New Zealand Data Sheet

CANESTEN®

Canesten Clotrimazole Thrush 6 Day Cream, internal vaginal cream 10 mg/g (1%)

Canesten Clotrimazole Thrush 3 Day Cream, internal vaginal cream 20 mg/g (2%)

Canesten Clotrimazole Thrush 1 Day Cream, internal vaginal cream 100 mg/g (10%)

Canesten Clotrimazole Thrush 6 Day Pessary, vaginal pessary 100 mg

Canesten Clotrimazole Thrush 1 Day Pessary, vaginal pessary 500 mg

Canesten Clotrimazole Thrush 1 Day Pessary & Cream, vaginal pessary 500 mg + topical cream 10 mg/g (1%)

1. Name of the Medicinal Product

Clotrimazole

1-(o-chloro- α , α - diphenylbenzyl) imidazole

C22H17CIN2

Molecular Weight 344.84

Clotrimazole is a colourless, crystalline, weakly alkaline substance, melting point 141°- 145°C, soluble in acetone, chloroform and ethanol and practically insoluble in water. It forms stable salts with both organic and inorganic acids. It is not photosensitive but is slightly hygroscopic, and may be hydrolysed in acid media.

2. Qualitative and Quantitative Composition

Qualitative Composition in terms of the active ingredient

All formulations: clotrimazole

Quantitative Composition in terms of the active ingredient

Canesten Clotrimazole Thrush 6 Day Cream contains 10 mg/g (1% w/w) of clotrimazole in a vanishing cream base.

Canesten Clotrimazole Thrush 3 Day Cream contains 20 mg/g (2% w/w) of clotrimazole in a vanishing cream base.

Canesten Clotrimazole Thrush 1 Day Cream contains 100 mg/g (10% w/w) of clotrimazole in a vanishing cream base

Canesten Clotrimazole Thrush 6 Day Pessary contains 100 mg of clotrimazole in each pessary.

Canesten Clotrimazole Thrush 1 Day Pessary contains 500 mg of clotrimazole in each pessary.

Canesten Clotrimazole Thrush 1 Day Pessary & Cream contains 500 mg of clotrimazole in each pessary and 10 mg/g clotrimazole in the cream.

For a full list of excipients, see section 6.1.

3. Pharmaceutical Form

Canesten Clotrimazole Thrush 6 Day Cream Vaginal cream.

A white, opaque cream.

Canesten Clotrimazole Thrush 3 Day Cream Vaginal cream.

A white, opaque cream.

Canesten Clotrimazole Thrush 1 Day Cream Vaginal cream.

A white, opaque cream.

Canesten Clotrimazole Thrush 6 Day Pessary Vaginal pessary.

White pellet-shaped pessaries.

Canesten Clotrimazole Thrush 1 Day Pessary Vaginal pessary.

A white, pellet-shaped pessary.

Canesten Clotrimazole Thrush 1 Day Pessary & Cream Combination product – vaginal pessary and topical cream.

A white, pellet-shaped pessary and white, opaque cream.

4. Clinical Particulars

4.1 Therapeutic Indications

Canesten Clotrimazole Thrush 6 Day, 3 Day and 1 Day creams are indicated for the topical treatment of vulvovaginal candidiasis. Canesten cream may also be used in conjunction with Canesten vaginal pessaries in the management of Candida vulvovaginitis or infection of the peri-anal area, while application of the cream to the glans penis of the partner may help prevent re-infection of the female.



Canesten Clotrimazole Thrush 6 Day and 1 Day vaginal pessaries are indicated for the topical treatment of vaginal candidiasis.

Canesten Clotrimazole Thrush 1 Day Pessary & Cream is indicated for the topical treatment of vulvovaginal candidiasis. The cream can also be used in the management of Candida vulvovaginitis or infection of the perianal area, while application of the cream to the glans penis of the partner may help prevent re-infection of the female.

