SUMMARY OF PRODUCT CHARACTERISTICS

1. Trade name of the medical product

Rozex

2. Qualitative and quantitative composition

Metronidazole 0.75% w/w

Excipients with known effect: One gram of gel contains: Propylene glycol 30mg Propyl parahydroxybenzoate 0.2mg/g Methyl parahydroxybenzoate 0.8 mg/g

For the full list of excipients, see section 6.1.

3. Pharmaceutical form

Gel

Colorless to pale yellow homogenous gel, which may turn to slightly brown colour over time.

4. Clinical particulars

4.1 Therapeutic indications

Topical application for the treatment of inflammatory papules, pustules and erythema of rosacea.

4.2 **Posology and method of administration**

Posology

For topical administration only.

The average period of treatment is three to four months. The recommended duration of treatment should not be exceeded. However, if a clear benefit has been demonstrated, continued therapy for a further three to four months period may be considered by the prescribing physician depending on the severity of the condition. In clinical studies, topical metronidazole therapy for rosacea has been continued for up to 2 years. In the absence of a clear clinical improvement, therapy should be stopped.

Older people: The dosage recommended in the elderly is the same as that recommended in adults.

Paediatric population: Not recommended. Safety and efficacy have not been established.

Method of administration:

Rozex gel should be applied in a thin layer to the affected areas of the skin twice daily, morning and evening. Areas to be treated should be washed with a mild cleanser before application. Patients may use non-comedogenic and non-astringent cosmetics after application of Rozex gel.

4.3 Contraindications

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

4.4 Special warnings and precautions for use

Contact with mucous membranes should be avoided.

Rozex gel has been reported to cause lacrimation of the eyes, therefore, contact with the eyes should be avoided. If a reaction suggesting local irritation occurs patients should be directed to use the medication less frequently or discontinue use temporarily and to seek medical advice if necessary. Metronidazole is a nitroimidazole and should be used with care in patients with evidence of, or history of, blood dyscrasia. Exposure of treated sites to ultraviolet (e.g. solarium, sun-lamp) or strong sunlight (including sun-bathing) should be avoided during use of metronidazole. Metronidazole transforms into inactive metabolite due to UV exposure, therefore its efficacy decreases significantly. Phototoxic side- effects haven't been reported in clinical trials in relation to metronidazole. Unnecessary and prolonged use of this medication should be avoided.

Evidence suggests that metronidazole is carcinogenic in certain animal species. There is no evidence to date of a carcinogenic effect in human (see section 5.3).

This product contains propylene glycol that may cause skin irritation. This product contains methyl hydroxybenzoate and propyl hydroxybenzoate which may cause allergic reactions (possibly delayed).

4.5 Interaction with other medicinal products and other forms of interaction.

Interaction with systemic medication is unlikely because absorption of metronidazole following cutaneous application of Rozex gel is low. Nevertheless, it should be mentioned that disulfiram-like reactions have been reported in a small number of patients taking metronidazole and alcohol concomitantly. Oral metronidazole has been reported to potentiate the effect of warfarin and other coumarin anticoagulants, resulting in a prolongation of prothrombin time. The effect of topical metronidazole on prothrombin is not known. However, very rare cases of modification of the INR values have been reported with concomitant use of Rozex and coumarin anticoagulants.

4.6 Fertility, pregnancy and lactation

Pregnancy

There is no experience to date with the use of Rozex gel in pregnancy. In case of oral administration, metronidazole crosses the placental barrier and rapidly enters the foetal circulation. No foetotoxicity was observed after oral metronidazole in either rats or mice. However because animal reproduction studies are not always predictive of human response and since oral metronidazole has been shown to be a carcinogen in some rodents this drug should be used in pregnancy only if clearly needed.

Breast-feeding

After oral administration, Metronidazole is excreted in breast milk in concentrations similar to those found in the plasma, Metronidazole blood levels from topical administration are significantly lower than those achieved after oral administration. A decision should be made to discontinue nursing or to discontinue the drug, taking into account the importance of the drug to the mother.

4.7 Effects on ability to drive and use machines

Rozex Gel has no influence on the ability to drive and use machines.

4.8 Undesirable effects

Because of the minimal absorption of metronidazole and consequently its insignificant plasma concentration after topical administration, the adverse experiences reported with the oral form of the drug have not been reported with Rozex gel. Adverse reactions reported with Rozex gel have been only local and mild.

