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PATIENT GUIDE

Hair loss treatments *for pattern hair loss in men and women*

Finasteride and topical minoxidil are approved for pattern hair loss. Dutasteride, minoxidil tablets and compounded scalp preparations are prescribed off label, and the evidence behind each one differs.

CONDITION	FDA APPROVED	ROUTES	FIRST CHECK	SOURCES
Pattern hair loss	Finasteride, minoxidil	Oral and topical	4 to 6 months	32 · PMID linked

§ 01

Overview

Pattern hair loss on the top of the scalp has treatments that work, and two of them carry an FDA approval for it. Finasteride 1 mg tablets are approved for male pattern hair loss in men only,[22] and topical minoxidil 2 percent and 5 percent are sold over the counter as hair regrowth treatments for men and women.[23] The other options on our menu, including dutasteride capsules, low dose minoxidil tablets and compounded scalp solutions, are not approved for hair loss, so prescribing them for it is off label, which a physician may lawfully do.[24]

How much research sits behind each option differs a great deal. Platelet rich plasma for hair has its own guide (OCW WP 057). Every number here comes from a current FDA label or a published study, listed at the end with a link.

107 hairs	**More hair at one year on finasteride 1 mg.** In the trials behind the FDA label, treated men had 107 more hairs than men on placebo at 12 months, counted in a one inch circle (5.1 cm²) of balding vertex scalp against a baseline of 876.[22] [1]
45%	**More regrowth from 5 percent than 2 percent minoxidil.** In 393 men who applied a solution twice daily for 48 weeks, the 5 percent strength produced 45 percent more hair regrowth than the 2 percent strength.[2]
15.1%	**Unwanted body hair on minoxidil tablets.** Across 1,404 patients taking low dose minoxidil tablets for hair loss, extra body hair was the commonest side effect, and it led 0.5 percent of them to stop.[3]
Two	**Treatments here the FDA has approved for hair loss.** Finasteride 1 mg tablets and topical minoxidil. Dutasteride, minoxidil tablets and every compounded preparation are approved for something else or not at all.[24]

§ 02

What these treatments are

Pattern hair loss, also called androgenetic alopecia, is the gradual shrinking of scalp follicles under the influence of androgens, so that thick pigmented hairs are replaced over years by finer, shorter ones.[1] The medicines used against it fall into two families that work in completely different ways, and they are often used together.[4]

Finasteride and dutasteride

Both are 5 alpha reductase inhibitors taken as a daily tablet or capsule. Finasteride blocks the type 2 form of the enzyme that turns testosterone into dihydrotestosterone, or DHT, and lowers DHT in the blood and in the scalp.[1] Dutasteride blocks the type 1 and the type 2 forms, and both are present in hair follicles.[5] Finasteride 1 mg is the only one the FDA has approved for hair loss, and only for men.[22] Dutasteride is approved here for the symptoms of an enlarged prostate, so hair use is off label.[25]

Minoxidil, on the scalp and by mouth

Minoxidil began as a blood pressure tablet, and the hair growth seen as a side effect led to the topical products.[26] Those come as a 2 percent or 5 percent solution applied with a dropper and as a 5 percent foam, labelled for hair regrowth on the top of the scalp.[23] The tablets remain an approved medicine only for hypertension that has not responded to a diuretic plus two other blood pressure drugs, in 2.5 mg and 10 mg strengths.[26] The doses used for hair loss are far smaller and no regulator has set them, so 43 hair specialists from 12 countries published a consensus statement on prescribing them in 2025.[6] Minoxidil does nothing to your hormones either way.

Compounded scalp solutions and capsules

A compounded preparation is made for one named patient by a licensed pharmacy on a prescription, and it is not an FDA approved product.[27] Ours put minoxidil in a scalp solution with one or more of finasteride, dutasteride, latanoprost, tretinoin or caffeine, or combine low dose minoxidil with biotin in a capsule. Each ingredient alone is the active ingredient of some approved medicine, which makes it eligible for compounding under section 503A.[28] [24]

