SUMMARY OF PRODUCT CHARACTERISTICS

1. Name of the medicinal product

Suraxim 400 mg Capsules

2. Qualitative and quantitative composition

For a full list of excipients, see section 6.1

3. Pharmaceutical form

Dosage Form: **Capsules**

Suraxim® 400 mg Capsules Description: Purple Opaque cap and white opaque body, size 0' hard gelatin capsules, containing off-white to yellowish powder.

4. Clinical particulars

4.1 Therapeutic indications

SURAXIM® is indicated in the treatment of the following:

- Pharyngitis, tonsillitis and sinusitis.
- Acute bronchitis and acute exacerbations of chronic bronchitis.
- Otitis media.
- Uncomplicated urinary tract infections.
- Uncomplicated urethral or cervical gonorrhea.
- Bacterial gastroenteritis.

4.2 Posology and method of administration

Adults:

The recommended dose of **SURAXIM®** is 400 mg daily. This may be given as a 400 mg capsule once daily, or as a 200 mg capsule every 1 2 hours.

For the treatment of uncomplicated urethral or cervical gonococcal infections, a single oral dose of 400 mg is recommended.

Children:

Children weight more than 50 kg or older than 12 years should be treated with the recommended adult dose.

Renal impairment:

SURAXIM® may be administered in the presence of impaired renal function as follows:

Creatinine clearance	Dose
≥ 60 ml/min Standard dose	(400 mg daily)
21 -60 ml/mm	75% of the standard dose (300 mg daily)
≤ 20 ml/min	Half the standard dose (200 mg daily)

4.3 Contraindications

Cefixime is contraindicated in patients with known allergy to cephalosporin group of antibiotics.

4.4 Special warnings and precautions for use

- Before therapy with cefixime is instituted, careful inquiry should be made to determine whether the patient has had previous hypersensitivity reactions to cephalosporins, penicillins, or other drugs. If this product is to be given to penicillin-sensitive patients, caution should be exercised because cross hypersensitivity among beta-lactam antibiotics has been clearly documented and may occur in up to 10% of patients with a history of penicillin allergy. If an allergic reaction to cefixime occurs, discontinue the drug. Serious acute hypersensitivity reactions may require treatment with epinephrine and other emergency measures, including oxygen, intravenous fluids, intravenous antihistamines, corticosteroids, pressor amines and airway management, as clinically indicated.
- Anaphylactic/anaphylactoid reactions (including shock and fatalities) have been reported with the use of cefixime.
- Antibiotics, including cefixime, should be administered cautiously to any patient who has demonstrated some form of allergy, particularly to drugs. Treatment with broad spectrum antibiotics, including cefixime, alters the normal flora of the colon and may permit overgrowth of clostridia. Studies indicate that a toxin produced by Clostridium difficile is a primary cause of severe antibiotic-associated diarrhea including pseudomembranous colitis.
- Pseudomembranous colitis has been reported with the use of cefixime and other broad-spectrum antibiotics (including macrolides, semisynthetic penicillins, and cephalosporins); therefore, it is important to consider this diagnosis in patients who develop diarrhea in association with the use of antibiotics. Symptoms of pseudomembranous colitis may occur during or after antibiotic treatment and may range in severity from mild to life threatening.

- Mild cases of pseudomembranous colitis usually respond to drug discontinuation alone. In moderate to severe cases, management should include fluids, electrolytes, and protein supplementation. If the colitis does not improve after the drug has been discontinued, or if the symptoms are severe, oral vancomycin is the drug of choice for antibiotic-associated pseudomembranous colitis produced by C. difficile. Other causes of colitis should be excluded.
- The possibility of the emergence of resistant organisms which might result in overgrowth should be kept in mind, particularly during prolonged treatment. In such use, careful observation of the patient is essential. If super-infection occurs during therapy, appropriate measures should be taken. The dose of cefixime should be adjusted in patients with renal impairment as well as those undergoing continuous ambulatory peritoneal dialysis (CAPD) and hemodialysis (HD). Patients on dialysis should be monitored carefully.
- Cefixime should be prescribed with caution in individuals with a history of gastrointestinal disease, particularly colitis. Cephalosporins may be associated with a fall in prothrombin activity. Those at risk include patients with renal or hepatic impairment, or poor nutritional state, as well as patients receiving a protracted course of antimicrobial therapy, and patients previously stabilized on anticoagulant therapy. Prothrombin time should be monitored in patients at risk and exogenous vitamin K administered as indicated.

4.5 Interaction with other medicinal products and other forms of interaction

A false positive reaction for glucose in the urine may occur with Benedict's or Fehling's solutions or with copper sulphate test tablets, but not with tests based on enzymatic glucose oxidase reactions.
A false positive direct Coombs test has been reported during treatment with cephalosporin antibiotics, therefore it should be recognised that a positive Coombs test may be due to the drug.
In common with other cephalosporins, increases in prothrombin times have been noted in a few patients. Care should therefore be taken in patients receiving anticoagulation therapy.

4.6 Fertility, pregnancy and lactation

Reproduction studies have been performed in mice and rats at doses up to 400 times the human dose and have revealed no evidence of impaired fertility or harm to the foetus due to cefixime. In the rabbit, at doses up to 4 times the human dose, there was no evidence of a teratogenic effect; there was a high incidence of abortion and maternal death which is an expected consequence of the known sensitivity of rabbits to antibiotic-induced changes in the population of the microflora of the intestine. There are no adequate and well-controlled studies in pregnant women. cefixime should therefore not be used in pregnancy or in nursing mothers unless considered essential by the physician.

4.7 Effects on ability to drive and use machines

No studies on the effect on the ability to drive and use machines have been performed.

