1.3 Product Information

1.3.1 Summary of Product Characteristics (SmPC)

Enclosed.

Summary Product Characteristics

1. Name of the proprietary product: SASTESCINE

Name of the nonproprietary International Product: Hyoscine Butylbromide Injection BP 10 mg/ml

Route of Administration: Intramuscularly / Intravenously

2. Qualitative and Quantitative composition:

No.	Ingredient	Specification	Quantity/ ml (mg)	% Overages	Reason for Inclusion
1.	Hyoscine butylbromide	BP	10.00	-	Active
2.	Sodium Acetate	BP	1.60	-	Buffering agent
3.	Glacial Acetic acid	BP	0.502	-	Preservative
4.	Water For injection	BP	q.s. to 1 ml	-	Vehicle

Where, BP: British Pharmacopoeia, q.s.: quantity sufficient.

*The quantity of Hyoscine butylbromide BP is based on 100% assay and potency.

3. Pharmaceutical Form: Solution for injection

4. Clinical Particulars:

4.1 Therapeutic indications:
Hyoscine Butylbromide Injection BP are indicated in acute spasm, as in renal or biliary colic, in radiology for differential diagnosis of obstruction and to reduce spasm and pain in pyelography, and in other diagnostic procedures where spasm may be a problem, e.g. gastro-duodenal endoscopy.

4.2 Posology and method of administration:
Adults:
One ampoule (10 mg) intramuscularly or intravenously, repeated after half an hour if necessary. Intravenous injection should be performed 'slowly' (in rare cases a marked drop in blood pressure and even shock may be produced by Hyoscine Butylbromide Injection BP). When used in endoscopy this dose may need to be repeated more frequently.
Maximum daily dose of 100 mg

Special populations
Elderly: No specific information on the use of this product in the elderly is available. Clinical trials have included patients over 65 years and no adverse reactions specific to this age group have been reported.

Paediatric population
Not recommended for children.

Hyoscine Butylbromide Injection BP should not be taken on a continuous daily basis or for extended periods without investigating the cause of abdominal pain.

Diluent:
Hyoscine Butylbromide Injection BP solution may be diluted with dextrose or with sodium chloride 0.9% injection solutions.

4.3 Contraindications:
It should not be administered to patients with myasthenia gravis, megacolon, narrow angle glaucoma, tachycardia, prostatic enlargement with urinary retention, mechanical stenoses in the region of the gastrointestinal tract or paralytic ileus.
Hyoscine Butylbromide Injection BP should not be used in patients who have demonstrated prior hypersensitivity to hyoscine butylbromide or any other component of the product.
Hyoscine Butylbromide Injection BP should not be given by intramuscular injection to patients being treated with anticoagulant drugs since intramuscular haematoma may occur.

4.4 Special warnings and precautions for use:
In case severe, unexplained abdominal pain persists or worsens, or occurs together with symptoms like fever, nausea, vomiting, changes in bowel movements, abdominal tenderness, decreased blood pressure, fainting, or blood in stool, appropriate diagnostic measures are needed to investigate the etiology of the symptoms.
Hyoscine Butylbromide Injection BP should be used with caution in conditions characterised by tachycardia such as thyrotoxicosis, cardiac insufficiency or failure and in cardiac surgery where it may further accelerate the heart rate.
Because of the possibility that anticholinergics may reduce sweating, Hyoscine Butylbromide Injection BP should be administered with caution to patients with pyrexia.
Elevation of intraocular pressure may be produced by the administration of anticholinergic agents such as Hyoscine Butylbromide Injection BP in patients with undiagnosed and therefore untreated narrow angle glaucoma. Therefore, patients should seek urgent ophthalmological advice in case they should develop a painful, red eye with loss of vision after the injection of Hyoscine Butylbromide Injection BP.
After parenteral administration of Hyoscine Butylbromide Injection BP, cases of anaphylaxis including episodes of shock have been observed. As with all drugs causing such reactions, patients receiving Hyoscine Butylbromide Injection BP by injection should be kept under observation.

