PRESCRIPTION MONOGRAPH

Compounded Active Ingredients: Minoxidil/Finasteride/Fluocinolone/Latanoprost/Tretinoin **Form:** Topical Foam

Drug Class:

Minoxidil: Antihypertensive vasodilator

• Finasteride: Type II 5-α-reductase inhibitor (antiandrogen)

Fluocinolone: Corticosteroid

Latanoprost: Prostaglandin F2α analog

Tretinoin: Vitamin A derivative topical retinoid

Mechanism of Action 1,2,3,4,5:

When compounded together, Minoxidil, Finasteride, Fluocinolone, Latanoprost, and Tretinoin have the potential to provide a multi-targeted approach that enhances overall hair growth and preservation. Together they are intended to work by:

- Stimulate vascular and follicular activity by opening potassium channels in dermal papilla cells, to enhance blood flow and nutrient delivery to follicles, promoting local growth factors.
- Lower levels of DHT (a hormone linked to hair loss) in the scalp, to help protect hair follicles from shrinking and to slow down shedding.
- Control inflammation by dampening cytokine signaling, reducing perifollicular inflammation, and improving tolerability of other ingredients.
- Prolong hair growth cycle, increasing follicular proliferation, pigmentation, and shaft thickness.
- Improve penetration and cycling by increasing absorption of minoxidil and promoting keratinocyte turnover to synergize with follicular cycling.

Indications Commonly Prescribed For:

- Androgenetic alopecia
- Post-inflammatory shedding
- Cosmetic hair quality: To improve density, thickness, and retention
- Inflammatory scalp alopecia

Before Use: Let your health care provider know if you have any medication allergies before you take this compounded preparation. Let your health care provider know if you have any liver or kidney problems. Let your healthcare provider know of all supplements you are currently taking.

Contraindications:

- Hypersensitivity to any component
- Scalp irritation or dermatitis where barrier is compromised
- Systemic absorption of high minoxidil concentrations may cause hypotension

Cautions: Let your Healthcare provider know if you experience any adverse side effects. Benefits persist only while on therapy.

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How to Use: This compounded preparation is provided as a topical foam for application to the scalp. Apply the directed amount of foam to the affected areas, usually once or twice daily as instructed by your provider. Part the hair to ensure the foam makes direct contact with the scalp and gently massage if recommended. Wash your hands thoroughly after application. Avoid contact with the eyes, mouth, or broken skin. If you miss a dose, take as soon as you remember, but not at the time for the next dose. Desired results may take up to 3-6 months; continuous use is needed to maintain effect.

Warnings and Precautions:

- Initial shedding: Minoxidil may cause early "shedding" as follicles transition.
- Systemic absorption risk: monitor for hypotension and tachycardia.
- Retinoid irritation: Tretinoin can cause erythema, peeling, burning; start low or cycle dosing.
- Topical steroid risks include atrophy, telangiectasias, or rebound dermatitis with prolonged use.
- Scalp conditions: Use with caution with psoriasis, eczema, or other compromised barrier.
- Finasteride may lower serum DHT; counsel men of reproductive age.
- · May darken hair/skin at site of use.

Adverse Reactions:

Common:

- Mild skin irritation, burning sensation
- · Itching, Dryness, Redness
- Initial shedding
- Hyperpigmentation

Rare:

- Tachycardia, Hypotension
- Dizziness
- Hair atrophy
- Decreased libido, erectile dysfunction

Interactions:

- Concurrent strong vasodilators or antihypertensives may have additive hypotensive effect if absorption is higher than expected.
- Tretinoin may increase minoxidil absorption and heighten irritation if used with other keratolytics.
- Additive antiandrogen effect with dutasteride; may alter PSA levels.
- Corticosteroids: Local immunosuppression if used with other topical immunomodulators.

Use in Specific Populations:

- Pregnancy: Avoid if pregnant or planning pregnancy due to teratogenic risk
- Pediatrics: Avoid unless under dermatologic supervision
- Geriatrics: Start with the lower minoxidil strength (2%) and monitor tolerability

Storage:

- Store in original container at room temperature (up to 30°C or 86°F)
- Store in a cool dry place away from heat, sunlight, and moisture

Monitoring Parameters:

- Skin/hair response over 8–12 weeks
- Prostate screening (men >50): Adjust PSA interpretation if systemic absorption suspected
- Steroid use: Monitor for skin atrophy or telangiectasia if fluocinolone is used long term.

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Citations:

- 1. Li M, Marubayashi A, Nakaya Y, Fukui K, Arase S. Minoxidil-induced hair growth is mediated by adenosine in cultured dermal papilla cells: possible involvement of sulfonylurea receptor 2B as a target of minoxidil. J Invest Dermatol. 2001;117(6):1594-1600. doi:10.1046/j.0022-202X.2001.01570.x
- 2. Kaufman KD, Olsen EA, Whiting D, Savin R, DeVillez R, Bergfeld W, Price VH, Van Neste D, Roberts JL, Hordinsky M, Shapiro J, Binkowitz B, Gormley GJ; Finasteride Male Pattern Hair Loss Study Group. Finasteride in the treatment of men with androgenetic alopecia. J Am Acad Dermatol. 1998;39(4):578 589. Available from: Radcliffe Department of Medicine website. Accessed September 17, 2025.
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