4.8 Undesirable effects

Most of adverse reactions observed in clinical trials were of a mild and transient nature. The most commonly seen adverse reactions were gastrointestinal events, which were reported in 30% of adult patients on either the BID or the QD regimen. Clinically mild gastrointestinal side effects occurred in 20% of all patients, moderate events occurred in 9% of all patients and severe adverse reactions occurred in 2% of all patients. Individual event rates included diarrhea, loose or frequent stools, abdominal pain, nausea, dyspepsia, and flatulence. The incidence of gastrointestinal adverse reactions, including diarrhea and loose stools, in pediatric patients receiving the suspension was comparable to the incidence seen in adult patients receiving capsules.

These symptoms usually responded to symptomatic therapy or ceased when cefixime was discontinued.

Several patients developed severe diarrhea and/or documented pseudomembranous colitis, and a few required hospitalization.

The following adverse reactions have been reported following the use of cefixime. Incidence rates were less than 1 in 50 (less than 2%), except as noted above for gastrointestinal events.

Gastrointestinal: Diarrhea, loose stools, abdominal pain, dyspepsia, nausea, and vomiting. Several cases of documented pseudomembranous colitis were identified during the studies. The onset of pseudomembranous colitis symptoms may occur during or after therapy.

Hypersensitivity Reactions: Anaphylactic/anaphylactoid reactions (including shock and fatalities), skin rashes, urticania, drug fever, pruritus, angioedema, and facial edema. Erythema multiforme, Stevens-Johnson syndrome and serum sickness-like reactions have been reported.

Hepatic: Transient elevations in SGPT, SGOT, alkaline phosphatase, hepatitis, jaundice.

Renal: Transient elevations in BUN or creatinine, acute renal failure.

Central Nervous System: Headaches, dizziness, seizures.

Hemic and Lymphatic Systems: Transient thrombocytopenia, leukopenia, neutropenia, and eosinophilia.

Prolongation in prothrombin time was seen rarely.

Abnormal Laboratory Tests: Hyperbilirubinemia.

Other: Genital pruritus, vaginitis, candidiasis, toxic epidermal necrolysis.

In addition to the adverse reactions listed above which have been observed in patients treated with cefixime, the following adverse reactions and altered laboratory tests have been reported for cephalosponin-class antibiotics:

Adverse reactions: Allergic reactions, supeninfection, renal dysfunction, toxic nephropathy, hepatic dysfunction including cholestasis, aplastic anemia, hemolytic anemia, hemorrhage, and colitis.

Several cephalosponins have been implicated in triggering seizures, particularly in patients with renal impairment when the dosage was not reduced. If seizures associated with drug therapy occur, the drug should be discontinued. Anticonvulsant therapy can be given if clinically indicated.

Abnormal Laboratory Tests: Positive direct Coombs test elevated LDH, pancytopenia, agranulocytosis.

4.9 Overdose

Gastric lavage may be indicated; otherwise, no specific antidote exists. Cefixime is not removed in significant quantities from the circulation by hemodialysis or penitoneal dialysis. Adverse reactions in healthy adult volunteers receiving single doses up to 2 g of Cefixime did not differ from the profile seen in patients treated at the recommended doses.

5. Pharmacological properties

5.1 Pharmacodynamic properties

Theraputic Category: Cephalosporins
ATC code: J01DD08

SURAXIM® (Cefixime as trihydrate) is an orally active broad spectrum, bactericidal, semi-synthetic third generation cephalosporin antibiotic. Highly β-lactamase stable and as a result, many organisms resistant to penicillins and some cephalosporins, due to the presence of β-lactamases, are susceptible to **SURAXIM®**. It acts directly by inhibiting the cell wall synthesis in the following gram positive organisms: *Streptococcus pneumoniae , Streptococcus pyogenes, Streptococcus agalactiae,* and gram negative organisms: *Haemophilus influenzae, Haemophilus parainfluenzae, Moraxella catarrhalis, E. coli, Proteus mirabilis, Proteus vulgaris, Neisseria gonorrhoeae, Klebsiella pneumoniae, Klebsiella oxytoca, Pasteurella multocida, Providencia species, Salmonella species, Shigella species, Citrobacter diversus* and *Serratia marcescens*

5.2 Pharmacokinetic properties

Approximately 40 - 50% of Cefixime administered dose is absorbed, absorption is not significantly modified by the presence of food. It is widely distributed throughout the body and reaches therapeutic concentration in most tissues and body fluids, including synovial, pericardial, pleural, peritoneal, bile, sputum, urine, bone, myocardium, gallbladder, skin and soft tissue. Cefixime is excreted by renal and biliary mechanisms and 50% of Cefixime dose is eliminated as active form in the urine by glomerular filtration mainly.

5.3 Preclinical safety data

Not applicable.

6. Pharmaceutical particulars

6.1 List of excipients

- Microcrystalline Cellulose
- Sodium Lauryl Sulfate
- Magnesium Stearate

6.2 Incompatibilities

Not applicable.

6.3 Shelf life
3 years.

6.4 Special precautions for storage
Store below 30°C.

6.5 Nature and contents of container
Suraxim® 400 mg Capsules are packed in PVC/PVDC rolls with Aluminum foil blisters with a multi folded leaflet.

Pack sizes:
5 capsules (5 capsules /blister, one blister /pack)

6.6 Special precautions for disposal and other handling
Any unused product or waste should be disposed of in accordance with local requirements.

7. Marketing authorization holder
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8. Marketing Authorization Number(s)
05350/06863/NMR/2018

9. Date of first authorization/renewal of the authorization
Date of first Authorization: Sep 24, 2020

10. Date of revision of the text
July, 2013