Eflornithine Hydrochloride Therapeutic Cheat Sheet

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TRADE NAME

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MECHANISM OF ACTION

- Irreversible inhibition of ornithine decarboxylase (ODC), which is necessary for synthesis of cationic polyamines, enzymes involved in cellular growth. Therefore, eflornithine is thought to inhibit ODC in hair follicles, resulting in decreased hair growth.^{1,2}
 - Reduced ODC activity is associated with reduced anagen (growth) phase, slowing hair growth.¹

FDA APPROVED FOR

> Reduction of unwanted facial hair in women.³

OFF-LABEL USES

> Combination with laser hair removal for added hair reduction benefit.^{4,5}

DOSING (TOPICAL)

> Apply a thin layer of effornithine hydrochloride 13.9% cream twice daily (at least 8 hours apart) to affected areas on the face and chin. Rub in thoroughly and do not wash the treated area for 4 hours.³

SIDE EFFECTS 1,3

- > Skin irritation: redness, stinging, burning, tingling
- > Folliculitis

DRUG INTERACTIONS

> No known interactions.³

CONTRAINDICATIONS

COUNSELING³

- > Transient stinging or burning can occur when applied to open skin.
- Effornithine appears to slow hair growth rather than remove hair so patients will likely need to continue hair removal methods.
 - For instance, randomized controlled trials combined topical effornithine with laser hair removal, which improved hair reduction compared to laser hair removal alone (in women with unwanted facial hair4 and patients with pseudofolliculitis barbae5).
- > Cosmetics and sunscreen can be applied over treated areas after the cream has dried.
- > Improvement should be expected after 4 to 8 weeks.
- Beneficial effects of effornithine will fade 8 weeks after discontinuation.
- > If skin irritation is experienced by patients, application can be reduced to once daily.

PREGNANCY

- > Category C:³
 - In animal studies (rats) reported in the package insert, topical treatment without prevention of ingestion resulted in reduced number of live fetuses, decreased fetal weight, and delayed ossification as well as viscera formation. When ingestion was avoided, these effects were not observed.
 - > No controlled studies in humans.
 - In clinical trials reported by Bristol-Meyers Squibb, 19 pregnancies occurred in patients using effornithine cream with the following outcomes: 9 healthy infants, 4 spontaneous abortions, 5 induced/elective abortions, and 1 birth defect (Down Syndrome).

MONITORING

> No monitoring needed.

> Hypersensitivity to any preparation components.³