4.2 Dose and Method of Administration

Canesten Clotrimazole Thrush 6 Day Cream

Once daily, preferably in the evening for six successive days, one applicator should be filled with cream (approx. 5 g) and inserted as deeply as possible into the vagina with the patient lying on her back. The 35 g tube of cream for vaginal use provides for six such doses.

Canesten Clotrimazole Thrush 3 Day Cream

Once daily, preferably in the evening for three successive days, one applicator should be filled with cream (approx. 5 g) and inserted as deeply as possible into the vagina with the patient lying on her back. The 20 g tube of cream for vaginal use provides for three such doses.

Canesten Clotrimazole Thrush 1 Day Cream

The disposable applicator should be filled with Canesten Clotrimazole Thrush 1 Day cream, ensuring the entire contents of the tube are used (approx. 5 g). The cream is then inserted as gently and deeply as possible into the vagina with the patient lying on her back at bedtime as a single dose of treatment.

Canesten Clotrimazole Thrush Vaginal Pessaries

The pessaries should be inserted as deeply as possible into the vagina once daily, preferably in the evening before going to bed. This is best achieved using the plastic applicator provided and when lying back with the legs slightly drawn up. In pregnancy, digital insertion may be preferable to use of the applicator.

A course of treatment normally consists of either a single 500 mg pessary (Canesten Clotrimazole Thrush 1 Day Pessary) or of six 100 mg pessaries (Canesten Clotrimazole Thrush 6 Day Pessary). The latter may be given either as two pessaries, inserted one after the other, daily for three days or as one pessary daily for six days. Clinical investigations have shown comparable efficacy from either dosage scheme. Where a first course proved unsuccessful, a second course produced success in 8 of 12 women treated.

Clotrimazole vaginal pessaries need moisture in the vagina to dissolve completely, otherwise undissolved pieces of the vaginal pessary might crumble out of the vagina. To prevent this it is important to insert the medication as deeply as possible into the vagina at bedtime. Should the vaginal pessary not dissolve completely within one night, the use of a vaginal cream should be considered.

Generally:

If symptoms persist for more than 7 days or do not improve within 4 days, the patient may have a medical condition that requires treatment by a doctor.

The treatment can be repeated if necessary, however recurrent infections may indicate an underlying medical cause, including diabetes or HIV infection. Patients should seek medical advice if symptoms return within 2 months or they have had 3 or more infections within 6 months.

If the labia and adjacent areas are simultaneously infected, local treatment with an external cream should also be given in addition to the intravaginal treatment (combination treatment). The sexual partner should also undergo local treatment if symptoms e.g. pruritis, inflammation, etc. are present.

Treatment during the menstrual period should not be performed. The treatment should be finished before the onset of menstruation.



Do not use tampons, intravaginal douches, spermicides or other vaginal products while using this product.

Avoidance of vaginal intercourse is recommended in case of vaginal infection and while using this product as the partner could become infected.

During pregnancy, the vaginal pessaries should be used and should be inserted without using an applicator.

Canesten vaginal products are intended for use by adults aged 18 - 60 years, unless use is advised by a doctor.

Paediatric Population

Canesten vaginal products are intended for use by adults aged 18 – 60 years. There are no data available for paediatric use

4.3 Contraindications

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

4.4 Special Warnings and Precautions for Use

If the patient has a fever (temperature of 38°C or above), lower abdominal pain, back pain, foul smelling vaginal discharge, nausea, vaginal haemorrhage and/or associated shoulder pain the patient should consult a doctor.

Generally:

Keep the medicine out of reach of children.

Avoid contact with eyes.

Do not swallow.

Clotrimazole cream may reduce the effectiveness and safety of latex products such as condoms and diaphragms when applied to the genital area (women: intravaginally, labia and adjacent area of the vulva; men: prepuce and glans of the penis).

For products containing cetostearyl alcohol i.e. the cream presentations:

Cetostearyl alcohol may cause local skin reactions (e.g. contact dermatitis).

4.5 Interactions with Other Medicines and Other Forms of Interaction

Concomitant treatment with vaginal clotrimazole and oral tacrolimus (FK-506; immunosuppressant) might lead to increased tacrolimus plasma levels, and similarly with sirolimus. Patients should thus be thoroughly monitored for symptoms of tacrolimus or sirolimus overdosage, if necessary by determination of the respective plasma levels.

