SUMMARY OF PRODUCT CHARACTERISTICS

1 NAME OF THE MEDICINAL PRODUCT

Famotidine 20 mg film-coated tablets

2 QUALITATIVE AND QUANTITATIVE COMPOSITION

Each film-coated tablet contains 20 mg famotidine.

For the full list of excipients, see section 6.1.

3 PHARMACEUTICAL FORM

Film-coated tablets

6.2mm-6.5mm (edge to edge) and 7.0mm-7.2mm (point to point), hexagonal, biconvex, brown film-coated tablet

4 CLINICAL PARTICULARS

4.1 Therapeutic indications

Famotidine tablets are indicated for the following conditions;

- Prevention of relapses of duodenal ulceration
- Duodenal ulcers
- Benign gastric ulcers
- Zollinger-Ellison syndrome
- Symptomatic treatment of mild to moderate reflux oesophagitis

4.2 Posology and method of administration

Posology

Adults

Duodenal ulcers - The initial recommended dose is 40 mg of famotidine to be taken at night. Healing generally occurs in most patients within 4 weeks. This period, however, may be shortened if an endoscopic examination reveals that the ulcer has healed. However, in those patients whose ulcers have not healed within this 4 week period, treatment should continue for a further 4 weeks.

Prevention of relapses of duodenal ulceration – To prevent ulcers from reoccurring the recommended dose is 20 mg of famotidine to be taken at night

Benign gastric ulcers – The recommended dose of 40 mg of famotidine to be taken at night. Treatment should continue for between 4-8 weeks unless earlier healing is revealed by endoscopy.

Zollinger-Ellison syndrome – Patients who are not receiving any antisecretory therapy should be started on a dose of 20 mg of famotidine every 6 hours. The dosage should then be adjusted to individual response. Doses up to 800 mg daily have been used up to one year without the development of significant adverse effects or tachyphylaxis.

If the desired inhibition of acid secretion cannot be attained with a daily dosage of 800 mg, alternative treatment should be considered to regulate acid secretion, since no long term experience with dosages of more than 800 mg of famotidine/day have been recorded.

Treatment should be continued for as long as necessary. Patients who have been receiving other H2-receptor antagonist treatment may be switched directly to famotidine treatment at a higher dosage than the initial dosage that is usually recommended. The starting dosage will depend on the severity of the disease and the dosage of the last dose of H2-antagonist previously used.

Symptomatic treatment of mild to moderate oesophagitis – The recommended dose in case of mild oesophagitis is 20 mg of famotidine twice daily, in case of mild to moderate oesophagitis the recommended dose is 40 mg twice daily. Generally treatment should be conducted for 6 weeks. If the condition has not improved, treatment should be continued for a further 6 weeks.

Elderly
The dosage regimen recommended for elderly patients is the same as for adults.

Use in impaired renal function.
Famotidine is primarily eliminated via the kidneys. For patients with impaired renal function in whom creatinine clearance is less than 30ml/min, the daily dosage of famotidine should be reduced by 50%. Caution is advised in patients with renal impairment.

Dialysis patients should also take dosages that are reduced by 50%. Famotidine 20 mg tablets should be administered at the end of dialysis or thereafter since some of the active ingredient is removed via dialysis.

Paediatric population
The efficacy and safety of famotidine in children have not been established.

Method of administration
For oral use.
Famotidine tablets can be taken with or without food (see section 5.2).

4.3 Contraindications

Hypersensitivity to the active substance or to any of the excipients listed in section 6.1 or to other H2-receptor antagonists.

Cross sensitivity in this class of compounds has been observed. Therefore, famotidine should not be administered to patients with a history of hypersensitivity to other H2-receptor antagonists.

4.4 Special warnings and precautions for use

Gastric neoplasm
The presence of gastric malignancy should be excluded prior to the use of famotidine for the treatment of gastric ulcers. Symptomatic response of gastric ulcer following treatment with famotidine do not preclude the presence of gastric malignancy.

Renal dysfunction
As famotidine is excreted primarily via the kidney, caution should be exercised when treating patients who are suffering from impaired renal function. A reduction in daily dosage to 20 mg should be considered if creatinine clearance falls below 10ml/min (see section 4.2).

Paediatric population
The safety and efficacy for the use of famotidine in children has not been established.

Use in the elderly
When Famotidine was administered to elderly patients in clinical trials, no increase in the incidence or change in the type of drug-related side effects was observed. No dosage adjustment is required based on age alone.

General
In case of long-term treatment with high dosage, monitoring of blood count and liver function is recommended.
In case of long-standing ulcer disease, abrupt withdrawal after symptom relief should be avoided.

4.5 Interaction with other medicinal products and other forms of interaction

No clinically important drug interactions have been identified.

