

## **PRODUCT MONOGRAPH**

### **Clotrimaderm Vaginal 6**

(Clotrimazole Vaginal Cream USP 1%)

### **Clotrimaderm Vaginal 3**

(Clotrimazole Vaginal Cream USP 2%)

### **Clotrimaderm External Cream**

(Clotrimazole Vaginal Cream USP 1%)

## **Antifungal Agent**

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**Clotrimaderm Vaginal 6**  
(Clotrimazole Vaginal Cream USP 1%)

**Clotrimaderm Vaginal 3**  
(Clotrimazole Vaginal Cream USP 2%)

**Clotrimaderm External Cream**  
(Clotrimazole Vaginal Cream USP 1%)

## PART I: HEALTH PROFESSIONAL INFORMATION

### SUMMARY PRODUCT INFORMATION

Route of Administration	Dosage Form/ Strength	Clinically Relevant Nonmedicinal Ingredients
Vaginal	cream 1%, 2%	<i>For a complete listing see <a href="#">Dosage Forms, Composition and Packaging</a> section.</i>

### INDICATIONS AND CLINICAL USE

Clotrimaderm Vaginal 6 (clotrimazole) is indicated for the 6-day treatment of vaginal candidiasis.

Clotrimaderm Vaginal 3 (clotrimazole) is indicated for the 3-day treatment of vaginal candidiasis.

Clotrimaderm External Cream (Clotrimazole Cream 1%) is indicated for the topical treatment of external irritation caused by vulvovaginal candidiasis.

### CONTRAINDICATIONS

Patients who are hypersensitive to this drug or to any ingredient in the formulation or component of the container. For a complete listing, see the [DOSAGE FORMS, COMPOSITION AND PACKAGING](#) section of the product monograph.

### WARNINGS AND PRECAUTIONS

#### **General**

Clotrimaderm Vaginal cream and Clotrimaderm External Cream are not for ophthalmic use. Patients

*Clotrimaderm Vaginal 6*  
*Clotrimaderm Vaginal 3*  
*Clotrimaderm External Cream*

should seek medical advice if they have frequent vaginal infections or if their yeast infection returns in less than 2 months.

Patients should seek medical advice if they suffer from diabetes mellitus, or have underlying immunodeficiency disease (such as HIV-AIDS).

As with all topical agents, skin sensitization may result. Use of Clotrimaderm External Cream topical preparations should be discontinued should such reactions occur, and appropriate therapy instituted.

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

While sexual relation may be had during treatment with clotrimazole topical preparations, most couples wait until treatment has finished as the partner could become infected.

### **Effects on Fertility**

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

### **Special Populations**

#### **Pregnant Women:**

There are limited amounts of data from the use of clotrimazole in pregnant women. Animal studies do not indicate direct or indirect harmful effects with respect to reproductive toxicity (see [REPRODUCTION AND TERATOLOGY](#)). Although intravaginal application of clotrimazole has shown negligible absorption from both normal and inflamed human vaginal mucosa, Clotrimaderm Vaginal cream should not be used in the first trimester of pregnancy unless the physician considers it essential to the welfare of the patient. The use of applicators may be undesirable in some pregnant patients.

**Nursing Women:** Available pharmacodynamics / toxicological studies in animals have shown excretion of clotrimazole / metabolites in milk. Breastfeeding should be discontinued during treatment with clotrimazole.

## **ADVERSE REACTIONS**

### **Adverse Drug Reaction Overview**

Experimental, therapeutic, and large scale clinical studies have shown clotrimazole to be well tolerated after topical application.

#### **For Clotrimazole External Cream:**

Immune system disorders: anaphylactic reaction, angioedema, hypersensitivity

Vascular disorder: syncope, hypotension

Respiratory, thoracic and mediastinal disorders: dyspnea

Skin and subcutaneous skin disorders: urticarial, blisters, discomfort/pain, edema, erythema, irritation, peeling/exfoliation, pruritis, rash, stinging/burning sensation.

### **For Clotrimazole Vaginal Cream:**

Immune system disorders: anaphylactic reaction, angioedema, hypersensitivity

Vascular disorder: syncope, hypotension

Respiratory, thoracic and mediastinal disorders: dyspnea

Reproductive system disorders and breast disorders: vaginal exfoliation pruritis, ulvovaginal erythema, vulvovaginal burning sensation, blistering, vulvovaginal discomfort, vulvovaginal pain, vaginal hemorrhage, vaginal discharge.

Gastrointestinal disorder: abdominal pain, nausea

Skin and subcutaneous skin disorders: urticaria

General disorders and administration site conditions: pain, edema, application site irritation

Two of 419 (0.5%) patients treated with the 1% vaginal cream experienced adverse reactions judged to be possibly drug related. These were intercurrent cystitis and vaginal burning. Neither necessitated discontinuation of treatment. None were of serious consequence and no complications occurred.

In clinical trials, 2/217 patients (0.9%) who received 2% clotrimazole vaginal cream experienced an adverse reaction. Most adverse reactions involved local itching and burning. Only rarely was it necessary to discontinue treatment.

## **DRUG INTERACTIONS**

### **Overview**

#### **Drug-Drug Interactions**

Concomitant medication with vaginal Clotrimazole and oral tacrolimus/sirolimus (immunosuppressants) might lead to increased tacrolimus/sirolimus plasma levels. Patients should thus be thoroughly monitored for symptoms of tacrolimus/sirolimus overdose.