4.6 Fertility, Pregnancy and Lactation

Fertility

No human studies of the effects of clotrimazole on fertility have been performed, however animal studies have not demonstrated any effects of the medicine on fertility.

Pregnancy (Category A)

There is a limited amount of clinical data in pregnant women. Animal studies do not indicate direct or indirect harmful effects with respect to reproductive toxicity (see section 5.3). Clotrimazole can be used during pregnancy, but only under the direction of a health care professional. During pregnancy, the treatment should be carried out with Canesten clotrimazole vaginal pessaries since these can be inserted without using an applicator.



Lactation

There are no data on the excretion of clotrimazole into human milk. However, systemic absorption is minimal after administration and is unlikely to lead to systemic effects. Clotrimazole may be used during lactation.

4.7 Effects on Ability to Drive and Use Machines

The medication has no or negligible influence on the ability to drive or use machinery.

4.8 Undesirable Effects

Frequency not known. The following adverse reactions have been identified during post-approval use of clotrimazole. Because these reactions are reported voluntarily from a population of uncertain size, frequency cannot be estimated from the available data.

Immune system disorders: anaphylactic reaction, angioedema, hypersensitivity

Vascular Disorder: syncope, hypotension

Respiratory, thoracic and mediastinal disorders: dyspnea

Reproductive System and Breast Disorders: Vaginal exfoliation, vaginal discharge, vulvovaginal pruritis, vulvovaginal erythema, vulvovaginal discomfort, vulvovaginal burning sensation, vulvovaginal pain, vaginal haemorrhage.

Gastrointestinal Disorders: abdominal pain, nausea

Skin and Subcutaneous Tissue Disorders: rash, urticaria

General disorders and administration site conditions: application site irritation, oedema, pain.

Reporting of Suspected Adverse Reactions

Reporting suspected adverse reactions after authorisation of the medicine is important. It allows continued monitoring of the benefit/risk balance of the medicine. Healthcare professionals are asked to report any suspected adverse reactions https://nzphvc.otago.ac.nz/reporting/.

4.9 Overdose

No risk of acute intoxication is seen as it is unlikely to occur following a single vaginal or dermal application of an overdose (application over a large area under conditions favourable to absorption) or inadvertent oral ingestion. There is no specific antidote.

For advice on the management of overdose please contact the National Poisons Centre on 0800 POISON (0800 764766).

5. Pharmacological Properties

5.1 Pharmacodynamic Properties

Pharmacotherapeutic Group

Antifungals for vaginal use – imidazole and triazole derivatives.

ATC Code: G01 AF02

Mechanism of Action

Azoles (e.g. clotrimazole) are usually recommended for the local treatment of vulvovaginal candidosis that is characterized by vulvovaginal symptoms such as itching, burning, discharge, redness, swelling and soreness.

Clotrimazole acts against fungi by inhibiting ergosterol synthesis. Inhibition of ergosterol synthesis leads to structural and functional impairment of the fungal cytoplasmic membrane.

Clotrimazole has a broad antimycotic spectrum of action in vitro and in vivo, which includes dermatophytes, yeasts, moulds, etc.

Under appropriate test conditions, the MIC values for these types of fungi are in the region of less than $0.062 - 8.0 \,\mu\text{g/mL}$ substrate.

The mode of action of clotrimazole is primarily fungistatic or fungicidal depending on the concentration of clotrimazole at the site of infection. In vitro activity is limited to proliferating fungal elements; fungal spores are only slightly sensitive.

In addition to its antimycotic action, clotrimazole also acts on gram-positive micro-organisms (Streptococci / Staphylococci / Gardnerella vaginalis) and gram-negative micro-organisms (Bacteroides).

In vitro clotrimazole inhibits the multiplication of Corynebacteria and gram-positive cocci (with the exception of Enterococci) in concentrations of $0.5-10~\mu g/mL$ substrate.

