Guidance for cost-sensitive HIV therapy prescribing in NHS Scotland 2021 update

Scottish Health Protection Network HIV Clinical Leads

Version 8.3, approved 14/9/21

1. Aim

To support optimal HIV therapy prescribing and dispensing by Scottish HIV teams and NHS Boards in a cost-sensitive healthcare setting while ensuring optimal clinical outcomes for adults living with HIV.

2. Development process

The Scottish Health Protection Network (SHPN) HIV clinical leads recognise the need to minimise the budget impact of prescribing and dispensing of HIV treatment, whilst simultaneously maintaining excellent clinical outcomes.

The British HIV Association (BHIVA) produces evidence-based guidelines on antiretroviral therapy (ART) for the treatment of adult HIV infection [1]. This document is aimed at experienced HIV prescribers who are familiar with the content of the BHIVA guidelines and the wider issues relating to HIV prescribing. The BHIVA guidelines note that

> 'there are limited cost-effectiveness data in the UK comparing different antiretroviral drugs and for this reason we did not include cost-effectiveness as an outcome in ART comparisons'.

Therefore, whilst based on the considerations of drug regimen efficacy, tolerability and safety, this guidance also takes into account the current cost of various ART drugs to NHS Scotland. These may differ from other parts of the UK. It is also recognised that the budget impact of HIV care can be reduced in a number of ways, of which drug costs are a single factor. This guidance shares wider best practice on cost-sensitive prescribing from NHS Boards, in order to deliver consistency of approach and minimise duplication of effort.

The original version of this guidance was developed by HIV clinical leads, with input from HIV pharmacists, procurement colleagues from National Services Scotland (NSS), and representatives from the HIV third sector and was implemented in June 2017. It was updated in 2018. Following discussion and agreed revisions by a writing group including a patient representative, this version was approved by the HIV clinical leads at their meeting on 14 September 2021. Patient and third sector input will be maintained in future drafts.

3. Choice of HIV regimen for naive patients

The following recommendations for choice of ART in naive patients have been proposed by the HIV clinical leads taking account of changes in cost of available ART medicines since 2018, newly licensed antiretrovirals and evidence for two-drug regimens. It is recognised that regimen prices will continue to change, but also that there are resource costs including staff/patient time associated with switching HIV treatment. It is also recognised that new drugs and combinations, including injectables, will become available and more data on existing ART will become known (such as side effects and use in pregnancy).

The aim is to provide guidance rather than comprehensive instruction. This document will continue to be reviewed at the discretion of the HIV clinical leads.

As highlighted in HIV National Involvement Standards [2] and the BHIVA treatment guideline itself, it is expected that individual decisions on choice of HIV regimen will include discussion and consideration of the circumstances and wishes of the person living with HIV prior to starting ART. A discussion should take place with patients initiating therapy that they may be asked in the future to consider a change to their medicines to allow a lower cost regimen to be prescribed.

Triple therapy

Backbone

- Abacavir/lamivudine

or

- Tenofovir disoproxil/emtricitabine.

There is **no** significant cost difference between options.

Choose a generic backbone based on exclusions to abacavir[1] and/or established/significant predisposing risk factors for bone or renal problems.[2]

In BHIVA guidelines (5.3.1) abacavir/lamivudine is noted as an acceptable 'alternative' backbone in treatment-naive individuals. If neither backbone is suitable consider dual therapy with lamivudine/dolutegravir

Choose a 3rd agent

Preferred (alphabetical order)

- dolutegravir
- doravirine[4]
- raltegravir[5]

There are significant cost differences between options.

Alternatives (alphabetical order)

- boosted darunavir
- efavirenz
- rilpivirine (if VL<100,000 c/ml)

There are significant cost differences between options.

Dual therapy

Lamivudine/dolutegravir

Exclusion criteria:

- VL > 500,000
- CD4 < 200
- Hepatitis B co-infection or hepatitis B status unknown
- Known or suspected resistance to dolutegravir or lamivudine or no available resistance test prior to initiation
- AIDS-defining illness (except Kaposi's Sarcoma)

Single tablet regimens (STRs)

Notes

Where a single tablet regimen has a lower pharmaceutical cost this can be prescribed but the patient should be informed that they may be asked to switch to a regimen containing the same (or similar) medicines but separate tablets should costs change.

