Product Summary

1. Name of the Medicinal Product

Ikorel Tablets 10mg

2. Qualitative and Quantitative Composition

Nicorandil 10mg

3. Pharmaceutical Form

Tablets, off-white, round, with faceted edges, scored on one side and bearing the inscription IK10.

Clinical Particulars

4.1 Therapeutic Indications

Ikorel tablets are indicated for the prevention and long term treatment of chronic stable angina pectoris.

4.2 Posology and Method of administration

Route of administration: oral.

Adults: The recommended starting dose is 10mg nicorandil twice daily, although 5mg twice daily may be employed in patients particularly susceptible to headache. Subsequently the dosage should be titrated upward depending on the clinical response. The usual therapeutic dosage is in the range 10 to 20mg nicorandil twice daily, although up to 30mg twice daily may be employed if necessary.

Elderly: There is no special requirement for dosage reduction in elderly patients. As with all medicines, the lowest effective dosage should be used.

Children: A paediatric dosage has not been established and use of nicorandil is not recommended.

4.3 Contraindications

Ikorel is contraindicated in patients with cardiogenic shock, left ventricular failure with low filling pressures and in hypotension. It is also contraindicated in patients who have demonstrated an idiosyncratic response or hypersensitivity to nicorandil. Due to the risk of severe hypotension, the concomitant use of Ikorel and sildenafil (Viagra) is contraindicated

4.4 Special Warnings And Special Precautions For Use

The use of nicorandil should be avoided in patients with depleted blood volume, low systolic blood pressure, acute pulmonary oedema or acute myocardial infarction with acute left ventricular failure and low filling pressures.

Therapeutic doses of nicorandil may lower the blood pressure of hypertensive patients and therefore nicorandil, as with other antianginal agents, should be used with care when prescribed with antihypertensive drugs.

Alternative therapy should be considered if persistent aphtosis or severe mouth ulceration occurs.

4.5 Interactions with other Medicaments and other forms of Interaction

No pharmacological or pharmacokinetic interactions have been observed in humans or animals with beta-blockers, digoxin, rifampicin, cimetidine, nicoumalone, a calcium antagonist or a combination of digoxin and frusemide. Nevertheless, there is the possibility that nicorandil may potentiate the hypotensive effects of other vasodilators, tricyclic antidepressants or alcohol.

As the hypotensive effects of nitrates or nitric oxide donors are potentiated by sildenafil (Viagra), the concomitant use of Ikorel and sildenafil (Viagra) is contraindicated.

4.6 Pregnancy and Lactation

Pregnancy: Animal studies have not revealed any harmful effect of nicorandil on the foetus although there is no experience in humans. It should not be used in pregnant patients unless there is no safer alternative.

Lactation: As it is not known whether nicorandil is excreted in human milk, breastfeeding should be avoided by lactating patients who require therapy.

4.7 Effects on Ability to Drive and Use Machines

Patients should be warned not to drive or operate machinery until it is established that their performance is unimpaired by nicorandil.

4.8 Undesirable Effects

The most frequent effect to be anticipated is headache, usually of a transitory nature, especially when treatment is initiated.

Cutaneous vasodilation with flushing is less frequent. Nausea, vomiting, dizziness and a feeling of weakness have been reported occasionally. Myalgia and different types of rash have been reported rarely.

Hypotension may occur at high therapeutic doses. An increase in heart rate may occur at high doses.

Rare cases of persistent aphtosis or mouth ulcers which were occasionally severe have been reported. These resolved following treatment discontinuation.

4.9 Overdose

Acute overdosage is likely to be associated with peripheral vasodilation, decreased blood pressure and reflex tachycardia. Cardiac function should be monitored and general supportive measures employed. If necessary, circulating plasma volume should be increased by infusion of suitable fluid. In life-threatening situations, administration of vasopressors should be considered. There is no experience of massive overdosage in humans, although the LD_{50} in dogs is in the range 62.5 to 125 mg/kg and in rodents it is in the order of 1200 mg/kg.

Pharmacological Properties

5.1 Pharmacodynamic Properties

Nicorandil provides a dual mode of action leading to relaxation of vascular smooth muscle. A potassium channel opening action provides arterial vasodilation, thus reducing afterload, while the nitrate component promotes venous relaxation and a reduction in preload. Nicorandil has a direct effect on coronary arteries without leading to a steal phenomenon. The overall action improves blood flow to post-stenotic regions and the oxygen balance in the myocardium.

5.2 Pharmacokinetic Properties

Nicorandil is well absorbed with no significant first-pass metabolism. Maximum plasma concentrations are achieved in 30 to 60 minutes and are directly related to the dosage. Metabolism is mainly by denitration of the molecule into the nicotinamide pathway with less than 20% of an administered dose being excreted in the urine. The main phase of elimination has a half-life of about 1 hour. Nicorandil is only slightly bound to plasma proteins.

No clinically relevant modifications in the pharmacokinetic profile have been seen in the elderly or in patients with liver disease or chronic renal failure.

5.3 Preclinical Safety Data

There are no preclinical data of relevance to the prescriber which are additional to

that included in other sections of the SPC.

Pharmaceutical Particulars

6.1 List of Excipients

Corn starch, croscarmellose sodium, stearic acid and mannitol.

6.2 Incompatibilities

None stated.

6.3 Shelf Life

18 months.

6.4 Special Precautions for Storage

Store in a dry place below 25°C.

6.5 Nature and Contents of Container

Ikorel tablets are presented in soft tempered aluminium foil/PVC blister strips of 10 tablets, in which each tablet is linked to a silica gel capsule dessicant.

The blister strips are packaged in cartons of 10, 20, 30, 40, 50, 60, 70, 80, 90 or 100 tablets.

6.6 Instructions for Use/Handling

None stated.

Administrative Data

7. Marketing Authorisation Holder

May and Baker Ltd
RPR House
50 Kings Hill Avenue
Kings Hill
West Malling

Kent ME19 4AH

Trading as: May & Baker, or Rhône-Poulenc Rorer, or Rorer Pharmaceuticals, or Pharmuka, or Theraplix, or APS, or Berk Pharmaceuticals.

8. Marketing Authorisation Number

PL 0012/0229

9. Date of First Authorisation/Renewal of the Authorisation

6 June 1994

10. Date of (Partial) Revision of Text

August 1999

Legal Status

POM