In this publication you can find

CLINICAL STUDY
New aspects of the treatment of ALOPECIA AREATA

XL Hair®
A new medical approach for alopecia areata

Frequent Q&A

Enjoy healthy hair!
OUR NEW PROJECT
BEST COMPLEMENTS FOR PROFESSIONAL TREATMENT WITH XL HAIR REPARESTIM HAIR AD DAILY CARE HAIR

Hair Energy
Balanced hair nutrients
Restores hair vitality

N-Acetyl Cysteine 280,5 mg
Vit. B6 0,85 mg
Picolinate de Zinc 4,87 mg
Stearate 85,36 mg
Folic Acid 0,24 mg
Arginine 24,39 mg
Biotin 0,18 mg
Proline 1,95 mg
Nicotinamide 8,84 mg

Coming Soon
CLINICAL STUDY
Research & Publications
To evaluate the efficacy of a combined treatment with xl hair® in different baldness patterns

CASE REPORTS
Research & Publications
To evaluate the efficacy of a combined treatment with xl hair® in different baldness patterns

CLINICAL STUDY
Clinical study to evaluate the efficacy of a combined treatment
Microneedling device, xl hair®, ad daily care hair, in different baldness patterns.

XL HAIR®
What is it
How to inject

BEFORE & AFTER PICTURES
Clinical study to evaluate the efficacy of a combined treatment
Microneedling device, xl hair®, ad daily care hair, in different baldness patterns.

IN VITRO STUDY
Increased cell proliferation of human hair papillae cells increased by 23.3% after 48h exposure to XL Hair®

New aspects of the treatment of ALOPECIA AREATA

FOCUS ON HAIR COLORING & SCALP PROBLEMS
XL Hair, Reparestim TD Hair, AD Daily care Hair

XL HAIR®
A new medical approach for ALOPECIA AREATA

REPARESTIM® HAIR TD - AD DAILY CARE
New approach in hair loss treatment
Optimally prepare the skin before hair transplantation

FREQUENT Q&A
Questions & Answers
About XL Hair®, Reparestim® Hair TD & AD Daily care
The type of hair loss known in dermatology as alopecia has been a problem throughout human history, regardless of gender or age. Hair loss could be the symptom of a the skin disease or a complementary symptom of other internal illness. Hair loss is very visible and a blurred line between health and illness.

It is a well-known fact that female (picture 1) and male (picture 2) pattern hair loss are different in their etiological and physiological processes, except in regards to the androgenic factor, clinical symptoms, and progression of symptoms. We specially avoid using the words illness or disease, because, often, hair loss is a condition of the person’s general appearance. On the other hand, such conditions could develop into an illness easily and suddenly, a fact that may instigate impressive and dramatic changes in psychological status of the people. Based on the scientific research available for our analyses we could present the common view on the classification of hair loss. Different classification forms of alopecia (hair loss) are reported in the literature, most of them are based on androgenic and non-androgenic types. Testosterone activity is the most known and well-studied etiopathology of hair loss. The hormone testosterone plays an important role, seemingly independent of genetic predisposition. Androgenic alopecia (AGA) is an androgen-mediated disorder that causes hair thinning in a defined pattern. In the hair follicle cells, testosterone converts into the biologically more active metabolite dihydrotestosterone (DHT) catalysed by the enzyme 5-alpha reductase. This hormone binds to androgenic receptors in the hair follicle and the specific bond triggers cellular processes which reduce the anagen phase of the hair cycle. For this reason the hair passes earlier into the telogen phase and falls out. Gradually, over succeeding cycles, large, thick, pigmented terminal hair converts into thinner, shorter, indeterminate hairs and finally to short, wispy, non-pigmented vellus hair (i.e. the retrograde phase of the cycle) and the hair follicle becomes minute (picture 3). The density of the androgenic receptors in the hair follicles varies according to location in a manner that is genetically determined. However, the pathogenetic mechanisms underlying AGA are not fully understood.

Age factors too play an important role in AGA. The first manifestation usually occurs in the third decade. The prevalence of AGA increases with ageing, from 31% at age 40–55 years to 53% at age 65–69 years.

Female pattern hair loss (FPHL), or female patterned alopecia, is a form of non-scarring alopecia that might also be linked with androgen dysfunction. Androgenic alopecia

CLINICAL STUDY
TO EVALUATE THE EFFICACY OF A COMBINED TREATMENT WITH XL HAIR® IN DIFFERENT BALDNESS PATTERNS

by Evgeniya Ranneva, phd, dermatologist (Spain) and Gabriel Siquier, aesthetic medicine practitioner (Netherlands)
in women is less frequent, though the etiology is in principle the same as in men.

The actual statistic of female pattern hair loss (FPHL) does not reflect the actual state of the problem, as complaints of “hair loss” or “thinning hair” are not a priority for the patients compared to other diseases detected at the same time.

Diffuse, rapid onset, non-scarring alopecia is not common in patterned alopecia and should raise suspicion to the existence of iron deficiency, thyroid disease or other endocrine disorders such as polycystic ovarian syndrome, medication exposure; or an autoimmune etiology. The relationship of FPHL with pregnancy and maternity is by now widely known.

FPHL that occurs commonly in postmenopausal adult women is characterized by a progressive reduction in hair density on the crown of the scalp with sparing of the frontal hairline (Ludwig scale). Temporal recession occurs to a lesser degree in females compared to than in males.

After extensive research on PubMed, we were surprised not to find any information about “the aging process of hair”, which can be explained as genetically determined shortening of the anagen phase of growth with a constant telogen phase leading to a gradual conversion of terminal hairs into vellus hairs.

What is the clinical difference?

The FPHL pattern varies among individuals. The majority demonstrate mid-frontal thinning, while others have temporal and/or vertex involvement (the male type). Although uncommon in FPHL as compared to male pattern (MPHL), temporal thinning can be present and may be a first manifestation.

In MPHL symmetric fronto-parietal retraction of the hairline usually occurs. The hair in the central part of the vertex is rarefied and thin. The alopecia progresses and sooner or later results in a bald spot on the vertex. The remaining hair is distributed in crown-like pattern above the ears and at the scruff of the neck. However, it also becomes gradually thinner and silky, and grows more slowly.

Who is suffering more?

Despite a significantly large prevalence, many women feel the condition is rare and are affected socially and psychologically.

