



# Cellenis<sup>®</sup> PRP for Hair Restoration

The optimal treatment  
for hair loss



**Cellenis<sup>®</sup> PRP**  
SKIN REJUVENATION



## HAIR LOSS

Alopecia, one of the common causes of hair loss, does not affect a person as any other condition might: it is not painful or interferes with regular daily activities, nevertheless it is emotionally challenging, especially when hair loss affects the whole scalp. Fortunately, men and women started realizing that they do not have to be a victim of hair loss.

Nowadays, PRP treatment is wide spread and well established procedure in all cases of alopecia. Medical research in this field has been significantly increased and we get strong indications of the beneficial effect of PRP on hair re-growth.

## WHAT IS PRP?

PRP (Platelet Rich Plasma) is blood plasma containing high concentration of platelets. Although platelets are best known for their part in the blood clotting process, these cells are also considered as a biochemical storehouse of growth factors that participate in recovery and healing of tissues by enhancing physiologic processes. Antiapoptotic effects of activated PRP have been suggested as one of the major contributing factors stimulating hair growth as it prolongs the survival of dermal papilla cells during the hair cycle, in other words, inducing follicular stem cell differentiation as well as prolonging the phase of the hair growth cycle.

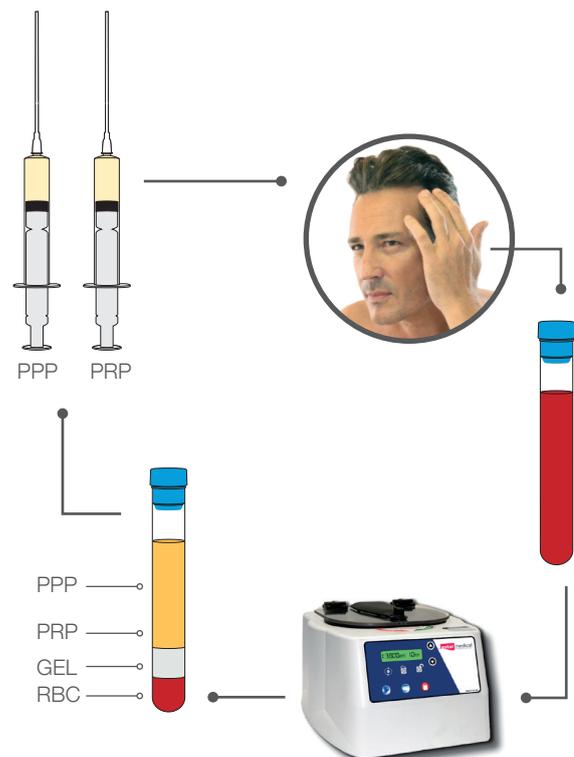
## PRP PREPARATION

A PRP hair growth treatment is a quick outpatient procedure that takes about 20 min. Cellenis® PRP process begins by taking a blood sample in an anti-coagulated tube with separation gel. The tube then centrifuged for 10 minutes to separate the red blood cells and granulocytes from plasma with platelets. Finally, Cellenis® PRP concentrate is injected into areas of the scalp that show hair thinning. Once injected in the dermal layer, platelets activation will occur, resulting in granules stimulation and growth factors release at the level of the follicles.

## THE ADVANTAGES OF CELLENIS® PRP

### SHORT PREPARATION AND HANDLING:

- 10 minutes centrifugation.
- Entire process takes ~15 minutes.
- Gel separation technique along with filtration process enables for the efficient preparation of pure PRP without catabolic erythrocytes and minimum level of catabolic granulocytes but at the same time with optimal controlled concentration of platelets, growth factors, desired anabolic cells (mononuclear cells) and stem cells taken from peripheral blood.
- Easy to use - only 3 core components and 5 simple steps.
- No capital equipment is required - simple low cost fix centrifuge will perfectly work.
- Flexibility of Cellenis® PRP system enables users to obtain higher or lower concentration by simply adjusting the amount of clear plasma removed from the tube.
- Closed system ensures optimal sterility and avoidance of infection.
- Two sizes of PRP tubes are available: 11ml and 22ml whole blood.
- CE (class IIB) and FDA (510k)\*



\*cleared for orthopedic applications



## FOLLOW-UP AFTER TREATMENT

Usually, there is no downtime or recovery period after a PRP procedure. Patients can actually continue their normal life routine immediately after undergoing the treatment.

