

PROFESSIONAL INFORMATION

SCHEDULING STATUS

S3

1. NAME OF THE MEDICINE

BURINEX 1 mg, tablets

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Each tablet contains bumetanide 1 mg.

Contains sugar: lactose monohydrate 52,3 mg per tablet.

For full list of excipients, see section 6.1.

3. PHARMACEUTICAL FORM

Tablets.

White, flat (8 mm), circular, uncoated, bevelled edge tablet, marked on one face with a score line and with the number “133” on the other.

The score line is only to facilitate breaking for ease of swallowing and not to divide into equal doses.

4. CLINICAL PARTICULARS

4.1 Therapeutic indications

BURINEX 1 mg is indicated for the treatment of oedema, e.g. that associated with congestive heart failure, renal disease, acute pulmonary oedema, hepatic ascites.

4.2 Posology and method of administration

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Posology

The following recommendations are based on clinical experience to date:

Most patients require a daily dose of 1 mg which can be given as a single morning dose.

Depending on the patient's response a second dose can be given six to eight hours later. In refractory cases, the dose can be increased until a satisfactory diuretic response is obtained.

The dose should be carefully titrated in each patient according to the patient's response and the required therapeutic activity. As a general rule, in patients not controlled on lower doses, dosage should be started at 5 mg daily and then increased by 5 mg increments every twelve to twenty-four hours until the required response is obtained or side effects appear.

Consideration should be given to twice daily dosage rather than once daily.

Paediatric population

Until further experience of paediatric use is accumulated, BURINEX 1 mg should not be given to children.

Method of administration

For oral administration.

4.3 Contraindications

- Hypersensitivity to the active substance, bumetanide or to any of the excipients listed in section 6.1.
- Anuria. Although BURINEX 1 mg can be used to induce diuresis in renal insufficiency, any marked increase in blood urea or the development of oliguria during treatment of severe progressive renal disease is an indication for stopping treatment with BURINEX 1 mg.

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- BURINEX 1 mg is contraindicated in hepatic coma and in acute cases of moderately severe or severe liver failure. This does not preclude its use in treatment of ascites due to hepatic cirrhosis, but such therapy is best initiated in hospital.
- BURINEX 1 mg is contraindicated in states of electrolyte depletion.

4.4 Special warnings and precautions for use

Excessively rapid mobilisation of oedema, particularly in elderly patients, may give rise to sudden changes in cardiovascular pressure relationships with circulatory collapse and should be borne in mind when BURINEX 1 mg is given in high doses orally.

Toxic epidermal necrolysis (TEN) and Stevens-Johnson syndrome (SJS)

Toxic epidermal necrolysis (TEN) and Stevens-Johnson syndrome (SJS), which can be life-threatening or fatal, have been reported in relation to non-antibiotic sulphonamide containing products, including BURINEX 1 mg. Patients should be advised of the signs and symptoms of SJS and TEN. If SJS and TEN is suspected, BURINEX 1 mg should be withdrawn immediately. If the patient has developed SJS or TEN, treatment with BURINEX 1 mg must not be restarted in this patient at any time.

Electrolyte imbalance

Electrolyte disturbance is likely to occur in those patients treated with high doses or for prolonged periods, particularly in those patients taking a low salt diet. Periodic checks of serum electrolyte levels, in particular sodium, potassium, chlorides and bicarbonates should be undertaken and where necessary replacement therapy instituted.

The precautions to be taken with BURINEX 1 mg are mainly those associated with electrolyte disturbance. Electrolyte depletion may show itself by weakness, dizziness, lethargy, leg cramps, anorexia, vomiting or mental confusion. Patients in whom a risk of depletion is likely, should undergo periodic serum electrolyte determinations (see section 4.8).

