HIGHLIGHTS OF PRESCRIBING INFORMATION
These highlights do not include all the information needed to use METROGEL, 1% safely and effectively. See full prescribing information for METROGEL, 1%.

METROGEL® (metronidazole) topical gel
Initial U.S. Approval: 1963

----------INDICATIONS AND USAGE----------
METROGEL, 1% is a nitroimidazole indicated for the topical treatment of inflammatory lesions of rosacea. (1)

----------DOSAGE AND ADMINISTRATION----------
- Cleanse treated areas before the application of METROGEL (2)
- Apply and rub in a thin film of METROGEL once daily to affected area(s). (2)
- Cosmetics may be applied after the application of METROGEL. (2)
- Not for oral, ophthalmic, or intravaginal use. (2)

----------DOSAGE FORMS AND STRENGTHS----------
Gel, 1%.

----------CONTRAINDICATIONS----------
METROGEL is contraindicated in those patients with a history of hypersensitivity to metronidazole or to any other ingredient in this formulation. (4)

----------WARNINGS AND PRECAUTIONS----------
- *Neurologic Disease:* Peripheral neuropathy, characterized by numbness or paresthesia of an extremity has been reported in patients treated with systemic metronidazole. Peripheral neuropathy has been reported with the post approval use of topical metronidazole. Immediate reevaluate METROGEL therapy if abnormal neurologic signs appear. (5.1)
- *Blood Dyscrasias:* METROGEL is a nitroimidazole; use with care in patients with evidence of, or history of, blood dyscrasia. (5.2)
- *Contact Dermatitis:* If dermatitis occurs, patients may need to discontinue use. (5.3)
- *Eye Irritation:* Topical metronidazole has been reported to cause tearing of the eyes. Avoid contact with the eyes. (5.4)

----------ADVERSE REACTIONS----------
Most common adverse reactions (incidence > 2%) are nasopharyngitis, upper respiratory tract infection, and headache. (6)

To report SUSPECTED ADVERSE REACTIONS, contact Galderma Laboratories, L.P. at 1-866-735-4137 or FDA at 1-800-FDA-1088 or *www.fda.gov/medwatch.*

----------DRUG INTERACTIONS----------
Oral metronidazole has been reported to potentiate the anticoagulant effect of coumarin and warfarin, resulting in a prolongation of prothrombin time. Use caution when administering METROGEL concomitantly to patients who are receiving anticoagulant treatment. (7)

----------USE IN SPECIFIC POPULATIONS ----------
Lactation: Breastfeeding not recommended. (8.2)

See 17 for PATIENT COUNSELING INFORMATION

Revised: 11/2023

FULL PRESCRIBING INFORMATION: CONTENTS*

*Sections or subsections omitted from the full prescribing information are not listed.

FULL PRESCRIBING INFORMATION

1 INDICATIONS AND USAGE

METROGEL, 1% is indicated for the topical treatment of inflammatory lesions of rosacea.

2 DOSAGE AND ADMINISTRATION

- Cleanse treated areas before the application of METROGEL.
- Apply and rub in a thin film of METROGEL once daily to affected area(s).
- Cosmetics may be applied after the application of METROGEL.
- For topical use only, not for oral, ophthalmic, or intravaginal use.

3 DOSAGE FORMS AND STRENGTHS

Gel, 1%. METROGEL is a clear, colorless to pale yellow gel. Each gram of METROGEL contains 10 mg (1%) of metronidazole.

4 CONTRAINDICATIONS

METROGEL is contraindicated in patients with a history of hypersensitivity to metronidazole or to any other ingredient in the formulation.

5 WARNINGS AND PRECAUTIONS

5.1 Neurologic Disease

Peripheral neuropathy, characterized by numbness or paresthesia of an extremity, has been reported in patients treated with systemic metronidazole. Peripheral neuropathy has been reported with the post approval use of topical metronidazole. Immediately reevaluate METROGEL therapy if abnormal neurologic signs appear. Administer metronidazole with caution to patients with central nervous system diseases.

5.2 Blood Dyscrasias

METROGEL is a nitroimidazole; use with care in patients with evidence of, or history of, blood dyscrasia.

5.3 Contact Dermatitis

Irritant and allergic contact dermatitis have been reported with METROGEL. If dermatitis occurs, patients may need to discontinue use.

5.4 Eye Irritation

Topical metronidazole has been reported to cause tearing of the eyes. Avoid contact with the eyes.

6 ADVERSE REACTIONS

The following clinically significant adverse reactions are described elsewhere in the labeling:

- Neurologic Disease *[see Warnings and Precautions (5.1)]*
- Contact Dermatitis *[see Warnings and Precautions (5.3)]*
- Eye Irritation *[see Warnings and Precautions (5.4)]*

6.1 Clinical Trials Experience

Because clinical trials are conducted under widely varying conditions, adverse reaction rates observed in the clinical trials of a drug cannot be directly compared to rates in the clinical trials of another drug and may not reflect the rates observed in practice.

