Real-world experience using bictegravir/emtricitabine/tenofovir-alafenamide (B/F/TAF) in a Scottish HIV cohort

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Background

There remains a need for effective, well-tolerated ART which is acceptable to patients on a long-term basis.

The combination tablet bictegravir/emtricitabine/tenofovir-alafenamide was shown to be non-inferior to dual NRTI regimens in combination with an NNRTI, PI or INSTI in clinical trials (1, 2). Subsequently, biktarvy received European marketing authorisation in June 2018 and was approved for use in NHS Scotland in September 2018.

Biktarvy is recommended for treatment of HIV-1 infection in patients without past or current resistance to any of the constituent drugs and is now a recommended regimen in both European and US guidelines for naïve and switch patients alike.

Study Aim

Our aim was to evaluate real-world usage and tolerability of B/F/TAF in our HIV-cohort.

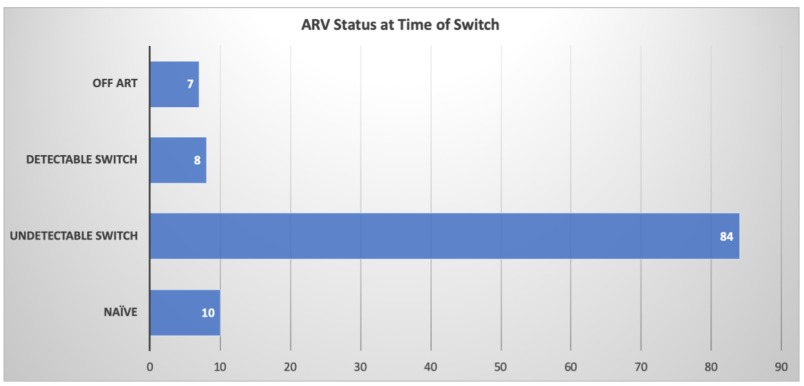
Materials & Method

Retrospective analysis was carried out using our clinical database to identify patients who started B/F/TAF between September 2018 and September 2019.

Patients' clinical records were used to determine demographics, indication for regimen, baseline laboratory parameters, resistance profile, whether regimen was stopped, reasons for stopping and subsequent regimen chosen.

Results

We identified 109 patients who commenced B/F/TAF within the allotted time-frame.



The most common indications for choosing B/F/TAF were high cardiovascular risk (28%), preference for single tablet (28%), drug-drug interactions (24%) and renal risk (22%).

33% of patients had some degree of prior antiretroviral resistance noted (22% NNRTI, 14.7% NRTI, 4.6% PI, 0% INSTI). No patients had developed further resistance to any constituent of B/F/TAF at time of follow-up.

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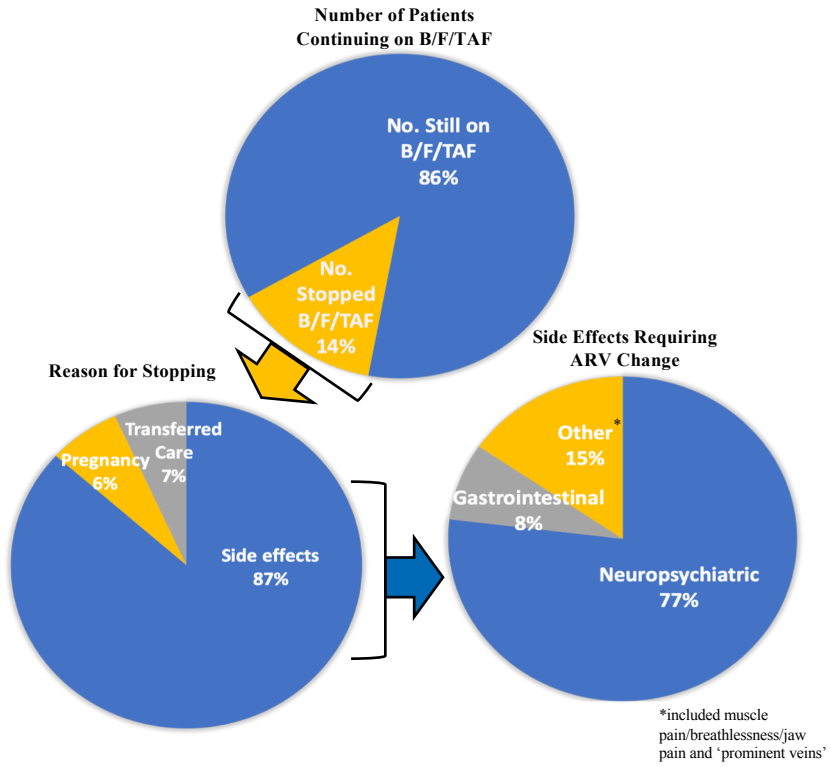
Results (cont'd)

Of those started on B/F/TAF, 15/109 patients (13.8%) stopped the regimen.



Amongst these patients the median time to discontinuation after starting B/F/TAF was 70 days.

Of those who stopped B/F/TAF, 9 maintained their F/TAF backbone while 5 switched and 1 patient stopped ARVs altogether.

Conclusion

Renal and cardiovascular risks along with drug interactions and patient preference for a single tablet were the most common reasons for choosing biktarvy.

12% of those who started biktarvy were subsequently stopped due to adverse effects, of which neuro-psychiatric side-effects were by far most common.

These results show real-world cohorts may have greater discontinuation rates due to side-effects compared to the trial cohorts.

Biktarvy may have comparable incidence of neuro-psychiatric side-effects to dolutegravir-based regimen (3).

Further analysis of larger cohorts is required to determine if those at risk of treatment limiting side-effects can be predicted.

References

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