4.5 Interaction with other medicinal products and other forms of interaction:
The anticholinergic effect of drugs such as tri- and tetracyclic antidepressants, antihistamines, quinidine, amantadine, antipsychotics (e.g. phenothiazines, butyrophenones), disopyramide and other anticholinergics (e.g. tiotropium, ipratropium, atropine-like compounds) may be intensified by Hyoscine Butylbromide Injection BP.
The tachycardic effects of beta-adrenergic agents may be enhanced by Hyoscine Butylbromide Injection BP.
Concomitant treatment with dopamine antagonists such as metoclopramide may result in diminution of the effects of both drugs on the gastrointestinal tract.

4.6 Fertility, pregnancy and lactation:
Pregnancy

There are limited data from the use of hyoscine butylbromide in pregnant women. Animal studies are insufficient with respect to reproductive toxicity. As a precautionary measure Hyoscine Butylbromide Injection BP is not recommended during pregnancy.

Lactation
There is insufficient information on the excretion of hyoscine butylbromide and its metabolites in human milk. A risk to the breastfeeding child cannot be excluded. Use of Hyoscine Butylbromide Injection BP during breastfeeding is not recommended.

Fertility
No studies on the effects on human fertility have been conducted.

4.7 Effects on ability to drive and use machines:
No studies on the effects on the ability to drive and use machines have been performed. However, patients should be advised that they may experience undesirable effects such as accommodation disorder or dizziness during treatment with Hyoscine Butylbromide Injection BP. Therefore, caution should be recommended when driving a car or operating machinery. If patients experience accommodation disorder or dizziness, they should avoid potentially hazardous tasks such as driving or operating machinery.

4.8 Undesirable effects:
Many of the listed undesirable effects can be assigned to the anticholinergic properties of Hyoscine Butylbromide Injection BP.

Adverse events have been ranked under headings of frequency using the following convention:

Very common	≥ 1/10
Common	≥ 1/100, < 1/10
Uncommon	≥ 1/1,000, <1/100
Rare	≥ 1/10,000, <1/1,000
Very rare	<1/10,000
Not known	cannot be estimated from the available data

Immune system disorders
Not known*: anaphylactic shock including cases with fatal outcome, anaphylactic reactions, dyspnoea, skin reactions (e.g. urticaria, rash, erythema, pruritus) and other hypersensitivity.

Eye disorders
Common: accommodation disorders
Not known*: mydriasis, increased intraocular pressure

Cardiac disorders
Common: tachycardia

Vascular disorders
Common: dizziness
Not known*: blood pressure decreased, flushing

Gastrointestinal disorders
Common: dry mouth
Constipation

Skin and subcutaneous tissue disorders
Not known*: dyshidrosis

Renal and urinary disorders
Not known*: urinary retention
Injection site pain, particularly after intramuscular use, occurs.

Hyoscine butylbromide, the active ingredient of Hyoscine Butylbromide Injection BP , due to its chemical structure as a quaternary ammonium derivate, is not expected to enter the central nervous system. Hyoscine butylbromide does not readily pass the blood-brain barrier. However, it cannot totally be ruled out that under certain circumstances psychiatric disorders (e.g. confusion) may also occur after administration of Hyoscine Butylbromide Injection BP .
*This adverse reaction has been observed in post-marketing experience. With 95% certainty, the frequency category is not greater than common, but might be lower. A precise frequency estimation is not possible as the adverse drug reaction did not occur in a clinical trial database of 185 patients.

