

เอกสารกำกับยาภาษาอังกฤษ

(เหมือนกันทุกขนาดบรรจุ)

Summary of Product Characteristics

MILLIFEX 180

Fexofenadine hydrochloride 180 mg

1. Name of the medicinal product

MILLIFEX 180 film-coated tablet

Fexofenadine hydrochloride 180 mg film-coated tablet

2. Qualitative and quantitative composition

Each film-coated tablet contains 180 mg of Fexofenadine hydrochloride which is equivalent to 168 mg of fexofenadine.

For the full list of excipients, see section 6.1.

3. Pharmaceutical form

Film-coated tablet.

Light orange, oblong, biconvex, film-coated tablet and plain on both sides.

4. Clinical particulars ^[1.1]

4.1 Therapeutic indications

Fexofenadine hydrochloride 180 mg is indicated in adults and children 12 years and older for the relief of symptoms associated with seasonal allergic rhinitis and chronic idiopathic urticaria.

4.2 Posology and method of administration

Posology

Dosage in Adults

The recommended dose of fexofenadine hydrochloride for adults is 180 mg once daily taken before a meal.

Fexofenadine is a pharmacologically active metabolite of terfenadine.

Dosage in Pediatric population

- Children aged 12 years and over

The recommended dose of fexofenadine hydrochloride to children aged 12 years and over is 180 mg once daily taken before a meal.

- Children under 12 years of age

The efficacy and safety of fexofenadine hydrochloride 180 mg has not been studied in children under 12.

Dosage in special population

Dosage in elderly patients

Studies in older people indicate that it is not necessary to adjust the dose of fexofenadine hydrochloride in these patients.

Dosage in patients with impaired renal function

Studies in renally impaired patients indicate that it is not necessary to adjust the dose of fexofenadine hydrochloride in these patients.

Dosage in patients with impaired hepatic function

Studies in hepatically impaired patients indicate that it is not necessary to adjust the dose of fexofenadine hydrochloride in these patients.

Method of administration

Fexofenadine hydrochloride should be administered with water. Foods or other medicines that can affect the drug absorption should be avoided.

4.3 Contraindication

Hypersensitivity to the active substance or to any of the excipients (listed in section 6.1).

4.4 Special warnings and precautions for use

As with most new medicinal products there is only limited data in the elderly and renally or hepatically impaired patients. Fexofenadine hydrochloride should be administered with care in these special groups.

Patients with a history of ongoing cardiovascular disease should be warned that, antihistamines as a medicine class, have been associated with the adverse reactions, tachycardia and palpitations (see section 4.8).

4.5 Interactions with other medicinal products and other forms of interactions

Fexofenadine does not undergo hepatic biotransformation, and therefore will not interact with other medicinal products through hepatic mechanisms. Co-administration of fexofenadine hydrochloride with erythromycin or ketoconazole has been found to result in a 2-3 times increase in the level of fexofenadine in plasma. The changes were not accompanied by any effects on the QT interval and were not associated with any increase in adverse reactions compared to the medicinal products given singly.

Animal studies have shown that the increase in plasma levels of fexofenadine observed after coadministration of erythromycin or ketoconazole, appears to be due to an increase in gastrointestinal absorption and either a decrease in biliary excretion or gastrointestinal secretion, respectively.

No interactions between fexofenadine and omeprazole was observed. However, the administration of an antacid containing aluminium and magnesium hydroxide gels 15 minutes prior to fexofenadine hydrochloride caused a reduction in the bioavailability, most likely due to binding in the gastrointestinal tract. It is advisable to leave 2 hours between administration of fexofenadine hydrochloride and aluminium and magnesium hydroxide containing antacids.

4.6 Pregnancy and lactation

Pregnancy

There are no adequate data from the use of fexofenadine hydrochloride in pregnant women. Limited animal studies do not indicate direct or indirect harmful effects with respect to effects on pregnancy, embryonal/fetal development, parturition or postnatal development (see section 5.3). Fexofenadine hydrochloride should not be used during pregnancy unless clearly necessary.