One pill once a day is not thought to have significant benefits versus two pills once a day in the majority of patients for virological control or adherence. (BHIVA 2016 6.1.5).

Specific individual requirement for STR may include factors that could lead to a high risk of selective adherence that cannot be mitigated using adherence interventions or devices.

Requirement for STR – consider options below which are listed in alphabetical order but note there are significant cost differences between options:

- Biktarvy®
- Delstrigo®
- Dovato® (dual therapy)
- Symtuza®
- Triumeq®

Prescribing notes

1 Exclusion criteria for abacavir/lamivudine backbone.

- VL >100,000 (except with dolutegravir)
- Resistance or RT not available prior to treatment
- HLA B5701 +ve or unable to get test done prior to treatment start
- Cardiovascular risk >20%
- Hepatitis B co-infection

2 Bone and renal disease risk factors
Renal disease (BHIVA 2016 8.5.2.11) specifically:

- Recommend against the use of ARVs that are potentially nephrotoxic in individuals with stages 3–5 CKD

Bone disease (BHIVA recommendation 8.10.3.1) specifically:

- Aged >40 with osteoporosis
- History of fragility fracture
- FRAX score >20%

3 Contraindications to abacavir and tenofovir isoproxil and dual therapy (Dovato®)
Where there are contraindications to abacavir and tenofovir disoproxil and to dual therapy with lamivudine/dolutegravir discuss case at MDT to consider a regimen containing tenofovir alafenamide or NRTI sparing regimen (Adapted recommendation 5.5.2 BHIVA 2016)

4 Published evidence for the use of doravirine in combination with tenofovir disoproxil/lamivudine (Delstrigo®). There is very limited evidence for the use of doravirine with abacavir/lamivudine.

5 Lack of evidence for raltegravir with abacavir/lamivudine

Additional notes

- Other ART regimens can be used, but there should be local discussion within a clinical group or multi-disciplinary team. It is recognised that patient factors as well as clinical considerations (such as genotypic resistance, high baseline viral load, cardiovascular/renal risk, HLA B*5701 positivity, pregnancy or the need to start therapy swiftly) may influence therapy decisions.
- Doravirine: In March 2021, during the update of this document, the Scottish Medicines Consortium has accepted doravirine (and the combination preparation: Delstrigo®) for restricted use in NHS Scotland. There is minimal clinical experience of this medicine currently within NHS Scotland Boards but has been included here based on review of NHS England Commissioning Document November 2019 [5] and other international guidelines.

The remainder of this guidance highlights other cost containment interventions that have been successfully used in NHS Scotland to minimise the budget impact of HIV treatment.

4. Clinician awareness of drug costs

Increased awareness of the actual cost of HIV treatments and how local prescribing impacts on cost will support clinicians and teams reflect on treatment decisions. Contract prices for individual agents are commercially sensitive, and are also subject to change owing to tendering and negotiation. Therefore, this information needs to be shared respecting commercial confidence and updated regularly.

The following information should be available to prescribers:

1. ART regimens initiated for treatment naïve patients on a regular basis.
2. Cost of individual combinations being used to treat patients.
3. Reflection on the impact of treatment decisions on patients including: adherence, engagement in care, virological control and side effects.
4. Regular reporting from NSS procurement to the HIV clinical leads and HIV pharmacists on changes in ART pricing detailed by methods of dispensing.

5. Wastage minimisation

Surplus medication supply may accumulate for numerous reasons, such as changes in appointment dates or therapy switches. Adherence support and patient feedback on dispensed medication is an integral part of clinical care. Peer support and the third sector can help patients optimise dealing with medication supplies in long-term conditions such as HIV. Clinical teams and pharmacy staff can have an impact on reducing drug wastage by ensuring that only the required amount of medication is dispensed and that the timing of

elective therapy switches are carefully planned. In some NHS Boards, electronic prescriptions and utilising homecare company deliveries have assisted this function.

