At-home photobiomodulation therapy for ANDROGENETIC ALOPECIA

Patients often seek recommendations from dermatologists for over-the-counter photobiomodulation therapy (PBMT) devices for androgenetic alopecia. Because dermatologists should be prepared to counsel patients about PBMT treatment options, Erin M. Dodd, M.D., Ronda S. Farah, M.D., and dermatology colleagues from the University of Minnesota reviewed 13 PBMT devices that are FDA-approved for androgenetic alopecia. The devices vary in shape, wavelength, light sources, technical features, price and level of clinical evidence.

**6 STAGES OF MALE-PATTERN HAIR LOSS**

1. **Pre-thinning**
2. **Thinning**
3. **Terminal thinning**
4. **Cyclical thinning**
5. **Restoration**
6. **Regrowth**

**CLINICAL TRIAL RESULTS**

**HOW PBMT DEVICES FARED IN TRIALS**

- **Combs**
  - HairMax Prima 7
  - HairMax Ultima 9
  - HairMax Ultima 12
  - NutraSlim Laser Hair Comb

- **Helmet**
  - iGrow Hair Growth System
  - iRestore Hair Growth System
  - Theradome LH80 PRO

- **Sports Caps**
  - Capillus82
  - Capillus202
  - Capillus272 Pro
  - LaserCap LCPro

**HairMax**

With five studies, HairMax laser combs have undergone more clinical testing than other PBMT devices included in this study. A trial of 110 men who underwent treatment for 15 minutes every three days for 26 weeks found the mean terminal hair density increased by 19.8 hairs/cm versus 7.6 hairs/cm decrease in the control group. Although patients reported improvements, it was not significantly different from the control group. A second trial of 28 men and 7 females treated for 15 minutes for three days over 26 weeks, patients reported increased hair counts by 93.5% and hair strength by 78.9%. The mean terminal hair density increased by 19.8 hairs/cm versus 7.6 hairs/cm in the control group.

**HairMax products PBMT products as Laser Bands and Laser combs with power outputs for laser bands between <255 MW AT <400 MW at a cost of $300 TO $600, respectively.**

**mGlow**

mGlow laser helmets (TOPHAT655) were tested in two studies in 41 men and 42 women who were treated for 25 minutes every other day for 16 weeks. The men and women both experienced statistically significant results (35% and 37% respectively).

**The Grow Products have a power capacity of <255 MW AT <700.**

**iRestore**

iRestore helmet was studied in 18 men and 18 women in one trial. The helmet was applied for 25 minutes three days per week for 3-6 months. An “improvement” in hair volume was found, but the study has not been published.

**iRestore has power capacity of <255 MW AT <400.**

**Capillus**

Capillus272 Pro laser sports cap was tested in 44 women for 30 minutes every other day for 17 weeks. The study found a 51% increase in terminal hair count as compared to the control group.

**Capillus272 PRO has a power capacity of <360 MW AT <3,000.**

**Theradome**

Theradome LH80 PRO is currently under study in 80 men who apply the helmet for 20 minutes for two days per week for 26 weeks.

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**Nutraslim**

This laser hair comb has not yet been tested in clinical trials.

**Nutraslim has power capacity of <30 MW AT <100.**