Primarily resistant variants of sensitive fungal species are very rare; the development of secondary resistance by sensitive fungi has so far only been observed in very isolated cases under therapeutic conditions.

5.2 Pharmacokinetic Properties

Pharmacokinetic investigations after vaginal application have shown that only a small amount of clotrimazole (3 - 10%) is absorbed. Due to the rapid hepatic metabolisation of absorbed clotrimazole into pharmacologically inactive metabolites the resulting peak plasma concentrations of clotrimazole after vaginal application of a 500 mg dose were less than 10 ng/mL, suggesting that clotrimazole applied intravaginally is unlikely to lead to measurable systemic effects or side effects.

5.3 Preclinical Safety Data

Non-clinical data reveal no special hazard for humans based on conventional studies of safety pharmacology, repeated dose toxicity, genotoxicity, carcinogenic potential and toxicity to reproduction and development.

The local and systemic tolerance of clotrimazole in different dosage forms was assessed in intravaginal studies in dogs and monkeys and in subacute dermal studies in rabbits. There was no evidence of treatment-related local or systemic adverse effects in any of these studies.

The oral toxicity of clotrimazole has been well-studied.

Following a single oral administration, clotrimazole was slight-to-moderately toxic in experimental animals, with LD50 values of 761 to 923 mg/kg bw for mice, 95 to 114 mg/kg bw for new born rats and 114 to 718 mg/kg bw for adult rats, > 1000 mg/kg bw for rabbits and > 2000 mg/kg bw for dogs and cats.

In repeated dose oral studies conducted in rats and dogs, the liver was found to be the primary target organ for toxicity. This was evidenced by an increase in serum transaminase activities and the appearance of liver vacuolation and fatty deposits starting at 50 mg/kg in the chronic (78-week) rat study and at 100 mg/kg in the subchronic (13-week) dog study.



Clotrimazole has been extensively studied in *in vitro* and *in vivo* mutagencity assays, and no evidence of mutagenic potential was found. A 78-week oral dosing study of clotrimazole in rats did not show any carcinogenic effect.

In a rat fertility study, groups of FB30 rats received oral doses of clotrimazole up to 50 mg/kg bw for 10 weeks prior to mating and either throughout a 3-week mating period (for males only) or, for females, until day 13 of gestation or 4-week postpartum. Neonatal survival was reduced in the 50 mg/kg bw group. Clotrimazole at doses up to 25 mg/kg bw did not impair the development of the pups. Clotrimazole at all doses did not affect fertility.

No teratogenicity effects were demonstrated in studies in mice, rabbits and rats, given oral doses of up to 200, 180 and 100 mg/kg respectively.

A study with 3 lactating rats administered 30 mg/kg clotrimazole intravenously showed that the medicine was secreted into milk at levels higher than in plasma by a factor of 10 to 20 at 4 hours after administration, followed by a decline to a factor of 0.4 by 24 hours.

Given the limited absorption of clotrimazole after vaginal application (estimated to be 3% - 10%) no hazard is expected from the use of vaginal clotrimazole.

6. Pharmaceutical Particulars

6.1 List of Excipients

Canesten Clotrimazole Thrush 6 Day Cream contains 10 mg/g (1% w/w) of clotrimazole in a vanishing cream base. The cream also contains sorbitan stearate, polysorbate 60, cetyl palmitate, cetostearyl alcohol, octyldodecanol, benzyl alcohol (2% w/w) and purified water.

Canesten Clotrimazole Thrush 3 Day Cream contains 20 mg/g (2% w/w) of clotrimazole in a vanishing cream base. The cream also contains sorbitan stearate, polysorbate 60, cetyl palmitate, cetostearyl alcohol, octyldodecanol, benzyl alcohol (2% w/w) and purified water.

Canesten Clotrimazole Thrush 1 Day Cream contains 100 mg/g (10% w/w) of clotrimazole in a vanishing cream base. The cream also contains sorbitan stearate, polysorbate 60, cetyl palmitate, cetostearyl alcohol, isopropyl myristate, benzyl alcohol (1% w/w) and purified water.