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BURINEX 1 mg increases the excretion of potassium. This may cause the gradual development of low serum potassium levels. Patients on long-term treatment should, therefore, be encouraged to take a high potassium diet. Potassium chloride supplements are indicated in those patients whose dietary potassium is possibly inadequate, the chloride tending to correct the hypochloreaemia and metabolic alkalosis, which is occasionally associated with potassium depletion. Potassium sparing diuretics, such as spironolactone, have been used as an alternative approach. Studies have shown that continued daily administration of BURINEX 1 mg for several months, supplemented with either potassium chloride or spironolactone produced an effective diuresis with minimal changes in serum electrolytes. Low serum potassium levels, it should be noted, increase the sensitivity of the myocardium to the toxic effects of digitalis.

It is also important to prevent hypokalaemia in patients with hepatic cirrhosis. Potassium supplements are also indicated in conditions associated with a particular tendency to potassium depletion, e.g., long-term treatment with corticosteroids, ulcerative colitis, prolonged vomiting or diarrhoea.

Hepatic Impairment

Encephalopathy may be precipitated in patients with pre-existing hepatic impairment.

Hypotension

Caution should be exercised when BURINEX 1 mg is used in patients with hypotension.

Hyperuricaemia

BURINEX 1 mg may cause an increase in blood uric acid.

Urinary tract obstruction

BURINEX 1 mg should be used with caution in patients with potential obstruction of the urinary

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tract.

Renal Impairment

Patients with chronic renal failure on high doses of BURINEX 1 mg should remain under constant hospital supervision.

Diabetic patients

Periodic checks on urine and blood glucose should be made in diabetics and patients suspected of latent diabetes.

Hypersensitivity

Patients allergic to sulphonamides may show hypersensitivity to BURINEX 1 mg.

Excipient warning

BURINEX 1 mg tablets contain lactose monohydrate as an excipient and patients with rare hereditary problems of galactose intolerance, total lactase deficiency or glucose-galactose malabsorption should not take BURINEX 1 mg.

4.5 Interaction with other medicines and other forms of interaction

Dose adjustment of hypoglycaemic medicines may be necessary in patients with diabetes mellitus.

Digitalis glycosides

Hypokalaemia increases the sensitivity to digitalis glycosides which might result in digitalis toxicity (nausea, vomiting, and dysrhythmias). Potassium level and signs for digitalis toxicity should be monitored. Therefore, the dose of bumetanide may need adjustment when given in conjunction with cardiac glycosides.

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Non-depolarising neuromuscular blocking medicines

Hypokalemia increases the sensitivity to non-depolarising neuromuscular blocking medicines.

Antihypertensive medicines and medicines inducing postural hypotension

BURINEX 1 mg may potentiate the effect of antihypertensive medicines. Therefore, patients taking these medicines should be monitored and dosage adjustment should occur where necessary.

NSAIDs

Certain non-steroidal anti-inflammatory drugs have been shown to antagonise the action of diuretics.

Lithium

BURINEX 1 mg reduces lithium clearance resulting in high serum levels of lithium. This may result in increased lithium toxicity, including increased risk of cardiotoxic and neurotoxic effects of lithium. Therefore, it is recommended that lithium levels are carefully monitored and where necessary the lithium dosage is adjusted in patients receiving this combination.

Anti-dysrhythmics

Concomitant use of BURINEX 1 mg and class III anti-dysrhythmic medicines may result in increased risk of electrolyte imbalance and subsequent cardiotoxicity (QT prolongation, torsades de pointes, cardiac arrest). Patients' electrolyte levels should be monitored as should symptoms of dysrhythmias.

Aminoglycosides

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The ototoxic effects of aminoglycosides may be increased by concomitant administration of potent diuretics such as BURINEX 1 mg.

Potassium depleting medicines

The potassium depleting effect of BURINEX 1 mg may be increased by other potassium depleting medicines (see section 4.4 and 4.8).

Probenecid

Probenecid inhibits the renal tubular secretion of BURINEX 1 mg leading to a diminished natriuresis.

Proton pump inhibitors

Administration of proton pump inhibitors has been associated with development of hypomagnesaemia. Hypomagnesaemia may be exacerbated with co-administration of BURINEX 1 mg and particular attention to magnesium levels should be given when this combination is used.