Relative to control subjects, women with FPHL completing a standardized questionnaire possessed a more negative body image and a pattern of less adaptive functioning. FPHL is solely a cosmetic concern which fosters psychological distress for patients, as it has a notable impact on quality of life; thus, women seeking evaluation want successful treatments that can minimize further hair loss while also stimulating new hair growth or regrowth of previously lost hairs.

Therapy

Unfortunately, no current therapy is curative and only one FDA-approved treatment is available at this time. Heightened interest and demand for improved, successful treatments have stimulated an expansion of treatments. When presenting the existing treatments we specify: pharmacological activity (PhA), legal status (LS) of pharmacological substances, well known commercial name (CN) of the product(s), negative information & side effects (NISE).

Minoxidil - vasodilator through the stimulation of potassium channels (PhA), medication (LS), approved FDA.
- Topical minoxidil 2% (Rogaine, Johnson and Johnson, New Brunswick, NJ, USA) (CN)
- Clinical effects are unpredictable. Facial hypertrichosis (picture 4), allergy contact dermatitis (picture 5) (NISE)

Finasteride - specific inhibitor of type II 5-reductase (PhA).
- Finasteride 1 mg daily dose (Propecia, Merck and Co, Inc, White House Station, NJ, USA) (CN)
- MPHL: Erectile dysfunction (NISE)
- FPHL: Off-label treatment (LS)

Dutasteride - inhibitor of both types I and II 5-reductase (PhA).
- Dutasteride (Avodart, GlaxoSmithKline, Research Triangle Park, NC, USA) (CN)
- MPHL: Erectile dysfunction (NISE)
Spironolactone reduces adrenal androgen production and exerts competitive blockade on androgen receptors in target tissues (PhA).

- Spironolactone (Aldactone, Pfizer Inc, New York, NY, USA) (CN)
- Off-label treatment for both genders (LS)

Unfortunately, no current therapy is curative and only one FDA-approved treatment is available at this time.

Estrogens decrease the duration of the telogen phase and increase the duration of the anagen phase in the human scalp (PhA).

- FPLH: the estrogen receptor beta and the polymorphism in the gene encoding aromatase (CYP19A1) in hair suggest estrogen's influence on the hair follicle growth cycles (PhA).
- Europe: topical estrogens are available for FPLH treatment (LS)

Hair transplant surgery

Surgical treatment of alopecia has been successfully performed for the past 4 decades (LS).

- The main problem is covering the bald area with donor plugs (or follicles) sufficient in number to be effective (NISE) Micro-grafting produces a more natural appearance than the old technique of transplanting plugs.
- Scalp reduction has been attempted to decrease the size of the scalp to be covered by transplanted hair.
- Transplantation procedures are often time consuming, uncomfortable, and expensive, and may not give an ultimate cure even after multiple treatments (NISE) (Table 1) (pictures 6/7)

Micropigmentation - pigment implantation into the area of hair loss with decorative & camouflage functions (picture 8). Micro pigmentation is not a medical procedure (LS)

- Infection, folliculitis, and allergic dermatitis (NISE)

<table>
<thead>
<tr>
<th>Side effects after hair transplant surgery</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scars</td>
</tr>
<tr>
<td>Skin infection</td>
</tr>
<tr>
<td>Folliculitis</td>
</tr>
<tr>
<td>Swelling/edema</td>
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<tr>
<td>Post treatment pain</td>
</tr>
<tr>
<td>Headache</td>
</tr>
<tr>
<td>Irregular or uneven or delayed hair growth</td>
</tr>
<tr>
<td>Bleeding</td>
</tr>
<tr>
<td>Numbness of the scalp</td>
</tr>
</tbody>
</table>

| Table 1. Side effect after hair transplant surgery |

Bimatoprost (Latisse, AllerganInc) is the only FDA-approved topical treatment for hypotrichosis of the eyelashes.
Hair loss is a cosmetically and psychologically distressing problem. It is important to diagnose early and start treatment immediately. It has always been problematic deciding who is to treat patients experiencing hair loss, especially because a lot of cases are due to hormonal dysfunction falling under the purview of gynecologists, urologists, endocrinologists, and dermatologists. Although few medications are currently approved for the medical treatment of both genders, there are not many other options that can be utilized with relatively minimal side effects.

New medical approach

One of the new potential treatments for hair loss (androgenic and non-androgenic) is to use medical devices CE class III for injections into the scalp area or applying it using microneedling devices. The main medical proposal for the new therapeutic approach is to be safe, minimize side effects during long-term therapy, and be effective.

XL Hair® is a new opportunity for the treatment of different baldness patterns and symptomatic hair loss made in conformity with EU Regulation (picture 9). The product is tested as being implantable, non-allergenic, non-teratogenic, non-cytotoxic, non-carcinogenic.

XL Hair® formula, designed for superficial and deep dermal injections, are based on the purest and most effective ingredients, with synergetic actions. Non cross-linked HA from biotechnological non-animal origin provides: antioxidant effect, turnover stimulation & matrix reorganization. Hyaluronic acid is associated in XL Hair® with active biorevitalization solution and helps to improving the transport function of the actives from BS. The complex actives of BS are: growth factors GF [Rh-Polipeptide-1, Copper peptide], deoxyribonucleic acid, amino acids [Alanine, Folic Acid, Leucine, Valine, Tyrosine, Glycine, Histidine, Isoleucine, Lysine, Methionine, Phenylalanine, Proline, Serine, Threonine and etc], trace elements [Ca, Fe, K, Mg, Mn, Na, P, Se and etc], vitamins [Vitamin A, PP, B, H and etc], terpenes [Quercetin], fatty acids [Oleic Acid, Linoleic Acid], flavonoids [Rutin, Kaempferol], antioxidants [Quercetin, Citric Acid, Ginkgolides A- B- C- M], NAD, NADP. The final target of the actives is to repair and to stimulate hair growth, increase the thickness of hair by improving skin nutrition and skin defence against internal & external stress and damage factors. Fibroblast growth factors (FGFs) and their receptors control a wide range of biological functions, regulating cellular proliferation, survival, migration and differentiation. Added to this is the delivery of copper peptide to the base of follicles, which helps strengthen hair while stimulating hair follicles to produce a strong hair shaft, help blood circulation in the scalp, and revitalize hair follicles. Another group known as nutritional supplementation including vitamins, minerals, and/or antioxidants may help in hair growth and health. Vitamins are necessary components and play important roles in cellular metabolism. Vitamins are considered "micronutrients" and occur in only very small amounts within cells, but are critically important as coenzymes. Amino acids have several functions: the energy storage function (proteins can be degraded into acetyl-CoA "cycle the Krebs cycle"), the endocrine integration function (hormones), the
informative function (membrane receptors, intracellular signals) Trace elements (XL Hair® content: Ca, Fe, K, Mg, Mn, Na, P, Se and etc) have an influence on the binding, transport and release of oxygen, donate or accept electrons in reaction of reduction or oxidation, compensate cells nutrition and play the structural role to important biological molecules. The biggest group of biorevitalization solution of XL Hair® is antioxidants. The mechanisms by which these antioxidants act at the molecular and cellular level include roles in gene expression and regulation, apoptosis, and signal transduction. Antioxidants are involved in fundamental metabolic and homeostatic processes and help repairing damaged biomolecules and defence antioxidant enzymes, which are mostly intracellular. Thanks to their unique formula, the products XL Hair® & Reparestim Hair® & AD daily care Hair® are capillary regenerators which revitalize and strengthen capillary fiber via a greater contribution of essential nutrients for capillary growth and a stimulating action of hair growth factors. The topical (Reparestim Hair®) and daily care (AD daily care Hair®) are analogs (similarly formulated) of injectable XL Hair®, recommended for use as complementary products for the treatment of hair loss.