Co-administration of posaconazole oral-suspension with famotidine should be avoided if possible, since famotidine may reduce the absorption of posaconazole oral-suspension during concomitant use.

Co-administration of famotidine with the tyrosine kinase inhibitors (TKIs) dasatinib, erlotinib, gefitinib, pazopanib may decrease plasma concentrations of TKIs resulting in lower efficacy, therefore co-administration of famotidine with these TKIs is not recommended. For further specific recommendations please refer to the product information of individual TKI medicinal products.

Famotidine does not interact with the cytochrome P450 drug metabolizing enzyme system. Compounds metabolized by this system which have been tested in man have included warfarin, theophylline, phenytoin, diazepam, propranolol, aminopyrine and antipyrine. Indocyanine green as an index of hepatic blood flow and/or hepatic drug extraction has been tested and no significant effects have been found.

Studies in patients stabilized on phenprocoumon therapy have shown no pharmacokinetic interaction with famotidine and no effect on the pharmacokinetic or anticoagulant activity of phenprocoumon.

In addition, studies with famotidine have shown no augmentation of expected blood alcohol levels resulting from alcohol ingestion.

Alterations of gastric pH may affect the bioavailability of certain drugs resulting in an decrease in the absorption of atazanavir.The absorption of ketoconazole and itraconazole could be reduced. Ketoconazole should be administered two hours before administering famotidine.

Probenecid inhibits the renal tubular secretion of famotidine and has been shown to cause a 50% increase in famotidine plasma concentrations. Therefore concomitant use of probenecid and famotidine should be avoided.

Concomitant use of famotidine and antacids may reduce the famotidine absorption and lead to lower plasma levels of famotidine. Therefore, famotidine should be administered 1-2 hours before taking an antacid.

The concomitant use of sucralfate inhibits the absorption of famotidine. Therefore, sucralfate as a rule should not be administered within two hours of the famotidine dose.

Risk of loss of efficacy of calcium carbonate when co-administered as phosphate binder with famotidine in haemodialysis patients.

4.6 Fertility, pregnancy and lactation

Pregnancy

Famotidine is not recommended for use in pregnancy, and should be prescribed only if clearly needed. Before a decision is made to use famotidine during pregnancy, the physician should weigh the potential benefits from the drug against the possible risks involved.

Breast-feeding
Famotidine is secreted in human breast milk. Therefore breast-feeding mothers should either stop taking famotidine or stop breast-feeding.

4.7 Effects on ability to drive and use machines

Some patients have experienced adverse reactions such as dizziness and headache while taking famotidine. Patients should be informed that they should avoid driving vehicles or operating machinery or doing activities which require prompt vigilance if they experience these symptoms (see section 4.8).

4.8 Undesirable effects

Famotidine has been demonstrated to be generally well-tolerated.

Adverse reactions are ranked under the heading of frequency, the most frequent first, using the following convention: very common (≥ 1/10), common (≥ 1/100 to < 1/10), uncommon (≥ 1/1,000 to < 1/100), rare (≥ 1/10,000 to < 1/1,000), very rare (< 1/10,000), including isolated cases and not known (cannot be estimated from the available data).

System Organ Class	Common	Uncommon	Rare	Very rare
Blood and lymphatic system disorders				leukopenia, thrombocytopenia, neutropenia, agranulocytosis, pancytopenia
Immune system disorders				hypersensitivity reactions (anaphylaxis, angioneurotic oedema, bronchospasm)
Metabolism and nutrition disorders		anorexia		

System Organ Class	Common	Uncommon	Rare	Very rare
Psychiatric disorders				reversible psychological disturbances including depression, anxiety disorders, agitation, disorientation, confusion, hallucinations, insomnia, reduced libido
Nervous system disorders	headache, dizziness	Taste disorder		convulsions, grand mal seizures (particularly in patients with impaired renal function), paresthesia, somnolence
Cardiac disorders				Atrioventricular block with H2-receptor antagonists administered intravenously, arrhythmias, QT prolongation (especially in patients with impaired renal function)
Respiratory, thoracic and mediastinal disorders				interstitial pneumonia sometimes fatal
Gastrointestinal disorders	constipation, diarrhoea	dry mouth, nausea and/or vomiting, abdominal discomfort or distension, flatulence,		
Hepatobiliary disorders				liver enzyme abnormalities, hepatitis, cholestatic jaundice. Isolated cases of worsening of existing hepatic disease.