## DOSAGE AND ADMINISTRATION

### **Dosing Considerations**

Vaginal Candidiasis may be accompanied by irritation in the vaginal area. Therefore, concomitant local treatment with Clotrimaderm Vaginal cream (or Clotrimazole External Cream) applied to the irritated vaginal area and as far as the anal region twice a day is advisable. Clotrimazole External Cream (or Clotrimazole Vaginal cream) applied on the glans penis may prevent re-infection by the partner.

N.B.: The cream should be inserted deep intravaginally by means of the applicator (See [PRECAUTIONS](#)). The plunger should then be depressed slowly.

General hygienic measures such as twice daily tub baths and avoidance of tight underclothing are important in vaginal infections.

### **Recommended Dose and Dosage Adjustment**

#### **Vaginal Candidiasis**

##### Clotrimaderm Vaginal 6

The recommended daily dose is ONE full applicator intravaginally for SIX consecutive days, preferably at bedtime.

##### Clotrimaderm Vaginal 3

The recommended daily dose is ONE full applicator intravaginally for THREE consecutive days, preferably at bedtime.

##### Clotrimaderm External Cream

The cream should be spread onto the irritated area once or twice daily as needed, for up to seven consecutive days.

## OVERDOSAGE

For management of a suspected drug overdose, contact your regional Poison Control Centre.
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## ACTION AND CLINICAL PHARMACOLOGY

### **Mechanism of Action**

Clotrimazole acts primarily by damaging the permeability barrier in the cell membrane of fungi. Clotrimazole brings about inhibition of ergosterol biosynthesis, an essential constituent of fungal cell membranes. If ergosterol synthesis is completely or partially inhibited, the cell is no longer able to construct an intact cell membrane. This leads to death of the fungus.

Exposure of Candida albicans to clotrimazole causes leakage of intracellular phosphorus compounds into the ambient medium with a concomitant breakdown of cellular nucleic acids and potassium efflux. The onset of these events is rapid and extensive after exposure of the organism to the drug, and causes a time-dependent and concentration-dependent inhibition of fungal growth.

### **Pharmacokinetics**

Pharmacokinetic investigations after vaginal application have shown that only a small amount of clotrimazole (3-10%) is absorbed. Due to the rapid hepatic metabolism of absorbed clotrimazole into pharmacologically active 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.

Metabolism studies performed after oral or intravenous administration have shown that in most species studies, levels of clotrimazole in tissue and serum are low. The majority of the drug is excreted as metabolites in the feces, with small amounts excreted in the urine. Human studies indicate slow excretion following oral administration of <sup>14</sup>C-labelled clotrimazole (greater than 6 days). After intraperitoneal and subcutaneous administration, very low levels have been observed in the urine. The absorption and organ distribution of the drug is very poor when administered parenterally.

The pharmacokinetics of topically applied clotrimazole in human subjects have been evaluated by Duhm et al. who reported on the penetration of radioactive clotrimazole 1% cream and 1% solution into intact and acutely inflamed skin. Six hours after application of the drug, the concentration of clotrimazole found in skin layers varied from 100 mcg/cm<sup>3</sup> in the stratum corneum to 0.5 to 1.0 mcg/cm<sup>3</sup> in the stratum reticulare and <0.1 mcg/cm<sup>3</sup> in the subcutis. No measurable amount of radioactivity (0.001 mcg/mL) was found in the serum within 48 hours after application of 0.5 mL of the solution or 0.8 g of the cream.

Intravaginal application of <sup>14</sup>C-labelled clotrimazole tablets containing 100 mg of active substance in human subjects has shown that the amount absorbed is less than 1/200 of that absorbed after the oral administration of 1.5 g of clotrimazole. The maximum serum concentration values were between 0.016 and 0.05 mcg/mL from one to three days after intravaginal application. Intravaginal application in human subjects of 5 mL <sup>14</sup>C-labelled clotrimazole vaginal cream containing 50 mg of active substance has shown that the systemic absorption of clotrimazole from the vaginal cream is quantitatively proportional to that from the vaginal tablets.

In animal experiments, clotrimazole exerts an *in vitro* and *in vivo*, dose-dependent, stimulating effect on certain microsomal enzyme systems which is approximately equal to that of phenobarbital in its inductive potential. However, this stimulating effect subsides rapidly when treatment is discontinued. The enzyme-inductive effect of clotrimazole has been found to be intact in adrenalectomized animals.

## STORAGE AND STABILITY

Clotrimaderm Vaginal 6, Clotrimaderm Vaginal 3, and Clotrimaderm External Cream must be stored at room temperature between 15°C and 30°C.

## DOSAGE FORMS, COMPOSITION AND PACKAGING

**Clotrimaderm Vaginal 6** is supplied in a 50 g tube of 1% vaginal cream in a carton containing 6 disposable plastic applicators and patient instructions. 50 g of Clotrimaderm Vaginal cream 1% is sufficient for 6 intravaginal applications with additional cream for extravaginal use if required.

**Clotrimaderm Vaginal 3** is supplied in a 25 g tube of 2% vaginal cream in a carton containing 3 disposable plastic applicators and patient instructions. 25 g of Clotrimaderm Vaginal cream 2% is sufficient for 3 intravaginal applications with additional cream for extravaginal use if required.