Clinical study

A multi-center, open label, non-comparative pilot study was performed in medical clinics in Spain, the Netherlands, and Romania, with 47 patients (32 women and 15 men) who had sought medical attention for hair loss. The diagnosis of alopecia is a combination of a detailed inquiry into the patient’s history, including family, social, and medical histories, as well as a comprehensive physical examination with appropriate testing. Hamilton referred to the mutual interplay of androgens, genetic and age factors in the origin of AGA and elaborated a precise method for the clinical assessment of alopecia. Hamilton’s classification was later modified by Norwood and was used during the examination. The pull test and non-invasive method of microscopic hair examination on portable video system (Menard) was included in the study. Exclusion criteria included history of severe allergic disorders, cutaneous infection or skin alteration affecting the scalp, known hypersensitivity or allergy, history of autoimmune disease, cortical or immunosuppressant therapy, acute joint rheumatics, repetitive angina, endocarditis, use of anticoagulant therapy, cicatricial alopecia, pregnancy and lactation. The patients signed consent forms and authorized the use of before and after pictures.

XL Hair® (Aesthetic Dermal, Spain) injectable CE class III medical device for scalp area, 3 ml per vial, single use; Reparestim Hair® (Aesthetic Dermal, Spain) 3 ml sterile solution for topical application by using sterile microneedling medical device Class IIa AD Roll TD® + Stamp (Aesthetic Dermal, Spain) 0.5 mm, 600 needles by roll, 12 needles by stamp, single use; and AD Daily Care Hair® (Aesthetic Dermal, Spain) solution 100 ml for personal use.

XL Hair® injections and Reparestim Hair application with microneedling device AD Roll TD® + Stamp repeated once a week on the area of hair loss, total 8 sessions (8 weeks) Spray AD Daily Care Hair® recommended for use directly onto the scalp and with light massage ensuring the product is well distributed over the problematic area. Spray applied
Results

During clinical study we enrolled 47 patients (32 women and 15 men), 35-50 years old, who required hair loss treatment targeting moderate-to-severe non-cicatrical alopecia affecting different areas, i.e. vertex, frontal and temporal. Inclusion criteria for the study were clinical evidence of moderate-to-severe non-cicatrical alopecia rated for men as grade IIa to V using the Norwood-Hamilton classification and rated for women as grade I to III using the Ludwig classification. Duration of progressive hair loss was from 5 to 10 years. 50% of the patients previously received different treatments, including 2% Minoxidil (Rogaine), Finasteride, nutrition supplements or other daily care without satisfactory results.

After analyses of the anamnestic data, the results are as follows: more than 50 % of the patients have genetically related hair problems, 32 % of the patients claim about a stressful life, 16% related the problem to pregnancy and 10 % were postmenopausal hair loss, one patient has hypertension.

30 % of the patients from the women’s group have anemia of varying grades. 50 % of the patients from the women’s group are using and hormonal contraception for more than 6 months, 40% of women more than 2 years. 60 % of women’s group had a special diet or a nutritional deficit during 6 months/one year.

In both groups 0% of patients had contact with any known toxin or radiation.

More than 10% from both groups had attacks of seborrheic dermatitis more than once, but only 5 % confirmed the diagnosis by dermatological consultation.

All patients concluded the study. In the female group, aesthetic improvement was significant, starting at 8 to 12 weeks if compared to before the treatment (pictures 10/11) At 12 weeks 61% of female group stopped losing hair. New hair growth was significantly increased within 24 weeks in 73% of the female group (picture 12/13).

In the male group 41% stopped active hair loss in 12 weeks.

New hair growth was significantly increased in 24 weeks in 63% of the male group (pictures 14/15/16/17/18/19/20/21) 60 % of both groups achieved a high rate mark of satisfaction, from good to excellent. Surprisingly, more than 85% (only 61% of them achieved good clinical results) of the male group declarated to be highly satisfied by the treatment included injections technique and daily care application, and are motivated to continue or repeat the treatment course.

SIDE EFFECTS

Some patients presented untoward effects like swelling and ecchymosis that resolved within 24 and 48 hours.

Conclusion

The results of the study indicate that injections of XL Hair® and Reparestim Hair TD® applied with
a microneedling device (AD Roll TD® + Stamp) and combined with AD Daily Care Hair® are an efficient treatment for hair loss in different baldness patterns. The results indicate that intradermal injections of XL Hair® and microneedling with Reparestim® Hair TD combined with AD Daily Care Hair® induce the activation of the hair follicle which promotes an enlargement of the anagen phase and a shortening of the telogen phase, reversing the miniaturization of the hair follicles, stopping hair loss and promoting new hair growth.

The protocol of application and frequency of treatment have been adapted by gender. To optimize results, the application of AD Daily Care Hair® cannot be less than 6 months in duration, which means regular home daily care is very important for maintaining results. The best efficacy was observed in case of symptomatic hair loss in female pattern: after pregnancy, nursing period, stress, or died. In the male pattern, which is related to androgenic alopecia, results are satisfactory but require further investigation. Patient with androgenic alopecia should be treated longer: once every one to two weeks for a 12 weeks duration, at minimum. 60% of the patients from both groups were satisfied with the results after 24 weeks of treatment. The biological and pharmacological functions of XL HAIR® (Reparestim® Hair) have not yet been fully investigated.