System Organ Class	Common	Uncommon	Rare	Very rare
Skin and subcutaneous tissue disorders		rash, pruritus, urticaria		alopecia, Stevens Johnson syndrome/toxic epidermal necrolysis sometimes fatal
Musculoskeletal and connective tissue disorders				Arthralgia, muscle cramps
Reproductive system and breast disorders				Impotence.
General disorders and administration site conditions		fatigue		chest tightness
Investigations			increase in laboratory values (transaminases, gamma-GT, alkaline phosphatase, bilirubin)	

Adverse effects - causal relationship unknown
Rare cases of gynaecomastia, have been reported, however, in controlled clinical trials the incidences were not greater than those seen with placebo.

Reporting of suspected adverse reactions
Reporting suspected adverse reactions after authorisation of the medicinal product is important. It allows continued monitoring of the benefit/risk balance of the medicinal product. Healthcare professionals are asked to report any suspected adverse reactions via the Yellow Card Scheme at: www.mhra.gov.uk/yellowcard or search for MHRA Yellow Card in the Google Play or Apple App Store

4.9 Overdose

The adverse reactions in overdose cases are similar to the adverse reactions encountered in normal clinical experience (see section 4.8).

Patients with Zollinger-Ellison syndrome have tolerated doses up to 800 mg/day for more than a year without development of significant side effects.

In the event of overdose the usual measures to remove unabsorbed material from the gastrointestinal tract, clinical monitoring, and supportive therapy should be employed.

5 PHARMACOLOGICAL PROPERTIES

5.1 Pharmacodynamic properties

Pharmacotherapeutic group:
Drugs for peptic ulcer and gastro-oesophageal reflux
disease (GORD), H2-receptor antagonists, ATC code: A02BA03

Clinical efficacy and safety
In healthy volunteers, single oral doses of famotidine (5 mg to 40 mg) produced doserelated inhibition of basal and pentagastrin, betazole or insulin-stimulated gastric secretion. In addition, pepsin levels were also reduced and there was a decrease in the volume of the basal gastric juice and the gastric juice secreted on stimulation. Similar inhibitory effects on gastric secretion were also noted in patients with benign gastric or duodenal ulceration.

In contrast to control subjects on cimetidine 300 mg or on placebo, inhibition of gastric secretion persisted in volunteers given a second pentagastrin challenge 5-7 hours after the initial dose of famotidine.

A single oral dose of 40 mg of famotidine, given at 9 pm was effective for more than 12 hours after administration and had some continuing effect through the breakfast meal. The duration of action of the 80 mg dose of famotidine administered at 9 pm was no longer than the 40 mg dose.

In several studies, 10 mg and 20 mg doses of famotidine increased basal serum gastrin levels, however the levels remained unchanged in others. Gastric emptying, and hepatic and portal blood flows were unaltered by famotidine. In addition, famotidine did not cause changes in endocrine function.

5.2 Pharmacokinetic properties

Absorption
The drug is rapidly absorbed and takes effect within an hour of oral administration, reaching dose-related peak plasma concentrations within 1-3 hours. Oral bioavailability is not affected by the presence of food in the stomach. Repeated doses do not lead to accumulation of the drug.

Distribution
There is relatively low (15-20%) protein binding of famotidine in the plasma.
The plasma half-life after a single oral dose or multiple repeated doses (for 5 days) was approximately 3 hours.

Biotransformation
The drug is metabolised in the liver, with formation of the inactive sulfoxide metabolite.

Elimination
Famotidine is excreted mainly unchanged in the urine (25-60%); a small amount of the drug may be excreted as the sulfoxide.

Linearity/non-linearity
Famotidine displays linear kinetics.

5.3 Preclinical safety data

There are no pre-clinical data of relevance to the prescriber which are additional to that already included in other sections of the SPC..

6 PHARMACEUTICAL PARTICULARS

6.1 List of excipients

Tablet core

Pregelatinised starch
Microcrystalline cellulose
Talc
Magnesium stearate
Iron oxide red (E172)

Film-coating

Hypromellose
Talc
Macrogol
Iron oxide yellow (E172)
Titanium dioxide (E171)
Iron oxide red (E172)
Iron oxide black (E172)

6.2 Incompatibilities

Not applicable

6.3 Shelf life

3 years

6.4 Special precautions for storage

This medicinal product does not require any special storage conditions.

6.5 Nature and contents of container

PVC-Aluminium-blisters with 7, 10, 14, 20, 21, 28, 30, 50, 56, 60, 100 film-coated tablets

Not all pack sizes may be marketed.

6.6 Special precautions for disposal

No special requirements.
Any unused medicinal product or waste material should be disposed of in accordance with local requirements.

7 MARKETING AUTHORISATION HOLDER

Mercury Pharmaceuticals Ltd.
Dashwood House,
69 Old Broad Street,
London EC2M 1QS,
United Kingdom

8 MARKETING AUTHORISATION NUMBER(S)

PL 12762/0682

9 DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION

03/02/2025

10 DATE OF REVISION OF THE TEXT

03/02/2025