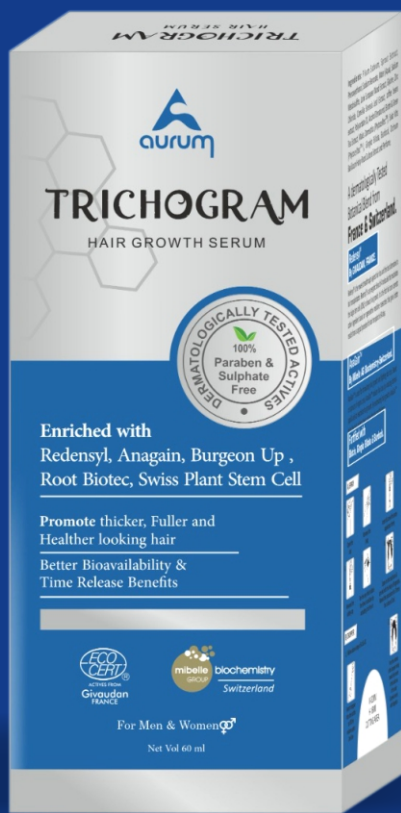


# TRICHOGRAM

HAIR GROWTH SERUM



## Enriched with

Redensyl<sup>®</sup> 3%, Anagain<sup>™</sup> 2%, Burgeon Up<sup>™</sup> 2%,  
Root Biotec<sup>™</sup> 2%, Swiss Plant Stem Cell 0.5%

**Dermatologically Tested Ingredients**

Better Bioavailability &  
Time Release Benefits

## Redensyl<sup>®</sup> By GIVAUDAN, FRANCE.

REDENSYL<sup>™</sup> (GIVAUDAN, FRANCE) scientifically formulated & is made up of pure plant extracts such as DHQG (DIHYDROQUERCETIN GLUCOSIDE), EGCG 2 (EPIGALLOCATECHIN 2 GALLATE), GLYCINE, ZINC CHLORIDE, META-BISULFITE. Owing to its natural content, REDENSYL<sup>™</sup> does not have side effects.

REDENSYL<sup>™</sup> targets stem cells and human fibroblasts from the dermal papilla to improve hair growth while reducing hair loss.

Reactivates the bulge stream cells.

After 3 months at the clinical level, increase hair growth with more than 10000+ new hair in average (better than one hair transplant procedure).

Biological targets: stem cells, HFDPC (PRIMARY HUMAN FOLLICLE DERMAL PAPILLA CELLS), IL8 (INHIBITION OF EPIDERMAL GROWTH FACTOR RECEPTOR)

## AnaGain<sup>™</sup> By Mibelle Ag Biochemisty-Switzerland.

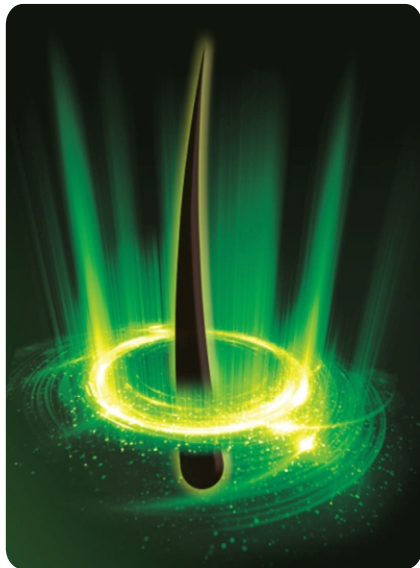
ANAGAIN<sup>™</sup> (MIBELLE BIOCHEMISTRY, SWITZERLAND) is an organic pea sprout extract to rebalance the hair cycle. Based on sprouts of organic pea, ANAGAIN<sup>™</sup> reduces hair loss by inducing dermal papilla cells to reactive hair growth.

These treatments effectively block DHT, thereby tackling your root cause, nipping the problem at the bud. For instance, ANAGAIN<sup>™</sup>, the first-ever hair fertility treatment for men, uses as an extract from basil that inhibits 5 $\alpha$ Reductase and stimulates hair follicles.

ANAGAIN<sup>™</sup> stimulates the release of hair growth factors in dermal papilla cells that lead to a shortening of the TELOGEN phase and the activation of a new ANAGEN phase in hair follicles. In this way, ANAGAIN<sup>™</sup> stops and prevents the hair loss process and stimulates hair growth.