### **Composition**

**Clotrimaderm Vaginal 6** contains 10 mg/g of clotrimazole in a cream base of sorbitan monostearate, polysorbate 60, cetyl esters wax, cetostearyl alcohol, 2-octyl dodecanol, purified water, and benzyl alcohol 1% as preservative.

**Clotrimaderm Vaginal 3** contains 20 mg/g of clotrimazole in a cream base of sorbitan monostearate, polysorbate 60, cetyl esters wax, cetostearyl alcohol, 2-octyl dodecanol, purified water, and benzyl alcohol 1% as preservative.

**Clotrimaderm External Cream 1%** contains 10 mg/g of clotrimazole in a cream base of sorbitan monostearate, polysorbate 60, cetyl esters wax, cetostearyl alcohol, 2-octyl dodecanol, purified water, and benzyl alcohol 1% as preservative.



## PART II: SCIENTIFIC INFORMATION

### PHARMACEUTICAL INFORMATION

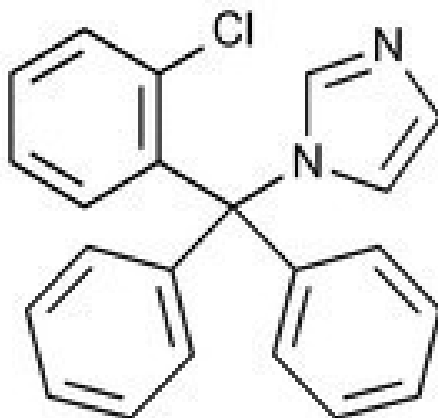
#### Drug Substance

Proper name: clotrimazole

Chemical name: 1-(o-chloro- $\alpha$ -diphenylbenzyl) imidazole

Molecular formula and molecular mass:  $C_{22}H_{17}ClN_2$  344.84 g/mol

Structural formula:



Physicochemical properties: Clotrimazole is a white to pale yellow, crystalline, weakly alkaline substance, M.P. 145°C, soluble in acetone, chloroform and ethanol, and practically insoluble in water. It forms stable salts with both inorganic and organic acids. It is not photosensitive but slightly hygroscopic and may be hydrolyzed in acid media.

## CLINICAL TRIALS

In 8 double-blind studies and one single-blind study involving 432 patients using the 1% cream for 7 days, the average mycological cure rate was 72% with a range of 55 - 90%.

Oral contraceptives did not significantly alter mycological cure rates and overall success. In a limited number of pregnant women, both the 1% cream and the 100 mg tablet appeared to be effective, although the cure rates seemed to be somewhat lower.

In clinical trials with clotrimazole 2% vaginal cream, 266/303 patients (88%) had a negative culture for Candida sp. four weeks following treatment.

## MICROBIOLOGY

Clotrimazole is an antifungal agent with a broad spectrum of activity. In general, the *in vitro* activity of clotrimazole corresponds to that of tolnaftate, griseofulvin, and pyrrolnitrin against dermatophytes (Trichophyton, Microsporum and Epidermophyton species) and to that of the polyenes, amphotericin B and nystatin, against budding fungi (Candida and Histoplasma species).

*In vitro*, clotrimazole is fungistatic for most isolates of pathogenic fungi at concentrations of 0.02 to 10 mcg/mL. The drug is fungicidal for many isolates of Trichophyton, Microsporum, Epidermophyton and Candida species at concentration of 0.1 to 2 mcg/mL.

No one-step or multiple-step secondary resistance to clotrimazole has developed during successive passages of C. albicans, C. krusei, C. pseudotropicalis, T. mentagrophytes, T. rubrum, Cryptococcus neoformans, Aspergillus niger, and A. nidulans. Only a few isolates have been designated as having primary resistance to clotrimazole: a single isolate of C. guillermundii, six isolates of C. neoformans, three isolates of Paracoccidioides brasiliensis and two isolates of Blakeslea trispora.

Topical application of clotrimazole has been effective in the treatment of skin infections experimentally induced in the guinea pig with T. mentagrophytes and T. quinckeanum.

Clinical studies conducted as double-blind trials with mycological control have shown that clotrimazole is effective in the treatment of tinea cruris, tinea corporis, tinea pedis, tinea versicolor and cutaneous candidiasis. Mycological examinations have proven its efficacy against Trichophyton rubrum, T. mentagrophytes, Malassezia furfur and Candida albicans. Griseofulvin-resistant dermatophytes show no cross resistance to clotrimazole. It may be assumed, therefore, that the site of action of this drug is different from that of other antimycotics. Consequently, there is no cross resistance between these agents.

### **Antifungal Activity in Vitro**

Minimum inhibitory concentrations (MICs) of clotrimazole were determined in serial dilution in broth or agar and in agar diffusion tests using the punched hole procedure. Conventional culture substrates, incubation times, and incubation temperatures were used. At concentrations less than 2 mcg/mL, clotrimazole was fungicidal for many isolates of C. albicans, Trichophyton sp., Microsporum sp., and Epidermophyton sp., tested, and at concentrations less than 5 mcg/mL, clotrimazole was fungistatic for other isolates of these species. Addition of bovine serum to the culture media at a final concentration of 30% resulted in somewhat higher MICs of clotrimazole.