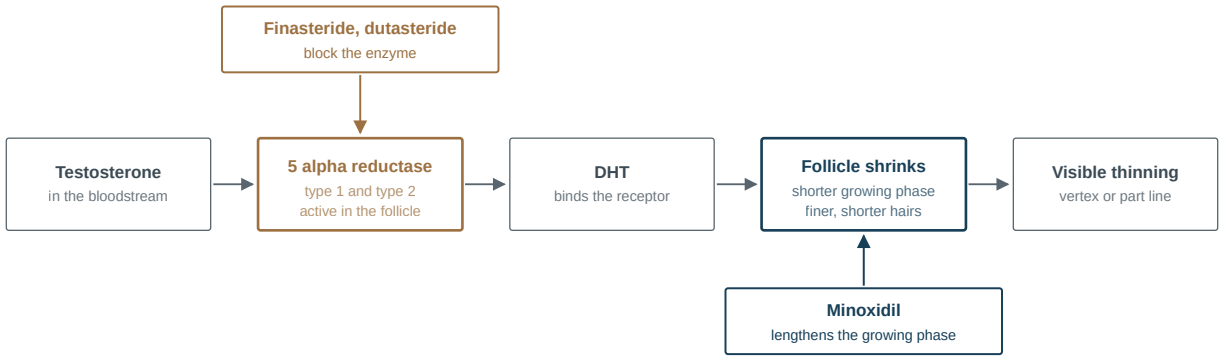
THE TREATMENTS AT A GLANCE

TREATMENT	WHAT IT IS	HOW IT IS GIVEN	FDA APPROVED FOR HAIR LOSS
Finasteride 1 mg	Type 2 5 alpha reductase inhibitor[1]	One tablet by mouth daily[22]	YES men only[22]
Dutasteride 0.5 mg	Type 1 and type 2 5 alpha reductase inhibitor[5]	One capsule by mouth daily[25]	NO approved for enlarged prostate[25]
Topical minoxidil	Potassium channel opener, 2 or 5 percent[7]	Solution or foam on the scalp[23]	YES over the counter[23]
Minoxidil tablets	The same drug as a blood pressure tablet[26]	Low dose by mouth daily[6]	NO approved for hypertension[26]
Compounded scalp solution	Minoxidil with added ingredients	Applied to the scalp	NO compounded[27]
Minoxidil with biotin capsule	Low dose minoxidil plus a B vitamin	One capsule by mouth daily	NO compounded[27]

§ 03

How they work

Testosterone circulating in the blood is converted by the enzyme 5 alpha reductase into DHT, a stronger androgen. In a follicle that has inherited sensitivity to it, DHT shortens the growing phase and shrinks the follicle a little with each cycle, so hairs emerge thinner and shorter until they no longer reach the surface as visible hair.[1] Finasteride and dutasteride act at the enzyme, so lowering DHT holds hairs in production only for as long as the tablet is taken, and the effect reverses within 12 months of stopping.[22]



The two families of medicine act on the same chain at different points. Finasteride blocks the type 2 enzyme and dutasteride blocks both forms, so less DHT reaches the follicle.[1,5] Minoxidil acts at the follicle itself, where its sulfated form opens potassium channels and holds hairs in growth for longer.[7] Both effects last only while treatment continues.[22,23]

Minoxidil works somewhere else entirely. It is a prodrug, converted in the body to minoxidil sulfate, and laboratory and animal work points to that active form opening potassium channels and so lengthening the growing phase. In cultured mouse whisker follicles and in balding macaque monkeys, several unrelated potassium channel openers increased hair growth, while a compound without that action did not.[7] The labels say plainly that the product will not work for everyone, and the medicine has to stay on the scalp, because the hair it holds is lost again once it stops.[23]

Taken as a tablet, minoxidil reaches the follicle through the bloodstream and relaxes blood vessels everywhere else as well, which is the source of its side effects.[26] Of the other compounded ingredients, latanoprost is a prostaglandin analogue that lengthens and thickens eyelashes as a side effect of glaucoma treatment,[8] and tretinoin increases how much minoxidil passes through the skin.[9]

KEY POINT

Lowering DHT and holding hairs in their growing phase are separate actions, so the two families of medicine can be used together. The Japanese Dermatological Association guideline recommends finasteride 1 mg daily, dutasteride 0.5 mg daily and topical 5 percent minoxidil twice daily as first line treatment for men, and topical minoxidil as first line for women, while stating that oral minoxidil should not be used and that oral finasteride and dutasteride are contraindicated in women with pattern hair loss.[4]

§ 04

What the research shows

Two of these treatments were tested in trials with more than a thousand participants, while several of the compounded ingredients rest on a single small study.