ANAGAIN<sup>™</sup> stimulates the hair follicle directly through a unique mechanism by re-balancing the hair growth cycle. It can stimulate dermal papilla cells by enhancing the expression of two specifics signalling molecules called fgf7 and noggin, responsible for the initiation of new hair growth and stimulation of the natural hair growth cycle.

## BURGEON-UP<sup>™</sup> ICHIMARU PHARCOS, JAPAN.



New plant extract works on stem cells

### BURGEON-UP

First natural hair growth ingredient focusing on RSPO1,  
**REGENERATIVE MEDICINE APPROACH**

BURGEON-UP<sup>™</sup> is an efficient plant-based active ingredient that is known to stimulate R-SPONDIN 1, a protein in tissue that will promote hair growth and prevent hair loss.

BURGEON-UP<sup>™</sup> utilizes freshly procured NASTURTIIUM OFFICINALE (watercress) grown in JAPAN from partnering farms to retain the product's high quality.

R-SPONDIN 1 is a protein involved in the regeneration of organs and tissue is currently increasing attention in the field of regenerative medicine. In the field of hair science, R-SPONDIN 1 activates the foundation of hair follicles, known as the outer root sheath, which is important in making thick hairs that do not come out easily. This led to the development of burgeon-up which is the hair growth material applied for the first time.

As BURGEON-UP<sup>™</sup> also suppresses the mechanism of action of male / female hormones, it activates follicles while also preventing hair loss.

**Burgeon: Begin to grow or flourish**

### What is R-spondin 1 (RSPO1)

RSPO1 is a stem cell growth factor used in the field of regenerative medicine and is a protein involved in organ development, maintenance, and regeneration.

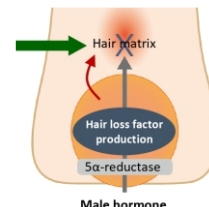
#### DUAL FUNCTION of RSPO1

PROMOTION of  
hair growth



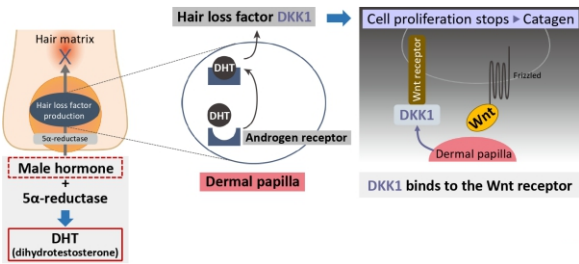
#### DUAL FUNCTION of RSPO1

PROTECTION from  
hair loss

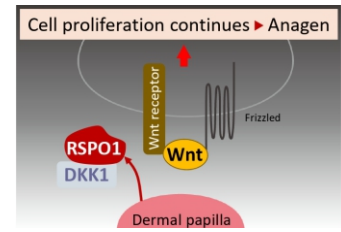




## Production process of hair loss factor



## RSP01: Acting as a protector



RSP01 neutralizes DKK1 and prolongs the growth phase Anagen.

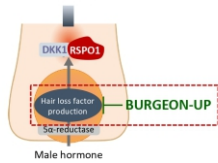
## Key Mechanism of BURGEON-UP

Upregulate the secretion of RSP01 in the dermal papilla.

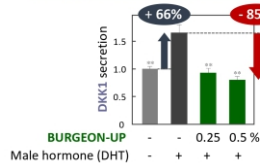
### BURGEON-UP inhibiting DKK1

BURGEON-UP significantly suppressed the DKK1 secretion.

RSP01 neutralizes DKK1 at hair matrix  
(Previous slide: acting as a Protector)



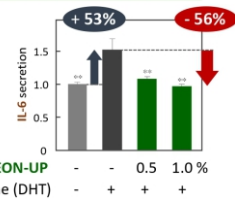
Suppressing the secretion of DKK1



The data showed that androgenic activity was suppressed in dermal papilla and hair matrix.

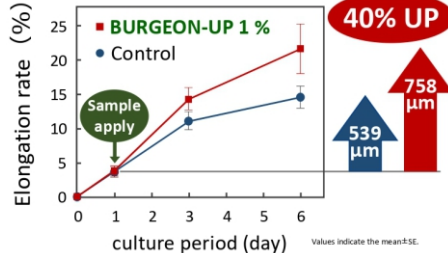
### BURGEON-UP inhibiting IL-6

Suppressing the secretion of IL-6



BURGEON-UP significantly suppressed the IL-6 secretion which is also related to hair loss.