The *in vitro* antifungal activity of clotrimazole was comparable to that of pyrrolnitrin; either compound at 0.78 mcg/mL was fungicidal for most strains of Trichophyton sp., Microsporum sp. and Epidermophyton sp., tested.

The type of action of clotrimazole was determined in the Warburg apparatus by measuring the oxygen consumption of proliferating organisms exposed to varying concentrations of the drug. Additional studies were performed using a classical subculture technique with organism counts made after 16, 24 and 48 hours of exposure to the drug. These experiments showed that the primary action of clotrimazole at concentrations up to 20 mcg/mL is fungistatic and affects only proliferating organisms. At concentrations greater than 20 mcg/mL, clotrimazole was fungicidal for some organisms.

The determinations of MICs of clotrimazole for budding fungi and for biphasic fungi in the yeast phase have been shown to be dependent on the size of the inoculum and the length of incubation time. MICs for several isolates of Candida albicans and Torulopsis glabrata were higher when the inoculum size or incubation time or both were increased.

The effects of inoculum size have been attributed to binding of clotrimazole to the surface of the fungal cells. This was established in a study of turntable cultures of C. albicans. After 24 hours, the amount of clotrimazole in a nutrient substrate was reduced from 1 mcg/mL to 0.7 mcg/mL by an inoculum of 1 to  $5 \times 10^5$  cells/mL.

A larger inoculum,  $1 \times 10^8$  cells/mL, reduced the drug concentration from 1 mcg/mL to 0.3 mcg/mL. When the cultures were centrifuged and the cell sediment was washed with physiological saline solution, the wash solutions contained clotrimazole in concentrations of 0.2 mcg/mL to 0.4 mcg/mL.

The effect of incubation time on the determination of MIC values is thought to be related to the mechanism of action of clotrimazole. Initial studies indicated that clotrimazole acted as an antimetabolite upon the amino acid and protein metabolism of the fungi, causing a gradual inhibition of fungal growth.

However, recent studies using C. albicans as the test organism have shown that the primary mode of action of clotrimazole is damage to the permeability of the cell membrane. Exposure of C. albicans to clotrimazole caused leakage of intracellular phosphorus compounds into the ambient medium with a concomitant breakdown of cellular nucleic acids. The onset of these events was rapid and extensive after exposure of C. albicans to the drug and caused a time- dependent and concentration-dependent inhibition of fungal growth.

### **Resistance Development**

Only a few isolates have been designated as having primary resistance to clotrimazole; a single isolate of Candida guilliermondii, six isolates of Cryptococcus neoformans, three isolates of Paracoccidioides brasiliensis, and two isolates of Blakeslea trispora. The potential for development of secondary resistance to clotrimazole was determined for several organisms by successive passages in a liquid medium, successive passages on a solid medium, or the Warburg proliferation test. Growth of dermatophytes and yeasts on Szybalski plates was also used as a method for determining the development of secondary resistance.

No change in sensitivity was detected for C. albicans in any of the tests for secondary resistance, and no change in sensitivity was detected for Trichophyton mentagrophytes, T. rubrum, C. krusei, C. pseudotropicalis, C. neoformans, Aspergillus niger, or A. nidulans after successive passages on liquid and solid media. Possible resistance development was noted in successive passages of Torulopsis glabrata and other Torulopsis species. Data obtained from Szybalski plate growth and from other tests indicated that dermatophytes and yeasts do not develop one- step or oligo-step secondary resistance.

### **TOXICOLOGY**

Non-clinical data reveal no special hazards for humans based on conventional studies of safety pharmacology, genotoxicity and carcinogenic potential. Effects in nonclinical studies, such as the effects on the liver (elevation of transaminases and alkaline phosphatase, liver cell hypertrophy) in the repeat-dose toxicity studies, the effects on the survival of the neonate in a rat fertility study, the species-specific indirect effects on the growth/survival of the fetus in a rat teratology study were observed with oral administration but only at exposures in excess of the maximum human exposure indicating little relevance to clinical use. Given the limited absorption of clotrimazole following a topical application, the potential for toxicity with the occasional use of Clotrimaderm Vaginal 6 is further limited.

Carcinogenicity of clotrimazole was evaluated in a 78-week oral dosing study in rats and the results did not show any carcinogenic effect of clotrimazole.

Clotrimazole has been extensively studied in *in vitro* and *in vivo* mutagenicity assays, and no evidence of genotoxic potential was found. In an Ames test, an *in vitro* biological assay to detect the mutagenicity of chemical compounds, clotrimazole showed no evidence of mutagenic activity.

Clotrimazole was found to be non-mutagenic in two additional *in vitro* studies, a gene mutation test in V79 cell lines and an Unscheduled DNA Synthesis (UDS) in primary rat hepatocytes. Studies evaluating the mutagenicity of clotrimazole in germ cells did not demonstrate mutagenic effects in a spermatogonia test in male hamsters, or in a dominant lethal test in male mice. Additionally, in mice, clotrimazole was not clastogenic in a micronucleus test.