What the evidence supports

Finasteride 1 mg grows hair in men and slows further loss. In two 1 year randomized placebo controlled trials in 1,553 men aged 18 to 41 with mild to moderate loss, hair count rose on finasteride and fell on placebo, a 107 hair difference at 12 months within a one inch circle of vertex scalp.[1] The blinded extensions reached 138 hairs at 2 years and 277 at 5 years, and by 5 years 35 percent of treated men had lost any hair from baseline against 100 percent on placebo. Improvement appeared as early as 3 months.[22]

Dutasteride 0.5 mg outperformed finasteride 1 mg over 24 weeks. A phase III trial randomized 917 men aged 20 to 50 to dutasteride 0.02, 0.1 or 0.5 mg daily, finasteride 1 mg daily or placebo. Hair count and width rose with dutasteride dose, and at week 24 dutasteride 0.5 mg increased both in a 2.54 cm target area more than finasteride (P = .003 for count, P = .004 for width) and more than placebo, with adverse events similar across the groups. The trial ran 24 weeks only.[5]

Topical minoxidil works in men and in women. In 393 men aged 18 to 49 treated twice daily for 48 weeks, the 5 percent solution beat both the 2 percent solution and placebo on hair count and on ratings of scalp coverage, with 45 percent more regrowth than the 2 percent strength.[2] In 381 women of the same ages, 5 percent beat placebo on all three main measures, while 2 percent beat placebo on hair count and investigator rating but not on the women's own assessment.[10]

Pooling the trials puts the three medicines close together. A Bayesian network meta analysis of 23 studies of single drug treatment in men found the largest rise in total hair count at 24 weeks with dutasteride 0.5 mg daily, ahead of finasteride 1 mg (mean difference 7.1 hairs per cm², 95 percent confidence interval 5.1 to 9.3) and of 2 percent topical minoxidil (8.5, 4.8 to 12.3), while 5 mg of minoxidil by mouth gave the largest rise in terminal hair count at that point and finasteride 1 mg the largest at 48 weeks.[11] In women, a summary of a Cochrane systematic review of 22 randomized trials in 2,349 participants pooled four of them and found that more women reported a moderate increase in regrowth on minoxidil than on placebo (relative risk 1.86, 95 percent confidence interval 1.42 to 2.43).[12]

Minoxidil tablets have not beaten the solution. A double blind trial compared 5 mg once daily against 5 percent solution twice daily in 90 men, 68 of whom finished; the tablet was not superior on terminal hair density at either site, and only the vertex photographs favoured it, by 24 percent (P = .04).[13] A meta analysis then pooled four randomized trials in 279 patients followed for 24 to 39 weeks and found no difference between tablet and solution in hair density or hair diameter, with extra body hair twice as common on the tablet (risk ratio 2.01, 95 percent confidence interval 1.18 to 3.41).[14]

Topical finasteride raises hair count with much less drug in the blood. In a phase III trial at 45 European sites, 458 men received a topical finasteride spray, oral finasteride or placebo; at week 24 target area hair count had risen by an adjusted mean of 20.2 hairs against 6.7 on placebo (P < 0.001), numerically similar to the tablet, while peak plasma finasteride was more than 100 times lower and mean serum DHT fell 34.5 percent against 55.6 percent.[15] A separate trial randomized 40 men to a compounded 0.25 percent finasteride with 3 percent minoxidil solution or to 3 percent minoxidil alone for 24 weeks: the combination was superior for density, diameter and blinded photographs (all P < 0.05), and plasma DHT fell about 5 percent.[16] A systematic review found seven human studies of topical finasteride, in which hair counts rose and scalp and plasma DHT both fell while serum testosterone did not change.[17]

What is not yet known

The two tablets in women, and over time. The finasteride label reports a 12 month trial in 137 postmenopausal women in which effectiveness could not be demonstrated on any measure, and both drugs are contraindicated in pregnancy, so any use in a woman is off label and needs a detailed conversation first.[22] [4] For dutasteride the head to head trial lasted 24

weeks, with no multiyear placebo controlled hair trial to set beside the 5 year finasteride data. [5] [25] For oral minoxidil the published experience is largely open label, retrospective or short, and the 2025 consensus statement named comparative efficacy against the solution and long term safety as topics still needing study. [3] [6]