### ex-vivo



BURGEON-UP increased the human hair follicle elongation.

### Clinical trial

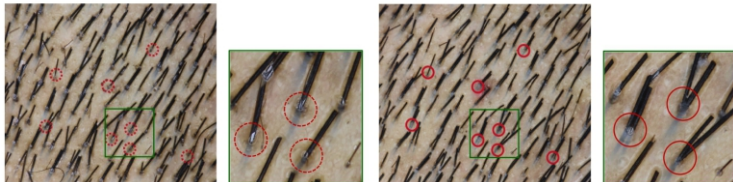
Hair growth test with lotion containing BURGEON-UP

Test design	A randomized, double blinded, safety and efficacy study.
Number of groups	n=20 /group, 2 groups (Active: BURGEON-UP 2% or Placebo)
Subject	Male 20-55 years old, Grade 3 - 6 (primary-hairline receded, parietal hair loss)
Assessment	Total hair number (/cm <sup>2</sup> ), hair growth rate (μm/day), hair thickness (μm)
Application	Twice in a day, 10push/ one time (about 0.12g/push)
Test period	6 months

### Clinical trial

0 month (baseline)

3 months

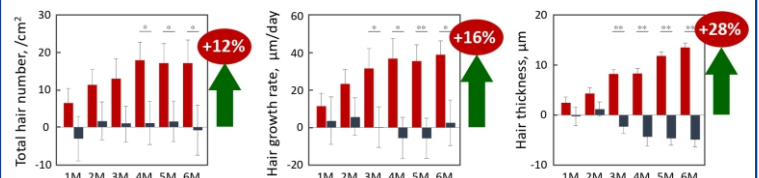


Changes in the number of hairs per unit area as assessed by phototrichogram analysis after 3 months.

### Clinical trial

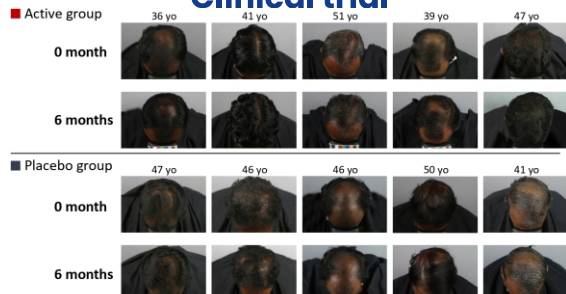
■ Active group  
■ Placebo group

The vertical line shows the actual value changed from the 0 month.



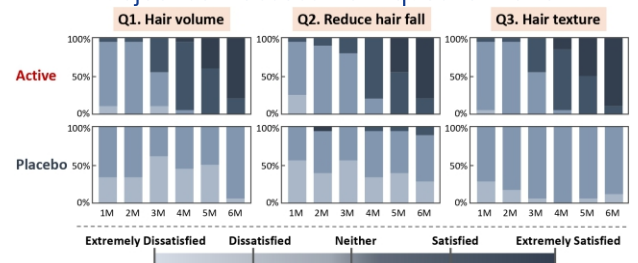
BURGEON-UP significantly increased the total hair number, hair growth rate, and hair thickness.

### Clinical trial



### Clinical trial

Subject self-assessment questionnaire



## Summary

Double roles acting as Promoter & Protector

### The world's first!

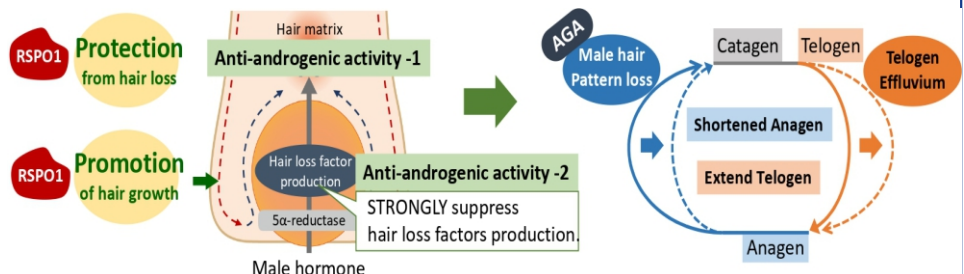
RSP01 attracted attention in the regenerative medicine as a hair growth material.

### Comprehensive care

Application for both male & female with Promotion and Protection efficacy.