## Acute Toxicology

### Animal

Species	LD <sub>50</sub> mg/kg
Mouse	761-923
Rat	708-718
Rabbit	>1000
Cat	>1000; vomiting from 100 mg/kg
Dog	>2000; vomiting from 100 mg/ kg

### Multidose Local Tolerance

- 1) Primary skin irritation (patch test): no detectable reddening on the intact rabbit skin at either 24 or 72 hours with 1% solution or cream of clotrimazole. Very slight erythema formation after 24 hours in the scarified rabbit skin.
2. Primary irritation on conjunctival mucosa: clotrimazole solution or cream produced a transient conjunctival irritation in rabbits, consisting in low-grade reddening and a slight increase in secretion. No grossly detectable alterations were present in either the cornea or the iris of any of the treated animals. Both the cream and solution produced a transient, very slight reddening of the conjunctival mucosa. No alterations occurred on the cornea.
3. Subacute (up to 13 weeks) dermal tolerance: the application of 1% clotrimazole solution or 1% cream was systemically well tolerated; no edema was seen on the treated skin, although mild erythema was observed sporadically. The animals in all groups with abraded skin manifested a slight healing tendency.
4. Subacute (dogs: 14 days; monkeys: 13 weeks) local vaginal tolerance: the repeated application of clotrimazole vaginal tablets showed a satisfactory local and systemic tolerance. There were no detectable adverse effects, and the cytological examination in monkeys indicated variations consistent with normal estrus cycles.
4. Subacute (5 dogs: 30 days; 4 monkeys: 13 weeks; 10 healthy human volunteers: 28 days) local vaginal tolerance. The repeated application of vaginal cream showed a satisfactory local and systemic tolerance without adverse effects or abnormalities in vaginal cytology in all species.

## **Human**

In 453 cases under treatment which were evaluated with respect to photosensitivity and phototoxicity, no reactions were encountered.

Twenty normal subjects were tested in a controlled study for sensitivity to ultraviolet radiation. Areas of skin treated with clotrimazole were irradiated for 30 seconds on the first day and for one-half minute longer each time on every second day thereafter. One of the 20 subjects was irradiated once only; 9 subjects three times, and 10 subjects four times. One subject developed papule formation after the first exposure to ultraviolet radiation.

There were undesirable effects in three (0.5%) of 653 patients treated with clotrimazole vaginal cream which were possibly related to treatment. Discontinuation of treatment was necessary in a patient with a sensation of vaginal burning and in another patient with a possible allergic reaction, manifested by vaginal burning, local irritation and erythema. Treatment was, however, continued in a patient with intercurrent cystitis.

## **REPRODUCTION AND TERATOLOGY**

At dosages up to 100 mg/kg (oral), clotrimazole was well tolerated by pregnant mice, rats and rabbits, and it had no embryotoxic or teratogenic effect.

When given to pregnant rats at oral doses of 100 mg/kg from day 6 through day 15 of gestation, the number of resorptions was higher and the fetal weights were lower than the controls, but the number of fetal malformations did not differ significantly from that of the control group.

Rats treated with clotrimazole for 10 weeks at dosage up to 50 mg/kg/day did not show any difference from the control group in the duration of estrus, fertility, duration of pregnancy, or in the number of implantations and resorptions. The dose of 50 mg/kg/day impaired the development of the young, and dams receiving this dose level raised fewer offspring.

The intravaginal administration of 100 mg/kg clotrimazole from the sixth to the fifteenth day of gestation was well tolerated by pregnant rats, and there were no harmful effects on the fertilization rate, the resorption rate, the mean fetal weight, and the frequency of stunted forms and of fetuses with slight bone alterations. No malformations were produced by this dose.

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**PART III: CONSUMER INFORMATION**

**Clotrimaderm Vaginal 6  
Clotrimazole Vaginal Cream USP 1% -**

**Antifungal**

**This leaflet is part III of a three-part "Product Monograph" published when Clotrimaderm Vaginal 6 was approved for sale in Canada and is designed specifically for Consumers. This leaflet is a summary and will not tell you everything about Clotrimaderm Vaginal 6. Contact your doctor or pharmacist if you have any questions about the drug.**

**ABOUT THIS MEDICATION**

**What the medication is used for:**

Clotrimaderm Vaginal 6 is used to treat vaginal yeast infections. Clotrimazole can cure most vaginal yeast infections. Even though the symptoms of an infection may be relieved in only a few hours or days, you should use Clotrimaderm Vaginal 6 for a full 6 days. This will decrease the chance of the infection returning.

*What is a "yeast infection"?*

A "yeast infection" may occur any time there is an overgrowth of yeast organisms in the vagina. The vagina normally has bacteria and yeast organisms present. Under some conditions, the number of yeast organisms rises, irritating the delicate tissues of the vagina and vaginal opening. Conditions that make this more likely to occur are illness and the use of antibiotics (antibiotics do not affect the yeast organism). Changes in hormone levels may also increase the risk of a yeast infection. Changes that can occur during pregnancy, with the use of oral contraceptive pills, or just before a woman's period, may all increase the risk of a vaginal yeast infection. Some diseases, such as diabetes, can also make a person more susceptible. Even such things as hot humid weather, continuous use of panty liners, or tight, non-breathing clothing may increase a woman's chances of developing a yeast infection. These infections are not usually transmitted through sexual relations, even though a small percentage of male partners do have infections at the same time.

*How do I know if I have a "yeast infection"?*

When a "yeast infection" occurs, the body responds with an increase in vaginal secretions. These secretions are generally thick and sticky, but odourless. These are often referred to as "cheesy" or "curd-like" because of

their similarity to cottage cheese. These secretions are irritating to the tissues of the vaginal area, causing intense itching, redness, and swelling. Sometimes red spots or sores may develop, especially if the area has been scratched in response to the itching. Soreness in the vagina, discomfort when passing urine and pain during sexual relations is common.