EFFICIENCY CLINICALLY DEMONSTRATED

61% At 12 weeks stopped losing hair
73% New hair growth was significantly increased within 24 weeks in female group
60% of both groups achieved a high rate mark of satisfaction, from good to excellent
85% of the male group declared to be highly satisfied by the treatment included injections technique and daily care application, and are motivated to continue or repeat the treatment course.
CASE REPORT

Main indication: Androgenic alopecia
Products: XL Hair®, AD daily care hair

Patient age/sex: 34/Male
Area, pathology: scalp, androgenic alopecia
Type of treatment: intradermal injections, XL HAIR. Point by point injection, meso-gun
Average volume/frequency/sessions: injection of 3 ml, 1 treatment/week, average 8 treatments
Daily home care: AD daily care Hair, topical application 3 times/ week, 8 weeks
Combination treatment: -
Comments: exceptional improvement of hair density, stop of hair loss

Information about the doctor:

Name: Gabriel
Surname: Siquier
Country: Netherlands
Speciality: Aesthetic medicine practitioner
Web adress: info@dametoclinic.com

The company Aesthetic Dermal S.L. thanks Dr. Gabriel Siquier for his energy and effort to participate the study of PRRS products
CASE REPORT

Main indication: Hair line enlargement
Product: Reparestim® Hair TD, AD daily care hair

Before

After

Patient age/sex: 22/female
Area, pathology: scalp
Type of treatment: microneedling (AD Roll TD 0,5 mm) followed by topical application of Reparestim® Hair TD
Average volume/frequency/sessions: 3 ml, 1 treatment/week, average 8 treatments
Daily home care: AD daily care Hair, topical application 3 times/ week, 8 weeks
Combination treatment: -
Comments: Evident improvement of hair density and appearance

Information about the doctor:

Name: Jane
Surname: Ranneva
Country: Spain
Speciality: Dermatologist, aesthetic medicine practitioner
Web adress: drranneva@clinicahera.es

The company Aesthetic Dermal S.L. thanks Dr. Jane Ranneva for her enthusiasm in the development of RRS products.
HAIR PULL TEST

The hair pull test is a simple diagnostic test in which the physician lightly pulls a small amount of hair (approx 100 simultaneously) in order to determine if there is excessive loss (normal range is 1 to 3-5 hairs per pull).

<table>
<thead>
<tr>
<th>BEFORE TREATMENT</th>
<th>3 MONTHS AFTER TREATMENT</th>
<th>6 MONTHS AFTER TREATMENT</th>
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<tbody>
<tr>
<td>More than 5</td>
<td>More than 5</td>
<td>More than 5</td>
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<td>More than 20</td>
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<td>More than 50</td>
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<tr>
<td>More than 100</td>
<td>More than 100</td>
<td>More than 100</td>
</tr>
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DIAGNOSTICS TESTS

- Hormone levels (DHEAs, testosterone, androstenedione, prolactin, follicular stimulating hormone, and leutinizing hormone)
- Serum iron
- Serum ferritin
- Total iron binding capacity (TIBC)
- Thyroid stimulating hormone (T3, T4, TSH)
- VDRL (a screening test for syphilis)
- Complete blood count (CBC)

SAVIN TEST - MEN (tick the type of alopecia)
CLINICAL STUDY TO EVALUATE THE EFFICACY OF A COMBINED TREATMENT: MICRONEEDLING DEVICE, XL HAIR®, AD DAILY CARE HAIR, IN DIFFERENT BALDNESS PATTERNS.

<table>
<thead>
<tr>
<th>SAVIN TEST - WOMEN (tick the type of alopecy)</th>
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<tbody>
<tr>
<td>![Hair Loss Images]</td>
</tr>
<tr>
<td>Grade I</td>
</tr>
<tr>
<td>□ YES</td>
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</tbody>
</table>

RECOMMENDED SESSIONS: 1 per week, 8 sessions.

EVALUATION For more information about participating, please contact us: pharma@aestheticdermal.com

<table>
<thead>
<tr>
<th>EVALUATION</th>
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<tbody>
<tr>
<td><strong>EVALUATION</strong></td>
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<tr>
<td><strong>Doctor’s evaluation of the results</strong></td>
</tr>
<tr>
<td><strong>Patient’s evaluation of the results</strong></td>
</tr>
<tr>
<td>Physician’s and clinic name</td>
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<td>Phone / Fax</td>
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<tr>
<td>E-mail</td>
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<td>Signature and date of the filling in</td>
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TRANSEPIDERMAL PENETRATION ENHANCEMENT

![Microneedling Device Image] Patented Design
XL HAIR®

Hair energy & anti aging - Symptomatic hair loss - Alopecia - Different patterns of baldness. No age limit*

**MESO TREATMENT OF SCALP**

HA, non-cross-linked BIOREVITALIZATION SOLUTION

- FGF, GM peptide, Sodium DNA, amino acids, trace elements, vitamins, terpenes, fatty acids, flavonoids, antioxidants

**Area:** scalp  
**Average volume/session:** 3ml area  
**Type of injection:** Micro dermal papule or nappage/32G  
**Frequency:** 1 session / week · 1 protocol = 4-12 sessions average, 1 session / 2 weeks: 2 months  
**Recommended number of sessions:** Repeat protocol as necessary  
**Combination with other aesthetic treatments:**  
- RRS® injection can be done immediately before microneedling device  
- Home care: Daily Care Hair

RRS® XL Hair® must be used under appropriate aseptic conditions in an authorized clinic on healthy, disinfected skin.

**Before the treatment**  
Before the treatment, the physician should inform the patient:  
- about indications and effects  
- the possibilities of the side effects (pain, redness, ecchymosis, stinging sensations and swelling, local inflammation, usually disappearing in 24 hours)  
- check allergy test  
Sensitive skins may benefit from application of an anaesthetic cream prior to the treatment  
We recommend to have a consent signed by the patient.

**After the treatment**  
Avoid extreme temperatures  
Saunas - Hammam  
Direct exposure to sun or UV  
From next day make-up can be used

**Contraindications:**  
Allergy to any of the ingredients. Patients presenting any skin alteration, skin disease, infections or sequelae of streptococcal infections. Patients taking immunosuppressants, undergoing cortical therapy, with autoimmune disease history, patients with uncompensated diabetes, acute joint rheumatics, repetitive angina, and endocarditis.