In a controlled clinical trial, 557 subjects used METROGEL and 189 subjects used the gel vehicle once daily for up to 10 weeks. The following table summarizes selected adverse reactions that occurred at a rate of ≥1% and at a higher rate than vehicle:

Table 1: Adverse Reactions That Occurred at a Rate of ≥1% and Higher Than Vehicle in Subjects Treated with METROGEL for Up to 10 Weeks

Preferred Term	METROGEL	Vehicle
	(N= 557) N (%)	(N= 189) N (%)

Influenza	8 (1.4)	1 (0.5)
Upper respiratory tract infection	14 (2.5)	4 (2.1)
Urinary tract infection	6 (1.1)	1 (0.5)
Headache	12 (2.2)	1 (0.5)
Contact dermatitis	7 (1.3)	1 (0.5)
Hypertension	6 (1.1)	1 (0.5)

Table 2: Local Cutaneous Signs and Symptoms of Irritation That Were Worse Than Baseline in Subjects Treated with METROGEL for Up to 10 Weeks

	METROGEL	**Vehicle**
Sign/Symptom	**(N= 544) N (%)**	**(N= 184) N (%)**
Dryness	**138 (25.4)**	**63 (34.2)**
Mild	93 (17.1)	41 (22.3)
Moderate	42 (7.7)	20 (10.9)
Severe	3 (0.6)	2 (1.1)
Scaling	**134 (24.6)**	**60 (32.6)**
Mild	88 (16.2)	32 (17.4)
Moderate	43 (7.9)	27 (14.7)
Severe	3 (0.6)	1 (0.5)
Pruritus	**86 (15.8)**	**35 (19.0)**
Mild	53 (9.7)	21 (11.4)
Moderate	27 (5.0)	13 (7.1)
Severe	6 (1.1)	1 (0.5)
Stinging/burning	**56 (10.3)**	**28 (15.2)**
Mild	39 (7.2)	18 (9.8)
Moderate	7 (1.3)	9 (4.9)
Severe	10 (1.8)	1 (0.5)

The following additional adverse reactions have been reported with the topical use of metronidazole: transient redness, metallic taste, tingling or numbness of extremities, and nausea.

6.2 Post Marketing Experience

The following adverse reaction has been identified during post-approval use of topical metronidazole. Because this reaction is reported voluntarily from a population of uncertain size, it is not always possible to reliably estimate the frequency or establish a causal relationship to drug exposure.

Nervous System Disorders: Peripheral neuropathy
Ophthalmic Adverse Reactions: Tearing of the eyes

7 DRUG INTERACTIONS

Oral metronidazole has been reported to potentiate the anticoagulant effect of coumarin and warfarin, resulting in a prolongation of prothrombin time. Use caution when prescribing for patients who are receiving anticoagulant treatment.

8 USE IN SPECIFIC POPULATIONS

8.1 Pregnancy

Risk Summary

Available data have not established an association between metronidazole use during pregnancy and major birth defects, miscarriage or other adverse maternal or fetal outcomes. No fetotoxicity was observed after oral administration of metronidazole in pregnant rats or mice. The available data do not allow the calculation of relevant comparisons between the systemic exposures of metronidazole observed in animal studies to the systemic exposures that would be expected in humans after topical use of METROGEL.

The background risk of major birth defects and miscarriage for the indicated population is unknown. All pregnancies have a background risk of birth defect, loss, or other adverse outcomes. In the U.S. general population, the estimated background risk of major birth defects and miscarriage in clinically recognized pregnancies is 2-4% and 15-20%, respectively.

8.2 Lactation

Risk Summary

It is not known whether metronidazole is present in human milk after topical administration. Published literature reports the presence of metronidazole in human milk after oral administration. There are no data on the effects of metronidazole on milk production. Because of the potential for serious adverse reactions, advise patients that breastfeeding is not recommended during treatment with METROGEL.

8.4 Pediatric Use

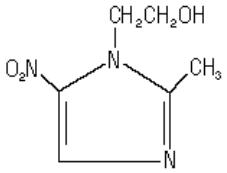
Safety and effectiveness of METROGEL have not been established in pediatric patients.

8.5 Geriatric Use

Sixty-six subjects aged 65 years and older were treated with METROGEL in the clinical study. No overall differences in safety or effectiveness were observed between these subjects and younger subjects, and other reported clinical experience has not identified differences in responses between the elderly and younger patients, but greater sensitivity of some older individuals cannot be ruled out.

11 DESCRIPTION

METROGEL (metronidazole) topical gel, 1% is a nitroimidazole for topical use. METROGEL is a clear, colorless to pale yellow, aqueous gel. Each gram contains 10 mg of metronidazole. Chemically, metronidazole is 2-methyl-5-nitro-1 *H*-imidazole-1-ethanol. The molecular formula for metronidazole is $C_6H_9N_3O_3$. It has the following structural formula:



Metronidazole has a molecular weight of 171.16. It is a white to pale yellow crystalline powder. It is slightly soluble in alcohol and has solubility in water of 10 mg/mL at 20˚C. Metronidazole belongs to the nitroimidazole class of compounds.

