

# TRIPLE ACTION HAIR LASER TREATMENT

## Medical studies



Hair laser therapy has been the subject of many studies with over 3.000 scientific papers published worldwide proving its numerous positive effects.

THE COSMETIC REPUBLIC laser hair treatment is certified as a 3R class laser device, and received the CE & ROHS certifications for conformity with the essential health and safety requirements set out by the European Directives.



### Objectives of the studies

- Hair growth evaluation
- Hair density measurement
- Hair loss evolution
- Scalp's health assessment
- Safety of the treatment

The study population consisted of 47 people from 25 to 50 years old with Androgenetic Alopecia experiencing hair loss within the past 16 months. They were instructed to use THE COSMETIC REPUBLIC hair loss treatment during 4 months. Hair density measurements were performed before and after finishing the treatment. Additional clinical visits were scheduled in-between to follow the progress and evaluate hair growth status.

### Before & after images

The below images correspond to macro photos taken using a Trichoscan, a software-based method for the analysis of human hair. These images were taken before the treatment, and 4 months after it. Normal hair count is around 220 hairs/cm<sup>2</sup>. Hair loss is noticeable approximately at 110 hairs/cm<sup>2</sup>.

The images from the Trichoscan are under magnification, so the viewed area is a 11mm circle. It is important to point out that increases in hair counts are often difficult to show on pictures since there are many variables affecting a picture of hair, as for instance, lighting, hair's length, exposure, hair colour, etc. Here are some examples of participants in our studies.

Before



After



Before



After



THECOSMETICREPUBLIC

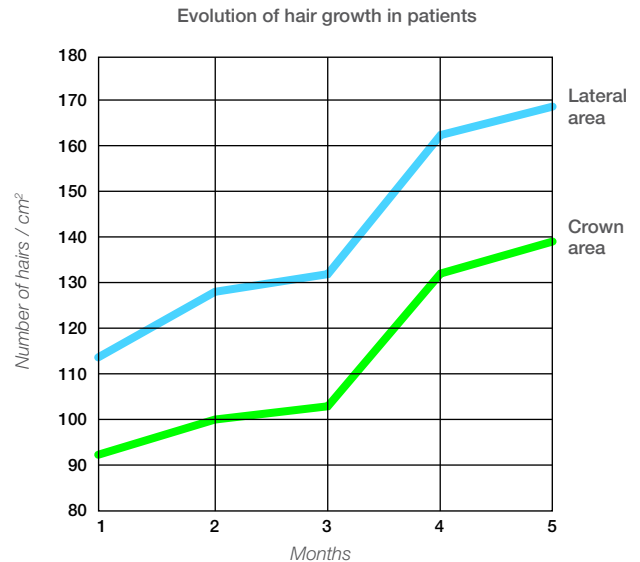
hair solutions

## Results

These are the positive aspects the participants in the studies noticed with the use of THE COSMETIC REPUBLIC hair laser treatment:

- Stimulates growth of new thicker hair
- Stops hair loss progression in 87% of the cases
- Increases in volume by 23%
- Increases blood supply to the scalp by 55% after one treatment
- 90% of users noticed thicker hair
- Very convenient treatment easy-to-do
- Increase in hair density (by 18 hairs/cm<sup>2</sup> in average)
- Non invasive
- No side effects
- Medically tested, effective and proven method
- Treatment for both men and women
- Also indicated to be used after hair transplant surgery

The tests showed that 91% of the patients had a significant increase of 18 hairs/cm<sup>2</sup>. An evidence that THE COSMETIC REPUBLIC Triple Action Hair Laser Treatment with microtechnology is a solution fighting hair loss. At the end of the four month period, 96,3% of the participants in the study experienced the benefits from using the treatment detailed above, with a significant general improvement of the hair's condition. Besides, 85,7% of participants experienced new hair growth with an average hair count increase for all patients of over 45%. These figures are significantly much better than any other treatment for hair re-growth nowadays available in the market.



## How the treatment works. The mechanism

Laser therapy has certain characteristics enabling physiological changes at a cellular level with several medical benefits for the organism, such as cellular reproduction acceleration, fibroblasts stimulation, higher levels of oxygen and food in blood, immune response improvement, and higher enzyme production. It is in fact a form of energy providing high levels of light to the hair follicle cells to assist them in their normal chemical processes (photo-biostimulation).

According to Scientist Dr. Joan Valles from Calgre Science, the process of photo-biostimulation is very similar to photosynthesis, in which plants translate sun light energy into chemical forms of energy for food and growth. Likewise, laser penetrates into the scalp tissues and increases the action of the Adenosine Triphosphate (ATP), a molecule that is an energy transporter in-between the cells. Laser light is absorbed by the cell mitochondria and is released in the form of energy to produce ATP, releasing high quantities of energy the organism uses to produce proteins and other cellular functions.

Likewise, laser light which increases the energy available to cells allowing them to absorb nutrients faster, also allows them to get rid of waste elements such as DHT (Dihydrotestosterone). DHT is a biologically active metabolite of the hormone testosterone belonging to the class of compounds called androgens, also commonly called androgenic hormones mostly known for being responsible for hair loss.

The **SAF100™ Concentrate with keratin microspheres** is enriched with keratin, B vitamin and encapsulated proteins for a better penetration & hair restoration. The concentrate has been specifically formulated to enhance the laser treatments' performance, as it is the essential tool to fight hair loss right from the root. The regenerative properties of the concentrate stimulates the formation of new hair stalks bringing nutrients to the follicle, protecting the hair from external damage as well. This is made possible thanks to the simultaneous action of the treatment which addresses the 2 most influential factors in promoting healthy hair; strengthening scalp blood microcirculation and bringing hair the essential nutrients that it needs. Thus, hair becomes stronger and visibly demonstrates more growth than before.

### Hair follicle