*No studies are available for use during pregnancy and breastfeeding or in case of treatment on children or minors under 18.

MORE INFORMATION IN RRS-INJECT.COM/MEDINET
AESTHETIC DERMAL | Clinical Results

Before/After

Before/After
XL HAIR - Proliferation of human papilla cells. In vitro study

SUMMARY

An in vitro test has been performed on XL HAIR for efficacy assessment on Human Hair dermal papilla cells. Cell proliferation following the exposure to the actives in particular conditions has been evaluated. Cell proliferation after starving at different end times through the MTT assay: cell viability assay using cultured dermal papilla cells from human hair follicles to assess the cell proliferation following exposure to the test sample.

On the basis of the tests carried out, under the adopted experimental conditions, the sample of the test substance.

XL HAIR

Is able to increases cells proliferation with respect to untreated control cell cultures. The highest effect (+23.3%) is pointed out at 1mg/ml of active substance after a 48 hours exposure-period.

INTRODUCTION

On behalf of AESTHETIC DERMAL an in vivo test has been performed for efficacy assessment of the test product XL HAIR, using Human Hair dermal papilla cells. The study was performed in Abich laboratory, located in Via 42 Martiri, 213/B - 28924 - Verbania - Italy.

The experimentation started on 9th June 2014 and ended on 12th June 2014.

<table>
<thead>
<tr>
<th>Cells</th>
<th>Human Hair dermal papilla cells</th>
</tr>
</thead>
<tbody>
<tr>
<td>Culture plate</td>
<td>24 wells plate</td>
</tr>
<tr>
<td>(cellular)</td>
<td>15000 c/well</td>
</tr>
<tr>
<td>Culture Medium</td>
<td>Mesenchymal stem cell medium +2,5% FBS</td>
</tr>
<tr>
<td>Cell synchronization</td>
<td>6 hours starvation</td>
</tr>
<tr>
<td>Cell activation</td>
<td>Serum free medium +/- product dilution</td>
</tr>
<tr>
<td>Proliferation assay</td>
<td>MTT assay</td>
</tr>
<tr>
<td>Result expression</td>
<td>% cell viability = [OD (500nm - 690nm) test product/OD (500nm - 690nm) negative control] x 100</td>
</tr>
<tr>
<td>Replicates</td>
<td>3</td>
</tr>
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- **Stimulates papilla cells REGENERATION 23% proliferation gain**
Alopecia areata (AA) is a disease involving non-scarring hair loss determined by autoimmune disorders and inflammation. The disease affects hair on the scalp and/or other parts of the body. The AA occurs in people of all ages and affects 1–2% of humans. The purpose of this paper is to present the latest knowledge on the treatment of AA. The decision on the type of treatment depends on the type of hair loss, extent of changes, general health status, the patient’s age, and his/her motivation. Treatment methods should be chosen individually for each patient.

Alopecia areata (AA) is a disease involving non-scarring hair loss determined by autoimmune disorders and inflammation. The disease affects hair on the scalp and/or other parts of the body. The AA occurs in people of all ages and affects 1–2% of humans. Clinical forms of AA include [1, 2]:

- **alopecia areata focalis** – hair loss occurs in patches on the scalp or on other parts of the body (e.g. face, abdomen, extremities),
- **alopecia areata totalis** – the loss of all hair on the scalp (including eyebrows and eyelashes),
- **alopecia areata universalis** – the loss of all or almost all body hair,
- **alopecia maligna** – is a generalized long-term loss of hair, resistant to treatment,
- **ophiasis or alopecia areata marginata** – snake-shaped hair loss around the circumference of the head in the temporal, occipital and frontal areas,
- **ophiasis inversus** – the inverse pattern of hair loss, which expands from the central to the marginal area of the head,
- **alopecia areata diffusa or alopecia areata reticularis** – diffuse or reticular hair loss where no separate bald patches can be distinguished.

Nails are affected in about 7–60% of patients. Aberrations include: koilonychia, trachyonychia, Beau lines, onychorrhexis, nail pitting, onychomadesis, onycholysis and haemorrhagic spotting of the lunula. Poor prognostic factors include bald patches persisting for more than 1 year, aggravation or onset of hair loss before puberty, positive family history of AA, ophiasis pattern of involvement, associated nail changes, atopy, and Down syndrome [1].

Typical pathological changes are manifested as a well-separated bald spot. Skin in bald patches may be slightly depressed due to reduced mass of hair follicles, and mild erythema may develop in some cases. There is no atrophy, and on the margins, exclamation mark hair (thick and broken off) is present. Regrowing hair may demonstrate pigment alteration or a change in texture (i.e. straight or curly) [2].

Because the aetiology of AA remains unknown, the treatment is symptomatic and does not prevent disease relapse. The efficacy of many treatment methods has been questioned by many scientific authorities due to the lack of reliable clinical studies (the possibility of spontaneous hair regrowth and very few double-blind placebo-controlled clinical studies). The decision on systemic treatment depends on the type of hair loss, the extent of changes, general health status, the patient’s age and motivation, and concomitant diseases. Treatment methods should be chosen individually for each patient.

The disease course is difficult to predict because spontaneous remissions are frequently observed, while in about 5% of cases the disease progresses into total alopecia, and in 1% of cases into universal alopecia [3, 4].
completed treatment patients must be informed about the high risk of disease relapse [5].

In emotionally unstable patients, each exacerbation of hair loss symptoms may lead to a depression phase. In patients with psychoneurotic disorders, increased hair loss is an underlying symptom of psychopathic personality. In frequent cases, patients may have difficulties in interpersonal relations at the workplace [4] or in their private life (withdrawal from active social life). Alopecia areata is diagnosed based on trichoscopy, the hair pull test and trichogram. Histopathological examination can be carried out if diagnosis is uncertain. Trichoscopy is a modern method and is very useful in the monitoring of treatment for AA and the evaluation of its efficacy. This is a non-invasive, easy to use and painless test, which enables the objective assessment of disease activity. Patients need no hair shaving or dying, images can be recorded, and the only requirement is the considerable experience of the operator.

The purpose of this paper is to present the latest knowledge on the treatment of AA.