The inactive ingredients are betadex, edetate disodium, hydroxyethyl cellulose, methylparaben, niacinamide, phenoxyethanol, propylene glycol, propylparaben and purified water.

12 CLINICAL PHARMACOLOGY

12.1 Mechanism of Action

The mechanism of action of metronidazole in the treatment of rosacea is unknown**.**

12.2 Pharmacodynamics

The pharmacodynamics of metronidazole in association with the treatment of rosacea are unknown.
Cardiac Electrophysiology: The effect of METROGEL on the QTc interval has not been adequately characterized.

12.3 Pharmacokinetics

Topical administration of a one-gram dose of METROGEL to the face of 13 subjects with moderate to severe rosacea once daily for 7 days resulted in a mean ± SD C_{max} of metronidazole of 32 ± 9 ng/mL. The mean ± SD $AUC_{(0-24)}$ was 595 ± 154 ng*hr/mL. The mean C_{max} and $AUC_{(0-24)}$ are less than 1% of the value reported for a single 250 mg oral dose of metronidazole. The time to maximum plasma concentration (T_{max}) was 6-10 hours after topical application.

13 NONCLINICAL TOXICOLOGY

13.1 Carcinogenesis, Mutagenesis, Impairment of Fertility

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

In several long-term studies in mice, oral doses of approximately 225 mg/m^2/day or greater were associated with an increase in pulmonary tumors and lymphomas. Several long-term oral studies in the rat have shown statistically significant increases in mammary and hepatic tumors at doses >885 mg/m^2/day.

Metronidazole has shown evidence of mutagenic activity in several in vitro bacterial assay systems. In addition, a dose-related increase in the frequency of micronuclei was observed in mice after intraperitoneal injections. An increase in chromosomal aberrations in peripheral blood lymphocytes was reported in patients with Crohn's disease who were treated with 200 to 1200 mg/day of metronidazole for 1 to 24 months. However, in another study, no increase in chromosomal aberrations in circulating lymphocytes was observed in patients with Crohn's disease treated with the drug for 8 months.

14 CLINICAL STUDIES

In a randomized, vehicle-controlled trial, 746 subjects with rosacea were treated with METROGEL or vehicle once daily for 10 weeks. Most subjects had a disease severity score of 3 ("moderate") on the 5-point Investigator Global Assessment (IGA) scale, with 8 to 50 inflammatory lesions and no more than two nodules at baseline. The co-primary efficacy endpoints were the percent reduction in inflammatory lesion counts and percentage of subjects with success on IGA, defined as an IGA score of 0 ("clear") or 1 ("almost clear") at Week 10.

The efficacy results are shown in the following table:

Table 3: Inflammatory Lesion Counts and Global Scores in Subjects with Rosacea at Week 10 in a Clinical Trial

	METROGEL		Vehicle	
	N	Results N (%)	N	Results N (%)
Inflammatory lesions	557		189	
Baseline, mean count		18.3		18.4
Week-10, mean count		8.9		12.8
Reduction		9.4 (50.7)		5.6 (32.6)
Investigator Global Assessment	557		189	
Subject clear or almost clear		214 (38.42)		52 (27.51)
Subject with no change		159 (28.5)		77 (40.7)

Subjects treated with METROGEL experienced a mean reduction of 9.4 inflammatory lesions in the Week-10 LOCF group, compared to a reduction of 5.6 for those treated with vehicle, or a difference in means of 3.8 lesions.

16 HOW SUPPLIED/STORAGE AND HANDLING

How Supplied

METROGEL®is clear, colorless to pale yellow in color, and supplied as follows:
60 gram tube – NDC 0299-3820-60
55 gram pump – NDC 0299-3820-01

Storage and Handling

Store at controlled room temperature: 20˚ to 25˚C (68˚ to 77˚F), excursions permitted between 15˚ and 30˚C (59˚ and 86˚F).

17 PATIENT COUNSELING INFORMATION

Advise the patient to read the FDA-approved patient labeling (Patient Information).

Administration Instructions

Use as directed. Avoid contact with the eyes *[see Warnings and Precautions (5.4)]*.
Cleanse treated areas before the application of METROGEL *[see Dosage and Administration (2)]*
Advise patients to report any adverse reaction to their healthcare providers.

Neurologic Disease
Advise patients to immediately report any abnormal neurologic signs to their healthcare provider *[see Warnings and Precautions (5.1)]*.

Lactation
Advise women not to breastfeed during treatment with METROGEL *[see Use in Specific Populations (8.2)]*.

Rx Only
US Patent No. 6,881,726 and 7,348,317

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