The other compounded ingredients. We found no randomized trial of a topical dutasteride solution used on its own. A 24 week placebo controlled pilot of latanoprost 0.1 percent in 16 men with mild loss found higher density on the treated mini zone than the placebo zone (P = .0004), and its authors noted the result may not carry over to other patients or a whole scalp. [8] An open label trial in 210 men found a 0.2 percent caffeine liquid not inferior to 5 percent minoxidil on the proportion of growing hairs at 6 months, 10.59 against 11.68 percent, with no placebo group and no blinding. [18] A double blind trial in 31 men found 5 percent minoxidil with 0.01 percent tretinoin once daily no different from 5 percent minoxidil twice daily. [9] A review of biotin for hair and nails found 18 reported cases of benefit, every one in a patient who had an underlying condition affecting hair or nail growth, and concluded that there is not enough evidence to support it in healthy people; no trial has tested biotin and minoxidil in one capsule. [19] Every one of these studies tested a single ingredient or a pair, so what a four or five ingredient blend does, and how safe it is, remains unknown.

MAIN HUMAN STUDIES Randomized trials unless the design says otherwise.

STUDY	N	WHO AND HOW	MAIN FINDING
Kaufman 1998 [1]	1,553	Men 18 to 41, finasteride 1 mg daily or placebo, 1 year	107 more hairs than placebo in a one inch circle at 12 months
Gubelin Harcha 2014 [5]	917	Men 20 to 50, dutasteride, finasteride 1 mg or placebo, 24 weeks	Dutasteride 0.5 mg above finasteride for count (P = .003) and width (P = .004)
Olsen 2002 [2]	393	Men 18 to 49, minoxidil 5 or 2 percent or placebo twice daily, 48 weeks	5 percent superior to both; 45 percent more regrowth than 2 percent
Lucky 2004 [10]	381	Women 18 to 49, same three arms, 48 weeks	5 percent superior to placebo on all three measures; more itching and unwanted hair
Gupta 2022 [11]	23 trials	Network meta analysis of single drug trials in men	Dutasteride 0.5 mg first for total hair count at 24 weeks, finasteride 1 mg for terminal hair at 48 weeks
Penha 2024 [13]	90	Men 18 to 55, oral minoxidil 5 mg against topical 5 percent, 24 weeks	No superiority for the tablet; vertex photographs favoured it (P = .04)
Vañó Galván 2021 [3]	1,404	Retrospective safety review, titrated low oral doses, 3 months or more	Extra body hair 15.1 percent; 1.2 percent stopped; none life threatening
Piraccini 2022 [15]	458	Men, topical finasteride spray against placebo and the tablet, 24 weeks	20.2 against 6.7 hairs; serum DHT down 34.5 against 55.6 percent

SUMMARY

Finasteride 1 mg in men and topical minoxidil in men and women have the deepest evidence, measured over 48 weeks to 5 years. Dutasteride did more than finasteride over 24 weeks, and that is the length of the trial. Minoxidil tablets have matched the solution rather than beaten it. The other compounded ingredients rest on single small studies, and the blends themselves have never been tested.

§ 05

How these treatments are given

Doses come from the FDA label where one exists, and otherwise from the published studies. Where neither sets a dose, your physician sets it with you.

The two tablets

Finasteride's labelled dose is one 1 mg tablet once daily, with or without food. The label states that three months or more of daily use is generally needed before benefit is seen, that continued use is recommended to sustain it, and that stopping reverses the effect within 12 months. Efficacy in recession at the temples has not been established.[22] Dutasteride has no FDA label dose for hair loss, because it is not approved for it; the labelled prostate dose is one 0.5 mg capsule once daily, the dose used in the hair trials, swallowed whole rather than chewed or opened. [25] [5]

Minoxidil on the scalp

The drug facts labels set out how each product is used. The 5 percent solution for men is 1 mL from the dropper twice a day to the top of the scalp, and the 5 percent foam for men half a capful twice a day massaged in. The 2 percent solution for women is 1 mL twice a day, and the 5 percent foam for women half a capful once a day. All of them say that using more will not improve results, and that continued use is necessary or hair loss will begin again. The men's 5 percent products are labelled for the vertex only, and not for a receding hairline.[23]

Minoxidil by mouth

No regulator has set a dose of minoxidil for hair loss, so your physician sets it; for scale, the approved tablets for hypertension are 2.5 mg and 10 mg.[26] The published hair studies used 5 mg daily in men, [13] [14] and the 2025 consensus panel agreed on starting doses, contraindications and monitoring, though not on how to step the dose up. [6] Doses are usually titrated, as they were in three quarters of the large safety series. [3]