Systemic glucocorticosteroids have been used in the treatment of AA for many and in different modalities. Generally, they offer better outcomes in patients with multifocal AA than in patients with other forms of the disease.

Turkish scientists [6], in their paper on pulse methylprednisolone therapy for the treatment of extensive AA, suggested that therapy might be an option for severe multifocal AA, but in alopecia totalis or universalis treatment results are unsatisfactory. The study was carried out on 15 adult patients who received methylprednisolone of 500 mg intravenously on 3 consecutive days monthly for 3 months. According to these researchers, pulse methylprednisolone therapy appears to be a safe treatment option.

Staumont-Salle et al. carried out a 10-year-long assessment of pulse methylprednisolone therapy for AA [7]. The study included 60 patients treated between 1995 and 2000 and confirmed the low efficiency, both short- and long-term, of this treatment for AA.

Researchers from Saudi Arabia [8] evaluated the efficacy and safety of methylprednisolone for severe therapy-resistant AA, and found that the use of this drug in severe forms of AA has relative efficacy and tolerance, but with a high relapse rate.

In 2011, Alsantali presented a new treatment plan for AA in Clinical Cosmetic Investigative Dermatology. According to this plan, glucocorticosteroids are a third-line option in the treatment of AA. This includes: a once-monthly pulse of 300 mg methylprednisone (or a once-monthly pulse of 200 mg), intramuscular triamcinolone acetonide of 40 mg once monthly or oral dexamethasone of 0.5 mg/day [9].

Some researchers from Iran concluded that the use of methotrexate (15–25 mg once a week for 3 months) alone or with low doses of glucocorticosteroids or azathioprine alone is an effective treatment in patients with severe and chronic AA. This therapy may be an alternative option in the treatment of patients with severe forms of AA (due to safety and efficacy). The study included 20 patients who had a 6-month-long history of hair loss. Patients received 2 mg/kg body weight of azathioprine for 6 months. Hair regrowth was achieved in 53% of
patients and the drug was well tolerated [10].

Droitcourt et al. treated patients suffering from severe AA using high-dose pulse therapy with methylprednisolone (500 mg intravenously per day for 3 consecutive days monthly over 3 months) plus 15 mg of methotrexate once a week for the same treatment period [11]. Of the 14 patients (20 patients were treated), 10 had total hair regrowth and 4 had incomplete but satisfactory regrowth. Treatment was well-tolerated.

The analysis of many research papers has revealed a general controversy about the administration of glucocorticosteroids. Most researchers reported that the therapeutic outcome is short-lasting and the withdrawal of medication is followed by hair loss.

According to Miteva and Tosti [12], better therapeutic outcomes have been observed when treatment begins before the end of 3 months following the onset of the first symptoms in patients with universal alopecia, and before the end of 4 to 6 months in patients with focal AA. Pulse therapy based on the very short administration of high doses of glucocorticosteroids is associated with a lower number of adverse effects. Such therapy should be considered in adults with total or universal alopecia resistant to topical treatment or phototherapy [5].

Bhat et al. [13] assessed levels of trace elements (zinc, copper and magnesium) in patients with AA. Fifty patients were studied. Samples were analyzed using atomic absorption spectrometric methods. Serum zinc levels were decreased in AA patients compared to healthy controls. Serum copper and magnesium levels showed an insignificant rise.

The combination therapy (PUVA with 20 mg prednisone) may modify the immune system and increase the number of Treg cells, resulting in hair regrowth in patients with AA [12]. Hair regrowth was achieved in 100% of patients and 22% of patients had a relapse of hair loss 3 months after the termination of the treatment. Authors emphasized the efficacy of this method mainly in patients with AA resistant to treatment.

Limitations on the use of cyclosporine in the treatment of AA result from the high relapse rate after the termination of therapy, the need for long-term drug administration, and adverse effects, e.g. nephrotoxicity [5].

Ito et al. [14] concluded that spontaneous remission occurs in 80% of patients with AA within 1 year, and not all patients require intense therapy, and therefore watchful observation is one of the therapeutic options. However, when hair loss is progressing, treatment becomes necessary, and pulse methylprednisolone should be preferred.

Korean scientists studied the effects of intradermal botulinum toxin injections on AA (3 times on each side of the head). One patient reported aggravation, and the remaining patients had no local improvement. These results suggest that botulinum toxin injections are not useful as a treatment in AA [15].

Some scientists from Iran claim that antidepressant treatment may result in improvement in local conditions in patients with AA who have depressive disorders [16]. Other scientists claim that hypnotherapy may be effective in achieving a significant improvement and maintaining good emotional status and life quality in patients with resistant AA.

The use of biologics in the treatment of AA was also tested but no significant efficacy was shown, and there are some reports on aggravation during therapy [17].

Luk et al. [18] studied the efficacy and safety of diphenylcyclopropenone (DPCP) in Chinese patients with AA resistant to treatment with steroids and reported a good response achieved in over 50% of treated subjects.

Campuzano-Mayo, of Colombia, described the case of a 43-year-old patient with an 8-month history of AA of the scalp and beard. The urea breath test confirmed Helicobacter pylori infection. The patient went into remission.
from AA after *H. pylori* eradication [19].

There were also attempts to treat patients with AA with exposure to narrow-UVB to the medium total dose of 63.9 J/cm² or bexarotene gel, and different regrowth was achieved [20, 21].

There are also reports describing the effects of locally administered vitamin D analogues in the treatment of AA, and a comparative study on local treatment with 0.05% clobetasol and 1% pimecrolimus, where similar efficacy was found for both products [22].

Researchers from Iran determined the efficacy of topical triiodothyronine in patients with patchy AA. Ten patients with AA were treated with topical triiodothyronine and placebo applied twice daily. Hair regrowth was evaluated every 4 weeks. Blood count, along with thyroid function (T3, T4 and TSH) and liver function were also tested. After 12 weeks of treatment, there was no statistically significant difference between the outcome in the active treatment and placebo groups. Triiodothyronine was safe but not more effective than placebo [23].

Literature data on the effects of sulphasalazine on the treatment of AA can be compared with the efficacy of cyclosporine alone. Sulphasalazine is an efficient drug in cases resistant to other treatment methods, but offers a much poorer outcome in patients who had disease onset in childhood [5].

In some patients there is a clear correlation between AA and the nervous system function, and bald patches may occur suddenly after severe emotional trauma, both in children and adults. According to Manolache *et al*., the most frequent stressful events include the beginning of school or pre-school education, exams, change of school/group, problems with teachers, intensive studying, social problems with peers, death in the family, family financial problems, emigration of parents for work reasons, concomitant diseases and surgical procedures [24].