4.6 Fertility, pregnancy and lactation

Pregnancy

The use of BURINEX 1 mg in the first trimester of pregnancy should be avoided.

Breastfeeding

BURINEX 1 mg should not be used during breastfeeding.

Fertility

No human data available.

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4.7 Effects on ability to drive and use machines

BURINEX 1 mg has no or negligible direct influence on the ability to drive and use machines. However, the patient should be informed that dizziness may occur during treatment and this should be taken into account while driving or using machines.

4.8 Undesirable effects

a. Summary of the safety profile

The estimation of the frequency of undesirable effects is based on analysis of pooled data from clinical studies and spontaneous reporting.

Based on pooled data from clinical studies of more than 1,000 patients treated with bumetanide, approximately 12 % of patients may be expected to experience an undesirable effect.

The most commonly reported undesirable effects during treatment were headache and electrolyte disturbances (including hypokalaemia, hyponatraemia, hypochloraemia and hyperkalaemia) that occurred in approximately 4 % of patients and were followed by dizziness (including orthostatic hypotension and vertigo) and fatigue that occurred in approximately 3% of patients.

Electrolyte disturbances can occur especially during long term treatment.

Renal failure has been reported in post-marketing safety surveillance.

Severe cutaneous adverse reactions (SCARs), including Stevens-Johnson syndrome (SJS), toxic epidermal necrolysis (TEN), have been reported in association with bumetanide (see section 4.4).

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b. Tabulated summary of adverse reactions

Undesirable effects are listed by MedDRA system organ class.

Blood and lymphatic system disorders	
<i>Uncommon</i>	Bone marrow failure and pancytopenia, thrombocytopenia, leukopenia including neutropenia, anaemia.
Endocrine disorders	
<i>Frequency not known</i>	Hyperglycaemia
Metabolism and nutrition disorders	
<i>Common</i>	Electrolyte imbalance (including hypokalaemia, hyponatraemia, hypochloraemia and hyperkalaemia).
<i>Uncommon</i>	Dehydration, glucose metabolism disorder, hyperuricaemia and gout.
Nervous system disorders	
<i>Common</i>	Dizziness (including orthostatic hypotension and vertigo), fatigue (including lethargy, somnolence, asthenia and malaise), headache.
<i>Uncommon</i>	Syncope.
Ear and labyrinth disorders	
<i>Uncommon</i>	Hearing disturbances (reversible).
Cardiac disorders	
<i>Uncommon</i>	Chest pain and discomfort.
Vascular disorders	
<i>Uncommon</i>	Hypotension.
Respiratory, thoracic and mediastinal disorders	
<i>Uncommon</i>	Dyspnoea, cough.
Gastrointestinal disorders	

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<i>Common</i>	Abdominal pain and discomfort, nausea.
<i>Uncommon</i>	Vomiting, diarrhoea, constipation, dry mouth and thirst.
<i>Frequency not known</i>	Pancreatitis (with high doses).
Hepatobiliary disorders	
<i>Frequency not known</i>	Encephalopathy in patients with pre-existing hepatic disease, abnormalities of serum levels of hepatic enzymes
Skin and subcutaneous tissue disorders	
<i>Uncommon</i>	Rash (various types of rash reactions such as erythematous, maculo-papular and pustular have been reported). Dermatitis, eczema, urticaria, pruritus, photosensitivity.
<i>Frequency not known</i>	Stevens-Johnson syndrome (SJS), Toxic epidermal necrolysis (TEN).
Musculoskeletal and connective tissue disorders	
<i>Common</i>	Muscle spasms, pain and myalgia.
<i>Frequency not known</i>	Arthralgia
Renal and urinary disorders	
<i>Common</i>	Micturition disorder.
<i>Uncommon</i>	Renal impairment (including renal failure).
Reproductive system and breast disorders	
<i>Frequency not known</i>	Gynaecomastia and painful breasts.
General disorders and administration site conditions	
<i>Uncommon</i>	Peripheral oedema.
Investigations	

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<i>Frequency not known</i>	Raised blood urea and serum creatinine.
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For high dose therapy, treatment should be initiated at a low dose and gradually increased in 5 mg increments until the desired response is obtained.