Compounded solutions and capsules

These are prepared by a licensed pharmacy on a prescription written for you, so no regulator has set a dose or a strength.[27] The concentrations with published human data are 0.25 percent finasteride with 3 percent minoxidil, [16] latanoprost 0.1 percent, [8] tretinoin 0.01 percent with 5 percent minoxidil [9] and caffeine 0.2 percent. [18] Application is once or twice daily to the dry scalp, as the prescription states, and it is worth asking what is in the bottle and at what strength. For the capsule, no trial has tested minoxidil and biotin together, and the reported benefit of biotin comes from patients who had another condition affecting hair growth, [19] so the minoxidil is the part with evidence behind it. If you take biotin in any form, tell whoever draws your blood, because it changes several common test results; our vitamin and lipotropic injections guide (OCW WP 058) sets that out in full. [29]

§ 06

What to expect

Nothing happens quickly. Hair grows slowly, so every one of these treatments is judged in months. The finasteride label expects three months or more of daily use before benefit shows, with the largest gain over the first 2 years.[22] The minoxidil labels say results may occur at 2 months with twice daily use in men and that some men need at least 4 months, while women using the 5 percent foam once daily may see results at 3 months and some need 6; they also tell a user to stop and ask a doctor if there is no regrowth by 4 months in men or 6 months in women. [23]

What success usually looks like. In the finasteride trials the commonest outcome was the absence of further loss rather than a full head of hair. At 5 years a blinded panel rated 48 percent of treated men improved, 42 percent unchanged and 10 percent worse, against 6, 19 and 75 percent on placebo.[22] Keeping what you have is a real result.

Extra hair where you did not ask for it. With minoxidil tablets this is the commonest effect by far. At blood pressure doses, longer, thicker, darker fine body hair appears in about 80 percent of patients within 3 to 6 weeks, starting at the temples, between the eyebrows or on the upper cheek and later spreading.[26] At the low doses used for hair loss the figures run from

15.1 percent in the series of 1,404 patients to 49 percent in the randomized trial, [3] [13] and across four randomized trials it was about twice as common on the tablet as on the solution. [14] It fades after stopping, though 1 to 6 months may be needed for the appearance to return to normal. [26] Facial hair can be managed, and it is worth raising before you start.

Stopping, and what was never measured. Finasteride's effect reverses within 12 months of stopping,[22] and minoxidil on the scalp has to be continued or the regrowth is lost, [23] so these are long term treatments rather than a course. The labels describe no early shedding phase and we found no trial that measured one.

§ 07

Safety

These medicines have different safety profiles, and the approved labels give real numbers for several of them.

Finasteride

DRUG RELATED EFFECTS IN YEAR 1 OF THE FINASTERIDE 1 MG TRIALS From the FDA label, finasteride n = 945, placebo n = 934.[22]

EFFECT	FINASTERIDE 1 MG	PLACEBO
Decreased libido	1.8%	1.3%
Erectile dysfunction	1.3%	0.7%
Ejaculation disorder	1.2%	0.7%
Decreased volume of ejaculate	0.8%	0.4%
Stopped because of a sexual effect	1.2%	0.9%

Taken together, 36 of 945 men on finasteride (3.8 percent) reported one or more of these against 20 of 934 on placebo (2.1 percent), p = 0.04; they resolved in men who stopped and in most who carried on, and the yearly incidence of each fell to 0.3 percent or less by the fifth year. Post approval reporting, where no frequency can be calculated, includes sexual dysfunction that continued after treatment was stopped, covering erectile dysfunction and disorders of libido, ejaculation and orgasm, as well as depression, suicidal thoughts and behaviour, breast tenderness and enlargement, male breast cancer and reduced seminal quality.[22]

Finasteride also lowers PSA, the blood test used in prostate screening, from a mean of 0.7 to 0.5 ng/mL at month 12 in men aged 18 to 41, so tell whoever orders a PSA that you take it. On prostate cancer, the label reports the 7 year Prostate Cancer Prevention Trial in 18,882 men aged 55 and over on finasteride 5 mg daily, five times the hair loss dose: Gleason score 8 to 10 cancer occurred in 1.8 percent against 1.1 percent on placebo, and a 4 year dutasteride trial found 1.0 against 0.5 percent. The label states that 5 alpha reductase inhibitors may increase the risk of high grade prostate cancer and that the significance of this at the 1 mg hair loss dose is unknown.[22] [25] Finasteride is contraindicated in pregnancy, since blocking the conversion of testosterone to DHT can cause abnormalities of the external genitalia in a male fetus, so a woman who is or may become pregnant must neither take it nor handle crushed or broken tablets. [22]

