

Dual Antiretroviral Therapy in a Treatment Experienced HIV Cohort

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Background

- ❖ Dual boosted protease (PI/r) based therapy, ie. PI/r + 1 agent from another class, (DT) is not a recommended strategy¹.
- ❖ Small studies have shown good virological efficacy and it is sometimes used in clinical practice where treatment options are limited due to resistance or toxicity.
- ❖ We aimed to describe the characteristics, indications and outcomes of those prescribed DT.

Methods

- ❖ Patients attending the Mortimer Market Centre, London prescribed DT between 1999 and 2012 were identified using electronic patients records.
- ❖ Patient demographics and clinical characteristics were collated.
- ❖ The number of virological failures, cumulative resistance, number of previous regimens, reasons for DT and rates of viral load suppression were collected.

Results

Patient Demographics

- ❖ 132 (77% male) patients identified
- ❖ Median (range) age 49 (17-73) years
- ❖ 36% had a history of an aids-defining illness.
- ❖ 78% ART-experienced; median prior regimens 3 (range 0-11)

Illustration 1: ARV regimen prior to switching to DT

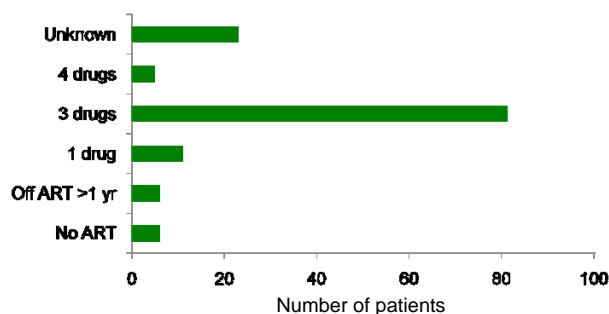


Illustration 2: Reasons for switching to DT

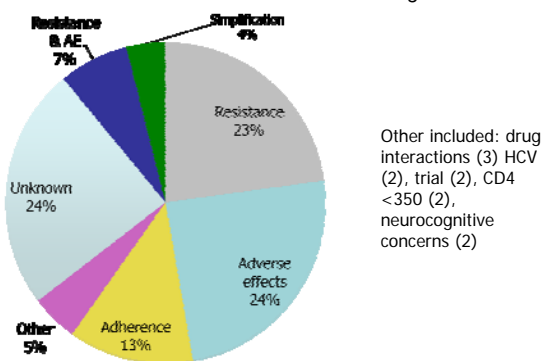
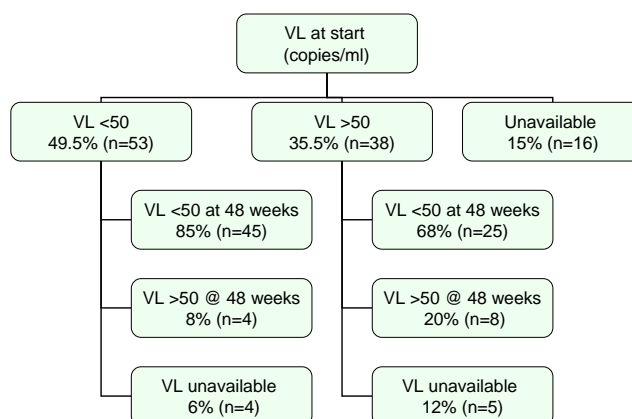


Table 1: DT regimens used (PI/r with additional agents)

PI/r	NRTI	NNRTI	Raltegravir	Maraviroc
ATZ/r (n=34)	32	2	0	0
DRV/r (n=71)	55	4	9	3
FSP/r (n=4)	4	0	0	0
LPV/r (n=10)	10	0	0	0
SQV/r (n=13)	12	1	0	0

- ❖ Patients remained on DT for median 23 months (range 1-123).
- ❖ At last measured VL 89% (77/87) of those with a result available maintained a VL <50 copies/ml.
- ❖ 19% (n=25) went on to stop dual therapy (table 2).

Fig 3: Virological outcomes (n=132; 25 excluded as on DT <12 months)



- ❖ Of those with a VL >50 at week 48 (n=12), seven had an undetectable VL and one had a decreasing VL at the last measured result, median 172 weeks (range 120-364) and 144 weeks, respectively.
- ❖ Of the 4 that remain detectable at the last measured VL, two had poor documented adherence and two had resistance.

Table 2: Reasons for stopping DT

Reason	Number (%)
Adverse effects	6 (24%)
Adherence	2 (8%)
Neuro-cognitive concerns	2 (8%)
Resistance	5 (20%)
Viral blips	2 (8%)
Improve regimen	4 (16%)
Unknown	4 (16%)

- ❖ Of the 5 individuals with resistance on stopping DT:
 - ❖ 4 had pre-existing 2 (2), 3 (1) or 5 class resistance (1).
 - ❖ 1 had emergent NRTI & PI mutations. Their VL was 10,300 on commencing DT. Addition of 3TC resulted in viral suppression.
 - ❖ Median CD4 change was +50 cells/mm³ (range -840-720) at 48 weeks.

Discussion

- ❖ We demonstrate that DT is an efficacious, well tolerated and useful alternative strategy in those for whom standard ART is not an option due to resistance or toxicity.
- ❖ Careful monitoring is required particularly with those with prior resistance to avoid the risk of accumulating further mutations.