Information to support primary care in managing patients affected by the shortages of bumetanide 1mg and 5mg tablets

Background:

There is a national shortage of bumetanide tablets, which is prescribed to patients with heart failure (HF) requiring diuresis and also for some patients with renal dysfunction and liver cirrhosis:

- Bumetanide 5mg tablets are out of stock until early March 2024
- Bumetanide 1mg tablets are out of stock until early January 2024
- Bumetanide 1mg/5ml SF oral solution remains available but is unable to support increased demand *(and is therefore reserved for paediatric patients and patients with swallowing difficulties confirmed/diagnosed by SAL team or equivalent)*

Recommended actions for healthcare professionals:

New patients should not be initiated on bumetanide tablets until these stock issues have resolved.

For patients currently prescribed bumetanide (who do not have sufficient supplies until the re-supply date):

1. Review the patient to ensure that this is still the most suitable therapy e.g. for HF indication can bumetanide be stopped if the patient is euvolaemic and stable?
    - For HF indication, please refer to page 5 of SEL HF guideline concerning diuretic therapy or NICE CKS chronic heart failure guide- managing diuretics
    - For renal indication, seek advice and guidance from a renal specialist
    - For liver indication, seek advice and guidance from a liver specialist
2. For patients requiring continued diuretic therapy who have insufficient supplies of bumetanide, **change to furosemide where possible** ensuring the patient is not intolerant to furosemide or any of the tablet excipients (SPC) and is counselled on the appropriate dose to take:
    - **Bumetanide 1mg is equivalent to 40mg oral furosemide tablets**
    - Furosemide is available as 20mg, 40mg and 500mg oral tablets. The 500mg tablets may be halved to provide a 250mg dose (*community pharmacies may need to order in this product*).
    - Dependent on the diuretic requirements of the patient, conversion to furosemide may require dose escalation (for HF this will be according to the patient's signs and symptoms of HF and weight changes- *see further information below* or refer to pages 5 & 6 of SEL HF guideline)
    - Any change in medication must be clearly explained to the patient and monitoring advice provided. Discuss also actions to be taken if any adverse effects are experienced following the change to furosemide or if signs of fluid overload occur (**see further investigation box, page 2*)
    - Patients should be encouraged to report any dizziness or light-headedness as this may be indicative of over treatment, and also to report sudden or sustained weight increase or decrease (1.5kg to 2kg (3 to 4lbs) within 2 to 3 days) or signs and symptoms requiring further investigation* to their GP, local specialist or community HF team
    - Remaining supplies of bumetanide are currently reserved for patients unable to be converted to furosemide e.g. intolerance/allergy
    - Unlicensed supplies of bumetanide may be sourced for patients unsuitable for a change; but lead times for this are variable. Please note that community pharmacies may not be able to obtain unlicensed products readily.
    - **A switch should be made before patients run out of tablets to avoid a break in therapy that could increase the risk of decompensation and unintentional fluid retention**

- If the above options are not considered appropriate or symptoms are not controlled on furosemide, then advice should be sought from HF, renal, liver or other specialists on appropriate management options
- Primary care clinicians may also wish to seek advice from the patient's specialist HF team prior to making changes if:
    i. The patient is prescribed high doses of bumetanide (>4mg per day), or
    ii. If there are concerns that changing therapy may precipitate decompensation or heart failure exacerbation, or
    iii. The patient has a potential sensitivity to changing medication (e.g. chronic kidney disease CKD stage 4 or above, symptomatic hypotension (systolic blood pressure <100mmHg) or previous recurrent hypokalaemia K+ <3.5mmol/L), and
    iv. The referral/advice is actioned in sufficient time to avoid the patient running out of medication

Further investigation is required if:

***At any time, patients should be advised to contact their GP, local specialist or HF specialist team if they experience any of the following:**

§ Weight increase or decrease of 1.5kg to 2kg (3 to 4 lbs) within 2 to 3 days
§ Worsening breathlessness
§ Worsening peripheral oedema (e.g. swollen ankles)

How to contact a specialist for advice:

Community heart failure team contact details per SEL borough:

Borough	Heart Failure Community Team contact details
Bexley	Email: oxl-tr.cardiac@nhs.net; Tel: 020 7188 8952 or 0208 3197060
Bromley	Email: kch-tr.PRUHheartfailurenurses@nhs.net Tel: 01689866097 and Bleep number is 739 Email: kch-tr.br-bromleyintegratedheartfailurenurses@nhs.net Tel: 0797 1484 508
Greenwich	Email: oxl-tr.cardiac@nhs.net Tel: 0208 3197060
Lambeth & Southwark	Email: Gst-tr.KHPcommunityHF@nhs.net Tel: 020 3049 4652
Lewisham	Email: LH.commuhfreferrals@nhs.net Tel: 0203 049 3473

SEL renal team referrals/emails: GSTT: gst-tr.renalreferralsguys@nhs.net; KCH: kch-tr.renal@nhs.net

SEL liver and hepatology referrals/emails: GSTT: gst-tr.gastroenterologyofficestaff@nhs.net; KCH: kch-tr.kchacld@nhs.net; LGT: eRS referral to gastroenterology

Clinical information:

Bumetanide is a loop diuretic licensed for the treatment of oedema associated with e.g., congestive heart failure, renal dysfunction including nephrotic syndrome and cirrhosis of the liver in adults. In oedema of renal or cardiac origin where high doses of a potent short-acting diuretic are required, a 5mg dose of bumetanide may be used in adults.

Furosemide is a loop diuretic licensed for use in all indications where a prompt and effective diuresis is required. It is similar in activity to bumetanide; both act within 1 hour of oral administration and diuresis is complete within 6 hours. The diuresis associated with these drugs is dose related.

Loop diuretics produce the same response if given at equipotent doses. When kidney function is normal, a 40mg dose of furosemide is approximately equal to 1mg of bumetanide. Selecting an equivalent dose is determined on a case-by-case basis as effects will differ based on clinical status and stability of patient, fluid status, and renal function. Patients switched from a stable dose of bumetanide to furosemide may require follow up to assess response, with dose titration if required, to ensure fluid balance remains stable. Diuretics | Treatment summaries | BNF | NICE

Patient information:

Diuretics - Drug cabinet - Heart Matters magazine - BHF
Pumping Marvellous | The UK's Heart Failure Charity

Reference:

Department of health and social care: Medicine Supply Notification Bumetanide 1mg and 5 mg tablets (12/10/2023) link: medicines supply tool *(for up to date information concerning shortages)*

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