Dutasteride

In the pooled 2 year prostate trials, over the first six months, impotence was reported by 4.7 percent on dutasteride against 1.7 percent on placebo, decreased libido by 3.0 against 1.4 percent, ejaculation disorders by 1.4 against 0.5 percent and breast enlargement or tenderness by 0.5 against 0.2 percent, with rates falling later; the label adds that these sexual effects may persist after treatment is stopped and that dutasteride's role in that persistence is unknown. It halves PSA within 3 to 6

months, and at 52 weeks it reduced total sperm count, semen volume and motility against placebo, with the sperm count effect not reversed 24 weeks later. Dutasteride is contraindicated in pregnancy, it is absorbed through the skin so pregnant women must not handle the capsules, and men taking it should not donate blood until 6 months after the last dose.[25]

Minoxidil

On the scalp, the labels tell a user to stop and ask a doctor if chest pain, a rapid heartbeat, faintness or dizziness occurs, if there is sudden unexplained weight gain, if the hands or feet swell, if the scalp becomes irritated, or if unwanted facial hair appears, and to ask a doctor first if there is heart disease; they add that the product may be harmful in pregnancy or while breastfeeding.[23] Itching and local irritation were more frequent with 5 percent than 2 percent in men, [2] and itching, irritation and extra hair growth were all more frequent with 5 percent in women. [10]

By mouth the picture is different, and the label for minoxidil tablets opens with a boxed warning, the most serious warning the FDA requires in a drug's labeling. It states that the tablets contain an antihypertensive agent that may produce serious adverse effects, that it can cause pericardial effusion, fluid around the heart, occasionally progressing to tamponade, and that angina may be made worse; it restricts the drug to hypertensive patients who have not responded to maximum doses of a diuretic plus two other blood pressure drugs, and requires close supervision with a beta blocker and usually a diuretic. At those blood pressure doses, pericardial effusion occurred in about 3 percent of treated patients not on dialysis, temporary swelling in 7 percent of patients who were not swollen at the start, and T wave changes in about 60 percent. The label also says minoxidil should be used in pregnancy only if the benefit justifies the risk, that extra hair growth has been reported in newborns exposed during pregnancy, and that it should not be given to a nursing mother.[26]

The doses used for hair loss are a fraction of those. In 1,404 patients the systemic effects were lightheadedness in 1.7 percent, fluid retention in 1.3 percent, a fast heart rate in 0.9 percent, headache in 0.4 percent, swelling around the eyes in 0.3 percent and insomnia in 0.2 percent; 1.2 percent stopped because of them and no life threatening effect occurred, in a retrospective series with no control group.[3] Headache affected 14 percent in the randomized trial. [13] Fluid around the heart and lungs with generalized swelling has nonetheless been reported in a patient taking low dose oral minoxidil for hair loss, so tell us promptly about breathlessness, swelling or palpitations. [20]

Compounded preparations

Compounded medicines are not FDA approved, and the FDA does not review their safety, effectiveness or quality before they are sold.[27] Topical finasteride reaches the bloodstream, since serum DHT fell 34.5 percent in the phase III trial, [15] so the pregnancy restriction and the possibility of sexual effects apply to it and to topical dutasteride. Latanoprost, in its licensed use as an eye drop, can darken the iris and the skin around the eye, so it is not something to let run onto the face. [8] Tretinoin increases how much minoxidil crosses the skin, and with it systemic exposure. [9] Biotin interferes with several laboratory tests, including the troponin test used to diagnose a heart attack. [29]

TELL YOUR PHYSICIAN BEFORE STARTING IF ANY OF THESE APPLY

- You are pregnant, may become pregnant, are planning a pregnancy or are breastfeeding.[22 25 26]
- You are a woman and finasteride or dutasteride has been suggested to you, since both are contraindicated in pregnancy and neither is approved for female pattern hair loss.[22 4]
- You have heart disease, heart failure, angina, an irregular heartbeat, low blood pressure or any kidney problem.[26 23]
- You have a personal or family history of prostate cancer, or you are due a PSA test.[22 25]
- You have had depression or thoughts of self harm, you are trying to father a child, or you donate blood.[22 25]
- Your hair loss came on suddenly, is patchy, follows childbirth or has no clear cause, or your scalp is red, inflamed, infected or sore.[23]
- You take biotin in any form, including hair, skin and nail supplements, or any other prescription medicine, over the counter product or supplement. Please bring the full list.[29]

