

From theory to reality: a clinic experience of Symtuza in complex patients

N Vora^{1,2}, I Runce-Unger², H Yeend-Curd-Trimble² and LJ Waters²

¹Centre for sexual health and HIV research, University College London

²Mortimer Market Centre, Central North West London NHS Foundation Trust

Background: Recommended anti-retroviral (ARV) regimens for treatment naive patients include single-tablet regimens (STR). These may improve adherence but evidence supporting improved efficacy is largely lacking. For those requiring second-line therapy, one-pill, once-daily options are more limited as HIV drug resistance may require the higher barrier to resistance offered by protease inhibitors (PI).

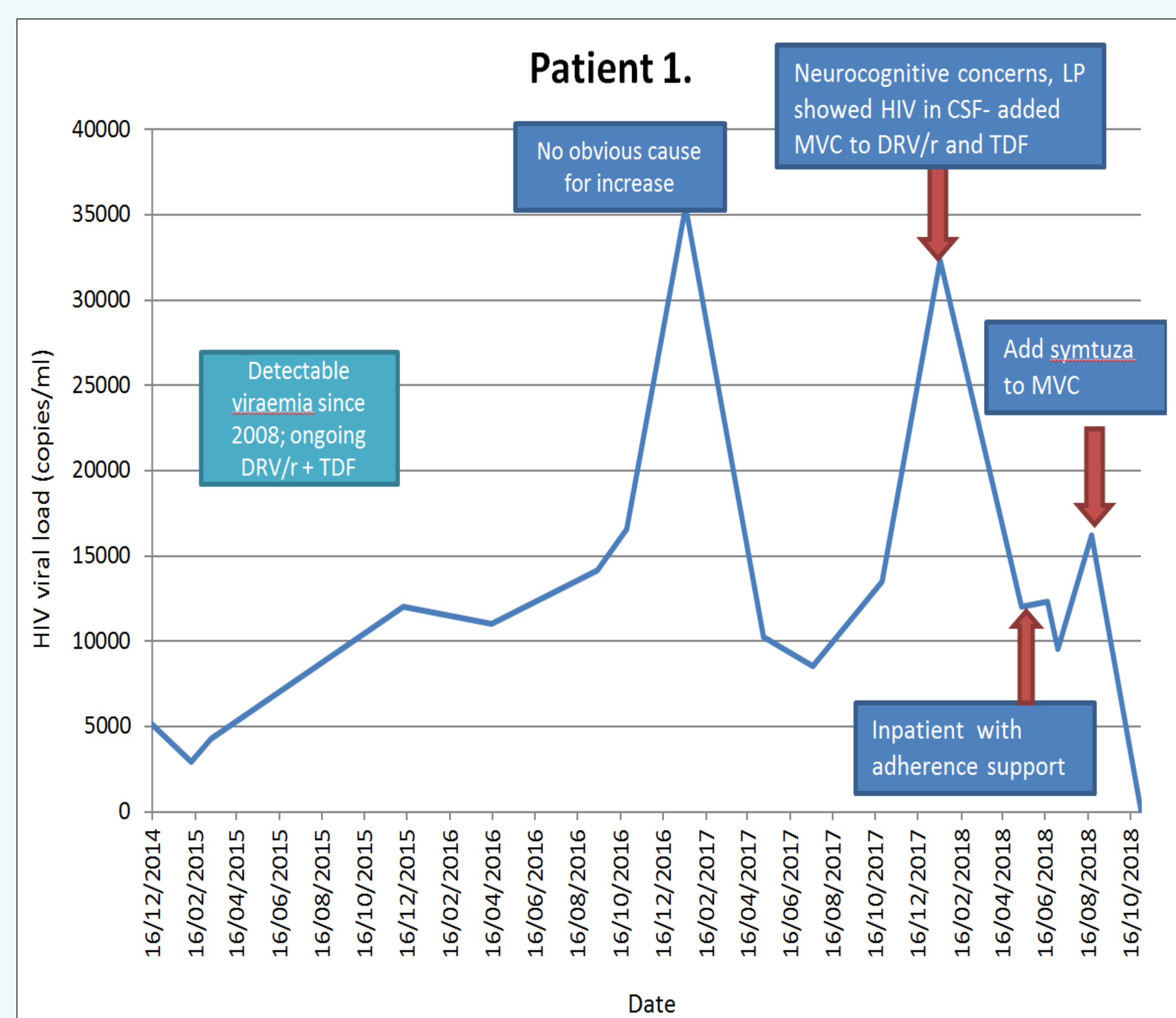
In September 2017, Darunavir/cobicistat/emtricitabine/tenofovir-AF (*Symtuza*), the first PI-based STR, was licensed to treat HIV-1 in adults and adolescents. NHS England commissioning guidance recommends it can be used where tenofovir-AF (TAF) policy applies or where a multi-disciplinary team (MDT) documents requirement for this regimen. We reviewed the outcomes for patients commencing *Symtuza* after MDT discussion at our central London clinic