In case severe, unexplained abdominal pain persists or worsens, or occurs together with symptoms like fever, nausea, vomiting, changes in bowel movements, abdominal tenderness, decreased blood pressure, fainting, or blood in stool, appropriate diagnostic measures are needed to investigate the etiology of the symptoms.
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4.9 Overdose:
Symptoms
Serious signs of poisoning following acute overdosage have not been observed in man. In the case of overdosage, anticholinergic symptoms such as urinary retention, dry mouth, reddening of the skin, tachycardia, inhibition of gastrointestinal motility and transient visual disturbances may occur, and Cheynes-Stokes respiration has been reported.

Therapy

Symptoms of Hyoscine Butylbromide Injection BP overdosage respond to parasympathomimetics. For patients with glaucoma, pilocarpine should be given locally. Cardiovascular complications should be treated according to usual therapeutic principles. In case of respiratory paralysis, intubation and artificial respiration. Catheterisation may be required for urinary retention.
In addition, appropriate supportive measures should be used as required.

5. Pharmacological properties:
5.1 Pharmacodynamic properties:
Pharmacotherapeutic group: Belladonna alkaloids, semisynthetic, quaternary ammonium compounds

ATC code: A03BB01

Hyoscine Butylbromide Injection BP is an antispasmodic agent which relaxes smooth muscle of the organs of the abdominal and pelvic cavities. It is believed to act predominantly on the intramural parasympathetic ganglia of these organs.

5.2 Pharmacokinetic properties:
Absorption and distribution
After intravenous administration hyoscine butylbromide is rapidly distributed ($t_{½\alpha}$ = 4 min, $t_{½\beta}$ = 29 min) into the tissues. The volume of distribution (Vss) is 128 L (corresponding to approx. 1.7 L/kg). Because of its high affinity for muscarinic receptors and nicotinic receptors, hyoscine butylbromide is mainly distributed on muscle cells of the abdominal and pelvic area as well as in the intramural ganglia of the abdominal organs. Plasma protein binding (albumin) of hyoscine butylbromide is approximately 4.4%. Animal studies demonstrate that hyoscine butylbromide does not pass the blood-brain barrier, but no clinical data to this effect is available. Hyoscine butylbromide (1 mM) has been observed to interact with the choline transport (1.4 nM) in epithelial cells of human placenta *in vitro*.

Metabolism and elimination
The main metabolic pathway is the hydrolytic cleavage of the ester bond. The half-life of the terminal elimination phase ($t_{½\gamma}$) is approximately 5 hours. The total clearance is 1.2 L/min. Clinical studies with radiolabeled hyoscine butylbromide show that after intravenous injection 42 to 61% of the radioactive dose is excreted renally and 28.3 to 37% faecally.
The portion of unchanged active ingredient excreted in the urine is approximately 50%. The metabolites excreted via the renal route bind poorly to the muscarinic receptors and are therefore not considered to contribute to the effect of the hyoscine butylbromide.

Paediatric population
No particular pharmacokinetic studies concerning hyoscine butylbromide have been performed in children.

5.3 Preclinical safety data:
In limited reproductive toxicity studies hyoscine butylbromide showed no evidence of teratogenicity in rats at 200 mg/kg in the diet or in rabbits at 200 mg/kg by oral gavage or 50 mg/kg by subcutaneous injection. Fertility in the rat was not impaired at doses of up to 200 mg/kg in the diet.

6. Pharmaceutical Particulars:

6.1 List of Excipients:

Sodium Acetate	BP
Glacial Acetic acid	BP
Water For injection	BP

6.2 Incompatibilities:
Nil.

6.3 Shelf Life: 24 months.

6.4 Special Precautions for storage:
Store below 30°C in a dry place. Protect from light.

6.5 Nature and contents of container:
1 ml clear glass ampoules, 10 ampoules are packed in a Tray, which is further packed in a printed Primary Carton along with the Pack Insert.

6.6 Special precautions for disposal and other handling:
None

7. Marketing Authorization Holder: M/S. SASTEK MEGA PHARMA & CHEMICAL CO.LTD

8. Marketing Authorization Number: ---

9. Date of first Authorization /renewal of the authorization: ---

10. Date of revision of text: March 2021