

# **Effect of a new topical treatment on androgenetic and telogen hair loss in women**

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## Summary

Hair loss is a frequent and distressing condition for both man and woman. The aim of our study was to evaluate a new topical product named REP884. This combination of natural ingredients was composed for one member of our family with the combination of androgenetic and telogen hair loss. Because of the reactions we decided to test it on more subjects.

We did see an overall increase of the Hair Mass Index with the cross section trichometer of average 61 %. The hair line moved forward and also in the self-assessment the scores improved. There were no side effects. REP884 seems to be a safe and effective treatment for both hair loss as to improve the quality of the hair.

## Keywords

Androgenetic hair loss, telogen hair loss, topical treatment, natural ingredients, cross section trichometer.

## Introduction

Androgenetic and telogen hair loss are the most frequent forms of decrease in hair density in both men and women. 75% of men deal with hair loss at a certain age. Approximately 30% of women deal with it at some point, most after menopause. For many people it means a distressing condition and they search for all kinds of therapies, sometimes with dangerous side effects.

Hair loss is a complex process with a poorly understood etiology where genetic, inflammation, hormonal, vascular, toxicological and nutritional factors play a role. These lead to alteration in the hair cycle at the anagen, catagen or telogen phase. The only pharmacological therapeutic options are Minoxidil, Finasteride and the AC pills. These all are poorly efficient and only have effect on androgenic hair loss.

## Materials and methods

This 6 months study was conducted from April 2016 till September 2016 at the Brightlands Maastricht Health Campus. The aim was to evaluate the efficiency of a topical product named REP884 on hair loss and the hair condition. The 7 healthy volunteers aged 36-68 presented a stage I till III stage on the Ludwig scale. They were recruited after a written informed consent. All had telogen or androgenetic hair loss or a combination of both. None of them used medication that could influence the hair growth or had a physical condition that could do so like Hypothyroidism or ½ year after pregnancy. Subjects who used products to improve the hair growth were also excluded. All volunteers used the topical REP884 3 times a week. This serum was applied on the scalp at least during ½ hour before it was washed out. Most subjects applied it in the evening and washed their hair in the morning. REP884 is a combination of natural and natural identical ingredients in an oily emulsion. It contains soybean extract, herbal ingredients and fulvic acid.

## Evaluation

Standardised photographs of a vertex view of the whole scalp were taken at the beginning, at 3 months and at the end of the study. All subjects filled in a self-assessment at the beginning and after each 6 weeks of the treatment. Although the Ludwig scale is very subjective we also scored this at the beginning and after 6 months. We measured the hair line from nose root to the centre and lateral at the beginning and at the end of the study. We scored the hair mass index with the cross section trichometer at the beginning and at the end of the study. This mechanical device measures precisely the cross-section area of a bundle of hair from a 2x2 cm area.

## Results

All subjects finished the test. With some subjects we did see an increase of hair loss the first period. We see that as a positive sign. The telogen hairs fall out to form a new anagen phase. Photographic review showed a significant difference between the start and the end of the study.