Methods: Patients prescribed *Symtuza* between 30/10/2018 (*Symtuza* first available) and 10/01/2019 were identified from electronic patient records. Case note review was undertaken to collect information including demographics, prior ART, resistance associated mutations (RAMs), rationale for use and pre- & post-treatment viral load (VL).

Results 1: 45 individuals received *Symtuza* during the period of study. 37/45 (82%) met TAF criteria and the remaining 8 (18%) were started on *Symtuza* following MDT recommendation for other reasons; these are summarised in table 1.

Pt	Age/gender	RAMs	ARV prior to switch	VL pre-switch	Rationale for <i>Symtuza</i>	VL post-switch
1	59 M	NRTI: (41LM, 215Y, 215C, M184V, 67N, 210W, 219E, 67DG) NNRTI: (188X, 106I) INI: (N155H, G163GR)	DRV/r/TDF/MVC	16,000, never suppressed (diagnosed Dec 1994)	Poor adherence, 3 class resistance.	VL 98 within 1 month.
2	45 M	INI (S153Y/F)	DRV/r/DTG	10,000, last suppressed Aug 2018	Poor adherence, social and housing issues.	VL<50 within 1 month
3	66 M	Wild-type	DRV/r/RAL/3TC	407	On methadone, intermittent ARV adherence/multiple treatment interruptions. Struggling with 5 pill burden	VL<50 within 3 weeks
4	50 M	Wild-type		339	Long-term non-progressor. Predicted adherence difficulties.	VL<50 within 4 weeks
5	45 F	Wild-type	TDF/FTC/RPV	79	Poor adherence (missing 3-4 tablets a week). Metformin, low mood, increased CVD risk	VL<50 within 2 weeks
6	25 F	NNRTI: (K103N)	ABC/3TC/DTG	338,000, last suppressed July 2017	Lifelong adherence issues (vertical transmission). ARVs stopped due to pregnancy safety concerns with dolutegravir.	VL 234 within 4 weeks
7	19 F	Wild-type	ABC/3TC/DTG (stopped 07/2017)	11,220	Complex psychological and safeguarding issues. Side effects on Truemeq.	VL=87 within 4 weeks
8	60 M	Unknown	D4T/3TC until 2003	70,000	Stopped ARVs and disengaged with care. Re-engaged with care, CD4 120 but no prior resistance results. Requesting STR.	VL<50 within 6 weeks

Results 2: 5/8 individuals were virally suppressed at last follow-up; the remaining 3 saw significant viral load reduction. Patient 1 is an individual who never achieved viral suppression & switch to *Symtuza* yielded a viral load of less than 200 within 1 month.



- **Conclusion:** individuals living with HIV and medical or other complexities (such as adolescents or individuals with complex social issues) may find adherence challenging & may differ from clinical trial participants.
- Our clinic experience highlights the opportunity to help complex patients achieve viral suppression, (despite previously persistent viraemia) with a PI-based STR.
- This supports the potential value of *Symtuza* in people who do not meet the renal/bone criteria of the TAF policy