In addition, Willemsen *et al*. carried out a study to investigate whether adult AA is associated with childhood or total lifetime traumatic events. The study was carried out using the “Traumatic Experiences Checklist” [25]. Ninety patients and 91 people from the control group were surveyed. The study demonstrated that the frequency of AA is affected by lifetime traumatic events. Also, there was an increased history of childhood trauma in patients with AA compared with control subjects.

«Trichotillomania (TTM) is a behavioral disorder characterized by recurrent and overwhelming urges to pull out body hair, accompanied by a sense of pleasure and relief after the hair has been plucked. Although the exact incidence of TTM is not known, it is estimated to affect as high as 4% of the population. TTM appears to be common in children and adolescents. Despite the adult cases who generally develop a chronic course and exhibit an accompanying psychopathology, in children TTM is usually a self-limited benign condition often considered to be a simple habit disorder.»

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*pict. 1* Trichotillomania, female patient before treatment

*pict. 2* Female patient after treatment with XL Hair once per week AD Daily Care Hair once per day, 4 weeks (courtesy dr. Ranneva)
References

Throughout the ages, society has influenced hairstyle trends — crew cut, straight vs. curly hair, hair coloring, etc. — which leaves the scalp exposed to different chemicals (eg, dyes, highlights, straightening agents, etc.), hair styling gadgets (eg, blow dryers, curling or straightening irons, etc.) and hair-care products (“rinse-off” or “leave-on” preparations). All of this may lead to scalp irritation.2

Heidi P. Chan, MD, Hongbo Zhai, MD, and Howard I. Maibach, MD

HAIR CHEMICALS THAT HAVE BEEN ASSOCIATED WITH SENSORY IRRITATION OF THE SCALP

- Hydrogen peroxide
- Ammonium persulfates
- p-Phenylenediamine
- Thioglycates

NEW ENERGY FOR YOU HAIR

Extensive sun exposure can turn the hair into a brittle, dry mop that breaks and splits easily. Choosing AD Daily Care Hair which provides full vitamin nutrition became good recommendation for the patients.
Alopecia Areata (AA) is a non-scarring hair loss disease with prevalence of 0.1-0.2% (calculated lifetime risk of 2%) depending on ethnic and world region\(^1\). It affects both sexes with some studies showing slightly higher prevalence on men (1.4:1 ratio)\(^2\). Most patients (66%) are younger than 30 years old\(^3\) and earlier onset of the disease is associated with poorer prognostics\(^2\). It is characterized as hair loss and thinning in a well-circumscribed skin region most times located on scalp and beard and it can evolve to total scalp hair loss (alopecia areata totalis) or even total body hair loss (alopecia areata universalis)\(^4\). The diagnostic may be achieved by trichoscopy, hair pull test or trichogram. Trichogram is being replaced by trichoscopy, which is a more modern, less painful and not invasive method that depends only on the experience of the operator\(^5\).

Even though the etiology of AA is still unknown, most specialists believe that it is an autoimmune disease caused by the breakdown of the immune privilege of the hair follicle and invasion of T lymphocytes which results in shortening of the anagen phase of hair growth and acute hair loss\(^6\). Like most autoimmune diseases, AA has a strong genetic component and familial cases have poorer prognosis, faster progression, more frequent relapses and greater resistance to therapy\(^7,8\).

Treatment of AA is far more challenging than it’s diagnostics with few, and many times ineffective, drugs available. There is no known curative therapy to date and currently treatment options relies on corticosteroids that are taken either by injections on the affected site, oral pills (in pulse doses) or topical formulations.

Abstract: Alopecia areata is a non-scarring hair loss disease that affects 1-2% of human population. For such a prevalent disease it is surprising that it’s etiology is not fully understood and treatment still poses a challenge with little therapeutic options that commonly have many side effects. XL Hair\(^{®}\) formula contains growth factors, macro and micro-nutrients and matrix remodeling actives that prolong the anagen phase of hair growth. It has already been proved effective on other types of non-cicatricial hairloss like alopecia androgenetica. In this case study, an AA patient is treated with once a week intradermal injections of XL Hair\(^{®}\) formula achieving astonishing results within the first 6 weeks of treatment (hair regrowth achieved after 3 weeks). The side effects reported were swelling and ecchymosis that lasted for 24-48h after the procedure. This encouraging result strengthens the evidence that XL Hair\(^{®}\) is a promising new therapy for all types of non-cicatricial hairloss.

Introduction

Alopecia Areata (AA) is a non-scarring hair loss disease with prevalence of 0.1-0.2% (calculated lifetime risk of 2%) depending on ethnic and world region\(^1\). It affects both sexes with some studies showing slightly higher prevalence on men (1.4:1 ratio)\(^2\). Most patients (66%) are younger than 30 years old\(^3\) and earlier onset of the disease is associated with poorer prognostics\(^2\). It is characterized as hair loss and thinning in a well-circumscribed skin region most times located on scalp and beard and it can evolve to total scalp hair loss (alopecia areata totalis) or even total body hair loss (alopecia areata universalis)\(^4\).

The diagnostic may be achieved by trichoscopy, hair pull test or trichogram. Trichogram is being replaced by trichoscopy, which is a more modern, less painful and not invasive method that depends only on the experience of the operator\(^5\).
(creams, gels, ointments, etc), immunosuppressive drugs like ciclosporin or anti-inflammatory drugs like sulfasalazine. However, all those treatments have limited success rate with often unsatisfactory results. Hair regrowth can be seen in 60-67% of the cases using intradermal corticosteroids and in 30% of the cases treated orally with the same class of drugs. Relapses occur frequently once treatment is discontinued and can affect up to 25% of the successfully treated patients.

It is, therefore, crucial to explore different treatment options for such a high prevalence disease with so little treatment options. This article presents a case study of a patient treated with XL Hair® formulation which is composed of growth factors, antioxidants, amino acids, DNA, trace elements, vitamins, matrix reorganization compounds and micro nutrients. The final target of the actives is to repair and to stimulate hair growth, increase the thickness of hair by improving skin nutrition and skin defenses against internal & external stress and damage factors.