Nursing mothers

There are no data on the content of human milk after administering of fexofenadine hydrochloride. However, when terfenadine was administered to nursing mothers, fexofenadine was found to cross into human breast milk. Therefore, fexofenadine hydrochloride is not recommended for mothers breast-feeding their babies.

Fertility

No human data on the effect of fexofenadine hydrochloride on fertility are available. In mice, there was no effect on fertility with fexofenadine hydrochloride treatment (see section 5.3).

4.7 Effects on ability to drive and use machine

On the basis of the pharmacodynamic profile and reported adverse reactions it is unlikely that fexofenadine hydrochloride tablets will produce an effect on the ability to drive or to use machines. In objective tests, Fexofenadine hydrochloride has been shown to have no significant effects on central nervous system function. This means that patients may drive or perform tasks that require concentration. However, in order to identify sensitive people who have an unusual reaction to medicinal products, it is advisable to check the individual response before driving or performing complicated tasks.

4.8 Undesirable effects

The following frequency rating has been used, when applicable:

Very common $\geq 1/10$; Common $\geq 1/100$ and $< 1/10$; Uncommon $\geq 1/1,000$ and $< 1/100$; Rare $\geq 1/10,000$ and $< 1/1,000$; Very rare $< 1/10,000$ and not known (frequency cannot be estimated from the available data).

Within each frequency grouping, undesirable effects are presented in order of decreasing seriousness.

In adults, the following undesirable effects have been reported in clinical trials, with an incidence similar to that observed with placebo:

Nervous system disorders

Common: headache, drowsiness, dizziness.

Gastrointestinal disorders

Common: nausea.

General disorders and administration site conditions

Uncommon: fatigue

In adults, the following undesirable effects have been reported in post-marketing surveillance. The frequency with which they occur is not known (cannot be estimated from available data):

Immune system disorders

hypersensitivity reactions with manifestations such as angioedema, chest tightness, dyspnea, flushing and systemic anaphylaxis

Psychiatric disorders

insomnia, nervousness, sleep disorders or nightmares/excessive dreaming (paroniria)

Cardiac disorders

tachycardia, palpitations

Gastrointestinal disorders

diarrhea

Skin and subcutaneous tissue disorders

rash, urticaria, pruritus

4.9 Overdose

Dizziness, drowsiness, fatigue and dry mouth have been reported with overdose of fexofenadine hydrochloride. Single doses up to 800 mg and doses up to 690 mg twice daily for 1 month or 240 mg once daily for 1 year have been administered to healthy subjects without the development of clinically significant adverse reactions as compared with placebo. The maximum tolerated dose of fexofenadine hydrochloride has not been established.

Standard measures should be considered to remove any unabsorbed medicinal product. Symptomatic and supportive treatment is recommended. Hemodialysis does not effectively remove fexofenadine hydrochloride from blood.

5. Pharmacological Properties ^[1,2]

5.1 Pharmacodynamic properties

Pharmacotherapeutic group: Antihistamines for systemic use

ATC-code: R06A X26

Mechanism of action

Fexofenadine hydrochloride is a non-sedating H₁ antihistamine. Fexofenadine is a pharmacologically active metabolite of terfenadine.

Clinical efficacy and safety

Human histamine wheal and flare studies following single and twice daily doses of fexofenadine hydrochloride demonstrate that the medicinal product exhibits an

antihistaminic effect beginning within one hour, achieving maximum at 6 hours and lasting 24 hours. There was no evidence of tolerance to these effects after 28 days of dosing. A positive dose-response relationship between doses of 10 mg to 130 mg taken orally was found to exist. In this model of antihistaminic activity, it was found that doses of at least 130 mg were required to achieve a consistent effect that was maintained over a 24 hour period. Maximum inhibition in skin wheal and flare areas were greater than 80%.