**What it does:**

Clotrimazole is an antifungal that kills the overgrowth of yeast organisms that cause the infection.

**When it should not be used:**

Do not use Clotrimaderm Vaginal 6:

- if you are allergic to clotrimazole or any ingredient in the formulation.
- in girls less than 12 years of age unless advised by a physician.

**What the medicinal ingredient is:**

Clotrimazole 1% w/w

**What the important non-medicinal ingredients are:**

Benzyl alcohol, cetostearyl alcohol, cetyl esters wax, octyl dodecanol, polysorbate 60, sorbitan monostearate, water.

**What dosage forms it comes in:**

vaginal cream: 1%

**WARNINGS AND PRECAUTIONS**

**BEFORE you use Clotrimaderm Vaginal 6 talk to your doctor or pharmacist if:**

- you are at increased risk for sexually transmitted diseases (e.g. HIV-AIDS), have multiple sexual partners or change partners often
- you have diabetes
- this is your first yeast infection
- you have frequent vaginal infections, or if your yeast infection returns in less than 2 months
- you are pregnant, think you are, or are nursing

Clotrimaderm Vaginal 6 is for vaginal use only.

Do not use Clotrimaderm Vaginal 6 if you have abdominal pain, fever or a foul-smelling discharge. If these symptoms are present, you could have a more serious condition and should consult your physician immediately.

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

Yeast infections do not cause fevers, chills, nausea, vomiting, diarrhoea, back pain, shoulder pain or vaginal haemorrhaging. If these symptoms are present, or if the vaginal discharge is foul-smelling, a more serious condition may be present and you should consult your physician immediately.

If there is no improvement in your symptoms in 3 days or if they have not disappeared within 7 days, you might not have a vaginal yeast infection. Discontinue treatment and contact your physician. Contact your physician if symptoms worsen.

Avoid contact with eyes; if this happens, rinse thoroughly with water.

If Clotrimaderm Vaginal 6 is accidentally swallowed, contact your local emergency room or Poison Control Centre immediately.

If you have any questions about Clotrimaderm Vaginal 6 or vaginal infections, contact your pharmacist or physician.

### **INTERACTIONS WITH THIS MEDICATION**

**Drugs that may interact with Clotrimaderm Vaginal 6 include:**

tacrolimus, sirolimus (immunosuppressant)

Clotrimazole may reduce the effectiveness of some birth control methods, such as condoms, diaphragms, or vaginal spermicides. This effect is temporary and occurs only during treatment.

### **PROPER USE OF THIS MEDICATION**

#### **Usual dose:**

Clotrimaderm Vaginal 6 is inserted high into the vagina once a day (preferably at bedtime) for 6 consecutive days. Sufficient cream is provided for 6 intravaginal applications. Extra cream is supplied for use in relieving the external itching and burning sometimes associated with a vaginal yeast infection. Clotrimaderm Vaginal 6 is only for use in the vagina and should never be taken by mouth. Treatment during the menstrual period should not be performed. The treatment should be finished before the onset of menstruation. While

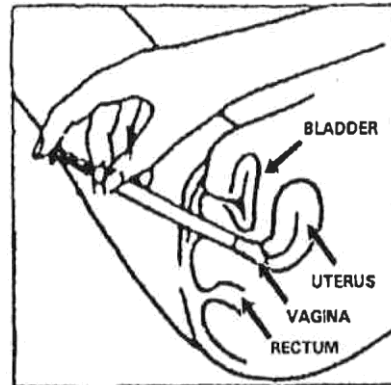
you may have sexual relations during treatment with Clotrimaderm Vaginal 6, most couples wait until treatment has finished as your partner could become infected.

#### **Filling the Applicator:**

Remove the cap from the tube of Clotrimaderm Vaginal 6 and reverse it to puncture the safety seal over the end of the tube. To fill the applicator, screw the open end of the applicator on the end of the tube. Gently squeeze the tube at the bottom. The plunger will rise as cream enters the applicator. When the plunger stops, the proper amount of Clotrimaderm Vaginal 6 has been pushed into the applicator and the applicator may be removed. Replace the cap and roll up the tube from the bottom so that the tube will be ready for the next use.

#### **Inserting the Medication:**

Clotrimaderm Vaginal 6 is inserted into the vagina in much the same way as a tampon. Stand, squat, or lie on your back in a comfortable position. Insert the filled applicator into the vagina as far as it will comfortably go. Holding the barrel of the applicator steady, gently depress the plunger until it stops. This will release the medication high in the vagina where it will be most effective. Remove the applicator.



#### **Using the Cream Externally:**

A small amount of Clotrimaderm Vaginal 6 may be applied to the opening of the vagina to help provide extra relief of external symptoms. Squeeze a small amount of cream onto your finger and gently spread over the irritated vaginal area. Use the cream once or twice a day and only during the period when external symptoms are present, to a maximum of 7 days.

**Disposing of the Applicator:**

The Clotrimaderm Vaginal 6 vaginal applicator is recyclable where facilities exist.

**Overdose:**

In case of drug overdose, call a poison control center or get medical help right away even if there are no symptoms.