Following a PRP treatment the patient could sense a minimal discomfort at the treated site.

It is important to note that anti-inflammatory pain medication (NSAIDs) are not allowed before and after the treatment.

## HOW TO EVALUATE THE IMPROVEMENT OF PRP HAIR GROWTH TREATMENT

Before the treatment, the area of concern should be microscopically evaluated, photographed and measured. Although results vary, improvement in hair growth should be measurable within 90 days, with hair growth continuing to improve at six months time. As every patient responds differently, routine follow-up and scrutiny can be helpful in determining when PRP should be repeated.

## THE COMBINATION OF PRP WITH OTHER HAIR RE-GROWTH THERAPIES

A multi-therapy approach may be needed depending on the severity of the patient's hair loss. PRP may be used as an adjunct to FDA approved re-growth medications and other alternative therapies like low level laser therapy and hair transplantation.



## STUDIES

Most studies examined safety, efficacy and feasibility of PRP injections in treating alopecia.

- Cellenis® PRP study (held under the Tropocells® PRP family) - 70 patients (31 males and 39 females) were recruited. Protocol: PPP (13±1 ml) was withdrawn from the tube, remaining (5±1 ml) plasma where 85%±5% of the platelets were present, creating the PRP. Thereafter, a local anesthesia was performed, 1.5mm microneedling roller was implied on the scalp and then PRP was injected. Patients underwent 2 sessions 3 months apart. At 12 post-treatment months, patients recovered with a clear advantage of 44% improvement. G. Amgar, P. Bouhanna
- PRP injection is **a simple, cost effective** and feasible treatment option for androgenic alopecia, with high overall patient satisfaction". Khatu et al; Singhal P. et al
- The generic term "platelet-rich plasma" basically does not allow for a clear distinction between the available products, because it does not take into account some key specifications such as platelet concentration potential, presence or absence of cells such as granulocytes. **Not all platelet concentrates are created equal...** because the many different products that are available in an ever-expanding market today, often lead to different types of blood aggregates, with different biology and potential uses" Schiavone G et al.
- PRP therapy stimulates hair growth through the **promotion of vascularization and angiogenesis**, as well as encourages hair follicles to enter and extend the **duration of the anagen phase** of the growth cycle."

Gupta AK, Carviel J.

This information is not intended to replace the medical advice of your doctor or health care provider. Please consult with your health care provider for advice about a specific medical condition.

### Reference

- Autologous PRP injection in androgenic Alopecia, Gilbert Amgar, Pierre Bouhanna, Prime-journal, 2015.  
Platelet-rich plasma in androgenic alopecia: myth or an effective tool. Khatu et al, Cutan Aesthet Surg. 2014;7:107-10.  
Platelet-rich plasma for androgenetic alopecia: a pilot study. Schiavone G et al. Dermatol Surg. 2014; 40  
A Mechanistic Model of Platelet-Rich Plasma Treatment for Androgenetic Alopecia. Gupta AK, Carviel J. Dermatol Surg. 2016 Dec;42(12):1335-1339.

## THE BEFORE AND AFTER TREATMENT WITH CELLENIS® PRP



Two treatments one month apart  
Three months post last treatment



One treatment  
Six months post treatment



Three treatments one month apart



Five sessions one month apart  
PRP was applied topically to the treatment areas  
Six months post first treatment

BEFORE

AFTER

**estar**

aesthetics™

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