Use of Dolutegravir/Lamivudine (DTG/3TC) in the Genitourinary and Infectious Diseases Clinic in St.James' Hospital.

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Background

Dolutegravir/lamivudine (DTG/3TC) is a two-drug antiretroviral treatment (ART). DTG/3TC is approved for both first-line ART and to facilitate ART switches. DTG/3TC as a single-tablet regimen became available at St. James's Hospital (SJH) in 2019.

The 2021 European AIDS Clinical Society, 2021 US department of Health and Human Services and 2020 International Antiviral Society–USA guidelines all endorse dolutegravir/lamivudine (DTG/3TC) as an initial ART regimen for treatment-naive patients and as a switch option for virologically suppressed patients [1].

The aim of this audit was to characterize the patients with HIV receiving DTG/3TC care at SJH including reasons for switch and levels of sustained virological response post switch.

Methods

We performed a retrospective review of clinical and pharmacy dispensing notes for all patients prescribed DTG/3TC from 2019 until December 2022. Demographic and clinical data were collected and standard descriptive statistics was used to summarise the findings.

Results

Since 2019, 130 patients were prescribed DTG/3TC (Fig 1) : 3 (2.3%) in 2019, 14 (10.8%) in 2020, 39 (30%) in 2021 and 74 (56.9%) in 2022. The median age was 49 years old (range 23-76), 13 (10%) were female and 117 (90%) were male.

Patient Characteristics		Number
Patients Rx'd DTG/3TG since 2019		130
	2019	3(2.3%)
	2020	14(10.8%)
	2021	39(30%)
	2022	74(56.9%)
Median age		49 yrs
Sex	M	117 (90%)
	F	13 (10%)
Previous ART regimens	ABC/3TC/DTG	59/130(45.4%)
	INSTI	22/130(16.9%)
	NNRTI	21/130(16.2%)
	PI	9/130(6.9%)
	Pre existing DTG/3TC	18/130 (13.8%)
Virally suppressed	At time of switch	110/112(98.2%)
	At next follow up	104/107(97.2%)
Discontinued DTG/3TC at follow up		11/107(10.3%)

Fig.1

Results

All patients prescribed DTG/3TC at SJH were ART-experienced. Previous ART regimens included: ABC/3TC/DTG in 59 (45.4%) patients, other integrase inhibitors (INSTI)-based regimens in 22(16.9%), non-nucleoside reverse transcriptase inhibitor (NNRTI)-based regimens in 21(16.2%), protease inhibitor (PI) based regimens in 9(6.9%), and 18(13.8%) were on DTG/3TC when they transferred care to SJH.

Results

Reason for switch was available for 103(79.2%) patients (Fig 2).
Concerns over cardiovascular risk were associated with 58 (56.3%) of switches, 8(7.8%) due to drug-drug interactions, 3(2.9%) due to renal toxicity, 5(4.9%) due to osteoporosis/osteopaenia, 21(20.4%) due to other confirmed or suspected drug toxicity, and 8(7.8%) for regimen simplification.

Of those that started DTG/3TC in SJH, 110 (98.2%) were virally suppressed at time of switch. Of those followed, 104 (97.2%) were virally suppressed at next follow-up. 2(1.9%) patients were not virally suppressed at next follow-up. 1(0.9%) patient switched back to their prior regimen before follow-up viral load could be done on treatment.

5 (4.5%) patients were not followed due to transfer of care. 11(10.3%) patients discontinued DTG/3TC at next follow-up. 4(6.8%) patients who switched from ABC/3TC/DTG did not tolerate DTG/3TC.

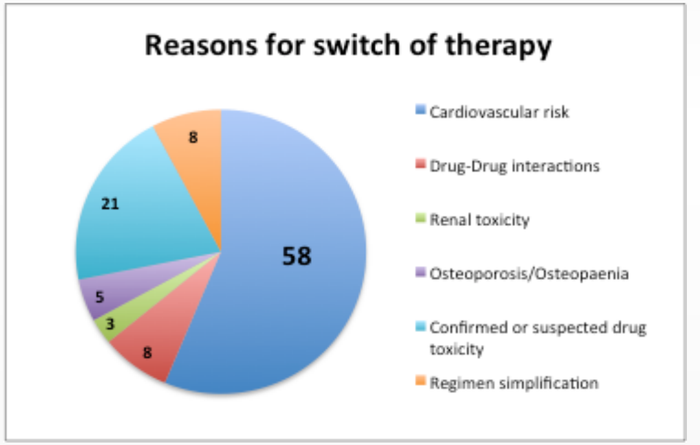

Fig.2

Conclusion

According to NHS pricing, DTG/3TC is more expensive than NNRTI-based regimens but cheaper than the INSTI and PI ART regimens studied. Using these estimates, switching 84 patients to DTG/3TC will result in annual drug savings of greater than €150,000.

Approximately 90% of patients switched to DTG/3TC maintained this treatment at next follow-up. Switch to DTG/3TC may have significant cost-savings in suitable patients.

References

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