**SIDE EFFECTS AND WHAT TO DO ABOUT THEM**

If you experience a rash or new irritation while using the product, discontinue use and contact your doctor. Rarely, severe allergic reactions (swelling of face, eyes, mouth, hands and feet) have occurred.

*This is not a complete list of side effects. For any unexpected effects while taking Clotrimaderm Vaginal 6, contact your doctor or pharmacist.*

**HOW TO STORE IT**

Keep Clotrimaderm Vaginal 6 and all other medications out of the reach and sight of children.

Store at room temperature between 15°C and 30°C.

**Reporting Side Effects**

You can report any suspected side effects associated with the use of health products to Health Canada by:

- Visiting the Web page on Adverse Reaction Reporting (<https://www.canada.ca/en/health-canada/services/drugs-health-products/medeffect-canada/adverse-reaction-reporting.html>) for information on how to report online, by mail or by fax; or
- Calling toll-free at 1-866-234-2345.

*NOTE: Contact your health professional if you need information about how to manage your side effects. The Canada Vigilance Program does not provide medical advice.*

**MORE INFORMATION**

If you want more information about Clotrimaderm Vaginal 6:

- Talk to your healthcare professional;
- Find the full product monograph that is prepared for healthcare professionals and includes this Patient Medication Information by visiting the Health Canada website (<https://health-products.canada.ca/dpd-bdpp/index-eng.jsp>); the manufacturer's website ([www.taro.ca](http://www.taro.ca)), or by calling 1-800-268-1975.

This leaflet was prepared by Taro Pharmaceuticals Inc., 130 East Drive, Brampton, ON, L6T 1C1

Last Revised: April 29, 2022

**PART III: CONSUMER INFORMATION**

**Clotrimaderm Vaginal 3  
Clotrimazole Vaginal Cream USP 2% -**

**Antifungal**

**This leaflet is part III of a three-part "Product Monograph" published when Clotrimaderm Vaginal 3 was approved for sale in Canada and is designed specifically for Consumers. This leaflet is a summary and will not tell you everything about Clotrimaderm Vaginal 3. Contact your doctor or pharmacist if you have any questions about the drug.**

**ABOUT THIS MEDICATION**

**What the medication is used for:**

Clotrimaderm Vaginal 3 is used to treat vaginal yeast infections. Clotrimazole can cure most vaginal yeast infections. Even though the symptoms of an infection may be relieved in only a few hours or days, you should use Clotrimaderm Vaginal 3 for a full 3 days. This will decrease the chance of the infection returning.

*What is a "yeast infection"?*

A "yeast infection" may occur any time there is an overgrowth of yeast organisms in the vagina. The vagina normally has bacteria and yeast organisms present. Under some conditions, the number of yeast organisms rises, irritating the delicate tissues of the vagina and vaginal opening. Conditions that make this more likely to occur are illness and the use of antibiotics (antibiotics do not affect the yeast organism). Changes in hormone levels may also increase the risk of a yeast infection. Changes that can occur during pregnancy, with the use of oral contraceptive pills, or just before a woman's period, may all increase the risk of a vaginal yeast infection. Some diseases, such as diabetes, can also make a person more susceptible. Even such things as hot humid weather, continuous use of panty liners, or tight, non-breathing clothing may increase a woman's chances of developing a yeast infection. These infections are not usually transmitted through sexual relations, even though a small percentage of male partners do have infections at the same time.

*How do I know if I have a "yeast infection"?*

When a "yeast infection" occurs, the body responds with an increase in vaginal secretions. These secretions are generally thick and sticky, but odourless. These are often referred to as "cheesy" or "curd-like" because of

their similarity to cottage cheese. These secretions are irritating to the tissues of the vaginal area, causing intense itching, redness, and swelling. Sometimes red spots or sores may develop, especially if the area has been scratched in response to the itching. Soreness in the vagina, discomfort when passing urine and pain during sexual relations is common.

**What it does:**

Clotrimazole is an antifungal that kills the overgrowth of yeast organisms that cause the infection.

**When it should not be used:**

Do not use Clotrimaderm Vaginal 3:

- if you are allergic to clotrimazole or any ingredient in the formulation.
- in girls less than 12 years of age unless advised by a physician.

**What the medicinal ingredient is:**

Clotrimazole 2% w/w

**What the important non-medicinal ingredients are:**

Benzyl alcohol, cetostearyl alcohol, cetyl esters wax, octyl dodecanol, polysorbate 60, sorbitan monostearate, water.

**What dosage forms it comes in:**

vaginal cream: 2%

**WARNINGS AND PRECAUTIONS**

**BEFORE you use Clotrimaderm Vaginal 3 talk to your doctor or pharmacist if:**

- you are at increased risk for sexually transmitted diseases (e.g. HIV-AIDS), have multiple sexual partners or change partners often
- you have diabetes
- this is your first yeast infection
- you have frequent vaginal infections, or if your yeast infection returns in less than 2 months
- you are pregnant, think you are, or are nursing

Clotrimaderm Vaginal 3 is for vaginal use only.

Do not use Clotrimaderm Vaginal 3 if you have abdominal pain, fever or a foul-smelling discharge. If these symptoms are present, you could have a more serious condition and should consult your physician immediately.

