RABEMAX
Instructions
in medical use of the drug

Trade name: Rabemax.
International nonproprietary name: Rabeprazole.
Dosage form: Lyophilized powder for the preparation of solution for injection.
Compound: *Each bottle contains:*
Rabeprazole sodium 20 mg;
Excipients qs.
Pharmacotherapeutic group: PPI (Proton pump inhibitor).
ATX code: A02BC04.
Pharmachologic effect:
Pharmacodynamics:
Inhibition of the activity of the enzyme H+/K +- ATPase in the parietal cells of the stomach leads to inhibition of the final stage of hydrochloric acid formation. This effect is dose-dependent and leads to inhibition of both basal and stimulated secretion of hydrochloric acid, regardless of the stimulus. Rabemax binds to the proton pump of parietal cells via a covalent bond, which is accompanied by an irreversible decrease in acid secretion. Acid can only be released by newly formed proton pumps. Thus, the kinetics of rabeprazole in blood plasma is not critical for the antisecretory effect: the period of biological activity of rabeprazole significantly exceeds its half-life from blood plasma. Of great clinical importance is the half-life of the proton pump (20–24 hours), rather than the half-life of rabeprazole. The maximum level of reduction in secretion can be obtained when rabeprazole reaches the parietal cell at the time of its activation. This can be achieved by intravenous infusion of rabeprazole. Due to this, the proton pump activated under the influence of circadian rhythms (acetylcholine) or after meals (histamine and gastrin) immediately binds to the rabeprazole molecule and the production of hydrochloric acid stops. The active substance of the drug - rabeprazole - quickly accumulates in the acidic environment of the parietal cells of the stomach, where it is converted into the active form due to the addition of a sulfonamide group to it. Interacts with proton pump cysteines.
Pharmacokinetics:
After intravenous administration, the effect of rabeprazole develops over 1 hour and reaches a maximum after 2–4 hours. The average clearance with intravenous administration of a dose of 20 ml is 283 ± 98 ml/min. The half-life of a dose of 20 mg administered intravenously is 1.02 ± 0.63 hours. After discontinuation of the drug, secretory activity is restored within 2–3 days. Use of the drug at a dose of 20 mg per day for 2 weeks does not affect the function of the thyroid gland, carbohydrate metabolism, blood concentrations of parathyroid hormone, cortisol, estrogen, testosterone, prolactin, cholecystokinin, secretin, glucagon, FSH, LH, growth hormone, renin, aldosterone.
Absolute bioavailability after intravenous administration of a dose of 20 mg is about 100%, that is, all rabeprazole molecules reach parietal cells. Bioavailability rabeprazole does not change with repeated administration. Plasma protein binding is 97%. With repeated administration of rabeprazole, linear pharmacokinetics were observed , that is, the half-life, clearance and volume of distribution of rabeprazole do not depend on the dose. Metabolized in the liver. Rabeprazole sodium is biotransformed to form the main metabolites thioether and carbonic acid. Other metabolites - bellows, dimethylthioether and conjugate mercapturic acid are present in low concentrations. The half-life is about 1 hour. About 90% of the dose is excreted in the urine mainly in the form of two metabolites: the conjugate mercaptopuric and carboxylic acids. A small part of the metabolites is excreted in the feces. In elderly patients, the elimination of rabeprazole slows down somewhat. No accumulation of rabeprazole was observed.
Indications for use: Rabemax in the form of a solution is prescribed in cases where the administration of the oral form of the drug is impossible, namely:

- exacerbation of peptic ulcer of the stomach or duodenum with bleeding and severe erosions;
- short-term treatment of gastroesophageal reflux disease with erosions and ulcers;
- prevention of aspiration of acidic stomach contents;
- Zollinger - Ellison syndrome.

Contraindications:
- increased individual sensitivity;

- liver, kidney or respiratory failure;
- pregnancy and lactation period;
- children under 18 years of age.