Finasteride 1 mg has 5 year controlled data, and the label records finasteride's initial United States approval as 1992.[22] For minoxidil tablets, topical finasteride and every compounded blend, no long term safety study exists at the doses used in clinics, which the 2025 consensus panel listed as an open question. [6]

§ 08

Is this right for you

These treatments suit pattern hair loss, and the first job of a consultation is to establish that pattern hair loss is what you have.

Before we begin

- [ ] A review of your medical history, your family history of hair loss, and every medication and supplement you take
- [ ] Relevant measurements such as blood pressure and weight, so we have a clear starting point
- [ ] Baseline bloodwork, so that anything we see later can be compared against where you began
- [ ] A written note of your goals and standardized photographs, so we can judge progress together

Several other conditions thin or shed hair, and some are treatable in their own right, so they are looked for before a long term medicine is started. History and examination come first: where the loss sits, how fast it came on, whether hairs are shedding or thinning, and whether the scalp shows scarring. Trichoscopy, a magnified look at the scalp and hair shafts, separates several of these patterns, and blood tests follow where the picture is not clear.[21] Thyroid disease, iron deficiency and telogen effluvium, the heavy shedding that follows an illness, a crash diet, childbirth, surgery or a new medicine, are among the causes looked for, and the minoxidil labels say not to use the product for sudden or patchy loss, loss following childbirth or loss of unknown cause. [21] [23] Treating a thyroid problem or replacing iron is a different and often simpler job.

Reviewing your progress

We reassess against your documented starting point and your baseline photographs at defined intervals, using the same lighting and angles, because hair change is slow enough that memory is a poor guide. The labels set the first checkpoints at 4 months for men and 6 months for women on minoxidil, and at three months or more for finasteride.[23] [22] You are welcome to stop at any time, and we will tell you what to expect as the effect fades.

> QUESTIONS TO ASK YOUR PHYSICIAN
>
> Is this pattern hair loss, and what else have you ruled out? Which option is approved for someone like me, and which would be off label? What are the chances I keep what I have rather than regrow? How will we measure whether it is working, and when? What happens if I stop in two years? If my prescription is compounded, what is in it and at what strength? We are glad to answer all of these.

§ 09

Regulatory status

Finasteride. Finasteride 1 mg is FDA approved, as PROPECIA, for male pattern hair loss in men only. The label states that it is not indicated for women or children and that efficacy in recession at the temples has not been established, and it is contraindicated in women who are or may become pregnant.[22] Prescribing it to a woman is off label, which a physician may lawfully do; in pregnancy it is not an option at all. Finasteride 5 mg is approved separately for an enlarged prostate. [24]

Dutasteride. Dutasteride is FDA approved, as AVODART, only for symptomatic benign prostatic hyperplasia in men with an enlarged prostate, alone or with tamsulosin, and the label states that it is not approved for the prevention of prostate cancer. It carries no hair loss indication and the only approved form is an oral capsule, so hair use is off label.[25] [24]

Minoxidil. Minoxidil 2 percent and 5 percent are FDA approved over the counter as hair regrowth treatments, in solution and foam, with separate products for men and for women; using the men's 5 percent product on a woman, or any of them on the frontal hairline, goes beyond the labelled use.[23] [24] Minoxidil tablets are approved only for hypertension that has not responded to a diuretic plus two other blood pressure drugs, with a boxed warning about pericardial effusion and worsening angina. [26] No oral minoxidil product is approved for hair loss, so that use is off label, [24] and the 2025 international consensus statement was written to guide it. [6]

Compounded preparations. No topical finasteride, topical dutasteride, scalp latanoprost, combination scalp solution or minoxidil with biotin capsule is an FDA approved product. Latanoprost is approved only as an eye drop, and while the related prostaglandin bimatoprost is approved as a topical solution for thin eyelashes, no prostaglandin is approved for scalp hair.[24] Compounded drugs are not FDA approved, and the FDA does not verify their safety, effectiveness or quality before they are marketed. [27] Under section 503A of the federal Food, Drug, and Cosmetic Act a pharmacy compounding on a prescription may use a bulk ingredient that meets a USP or National Formulary standard or is a component of an FDA approved drug product, and each of these ingredients qualifies on one of those grounds. [28] [24]

For athletes. Neither finasteride, dutasteride nor minoxidil appears anywhere on the World Anti Doping Agency's 2026 Prohibited List, which came into force on 1 January 2026; no 5 alpha reductase inhibitor is named among the masking agents in section S5.[30] The list is reissued every year, so athletes in tested sport should check the current one each season. [30]

If you would like details about the preparation used in your treatment, please ask.