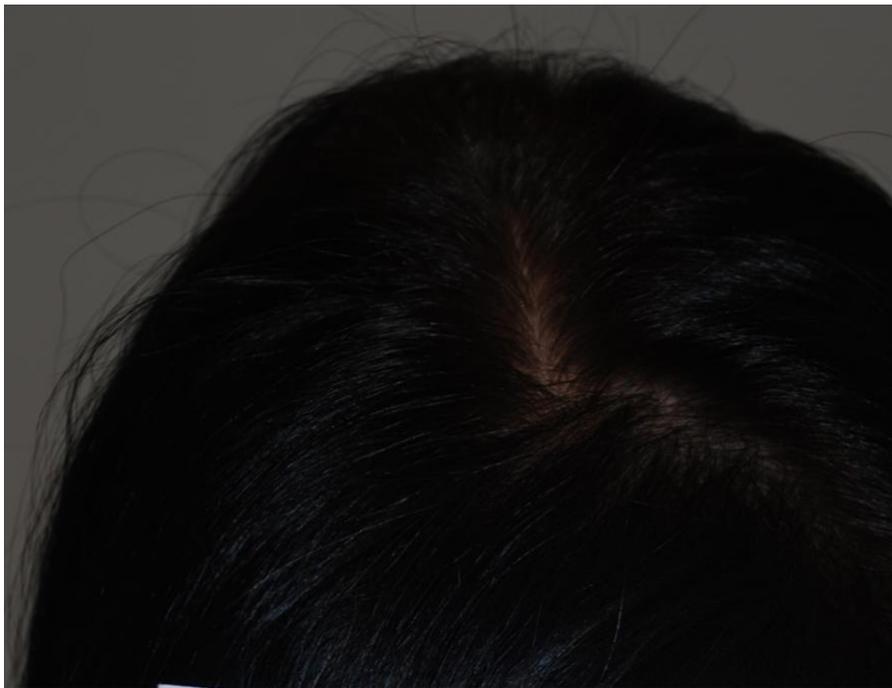


Fig.1 Although the light conditions differ we still see a change after 6 month of treatment

The hair mass index with the cross section trichometer showed an increase overall of 61%. Lowest score was 28,8%, the highest score 94,5%.

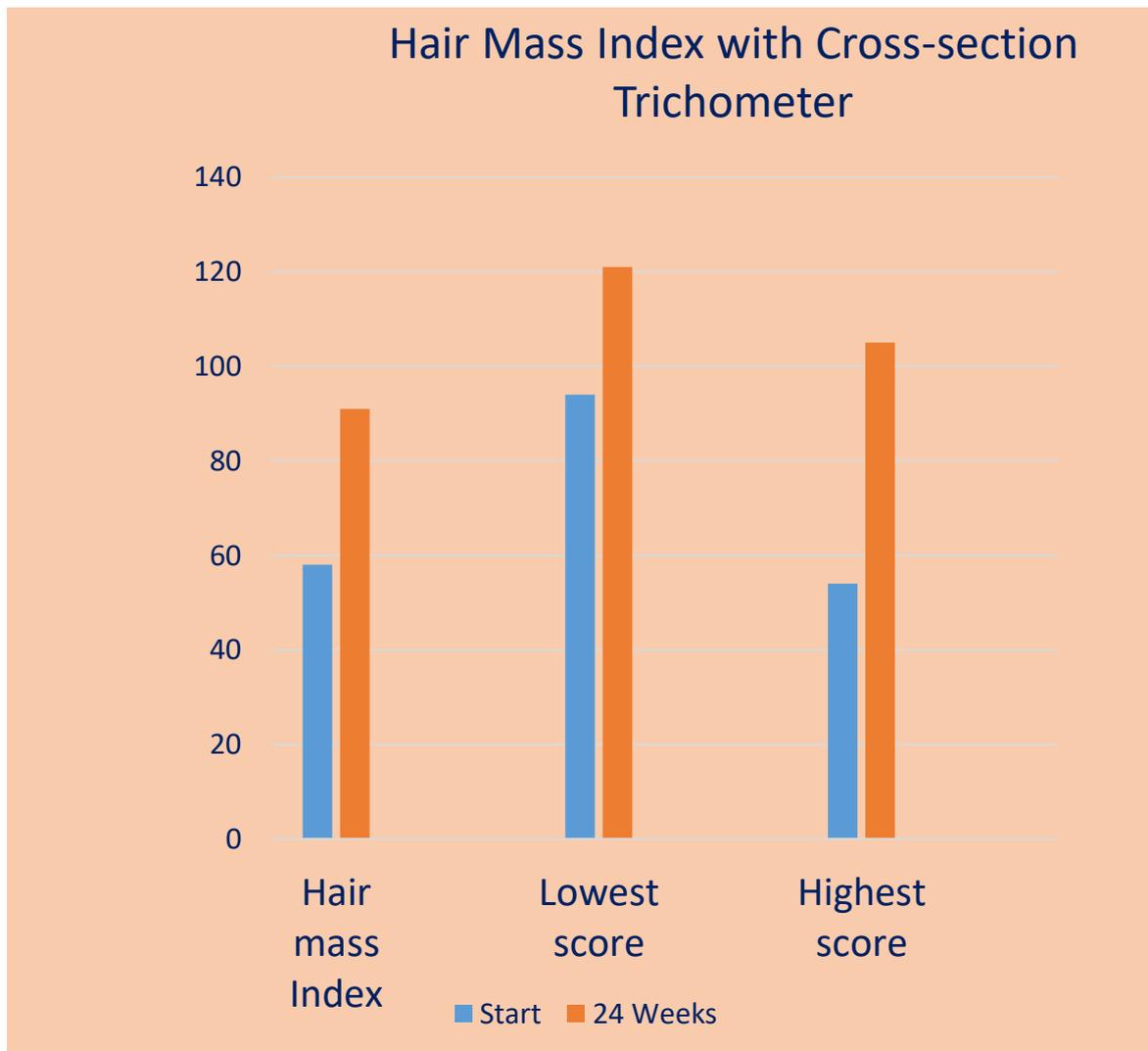
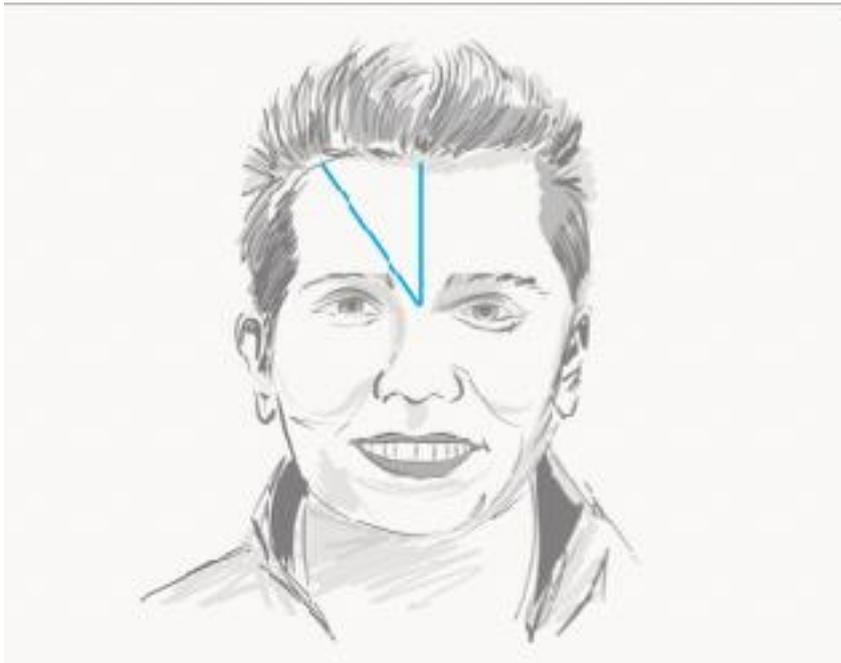