Reporting of suspected adverse reactions

Reporting suspected adverse reactions after authorisation of the medicine is important. It allows continued monitoring of the benefit/risk balance of the medicine. Health_care providers are requested to report any suspected adverse reactions to SAHPRA via the Med Safety APP (Medsafety X SAHPRA) and eReporting platform (who-umc.org) found on SAHPRA website.

For reporting of side effects directly to the HCR, contact +27 11 635 0134 or email Adcock.aereports@adcock.com.

4.9 Overdose

Symptoms are those caused by excessive diuresis.

Generally, measures should be taken to restore blood volume, maintain blood pressure and correct electrolyte disturbance. No other specific treatment appears to be necessary.

5. PHARMACOLOGICAL PROPERTIES

5.1 Pharmacodynamic properties

A 18.1 Diuretics

Pharmacotherapeutic group: Sulphonamides, plain.

ATC code: C03CA 02

BURINEX 1 mg (bumetanide) is a potent high ceiling diuretic, with a rapid onset and a short

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duration of action.

After oral administration, diuresis begins within thirty minutes with a peak effect between one and two hours. The diuretic effect is virtually complete in four to six hours.

The diuretic effect produced by BURINEX 1 mg is dose related so that patients who fail to respond to a low dose may respond as the dose is increased. BURINEX 1 mg has been shown to exert its major effect in the ascending limb of the loop of Henle, but it may also have an additional action in the proximal tubule. BURINEX 1 mg is a derivative of metanilamide and is chemically distinct from other available diuretics.

Investigations in healthy volunteers as well as in patients have revealed that BURINEX 1 mg is excreted in the urine.

5.2 Pharmacokinetic properties

Bumetanide is well absorbed after oral administration with bioavailability reaching between 80 and 95 %. The elimination half-life ranges from between 0,75 to 2,6 hours. No active metabolites are known. Renal excretion accounts for approximately half the clearance with hepatic excretion responsible for the other half. There is an increase in half-life and a reduced plasma clearance in the presence of renal or hepatic disease. In patients with chronic renal failure, the liver takes more importance as an excretory pathway although the duration of action is not markedly prolonged.

In neonates and infants, elimination appears slower than in older paediatric patients and adults, possibly because of immature renal and hepatobiliary functions. Mean serum elimination half-life decreases during the first month of life from 6 hours in neonates to 2,4 hours in infants 1 month of age.

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Mean serum elimination half-life is 2,5 and 1,5 hours in infants younger than 2 months of age and in those 2–6 months of age, respectively. Data for younger children, including neonates and infants, is not sufficient to allow for dosing recommendations, see section 4.2.

6. PHARMACEUTICAL PARTICULARS

6.1 List of excipients

Agar powder

Maize starch

Lactose monohydrate

Magnesium stearate

Polyethyleneglycol sorbitan oleate

Polyvinylpyrrolidone

Silicon dioxide

Talc

6.2 Incompatibilities

Not applicable

6.3 Shelf life

36 months

6.4 Special precautions for storage

Store at or below 30 °C.

Protect from light.

Keep blisters in the carton until required for use.

6.5 Nature and contents of container

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BURINEX 1 mg tablets are packed in PVC/Aluminium blisters. Cartons containing three (3) or ten (10) blister packs of 10 tablets each.

Not all pack types and pack sizes may be marketed.

6.6 Special precautions for disposal and other handling

No special requirements.

7. HOLDER OF CERTIFICATE OF REGISTRATION

Adcock Ingram Limited

1 New Road,

Erand Gardens

Midrand, 1685

Customer Care: 0860 ADCOCK / 232625

8. REGISTRATION NUMBER

G/18.1/94

9. DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION

06 December 1974

10. DATE OF REVISION OF THE TEXT

20 August 2025

Botswana: S2 B9300365
Namibia: NS2 04/18.1/0140

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