6. Generic substitution

Use of generic rather than branded medication is already in place for HIV medicines where patents have expired. Bioequivalence means that this has minimal impact on clinical outcomes, but provides scope for savings. It is important that patients understand the rationale, particularly when switching from a branded to a generic agent and also when an antiretroviral choice is made in anticipation of the availability of a generic version.

Information leaflets written by the HIV Pharmacists Association (HIVPA) for patients who are switching to generics are available [3] as well as questions and answers on generic medicines from the European Medicines Agency [4].

7. Switching ART regimens and use of single tablet regimens

Some single tablet regimens (STRs) are significantly more expensive than either alternative single tablet regimens or disaggregation from an STR to a two or three pill combination. Disaggregation can release savings from STRs using alternative generic and branded versions of their constituent parts or using suitable alternatives, including consideration of dual therapy. Given the regular change to pricing, and the likely availability of further generic drugs in the future, prescribers should have an awareness that some treatment options may offer now and in the future significant cost reductions and that patients are often willing to consider alternatives based on cost alone. Additional monitoring, healthcare team and patient time may be required in the short term to ensure supported changes are made safely and effectively.

The HIV clinical leads support the review of patients on single tablet regimens and other co-formulated medication to maximise the opportunity to recognise cost savings. However,

patient views and outcomes are integral to such discussions and consideration should be given to having these discussions at a face-to-face rather than a virtual appointment.

8. Homecare company dispensing/delivery and community pharmacy dispensing

These methods of dispensing of medicines can offer several advantages:

- increasing patient convenience where virtual clinic appointments are used
- more patient-centred approach, where attendance at clinic to collect medicines is problematic, to ensure continuity of medicine supply. In turn this increases the likelihood of patients' maintaining adherence, optimal viral suppression and preventing onward transmission.
- releases capacity within the hospital pharmacy service to allow for clinical and patient-facing activities such as pharmacist medication reviews and independent prescribing.

However, it should be noted that costs may vary significantly depending upon the ART being dispensed and hospital based, homecare company or community pharmacy supply. These costs should be reviewed before making decisions on the preferred dispensing route. In addition, for homecare dispensing, upfront staff resource is required to provide technical and administrative support. NHS Boards should review the advantages and work with pharmacy colleagues, in all sectors, and NSS procurement colleagues to maximise benefit for people living with HIV.

9. Review of high-cost drug regimens

Clinicians and patients should consider reviewing historical high-cost regimens including first-line STRs and complex salvage HIV regimens in light of alternative available medicines and new data (in particular switch data for newly available STRs), to assess if simplified

combinations can be used, whilst maintaining optimal viral suppression, adherence and clinical outcomes. Some NHS Boards have supported this by highlighting complex regimens to clinicians responsible for ongoing clinical care or identifying patients on high-cost combinations due to changes in ART pricing. Again, it is essential that patient views are required for any discussions regarding potential switching of ART medicines.

10. Engagement with NSS procurement

The HIV clinical leads have engaged actively with NSS to support tendering and procurement of HIV medications. This has provided expert clinical input to decision-making in relation to generic and branded agents, which in turn continues to assist negotiations to minimise budget impact.

11. References

1. British HIV Association. BHIVA HIV treatment guidelines and 2019 interim statement on 2 drug regimens (Accessed 2 March 2021). **www.bhiva.org/HIV-1-treatment-guidelines**

2. HIV Scotland. National Involvement Standards (Accessed 2 March 2021). **www.hiv.scot/News/national-involvement-standards-involving-people-living-with-hiv**

3. HIV Pharmacy Association. Patient information leaflets (Accessed 2 March 2021). **https://hivpa.org/patient-information-leaflets-pils/**

4. European Medicines Agency. Questions and answers on generic medicines. (Accessed 2 March 2021). **www.ema.europa.eu/en/documents/medicine-qa/questions-answers-generic-medicines_en.pdf**

5. NHS England Doravirine commissioning document 2019 (Accessed 2 March 2021) **www.england.nhs.uk/wp-content/uploads/2019/11/1822-Policy-for-publication.pdf**