Canesten Clotrimazole Thrush 6 Day Pessary contains 100 mg of clotrimazole in each pessary. The pessaries also contain lactose monohydrate, maize starch, magnesium stearate, silicon dioxide, calcium lactate pentahydrate, crospovidone, lactic acid, hypromellose, microcrystalline cellulose.

Canesten Clotrimazole Thrush 1 Day Pessary contains 500 mg of clotrimazole in each pessary. The pessaries also contain lactose monohydrate, microcrystalline cellulose, lactic acid, maize starch, crospovidone, calcium lactate; magnesium stearate, silicon dioxide, hypromellose.

Canesten Clotrimazole Thrush 1 Day Pessary & Cream contains 500 mg of clotrimazole in each pessary and 10 mg/g clotrimazole in the cream. The pessary also contains lactose monohydrate, microcrystalline cellulose, lactic acid, maize starch, crospovidone, calcium lactate; magnesium stearate, silicon dioxide, hypromellose. The cream also contains sorbitan stearate, polysorbate 60, cetyl palmitate, cetostearyl alcohol, octyldodecanol, benzyl alcohol (2% w/w) and purified water.

6.2 Incompatibilities

None known.



6.3 Shelf Life

Canesten Clotrimazole Thrush 6 Day Cream	48 months (4 years) from date of manufacture
Canesten Clotrimazole Thrush 3 Day Cream	48 months (4 years) from date of manufacture
Canesten Clotrimazole Thrush 1 Day Cream	36 months (3 years) from date of manufacture
Canesten Clotrimazole Thrush 6 Day Pessary	36 months (3 years) from date of manufacture
Canesten Clotrimazole Thrush 1 Day Pessary	36 months (3 years) from date of manufacture
Canesten Clotrimazole Thrush 1 Day Pessary & Cream	36 months (3 years) from date of manufacture

6.4 Special Precautions for Storage

Canesten Clotrimazole Thrush 6 Day Pessaries: Store at or below 30°C.

All other presentations: Store at or below 25°C.

Keep the medicine out of the reach of children.

6.5 Nature and Contents of Container

Canesten Clotrimazole Thrush 6 Day Cream

One tube containing 35 g of vaginal cream, 10 mg clotrimazole per gram (1% w/w) packed with six single-use disposable applicators and patient instruction sheet.

Canesten Clotrimazole Thrush 3 Day Cream

One tube containing 20 g of vaginal cream, 20 mg clotrimazole per gram (2% w/w) packed with three single-use disposable applicators and patient instruction sheet.

Canesten Clotrimazole Thrush 1 Day Cream

One tube containing 5 g of vaginal cream, 100 mg clotrimazole per gram (10% w/w) packed with a single-use applicator and patient instruction sheet.

Canesten Clotrimazole Thrush 6 Day Pessary

Packs of six vaginal pessaries each sealed in a blister with plastic applicator and patient instruction sheet. Each pessary contains 100 mg clotrimazole per tablet.

Canesten Clotrimazole Thrush 1 Day Pessary

One vaginal pessary sealed in a blister with plastic applicator and patient instruction sheet. Each pessary contains 500 mg clotrimazole.

Canesten Clotrimazole Thrush 1 Day Pessary & Cream

One vaginal pessary sealed in a blister with plastic applicator, one tube containing 10 g topical cream and patient instruction sheet. Each pessary contains 500 mg clotrimazole. Each gram of cream contains 10 mg clotrimazole.



6.6 Special Precautions for Disposal

Medicines should not be disposed of via wastewater or household waste. Ask a pharmacist how to dispose of medicines no longer required. These measures will help to protect the environment.

7. Medicine Schedule

Pharmacist Only Medicines

8. Sponsor

Bayer New Zealand Limited Auckland

P. O. Box 2825 Shortland Street Auckland 1140

Freephone 0800 229 376

www.canesten.co.nz

9. Date of First Approval

6 March 1975

10. Date of Revision of the Text

4 April 2022