**GENERIC AND TRADE NAME**

- Propecia
- Proscar

**FDA APPROVED FOR**

- Male pattern androgenetic alopecia (AGA)

**OFF-LABEL USES**

- Female pattern hair loss
- Frontal Fibrosing Alopecia/Lichen planopilaris
- Hirsutism
- Acne vulgaris
- Hidradenitis Suppurativa

**CONTRAINDICATIONS**

- Hepatic dysfunction

**MECHANISM OF ACTION**

Inhibits type II 5α-reductase, an enzyme located in pilosebaceous units that catalyzes the conversion of testosterone to the more potent androgen dihydrottestosterone (DHT), thereby decreasing both serum and local scalp DHT.

**DOSING**

- 1 mg QD (for AGA)
- 5mg (Proscar) is indicated for treatment of benign prostatic hypertrophy.
- 2.5 – 5 mg reported effective for Female pattern hair loss.  
- Topical finasteride has been studied in various formulations but is not commercially available in the United States.

**MONITORING**

- Prostate-specific antigen (PSA) may be decreased by 50% in 6 months, consider obtaining a baseline PSA for men 50 years or older before treatment and again at 6 months to establish a new baseline.
- Per package insert, any confirmed increase in PSA values over the lowest value of PSA while taking finasteride 1mg should be investigated, even if the increase is in the normal range.

**SIDE EFFECTS**

- Gynecomastia or breast tenderness
- May increase proportion of high-grade prostate cancers (does not increase incidence)
- May alter immune surveillance against cancer in aging men
- Severe myopathy
- Infrequently decreased libido, erectile and ejaculatory dysfunction, decreased ejaculate volume, and testicular pain are reported in 4% to 8% of older men taking 5mg finasteride (Proscar) and in 2% to 4% of younger patients taking 1mg finasteride (Propecia).
- Postfinasteride syndrome has been recently described and is controversial, as it was not noted in large clinical trials prior to the release of Propecia. This term characterizes sexual dysfunction, gynecomastia, cognitive impairment, depression, anxiety and suicidal ideation that persist after discontinuation of 5α-reductase inhibitors.
- In a retrospective health records review of over 11,000 men, persistent erectile dysfunction (PED) lasting months to years occurred in approximately 1% of men aged 16 to 42 years taking finasteride 1mg, and longer-term exposure was possibly associated with greater risk.
- Finasteride may reduce levels of neuroactive steroids linked to sexual function and depression, and several studies have reported depressive symptoms both during and after discontinuation of finasteride. Clinicians should screen for psychiatric history prior to prescribing.

**PREGNANCY**

- Teratogenic, pregnancy category X
- Manufacturers warn women who are or who may become pregnant not to handle crushed or broken tablets
- Although trace amounts of finasteride is detected in semen, teratogenic effects are not expected through sexual exposure.