Method of administration and dosage: Intravenous administration of the drug Rabemax is recommended only in cases where oral administration is not possible. As soon as the administration of oral rabeprazole becomes possible, intravenous use should be discontinued. The recommended dose is 20 mg - 1 time per day. The prepared solution should be administered intravenously only. For injection, the contents of the vial are dissolved in 5 ml of sterile water for injection and administered slowly over 5–15 minutes. For administration as an infusion, the contents of the vial are first dissolved in 5 ml of sterile water for injection, added to a 100 ml infusion solution (0.9% sodium chloride solution) and administered over 15–30 minutes. The ready-to-use solution must be used within 4 hours after preparation. Before use, the solution should be checked for sediment, discoloration or any other changes. The solution should be transparent and colorless, without visible inclusions. Unused solution should be discarded.

Side effect:

From the gastrointestinal tract: diarrhea, nausea; less often - vomiting, abdominal pain, flatulence, constipation; rarely - dry mouth, belching, dyspepsia; in isolated cases - impaired taste, anorexia, stomatitis, gastritis, increased transaminase activity.

From the nervous system and sensory organs: headache; less often - dizziness, asthenia, insomnia; very rarely - nervousness, drowsiness; in some cases - depression, visual impairment.

From the musculoskeletal system: rarely - myalgia; very rarely - arthralgia, cramps of the calf muscles.

From the respiratory system: rarely - inflammation or infection of the upper respiratory tract, severe cough; very rarely - sinusitis, bronchitis.

Allergic reactions: rarely - rash, itching.

Other: rarely - pain in the back, chest, limbs, swelling, urinary tract infection, fever, chills, flu-like syndrome; in isolated cases - increased sweating, weight gain, leukocytosis.

Overdose:

There is no information regarding an overdose of the drug; an increase in the severity of adverse reactions is possible.

Treatment: when using the drug in high doses, symptomatic therapy is carried out. There is no specific antidote. Rabeprazole sodium binds well to plasma proteins and is therefore poorly excreted during dialysis.

Drug interactions:

Sodium rabeprazole, like other proton pump inhibitors (PPIs), is metabolized by enzymes that are part of the hepatic cytochrome P450 (CYP450) system. Rabeprazole sodium does not interact with clinically significant interactions with amoxicillin and other drugs that are metabolized by CYP450 enzymes, such as warfarin, phenytoin, theophylline and diazepam. Sodium rabeprazole causes a strong and long-lasting decrease in hydrochloric acid production. Thus, sodium rabeprazole, in principle, can interact with drugs whose absorption depends on the pH of the gastric contents: a decrease in the concentration of ketoconazole in the blood plasma by 33% and an increase in the minimum concentration of digoxin by 22%. Therefore, individual patients using these drugs concomitantly with rabeprazole should be monitored to determine the need for dosage adjustments. The concentration of rabeprazole and the active metabolite of clarithromycin in the blood plasma increases by 24 and 50%, respectively, when used simultaneously. This is considered as a positive result of interaction in the eradication of N. pruiogi . Research in vitro on human liver microsomes showed that sodium rabeprazole metabolized by isoenzymes of the CYP450 system (CYP2C9 and CYP3A). These studies suggest that rabeprazole has a low potential for drug interactions; Moreover, its effect on the metabolism of cyclosporine is similar to other proton pump inhibitors. Incompatibility: Rabeprazole can only be dissolved in sterile water for injection or saline solution (0.9% sodium chloride solution). No other solutions should be used together with rabeprazole for injection.

Special instructions: Before starting treatment, it is necessary to exclude malignant neoplasms of the stomach, since treatment can mask symptoms and delay correct diagnosis. Prescribe with caution to patients with severely impaired liver and kidney function. If drowsiness occurs, you should stop driving and other activities that require increased concentration.

Release form:

Lyophilized powder for the preparation of solution for injection in a bottle. One bottle along with instructions for use in a cardboard package.

Storage conditions:

Store in a dry place, protected from light, at a temperature not exceeding 25 °C and out of reach of children. Do not freeze.

Shelf life:
Indicated in the packaging.
Do not use after expiration date.
Vacation conditions:
By doctor's prescription.

Made for:
MAXX-PHARM LTD.
London, Great Britain