System Organ Class	Frequency	Adverse drug reaction
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Skin and subcutaneous tissue disorders	Common (≥ 1/100, < 1/10)	Dry skin, erythema, pruritus, skin discomfort (burning, pain of skin/stinging), skin irritation, worsening of rosacea.
	Unknown frequency	Contact dermatitis, swelling face, skin exfoliation
Nervous system disorders	Uncommon (≥ 1/ 1,000, < 1/100)	Hypoesthesia, paraesthesia, dysgeusia (metallic taste)
Gastrointestinal disorders	Uncommon (≥ 1/ 1,000, < 1/100)	Nausea

Watery eyes have been reported if applied too closely to this area.

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. Any suspected adverse events should be reported to the Ministry of Health according to the National Regulation by using an online form <u>https://sideeffects.health.gov.il</u>

4.9 Overdose

No data exists about overdosage in humans. Acute oral toxicity studies with a topical gel formulation containing 0.75% w/w metronidazole in rats have shown no toxic action with doses of up to 5 g of finished product per kilogram body weight, the highest dose used. This dose is equivalent to the oral intake of 12 tubes of 30g packaging Rozex gel for an adult weighing 72 kg, and 2 tubes of gel for a child weighing 12 kg.

5. Pharmacological properties

5.1 Pharmacodynamic properties

Pharmacotherapeutic Group: Chemotherapeutics for external use ATC code: D06BX01

Metronidazole is an antiprotozoal and antibacterial agent which is active against a wide range of pathogenic micro-organisms. The mechanisms of action of metronidazole in rosacea are unknown but available evidence suggests that the effects may be antibacterial and/or anti-inflammatory.

5.2 Pharmacokinetic properties

Absorption

Metronidazole is rapidly and nearly totally absorbed after oral administration. The drug is not significantly bound to serum proteins and distributes well to all body compartments with the lowest concentration found in the fat.

Distribution

Bioavailability studies with Rozex gel in rosacea patients treated with 7.5 mg metronidazole applied topically to the face resulted in maximum serum concentrations of 66 ng/ml which is approximately 100 times less than those attained after a single oral dose of 250 mg. In most patients at most time points after Rozex gel application, serum concentrations of metronidazole were below the detectable limits of the assay (25 ng/ml).

Elimination

Metronidazole is excreted primarily in the urine as parent drug, oxidative metabolites and conjugates.

5.3 Preclinical safety data

The toxicity studies conducted with the Metronidazole 0.75% Topical Gel formulation demonstrate that the product is non-toxic in rats after acute oral administration 5g/kg and produced no ocular irritation in rabbit eyes. The formulation produced no observable effects in rabbits after dermal application of 13 mg /kg for 90 days.

No compound-related dermal or systemic effects were observed in a 13-week cutaneous route toxicity study, in which Rozex gel containing Metronidazole 0.75% w/w was applied daily to rabbits at doses ranging between 0.13 and 13 mg/kg.

Metronidazole has shown evidence of carcinogenic activity in a number of studies involving chronic, oral administration in mice and rats but not in studies involving hamsters.

One study showed a significant enhancement of UV induced skin tumours in hairless mice treated with Metronidazole intraperitoneally (15 μ g per g body weight and per day for 28 weeks). Although the significance of these studies to man is not clear, patients should be advised to avoid or minimise exposure of metronidazole treated sites to sun.

Metronidazole has shown mutagenic activity in several in vitro bacterial assay systems. In addition, a dose-response increase in the frequency of micronuclei was observed in mice after intraperitoneal injection and an increase in chromosome aberrations have been reported in patients with Crohn's disease who were treated with 200 to 1200mg/day of metronidazole for 1 to 24 months. However, no excess chromosomal aberrations in circulating human lymphocytes have been observed in patients treated for 8 months.

6. Pharmaceutical particulars

6.1 List of excipients

Carbomer 940 Disodium edetate Methyl parahydroxybenzoate Propyl parahydroxybenzoate Propylene Glycol Sodium hydroxide Purified water

6.2 Incompatibilities

None applicable

6.3 Shelf life

Rozex gel has a shelf life when unopened of 36 months After first opening, the gel may be used for up to 3 months.

6.4 Special precautions for storage

Store at room temperature (15° C - 25° C)

6.5 Nature and contents of container

Aluminium tubes Pack size: 30g 6.6 Instructions for Use/Handling

Not applicable

7. Manufacturer: Laboratories Galderma, France

8. Registration holder: Rafa Laboratories Ltd., P.O.Box 405, Jerusalem 9100301. Registration number: 062 18 26970 Revised in November 2021 according to MOHs guidelines.