Fig.2 The Hair Mass Index with the Cross Section Trichometer showed an increase of average 61%. The lowest score was 28,8%; the highest score 94,5%

In the Ludwig scale the improvement was an average of 2,7 positions with the lowest score 2 positions and the highest score 3 positions.

The distance between the nose root and the hair line moved central in an average from 6,3 to 6,1 cm, the best had an improvement from 6,7 to 6,0 cm. The lateral average was from 8,0 cm to 7,2 cm. The best from 8,0 to 6,6 cm.



	BEFORE	AFTER
<b>Central average</b>	6,3 cm	6,1 cm
<b>best</b>	6,7 cm	6.0 cm
<b>Lateral average</b>	8,0 cm	7,2 cm
<b>best</b>	8,0 cm	6,5 cm

In the self-assessment the subjects scored the hair loss reduction, the thickness, the looks, the manageability, general improvement and the self-confidence. The score was on a scale of 1-10, with 1 is bad and 10 is good. Each 6 weeks we saw an improvement of all the parameters as showed in the table. In table 2 there is the score of self-assessment in percentages increase. There were no side effects.



### Discussion

This serum demonstrated a positive effect of the serum REP884 on both the hair density measured with the cross-section Trichometer and showed improvement on the photographs. Also the self-assessment showed a clear improvement in the scores. There was an improvement in the quantity as well as at the quality of the hairs.

The formulation of the serum REP884 is based on data collected from different references. It covers the possible nutritional factors, the inflammation, the oxidation and the conversion of testosterone in dihydrotestosterone.

We did start this study as a pilot. Because of these scores there is no need for a double blind randomised follow up study.

### Conclusion

REP884 seems to be an effective and save way to prevent hair loss, to stimulate the hair follicles and to increase the quality of the hair.