

## The Bulletin from the Clinical Pharmacist

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### Pharma today Finasteride

**Introduction:** The invention of the drug followed landmark observations in 1974 by researcher Julianne Imperato-McGinley at Cornell University. She studied a remote village in the Dominican Republic where male children had a rare genetic 5-alpha reductase deficiency. Because these individuals lacked the enzyme that converts testosterone to dihydrotestosterone (DHT), they naturally had much smaller prostates and did not experience male pattern baldness.

**Mechanism of Action:** Finasteride is a prescription medication primarily used to treat male pattern hair loss and benign prostatic hyperplasia (BPH). It works by inhibiting the 5-alpha-reductase enzyme, which prevents the conversion of testosterone into dihydrotestosterone (DHT). Lowering DHT helps shrink enlarged prostates and prevents hair follicle miniaturization.

#### Indications:

**Male Pattern Hair Loss (Androgenetic Alopecia):** Typically prescribed as a 1 mg daily dose, it slows hair loss and stimulates regrowth.

**Benign Prostatic Hyperplasia (BPH):** Prescribed at a higher 5 mg daily dose to shrink an enlarged prostate, relieve urinary hesitancy, and lower the risk of urinary retention.

#### Contraindication:

**Men:** Potential side effects include erectile dysfunction, decreased libido, and reduced ejaculate volume.

**Women:** Finasteride is strictly contraindicated for women and must never be handled by those who are pregnant due to the risk of severe birth defects in male babies.

#### Dosage and Administration:

Indication	Dosing
Benign Prostatic Hyperplasia	5 mg PO OD; assess response after 12 weeks to 6 months
Androgenic Alopecia (Men Only)	1 mg PO OD for at least 3 months

#### Conclusion:

Finasteride is a hormone modifying drug that reduce DHT and is useful for BPH and androgen related hair loss. It is mainly used in men because of its approved indications and because pregnancy exposure in women can harm a male fetus, so female use should be limited to specialist supervised off label situations.