## IMPORTANT: PLEASE READ

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

Yeast infections do not cause fevers, chills, nausea, vomiting, diarrhoea, back pain, shoulder pain or vaginal haemorrhaging. If these symptoms are present, or if the vaginal discharge is foul-smelling, a more serious condition may be present and you should consult your physician immediately.

If there is no improvement in your symptoms in 3 days or if they have not disappeared within 7 days, you might not have a vaginal yeast infection. Discontinue treatment and contact your physician.

Contact your physician if symptoms worsen.

Avoid contact with eyes; if this happens, rinse thoroughly with water.

If Clotrimaderm Vaginal 3 is accidentally swallowed, contact your local emergency room or Poison Control Centre immediately.

If you have any questions about Clotrimaderm Vaginal 3 or vaginal infections, contact your pharmacist or physician.

### INTERACTIONS WITH THIS MEDICATION

**Drugs that may interact with Clotrimaderm Vaginal 3 include:**

tacrolimus, sirolimus (immunosuppressant)

Clotrimazole may reduce the effectiveness of some birth control methods, such as condoms, diaphragms, or vaginal spermicides. This effect is temporary and occurs only during treatment.

### PROPER USE OF THIS MEDICATION

#### **Usual dose:**

Clotrimaderm Vaginal 3 is inserted high into the vagina once a day (preferably at bedtime) for 3 consecutive days. Sufficient cream is provided for 3 intravaginal applications. Extra cream is supplied for use in relieving the external itching and burning sometimes associated with a vaginal yeast infection. Clotrimaderm Vaginal 3 is only for use in the vagina and should never be taken by mouth. Treatment during the menstrual period should not be performed. The treatment should be finished before the onset of menstruation. While

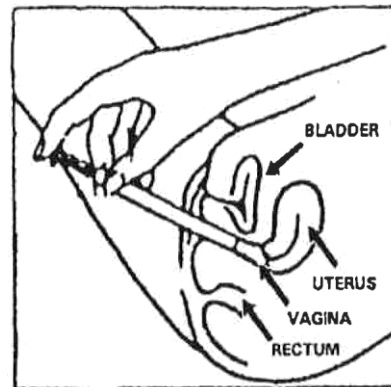
you may have sexual relations during treatment with Clotrimaderm Vaginal 3, most couples wait until treatment has finished as your partner could become infected.

#### **Filling the Applicator:**

Remove the cap from the tube of Clotrimaderm Vaginal 3 and reverse it to puncture the safety seal over the end of the tube. To fill the applicator, screw the open end of the applicator on the end of the tube. Gently squeeze the tube at the bottom. The plunger will rise as cream enters the applicator. When the plunger stops, the proper amount of Clotrimaderm Vaginal 3 has been pushed into the applicator and the applicator may be removed. Replace the cap and roll up the tube from the bottom so that the tube will be ready for the next use.

#### **Inserting the Medication:**

Clotrimaderm Vaginal 3 is inserted into the vagina in much the same way as a tampon. Stand, squat, or lie on your back in a comfortable position. Insert the filled applicator into the vagina as far as it will comfortably go. Holding the barrel of the applicator steady, gently depress the plunger until it stops. This will release the medication high in the vagina where it will be most effective. Remove the applicator.



#### **Using the Cream Externally:**

A small amount of Clotrimaderm Vaginal 3 may be applied to the opening of the vagina to help provide extra relief of external symptoms. Squeeze a small amount of cream onto your finger and gently spread over the irritated vaginal area. Use the cream once or twice a day and only during the period when external symptoms are present, to a maximum of 7 days.

**Disposing of the Applicator:**

The Clotrimaderm Vaginal 3 vaginal applicator is recyclable where facilities exist.

**Overdose:**

In case of drug overdose, call a poison control center or get medical help right away even if there are no symptoms.

**SIDE EFFECTS AND WHAT TO DO ABOUT THEM**

If you experience a rash or new irritation while using the product, discontinue use and contact your doctor. Rarely, severe allergic reactions (swelling of face, eyes, mouth, hands and feet) have occurred.

*This is not a complete list of side effects. For any unexpected effects while taking Clotrimaderm Vaginal 3, contact your doctor or pharmacist.*

**HOW TO STORE IT**

Keep Clotrimaderm Vaginal 3 and all other medications out of the reach of children.

Store at room temperature between 15°C and 30°C.

**Reporting Side Effects**

You can report any suspected side effects associated with the use of health products to Health Canada by:

- Visiting the Web page on Adverse Reaction Reporting (<https://www.canada.ca/en/health-canada/services/drugs-health-products/medeffect-canada/adverse-reaction-reporting.html>) for information on how to report online, by mail or by fax; or
- Calling toll-free at 1-866-234-2345.

*NOTE: Contact your health professional if you need information about how to manage your side effects. The Canada Vigilance Program does not provide medical advice.*

**MORE INFORMATION**

If you want more information about Clotrimaderm Vaginal 3:

- Talk to your healthcare professional;
- Find the full product monograph that is prepared for healthcare professionals and includes this Patient Medication Information by visiting the Health Canada website (<https://health-products.canada.ca/dpd-bdpp/index-eng.jsp>); the manufacturer's website ([www.taro.ca](http://www.taro.ca)), or by calling 1-800-268-1975.

This leaflet was prepared by Taro Pharmaceuticals Inc., 130 East Drive, Brampton, ON, L6T 1C1

Last Revised: April 29, 2022