

# **TrichoXidil**<sup>™</sup>

THE NATURAL CHOICE FOR CAPILLARY GROWTH 37% reduction in telogen-phase hair shafts in just 90 days



## **TrichoXidil**™

It is the natural choice for hair growth by stimulating the production of growth KGF, IGF-1 and VEGF. Considered for vegans, it is a phytocomplex with specific fractions of vegetable oils.

### **Mechanism of action**

It stimulates the gene expression of the growth factors KGF, IGF-1 and VEGF, involved in the proliferation of cells in the matrix, dermal papilla and vascular system' increases the amount of extracellular matrix in the dermal papilla and maintains the follicle in the anagen phase.

### **Recommended use**

Topical use: 2.5% to 5%.

- Androgenetic alopecia
- Alopecia areata
- Telogen effluvium
- Anagen effluvium



- ▲ KGF: Keratinocyte Growth Factor
- ▲ IGF-1: Insulin Growth Factor 1
- ▲ VEGF: Vascular Endothelial Growth Factor

### In Vitro Increased Expression of Growth Factors KGF, IGF-1 and VEGF.



The concentrations of 2.5% and 5% of **TrichoXidil™** proved to be superior to minoxidil in the quantification of IGF-1 (p <0.05) and KGF (p <0.05) mRNAs. However, quantification of VEGF mRNA showed superiority of minoxidil over TrichoXidil ™ (p <0.05).

# Hair Growth Stimulation

## A clinical study demonstrated its mechanism of action and proved its clinical effectiveness.

### In Vivo

In Vitro

32 volunteers, men and women between 25 and 50 years old, diagnosed with androgenetic alopecia were evaluated. The volunteers were divided into 7 groups. In the first evaluation, T=0, data and images were taken using the TrichoScan® equipment, in addition to the collection of the cylindrical

- 1. Control group without treatment (n=4)
- 2. Hydroalcoholic vehicle group without active pharmaceutical ingredient
- 3. TrichoSol<sup>™</sup> group without active pharmaceutical ingredient
- 4. Hydroalcoholic vehicle group with 2.5% minoxidil
- 5. TrichoSol<sup>™</sup> group with 2.5% minoxidil (n=5)
- 6. Hydroalcoholic vehicle group with 2.5% TrichoXidil™

Increased mRNA Expression (KGF, IGF-1 and VEGF)

7. TrichoSol<sup>™</sup> Group with 2.5% TrichoXidil<sup>™</sup> (n=5)

fragment for extraction of the total mRNA and respective quantification. The same procedure was repeated in the period T=90. Anagen and telogen follicles, follicular units and hair density were evaluated.

#### 2 3 KGF IGF-1 VEGF 4 **Relative mRNA expression Relative mRNA expression** 3. 3 3 (#) p<0.05 2 2 2

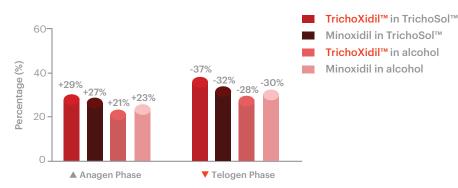
- The formulation of TrichoXidil™ in TrichoSol™ (7) significantly increased the expression of KGF mRNA compared to all other groups (p <0.05). Even in the formulation of TrichoXidiI™ with hydroalcoholic vehicle (6), the relative expression of KGF was significantly higher when compared to other formulations of minoxidil (p <0.05).
- The formulations were able to increase the relative expression of IGF-1 mRNA when compared to the control (1) and the group of volunteers who used only the hydroalcoholic vehicle (2). Formulations containing minoxidil significantly increased the relative expression of VEGF mRNA compared to the control, hydroalcoholic vehicle and TrichoXidil™ groups.

# **Relative mRNA expression** 0 90 0 90

# **Proven Clinical Effectiveness**

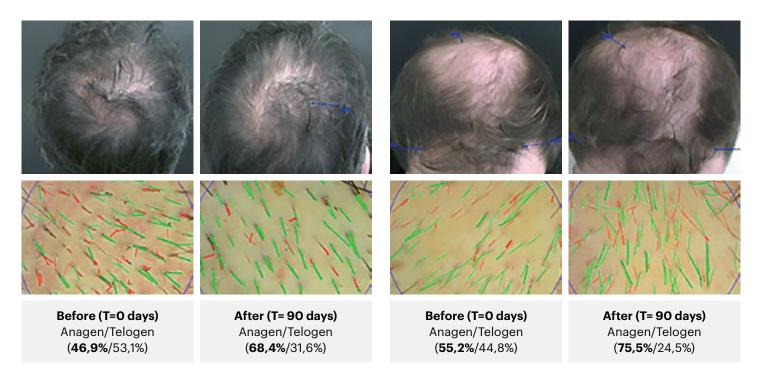
The treatment with TrichoXidil<sup>™</sup> in the TrichoSol<sup>™</sup> vehicle promoted in just 90 days a reduction of 37% of the hair shafts in the telogen phase and an increase of 29% of the hair shafts in the anagen phase.

### **Hair Growth Assessment**



• TrichoXidil™ in TrichoSol™ promoted a greater increase in the percentage of anagen follicles (29%) and a greater reduction in telogen follicles (37%), when compared to the formulation containing minoxidil.

### Proportion of hair shafts in Anagen/Telogen Phase



• Before and after 90 days of treatment with TrichoXidil™ 2.5% in TrichoSol™.

## **Formulations**

### **Combined Solution for Hair Growth Fagron Derma Pack TMT**

TrichoXidil™	2,5 g	+KGF +IGF1 +VEGF
Minoxidil Base	2,5 g	+PGE2
TrichoSol™	qsp 100 mL	+KGF +FGF10

Dosage: Apply to the affected areas twice a day or according to the prescriber's guidance.

## **Natural Hair Growth Solution**

**Fagron Derma Pack TRT** 

TrichoXidil™	2,5 g	+KGF +IGF1 +VEGF
TrichoSol™	qsp 100 mL	+KGF +FGF10

Dosage: Apply to the affected areas twice a day or according to the prescriber's guidance.

TrichoSol™: Natural solution that solubilizes and enhances the ingredients for hair growth by stimulating the production of KGF and FGF-10. Presents stability (Ortofarma) and allergenicity (Allergisa) tests.

To maximize the patient's treatment result, add the 3 steps of the Fagron Neogen™ line of hair care and hygiene to the protocol. All with **TrichoTech™** technology that stimulates the neogen phase of the hair growth cycle via KGF and FGF10 stimulation.

1. Fagron NeoOil™ Apply to dry scalp and hair, leaving it in occlusion for 10 minutes. Weekly use.

### 2. Fagron NeoWash™

Apply for hair wash, massaging for 2 minutes. Rinse and repeat. Daily use.

### 3. Fagron NeoCond™

Apply all over the hair shaft, massaging for 2 minutes. Rinse off. Daily use.

**Together** we create the future of personalized medicine.



Fagron Hellas 12 km N.R. Trikala - Larisa P.C. 42100, P.O. Box 32 Trikala, Greece

T +30 24310 83633-5 F +30 24310 83615 www.fagron.gr

