

| Active                    | Treatment Category for Hairloss  | Treatment/Ingredient action   |
|---------------------------|----------------------------------|---|
| Minoxidil                 | Prostaglandins, DHT, Circulation | Minoxidil is known as a vasodilator, this means it expands blood vessels in your scalp. Increased blood circulation of the scalp increases blood flow to the hair follicle and supports healthy growth.   |
| Finasteride               | Anti Androgenics                 | Finasteride is an Antiandrogenic inhibitor of Intracellular enzyme type- II- 5a reductase. The enzyme converts testosterone into the more potent androgen dihydrotestosterone (DHT). DHT is the main cause for MPB, male pattern baldness, it can also affect females. Using Finasteride to inhibit the enzyme activity reduces DHT levels and supports hair growth and reduces hairloss. |
| Dutasteride               | Anti Androgenics                 | Dutasteride is an Antiandrogenic inhibitor of Intracellular enzyme type- I- 5a reductase. The enzyme converts testosterone into the more potent androgen dihydrotestosterone (DHT). DHT is the main cause for MPB, male pattern baldness, it can also affect females. Using Dutasteride to inhibit the enzyme activity reduces DHT levels and supports hair growth and reduces hairloss.  |
| Estradiol (17 $\alpha$ -) | Anti Androgenics                 | 17 $\alpha$ -estradiol is a stereoisomer of the female hormone 17 $\beta$ -estradiol and inhibits the conversion of testosterone to the metabolite dihydrotestosterone (DHT) by suppressing 5 $\alpha$ reductase activity. In addition, it has been reported to stimulate the generation of hair follicular matrix cells.   |
| Prostaquinon              | Prostaglandin analogue           | Prostaquinon is a natural phytocomplex, derived from the essential oil of the seeds of <i>Nigella sativa</i> L., standardized on thymoquinone. It exerts anti-inflammatory, antioxidant activity and neutralizes follicular miniaturization, controlling inflammation and promoting an increase in the thickness and density of the hair.   |
| Latanoprost               | Prostaglandin analogue           | Latanoprost can induce anagen (the growth phase) in telogen (resting) follicles while inducing hypertrophic changes in the involved follicles. In conjunction with increased growth, increased pigmentation occurs.   |
| Caffeine Oral             | Circulation                      | Supports increased circulation to improve blood flow and support hair growth.   |
| Ketaconazole              | Inflamation                      | Ketaconazole is a antifungal and is used for fungal infections of the scalp and skin. Use for the treatment of dandruff and seborrheic dermatitis.  |
| Clobetasol                | Inflamation                      | Clobetasol glucocorticoid steroid for the treatment of psoriasis of the scalp and other serious scalp conditions, used in the treatment of Alopecia Areata  |
| Betamethasone             | Inflamation                      | Betamethasone glucocorticoid steroid for the treatment of psoriasis of the scalp and other serious scalp conditions, used in the treatment of Alopecia Areata.  |
| Hydrocortisone            | Inflamation                      | Hydrocortisone has equal glucocorticoid and mineralocorticoid. It is less aggressive than Clobetasol and Betamethasone, use to treat mild inflammation of scalp and skin conditions.  |
| Biotin                    | Vitamin/ Supplementation         | Biotin also known as vitamin B7 stimulates keratin production and stimulate follicle growth. Most people obtain biotin from their diet but others are unable to generate enough from Diet alone and therefore supplementation would be recommended.   |
| Coenzyme Q10              | Vitamin/ Supplementation         | Is an anti oxidant Supports the bodies metabolism and gene expression, reducing elevation of DHT which can be a result of the body using testosterone to create cellular energy. A good balance of co enzyme also supports keratin levels a protein associated with hair and nails.   |
| Selenium Yeast            | Vitamin/ Supplementation         | Selenium is a trace element and is believed to support the immune system, creating antioxidant enzymes that protect from free radicals, supporting body function. The antioxidant enzymes in selenium prevent damage to hair follicles and supporting the body to develop proteins to support hair growth.  |
| Oral Zinc                 | Vitamin/ Supplementation         | Zinc is vital for healthy hair, skin and nails, zinc deficiency can lead to a breakdown in protein structure, a healthy protein structure is important to support healthy hair follicles. Zinc can also support a healthy scalp and reduces dandruff and other skin conditions of the scalp and skin.   |