No significant differences in QT_c intervals were observed in seasonal allergic rhinitis patients given fexofenadine hydrochloride up to 240 mg twice daily for 2 weeks when compared to placebo. Also, no significant change in QT_c intervals was observed in healthy subjects given fexofenadine hydrochloride up to 60 mg twice daily for 6 months, 400 mg twice daily for 6.5 days and 240 mg once daily for 1 year, when compared to placebo. Fexofenadine at concentrations 32 times greater than the therapeutic concentration in man had no effect on the delayed rectifier K^+ channel cloned from human heart.

Fexofenadine hydrochloride (5-10 mg/kg po) inhibited antigen induced bronchospasm in sensitized guinea pigs and inhibited histamine release at supratherapeutic concentrations (10-100 μ M) from peritoneal mast cells.

5.2 Pharmacokinetic properties

Absorption

Fexofenadine hydrochloride is rapidly absorbed into the body following oral administration, with T_{max} occurring at approximately 1-3 hours post dose. The mean C_{max} value was approximately 494 ng/ml following the administration of a 180 mg dose once daily.

Distribution

Fexofenadine is 60-70% plasma protein bound.

Biotransformation and Elimination

Fexofenadine undergoes negligible metabolism (hepatic or non-hepatic), as it was the only major compound identified in urine and feces of animals and man. The plasma concentration profiles of fexofenadine follow a bi-exponential decline with a terminal elimination half-life ranging from 11 to 15 hours after multiple dosing. The single and multiple dose pharmacokinetics of fexofenadine are linear for oral doses up to 120 mg BID. A dose of 240 mg BID produced slightly greater than proportional increase (8.8%) in

steady state area under the curve, indicating that fexofenadine pharmacokinetics are practically linear at these doses between 40 mg and 240 mg taken daily. The major route of elimination is believed to be via biliary excretion while up to 10% of ingested dose is excreted unchanged through the urine.

5.3 Preclinical safety data

Dogs tolerated 450 mg/kg administered twice daily for 6 months and showed no toxicity other than occasional emesis. Also, in single dose dog and rodent studies, no treatment-related gross findings were observed following necropsy.

Radiolabelled fexofenadine hydrochloride in tissue distribution studies of the rat indicated that fexofenadine did not cross the blood brain barrier.

Fexofenadine hydrochloride was found to be non-mutagenic in various *in vitro* and *in vivo* mutagenicity tests.

The carcinogenic potential of fexofenadine hydrochloride was assessed using terfenadine studies with supporting pharmacokinetic studies showing fexofenadine hydrochloride exposure (via plasma AUC values). No evidence of carcinogenicity was observed in rats and mice given terfenadine (up to 150 mg/kg/day).

In a reproductive toxicity study in mice, fexofenadine hydrochloride did not impair fertility, was not teratogenic and did not impair pre- or postnatal development.

6. Pharmaceutical Particulars

6.1 List of excipients

Tablet core:

Microcrystalline Cellulose PH 101, Pregelatinized Starch, Croscarmellose Sodium, Alcohol (Ethanol), Isopropyl Alcohol, Microcrystalline Cellulose PH 102, Magnesium Stearate

Film coat:

Hypromellose (15 mPa.s), Hypromellose (5 mPa.s), Purified Water, Povidone K25, Polyethylene Glycol 400, Titanium Dioxide, Colloidal Silicon Dioxide, Iron Oxide Red, Iron Oxide Yellow

6.2 Incompatibilities ^[1.3]

Not applicable.

6.3 Shelf life

2 years

6.4 Special precautions for storage

Store below 30 °C

6.5 Nature and contents of container

Aluminum-aluminum blister pack of 10 tablets packed in paper box of 1, 5 and 10 packs.

6.6 Special precautions for disposal and other handling

No special requirements.

7. Marketing authorization holder

Millimed Co., Ltd.

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Phra Samut Chedi, Samut Prakan 10290, Thailand

Tel. +66 2461 1027

8. Marketing authorization number(s)

XXXXXXXX

9. Date of first authorization/renewal of the authorization

XX.XX.XX

10. Date of revision of the text

25 July 2020