1.3.1 Summary of Product Characteristics (SmPC)

(1) Name of the medicinal product

Cimetidine Injection

(2) Qualitative and quantitative composition

Each 2ml ampoule contains:

Approved name	Quantity/dose	Function
Cimetidine	200mg	Active substance
Sodium chloride	17mg	Preservatives
Hydrochloric acid	appropriate amount	Used to adjust pH value.
Water for injection	Be added to 2ml	Solvent

(3)Pharmaceutical form

Sterile small volume injection

2ml of Colourless clear liquid is filled in the glass ampoule（2ml）.

(4) Clinical particulars

①Therapeutic indications

This product is used for peptic ulcer.

② Posology and method of administration

Intravenous infusion: 0.2g of this product is diluted with 5% glucose injection or 0.9% sodium chloride injection or glucose sodium chloride injection 250 ~ 500ml before intravenous infusion at a rate of 1 ~ 4mg/kg per hour, 0.2 ~ 0.6g each time.

Intravenous injection: Diluted with 20ml of the above solution and injected intravenously slowly (2-3 minutes), once every 6 hours, 0.2g each time.

Intramuscular injection: 0.2g once, every 6 hours.

③ Contraindications

1. Prohibited for pregnant women and lactating women.

2. It is forbidden for those who are allergic to this product.

(5) Special warnings and precautions for use

①Not suitable for acute pancreatitis.

② Renal function and blood routine should be checked during medication.

③Simultaneous use of this product with central anticholinergic drugs should be avoided to avoid aggravating central nervous toxic reactions.
④ Caffeine and caffeinated beverages should be prohibited when using this product.
⑤ Sudden discontinuation of the drug may lead to chronic peptic ulceration and perforation, presumably due to the high acidity of the bounce after discontinuation. Therefore, it is necessary to continue taking medication (400mg per night) for 3 months after completion of treatment.
⑥ Interference to diagnosis: gastric occult blood test may appear false positive; Blood salicylic acid concentration, serum creatinine, prolactin, aminotransferase concentration may increase; Parathyroid hormone levels may decrease.
⑦ The following conditions should be used with caution: 1. serious heart and respiratory diseases; Use with caution in patients with hepatic and renal insufficiency. 2.The myelotoxicity of cimetidine may be increased in chronic inflammation, such as systemic lupus erythematosus (SLE).3.organic encephalopathy. 4. Renal function impairment (moderate or severe).
⑧ In case of discoloration, crystallization, turbidity and foreign body should be prohibited.

(6) Interaction with other medicinal products and other forms of interaction

1. Combined with acid-making drugs, it can relieve the pain of duodenal ulcer, but the absorption of cimetidine may be reduced, so it is generally not recommended.
2. The combination of this product with sulfoaluminum may reduce the therapeutic effect of sulfoaluminum (because the sulfoaluminum can only play its role after being hydrolyzed by stomach acid). Aggravating sedation and other central nervous depression symptoms, and may progress to respiratory and circulatory failure. If they must be used together with antacids, they should be at least 1 hour apart.
3. When used with coumarins, prothrombin time can be further prolonged, so it is necessary to pay close attention to the changes in the condition and adjust the dosage of anticoagulants.
4. Caution should be exercised when used with other intrahepatic metabolic drugs.
5. When combined with phenytoin sodium, the blood concentration of the latter increases and the toxicity may be enhanced. Pay attention to regular review of peripheral blood images.
6.This product can increase the absolute bioavailability of verapamil by nearly double, should be noted.
7. Patients should not use this product when taking digoxin and quinidine together.
8. This product can reduce the effect of tetracycline and enhance the effect of aspirin.
9. It can interfere with ketoconazole absorption and reduce its antifungal activity.
10. This product may cause psychotic symptoms when used in combination with captopril.
11. Due to its similar myonerve blocking effect to aminoglycosides, this effect is not countered by Neostigmine, but only by calcium chloride. Therefore, when combined with aminoglycoside antibiotics, respiratory depression or respiratory arrest may be caused.
12.When combined with propranolol, metoprolol and metronidazole, the blood

concentration may increase.
13. When used with theophylline, caffeine, aminophylline and other xanthine drugs, liver metabolism is reduced, which can lead to delayed clearance and increased blood drug concentration, which may cause toxic reactions.

