Antiretrovirals for the treatment of HIV in Acute Care

Key messages

- Many antiretrovirals (ARVs) have a high potential for drug interactions. ALWAYS check specialist interaction sources for any new medicines prescribed (see below under 'Interactions')
- Patients admitted to hospital on ARVs should **not** have doses omitted without good reason. If clinical condition warrants review of medicines and on assessment current ARVs are not appropriate, contact an HIV specialist for advice straight away. Otherwise, ensure medicines are available and appropriately prescribed and administered.
- Prescribe and administer ARVs at the correct time each day, confirming with the patient what time they usually take doses at. Timing should be consistent to ensure drug levels remain in an effective range
- Specify whether ARVs should be taken with food or a meal as this may affect bioavailability
- If patients are on more than one ARV preparation, ensure all preparations are prescribed and administered. Do not administer part of a regimen as sub-optimal treatment may lead to resistance

Medicines reconciliation

- Confirm name of ARVs, dose, and frequency (including exact time(s) of day) with the patient and clinic letters. If there is any doubt, contact the HIV pharmacy service at Gartnavel General on 0141 211 3383 to confirm currently prescribed ARVs.
- Do not rely on information on ECS as the medicines are not prescribed by the GP and ARVs may not be listed on ECS or may not be up to date.
- ARVs will only appear in the patient's ECS as an 'out of practice drug' if the GP practice has added it.

Supply

- Use patient's own supply. If unavailable, place an urgent order with pharmacy who will obtain from the Pharmacy Distribution Centre (PDC). If past the PDC cut off time or not in stock, pharmacy should contact the HIV pharmacy service at Gartnavel General on 0141 211 3383
- If supply is required out of hours, obtain from Ward 5C at QEUH via clinical co-ordinator.

Prescribing and administration

- Prescribe and administer complete ARV regimen at times consistent with the patient's usual dosing schedule. If a dose has been missed that day refer to SPC for advice on missed doses then resume normal dosing schedule thereafter.
- All components of the prescribed regimen **must** be taken i.e. if taking two different ARV preparations but only one is available, it is **not** acceptable to give part of the regimen whilst awaiting supply of the other. Sub-optimal treatment like this could lead to viral resistance. Avoid missed doses and obtain supplies as above.
- Annotate the Kardex with whether the ARV preparation should be taken with food or a meal. The amount of food recommended may differ depending on the combination prescribed. Always check the SPC at https://www.medicines.org.uk/emc/ for each medication. Incorrect administration may result in sub-optimal plasma levels for suppression of HIV which can lead to treatment failure and resistance.

Interactions

- Many ARVs have a high potential for drug interactions.
- Specialist sources such as the University of Liverpool HIV Drug interactions website, available at https://www.hiv-druginteractions.org/ must be checked to identify potential interactions when any new medicines are prescribed.
- Choice and/or dose of co-prescribed medicines may have to be altered to ensure they are effective and safe.
- Drug interactions that result in reduced plasma levels of ARVs can have serious consequences including treatment failure and development of resistance. Resistance reduces future treatment options and can mean the patient has to be on a more complex and often more expensive regimen.
- Drug interactions that result in increased plasma levels of ARVs can lead to toxicity.
- If the patient has been on a combination that appears to interact for a long time then this *may* have been accounted for when initiating/titrating the dose. Consider the severity of the interaction, e.g. use with caution or contraindicated? Use clinical judgement and available information to determine if any action is required. If in any doubt contact the specialist HIV pharmacy team.
- Interactions can be complex and can occur with some drugs that you may not usually
 associate with having a high potential for drug interactions, e.g. PPIs, multivitamins, iron and
 calcium supplements, intra-articular, inhaled and topical steroids as well as with nonprescribed substances including recreational drugs, herbal medicines, and dietary
 supplements.
- If the information is not available on the University of Liverpool website or advice is needed on how to manage the interaction, contact the specialist HIV pharmacy team.
- Some ARVs may also interact with enteral feeds. Please contact the specialist HIV pharmacy team at Gartnavel General on 0141 211 3383 for advice on timings of feeds in relation to ARVs.

More information on the treatment of HIV infection is in the British HIV Association treatment guideline available at <u>https://www.bhiva.org/HIV-1-treatment-guidelines</u> and in the <u>BNF</u>.