### Clinically proven

Significantly increase the Total hair number, Hair growth rate, and hair thickness.



## MECHANISM OF BURGEON-UP

Suppresses the action mechanism of male / female hormones (protecting the ANAGEN) and activates hair follicles (stimulating the ANAGEN).

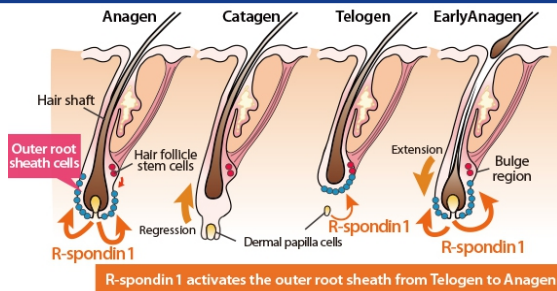
In hair tissues, the tissue regeneration-related protein R-SPONDIN 1 binds with the receptors (Igr5) in the outer root sheath, which is the foundation of hair follicles activates cells and stimulates hair growth.

Additionally, R-SPONDIN 1 suppresses the production of the hair loss factor DKK 1, which works in the mechanism of action of male hormones.

Burgeon-up is expected to have a "DOUBLE PUNCH" benefit by promoting the secretion of R-SPONDIN 1 from dermal papilla cells to stimulate hair growth while also preventing hair loss caused by male hormones.



## ROOTBIOTEC™



ROOTBIOTEC™ is a potent basil hairy root extract that has been designed for users to regain fuller and denser hair. The product is based on a unique, sustainable technology for cosmetic actives – the so-called "HAIRY ROOTS" technology.

ROOTBIOTEC™ successfully reduces hair loss by inhibiting 5 $\alpha$ Reductase ii activity and through stimulating the dermal papilla cells in hair follicles.

ROOTBIOTEC™ proved in a clinical study to significantly reduce hair loss by 31% after just two months of application.

Basil hairy root extract inhibits 5 $\alpha$ Reductase ii since 5 $\alpha$ Reductase is the enzyme which converts TESTOSTERONE to DIHYDROTESTOSTERONE, the hormone responsible for hair miniaturization in androgenic alopecia, the ability of basil hairy roots extract to inhibit the activity of 5 $\alpha$ Reductase ii, the enzyme isoform present in scalp hair follicles, was investigated.

The inhibitory potency of basil hairy roots extract on 5 $\alpha$ Reductase ii enzymatic activity was measured. The results for treatment with basil hairy roots extract showed a clear concentration dependent inhibition of 5 $\alpha$ Reductase ii. This indicates that basil hairy roots extract might be able to reduce hair loss in people with androgenic alopecia.

Basil hairy root extract reduces hair loss in a clinical study conducted for two months on a mixed panel with mild to moderate hair loss, basil hairy roots extract displayed the capacity to significantly reduce hair loss. Volunteers applied a fluid containing 1% of the basil hairy roots extract every evening over a period of 2 months. Results showed that the numbers of daily lost hair dropped by 26% after the first month and 31% following the second month. This suggests that basil hairy roots extract significantly reduces hair loss and thus leads to denser hair.

## MALUS DOMESTICA (PHYTOCELLTEC™) & SOLAR VITIS (PHYTOCELLTEC™)

PHYTOCELLTEC™ MALUS DOMESTICA is a patented liposomal preparation of apple stem cells derived from the 'UTTILIER SPÄTLAUBER', a rare Swiss Apple variety. These apple stem cells are rich in epigenetic factors and metabolites.

PHYTOCELLTEC™ MALUS DOMESTICA hair by MIBELLE BIOCHEMISTRY is able to protect the hair stem cells, against premature aging and loss.

This ingredient stimulates hair growth, prolongs the ANAGEN phase of hair and delays hair aging. It ensures the longevity of skin cells, vitalizes hair stem cell and delays senescence of hair follicles. PHYTOCELLTEC™ MALUS DOMESTICA hair is used in TRICHOGRAM®.

MALUS DOMESTICA (PHYTOCELLTEC™) & SOLAR VITIS (PHYTOCELLTEC™) use in TRICHOGRAM® for Better Bioavailability & Time Release Benefits..



Customer Care Number +91 8866 00 8024 / +91 9974 00 8024

Shop No. 6, Gf, Neelgiri Complex, Nr.Saibaba Temple, B/h. Sola Bhagwat, Sola, Ahmedabad, Gujarat-380060.