§ 10

Common questions

Which of these are FDA approved for hair loss?

Finasteride 1 mg tablets, for male pattern hair loss in men only,[22] and topical minoxidil 2 percent and 5 percent, sold over the counter. [23] Dutasteride is approved for an enlarged prostate and minoxidil tablets for hypertension, so using either for hair is off label, [25] [26] and the compounded solutions and capsules are not approved products at all. [27]

Which one works best?

For men, the deepest evidence is for finasteride 1 mg and 5 percent topical minoxidil, which act in different ways and are both first line in the Japanese guideline.[4] Dutasteride 0.5 mg did more than finasteride over 24 weeks in a trial of 917 men, and ranked first for total hair count at 24 weeks in a network meta analysis of 23 trials. [5] [11] For women, topical minoxidil is the option with randomized evidence. [10]

Is it safe, and what side effects should I expect?

In the first year of the finasteride trials, decreased libido affected 1.8 percent against 1.3 percent on placebo and erectile dysfunction 1.3 against 0.7 percent, falling to 0.3 percent or less by year five; the label also records reports, after approval, of sexual dysfunction continuing after the drug was stopped and of depression and suicidal thoughts, without a frequency.[22] Topical minoxidil mainly causes scalp itching and irritation, [2] and the tablet extra body hair, in 15.1 percent of 1,404 patients. [3]

How soon would I notice anything?

Three months or more of daily finasteride is generally needed before benefit shows, and the largest gain came over the first two years.[22] With minoxidil, results may appear at 2 months with twice daily use in men, and some men need at least 4 months; women on the 5 percent foam once daily may see results at 3 months and some need 6.[23]

Can a woman take finasteride or dutasteride?

Finasteride is not indicated for women, and the label reports a 12 month trial in 137 postmenopausal women in which effectiveness could not be demonstrated. Both drugs are contraindicated in pregnancy because they can affect the development of a male fetus, and the Japanese guideline treats both as contraindicated in female pattern hair loss, so any use in a woman is off label and needs a careful conversation first.[22] [25] [4]

Can these be combined?

Finasteride and minoxidil act at different points and are both first line for men, so they are commonly used together.[4] Combining ingredients inside one compounded bottle is different, since the published trials tested one or two ingredients and never four or five, so the effect and safety of a larger blend are not known.[16] Tretinoin also increases how much minoxidil crosses the skin.[9]

What happens if I stop?

Finasteride's effect reverses within 12 months of stopping,[22] and topical minoxidil has to be continued, since the labels state that hair loss will begin again without it.[23] Extra body hair from minoxidil tablets settles after stopping, though 1 to 6 months may be needed for the appearance to return to normal.[26]

Where is a compounded medicine made, and who oversees it?

Federal law sets out two kinds of compounding. Under section 503A, a state licensed pharmacy or physician prepares a medicine for one patient against that patient's own prescription, and the state board of pharmacy carries the day to day oversight while the FDA inspects for cause and on surveillance.[27] Under section 503B, an outsourcing facility registers with the FDA, works to federal manufacturing quality standards, reports adverse events and the products it makes to the agency, and is inspected by the FDA on a risk based schedule; it may also supply a clinic directly rather than for one named patient.[31] We use both kinds, and which one prepares your medicine depends on the preparation.

Is a compounded medicine the same as an FDA approved one?

No, and the difference matters. A compounded preparation is not FDA approved, and the agency does not check its safety, effectiveness or quality before it is sold, which is why an approved product is the first choice whenever one fits your situation.[27] What a prescription from a licensed pharmacy or a registered outsourcing facility does give you is a named prescriber, a facility answerable to a state board or to the FDA, ingredients that meet federal requirements, and a route for reporting a problem. A vial bought online and labelled for research use only has none of that: the FDA treats those products as unapproved new drugs when they are meant for people, and has written to the companies selling them.[32] Please do not use one.

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