

ACNETRET®

(Isotretinoin capsule 10/20 mg)

DESCRIPTION:

Isotretinoin (13-cis-retinoic acid) is a derivative of retinol (vitamin A). The first retinoid to be synthesized, in 1955, was isotretinoin & used for disorder of keratinization. Isotretinoin first approved by the US Food and Drug Administration (FDA) in 1982 for the treatment of severe recalcitrant nodulocystic acne. It is only oral retinoid known to have a profound effect on sebaceous gland activity & addresses all pathogenic mechanisms. It works by reducing the production of your skin's natural oil. It is also thought to reduce inflammation. Isotretinoin capsules will be prescribed for you by a specialist skin doctor.

PHARMACOKINETICS:

Oral Isotretinoin is best absorbed when taken with a high-fat meal, because it has a high level of lipophilicity. The efficacy of isotretinoin doubles when taken after a high-fat meal compared to when taken without food. First-pass hepatic metabolism further reduces bioavailability to approximately 20%. Due to Isotretinoin's molecular relationship to Vitamin A, it should not be taken with Vitamin A supplements due to the danger of toxicity through cumulative overdosing. It is rapidly but variably absorbed after oral administration giving peak plasma levels 1-4 hours after dosing. The mean half-life of the drug is 20 hours, its major metabolite being 4-oxo-isotretinoin which is rapidly formed following oral administration and has a longer elimination half-life of 33 hours. The drug undergoes enterohepatic recirculation and is more than 99% bound to plasma proteins.

MECHANISM OF ACTION:

- Isotretinoin has little or no ability to bind to cellular retinoid-binding proteins or retinoic acid nuclear receptors (RARs and RXRs) but act as a pro-drug that is converted intracellularly to metabolites that are agonists for RAR and RXR nuclear receptors. Antiandrogenic through competitive inhibition of 3-alpha-hydroxysteroid oxidation by retinol dehydrogenase resulting in reduced formation of dihydrotestosterone and androstenedione. It normalizes ductal hypercornification, and generally thins the epidermis to produce increased light reflectance – Retinoid glow.
- Isotretinoin is the most comedolytic of all antiacne agents. It indirectly lowers P. acnes counts, and exerts an anti-inflammatory effect.
- Isotretinoin-induced clinical improvement is associated with lowered levels of porphyrins in the sebaceous follicles and reduced concentrations of MMPs in the sebum.

INDICATIONS:

- Nodulocystic acne
- Fulminant acne
- Acne corporis
- Difficult/recalcitrant acne
- Moderate acne if scarring is imminent.
- Acne associated with psychologic distress.

CONTRAINDICATIONS:

- Isotretinoin is contraindicated in women who are pregnant or breastfeeding.
- Isotretinoin is also contraindicated in patients:
- With hypersensitivity to isotretinoin or to any of the excipients listed in section 6.1. The medicine contains hydrogenated soya-bean oil and refined soya-bean oil. It is possible that some patients who are allergic to peanuts may suffer cross reactivity to products containing soya protein
- With hepatic insufficiency.
- With excessively elevated blood lipid values.
- With hypervitaminosis A.
- Receiving concomitant treatment with tetracyclines.

SIDE EFFECTS:

- Headache, joint and muscle pain, back pain.
- Dry skin and lips
- Dry eyes, eye irritation
- Dry mouth
- Dry nose and nosebleeds
- Changes to blood tests

DOSAGE:

- The dose of isotretinoin is 0.5–1.0 mg/kg body weight, in two divided doses given after meals. Isotretinoin absorption is only 20% in fasted state versus 40% in the fed state.

- The treatment is continued till a cumulative dose of 120 mg/kg has been achieved.
- This typically may take 6–8 months.

WARNING AND PRECAUTIONS:

Do NOT use isotretinoin if:

- you are allergic to any ingredient in isotretinoin or to vitamin A
- you are pregnant, may become pregnant, or if you are planning to become pregnant
- you are breast-feeding
- you do not understand the possible risks of isotretinoin or you are not able to follow all of the instructions in the Medication Guide
- you are taking tetracycline antibiotics (eg, doxycycline) or vitamin A-type medicines (eg, etretinate, vitamin A)
Contact your doctor or health care provider right away if any of these apply to you.

Before using isotretinoin:

Some medical conditions may interact with isotretinoin. Tell your doctor or pharmacist if you have any medical conditions, especially if any of the following apply to you:

- if you are pregnant, planning to become pregnant, or are breast-feeding
- if you are taking any prescription or nonprescription medicine, herbal preparation, or dietary supplement
- if you have allergies to medicines, foods, or other substances
- if you are woman and unable to use 2 effective forms of birth control or avoid sexual intercourse
- if you have a personal or family history of mental or mood problems (eg, depression), or suicidal thoughts or actions
- if you have a personal or family history of asthma, diabetes, high blood cholesterol or triglyceride levels, heart disease, liver problems, bone loss (osteoporosis) or other bone problems (eg, weak bones), or an eating disorder (eg, anorexia)
- if you have a history of hearing problems (eg, ringing in the ears, hearing loss), stomach or bowel problems (eg, severe stomach pain, rectal bleeding, persistent or severe diarrhea), pancreas problems (eg, pancreatitis), or irregular menstrual periods
- if you are taking medicines that may decrease bone strength (eg, corticosteroids, such as prednisone; medicines for seizures, such as phenytoin)

Some MEDICINES MAY INTERACT with isotretinoin. Tell your health care provider if you are taking any other medicines, especially any of the following:

- Tetracyclines (eg, doxycycline) because the risk of increased pressure in the brain may be increased.
- Vitamin A-type medicines (eg, etretinate, vitamin A) because they may increase the risk of isotretinoin's side effects.
- Progestin-only birth control (eg, "mini-pill") because their effectiveness may be decreased by isotretinoin.

This may not be a complete list of all interactions that may occur. Ask your health care provider if isotretinoin may interact with other medicines that you take. Check with your health care provider before you start, stop, or change the dose of any medicine.

Manufactured by:

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