(7) Pregnancy and lactation

This product can pass through the placental barrier and enter the milk, causing liver dysfunction in fetuses and infants, so it is prohibited.
(8)Child medication
Use with caution for children.
(9) Elderly medication
Use with caution in elderly patients. The interval time of administration can be prolonged and the dosage can be reduced as appropriate.
(10)Adverse effects
1. Digestive system reaction. More common diarrhea, abdominal distension, dry mouth, slightly increased serum aminotransferase, and occasionally severe hepatitis, liver damage, liver steatosis, etc. There are reports of acute pancreatitis caused by the application of this product in animal experiments and clinical practice. Sudden drug withdrawal may lead to perforation of chronic peptic ulcer.
2. Urinary system reaction. It has been reported that acute interstitial nephritis leads to failure, but this toxic reaction is reversible.
3. Hematopoietic system reaction. It has certain inhibitory effect on bone marrow. A few patients have reversible moderate leukopenia or granulocytopenia.
4. Central nervous system response. It can pass the blood brain barrier and has certain neurotoxicity. Dizziness, headache, fatigue and lethargy are common. A few may have symptoms such as restlessness, insensitivity, vague language, sweating or epileptic seizures, hallucinations, delusions, etc. The blood drug concentration that causes poisoning symptoms is mostly 2 μ G/ml, and most of them occur in the elderly, children or patients with liver and kidney dysfunction. After neurotoxicity appears, it can generally disappear by reducing the dosage appropriately. The symptoms can be improved by treating with physostigmine, a choline like drug.
5. Cardiovascular system reaction, including bradycardia, facial flushing, etc. Sudden drop of blood pressure, atrial premature beat, cardiac and respiratory arrest, shortness of breath or dyspnea were occasionally seen during intravenous injection.
6. On endocrine and skin effects, this drug has an anti androgen effect, which can cause male breast development, female galactorrhea, sexual desire decline, impotence, sperm count reduction, etc. in large dosage, and can disappear after drug withdrawal; It can inhibit sebum secretion, induce exfoliative dermatitis, alopecia, oral ulcer, etc.

(11)Overdose

Common signs of overdose include shortness of breath or dyspnea and tachycardia.
Treatment:
first, remove the drugs that have not been absorbed in the gastrointestinal tract, and give them

clinical monitoring and support therapy. If respiratory failure occurs, give them artificial
respiration immediately, and give them to patients with tachycardia β Adrenaline blockers.

(12)Pharmacology and toxicology

1. Pharmacological action mainly acts on H2 receptor on parietal cells, playing a competitive role in inhibiting histamine, basic gastric acid secretion, and gastric acid secretion stimulated by food, histamine gastrin, caffeine and insulin. After the injection of 300mg for 4-5 hours, the secretion of basic gastric acid was inhibited by 80%, and the basic gastric acid was inhibited by 50% for 4-5 hours.
2.Toxicology study The subacute and chronic toxicity tests of rats and dogs showed that this product had a slight anti androgen effect, which could cause the weight reduction of prostate and seminal vesicles and the secretion of milk, but it disappeared after drug withdrawal. No mutagenic, carcinogenic, teratogenic effects, no dependence and tolerance.

(13)Pharmacokinetics

After absorption, it is widely distributed in tissues throughout the body except the brain. It can penetrate the placental barrier and its concentration in milk can be higher than that in plasma. The protein binding rate is 15% ~ 20%, and part of it is metabolized in the liver. The metabolites are Sulphoxide and hydroxymethyl cimetiding, which are mainly excreted through the kidney. After 24 hours, about 75% of the injection volume was excreted from the kidney in its original form. 10% can be excreted from feces. It can be cleared by hemodialysis. The half-life (t1/2) was 2.9 hours in patients with normal renal function, 3.7 hours in patients with creatinine clearance of 20 to 50ml/min, and 5 hours in patients with renal insufficiency.

(14) Storage

Shading and airtight storage.

(15) Shelf life

36 months.