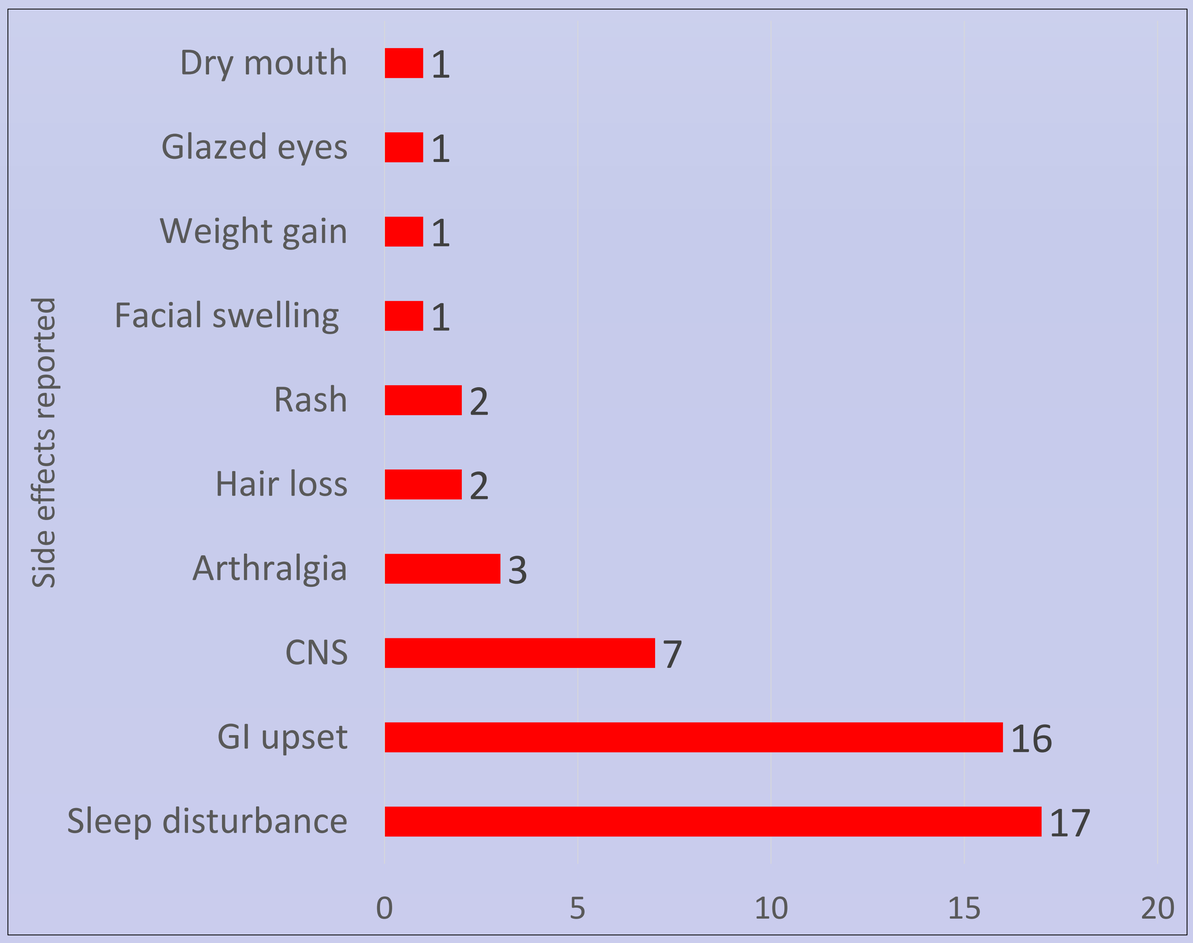
Gender		**Ethnicity**	
• Male	175 (82.2)	• White	134 (63.6%)
• Female	36 (7.8%)	• Black	45 (22.0%)
		• Asian	4.7%
Age		• Mixed	2.8%
• Median	42		
• Range	21-77		

Total follow-up years	115.2
Median duration of receiving DOR	7 months (range 1 day to 76 months*)
How was DOR taken?	Delstrigo™ 179 (83.5%)
Switch	193 (90%)
Treatment naïve	15 (7%)
Re-start after period off treatment	6 (3%)

Side effects

44 patients reported side effects

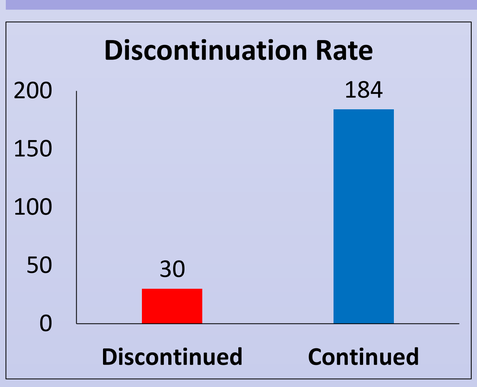
- 34 (77.3%) experienced only one side effect



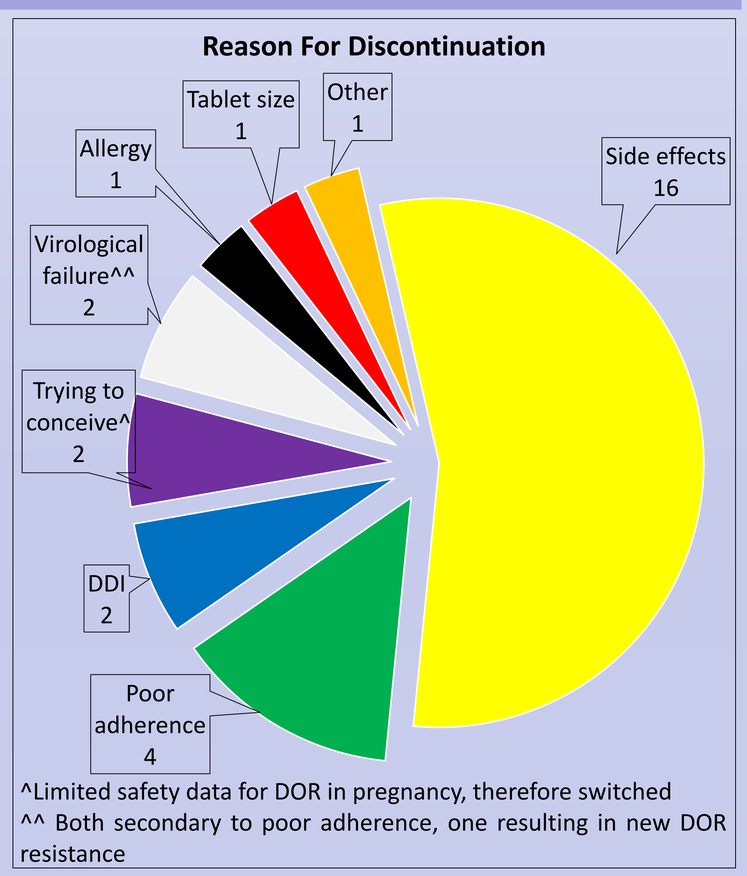
No significant effects were seen on hepatic or renal function:

- 24 (11.2%) had a transient transaminitis, with no requirement to alter treatment
- 2 (0.9%) had decline in eGFR, both with additional contributing factors

Discontinuation



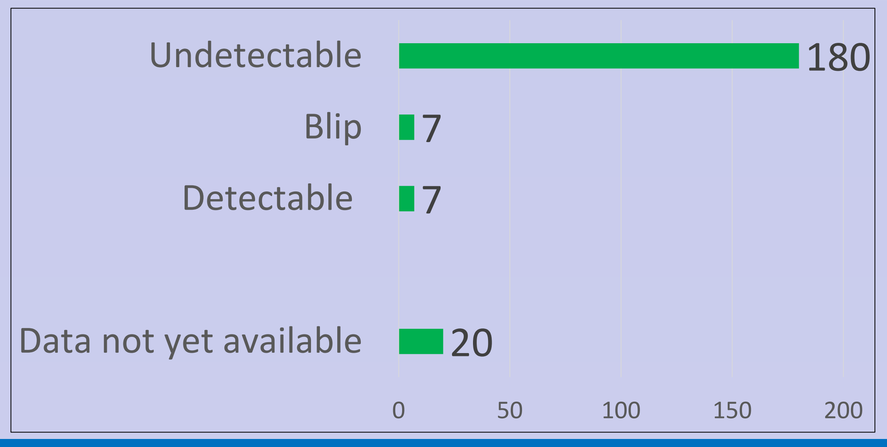
Median time to discontinuation was two months (range 0-15 months). The type of side effects leading to discontinuation was similar to the overall side effect profile; i.e. there was not a single side effect that was less tolerated than others.



^Limited safety data for DOR in pregnancy, therefore switched

^^ Both secondary to poor adherence, one resulting in new DOR resistance

Effect On Viral Load



Of those switched to DOR (193), 7 experienced blips, 7 had detectable viral load due to poor adherence of which one developed with DOR resistance.

Discussion

Doravirine appears to be a safe and effective treatment option in our cohort. We experienced a similar rate of side effects as has been reported in the key clinical trials[2], however, we observed a higher discontinuation rate as a result (1% versus 7.5% in our patients). Until February 2022 Doravirine and Delstrigo™ were on our regional antiretroviral medication prescribing algorithm, without need for MDT discussion. Now with the launch of the HIV National prescribing guidelines these will now require MDT prior to being prescribed. Although this may lead to a reduction in usage, further real-world evaluation is needed.

References

[1]Talwani R, Temesgen Z. Doravirine: a new non-nucleoside reverse transcriptase inhibitor for the treatment of HIV infection. Drugs Today (Barc). 2020 Feb;56(2):113-124. PMID: 32163527.

[2]Molina JM, Squires K, Sax PE; DRIVE-FORWARD trial group. Doravirine versus ritonavir-boosted darunavir in antiretroviral-naive adults with HIV-1 (DRIVE-FORWARD): 96-week results of a randomised, double-blind, non-inferiority, phase 3 trial. Lancet HIV. 2020 Jan;7(1):e16-e26. PMID: 31740348.

*2 patients had been part of research trials and therefore been on DOR predating its UK licensing