Treatment:

The treatment was accomplished by once a week intradermal injections of the XL hair® formula in the affected area (pic. 4/5). The injections contained hyaluronic acid 0,001 mg/ml associated in XL Hair® with active bio revitalization solution that helps to improve the transport function of the actives from BS. The complex actives of BS are: growth factors GF (Rh-Polipeptide-1,Copper peptide), deoxyribonucleic acid, amino acids (Alanine, Folic Acid, Valine, Tyrosine ,Glycine, Histidine, Isoleucine, Lysine, Methionine, Phenylalanine, Proline, Serine, Threonine and etc),trace elements (Ca, Fe, K, Mg, Mn, Na, P, Se and etc),vitamins (Vit A,PP, B,H and etc),terpenes (Quercetin), fatty acids (Oleic Acid ,Linoleic Acid), flavonoids (Rutin, Kaempferol), antioxidants (Quercetin, Citric Acid, Ginkgolides A- B- C- M), NAD, NADP. Fibroblast growth factors[FGFs]and their receptors control a wide range of biological functions, regulating cellular proliferation, survival, migration and differentiation. The treatment also delivers copper peptide to the base of follicles, which helps strengthen hair by stimulating hair follicles to produce a strong hair shaft, help blood circulation in the scalp, and revitalize hair follicles. Another group known as nutritional supplementation including vitamins, minerals, and/or antioxidants may help in hair growth and health. Vitamins are considered “micronutrients” and occur in only very small amounts within cells, but are critically important as coenzymes. Amino acids have several functions: the energy storage function (as it can be used on Krebs cycle), the endocrine integration function (hormones), the informative function (membrane receptors, intracellular signals). Trace elements have an influence on the binding, transport and release of oxygen, donate or accept electrons in reaction of reduction or oxidation, compensate cells nutrition and play the structural role to important biological molecules.

The biggest group of biorevitalization solution of XL Hair® is antioxidants. The mechanisms by which these antioxidants act at the molecular and cellular level include roles in gene expression and regulation, apoptosis, and signal transduction. Antioxidants are involved in fundamental metabolic and homeostatic processes and help repairing damaged biomolecules and defense antioxidant enzymes, which are mostly intracellular.

"XL Hair® neutralizes the functional imbalance and recovers hair follicle function resulting in hair regrowth"
Results:
The patients (pict. 1/3) had a complaint of a small baldness spot that appeared 6 to 12 months before treatment near the occipital area, this lesion was confirmed as AA by trichoscopy. Initial results were accomplished after only three weeks of treatment with visible hair regrowth and after six weeks the bald patch was no longer visible (pict. 2/6). Similar results were achieved in other non-cicatricial alopecia patients as presented on the previous case series with successful regrowth in 73% of the female group and 63% on the male one and overall satisfaction rate of 60%11. The only side effects reported were swelling and ecchymosis on the treated area that vanished 24-48h after the procedure. Since it is a single case study, relapse ratio cannot be defined and should be analyzed in further research.

Conclusions:
Alopecia areata is a non-cicatricial hair loss disease. In those types of baldness, the hair follicle is not damaged and what causes the disease is an imbalance in function that may have several etiologies. XL Hair® formula is so effective because it has growth factors, macro and micro-nutrients that extends the anagen phase of hair growth cycle and hyaluronic acid that promotes matrix reorganization. Therefore, it neutralizes the functional imbalance and recovers hair follicle function resulting in hair regrowth. Furthermore, XL Hair® have showed considerable less side effects than conventional therapy which encourage it’s use for longer periods preventing relapse. In conclusion, this case study shows that AA can be successfully treated by XL Hair® formula with minimal side effects and therefore puts it in advantage in comparison to standard therapy options.

References
**Reparestim® Hair TD - AD Daily care**

New approach in hair loss treatment
Optimally prepare the skin before hair transplantation

**ACTION**

- Improves transport function of signal molecules
- Stimulates cellular proliferation, migration and cells differentiation
- Improves cellular metabolism

**ACTIVE INGREDIENTS**

- **Fibroblast Growth Factor**
- **Rh-Polypeptide-1**
- **Copper peptide**
- **Vitamins**: Ascorbic acid (Vit. C), Retinol (Vit. A), Biotin (Vit. B8), Riboflavin (Vit. B2), Pyridoxine (Vit. B6), Folic acid (Vit. B9), Tocopherol (Vit. E), Cyanocobalamin (Vit. B12).
- **Nucleotides**: Adenine, Cytosine, Guanine, Thymine.
- **Organic Silicium**
- **Hyaluronic acid**

**ACTION**

- Improves local blood circulation
- Nutritional supplementation
- Energy storage function

**ACTIVE INGREDIENTS**

- **Amino acids**: Alanine, Arginine, Aspartic acid, Glutamic acid, Glycine, Histidine, Hydroxyproline, Isoleucine, Leucine, Lysine, Methionine, Phenylalanine, Proline, Serine, Threonine, Tyrosine, Valine.
- **Trace elements**: Cu, Fe, Zn, Se, Ca, Mg.
- **Vitamins**: Ascorbic acid (Vit. C), Retinol (Vit. A), Biotin (Vit. B8), Riboflavin (Vit. B2), Pyridoxine (Vit. B6), Folic acid (Vit. B9), Tocopherol (Vit. E), Cyanocobalamin (Vit. B12).
- **Hyaluronic acid**
- **Flavonoids**: Quercetin, Kaempferol, Rutin.
- **Fatty acids**: Linoleic acid, Linolenic acid.
**Anti oxidant**

*ACTION*
- Anti oxidant
- Helps to repair damaged biomolecules
- Improves anti oxidant defence

*ACTIVE INGREDIENTS*
- Vitamins: Ascorbic acid (Vit. C), Retinol (Vit. A), Tocopherol (Vit E), Cyanocobalamin (Vit B12).
- Terpenoids: Quercetin, Quercetin.

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**Skin hydration**

*ACTION*
- Hydrobalance
- Skin matrix hydration

*ACTIVE INGREDIENTS*
- Hyaluronic acid

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Scan here

**OPTIMALLY SELECTED CONCENTRATION OF MAIN ACTIVES**

**MAXIMUM NUTRIENTS**

**STIMULATION OF HAIR GROWTH FACTORS**

**DEFENCE AGAINST FREE RADICALS**
What is XL Hair®?

XL Hair® is an injectable medical device, CE certified class III, made of a non cross linked hyaluronic acid, mainly used as a intradermal carrier and associated to a Bio-stimulating solution.

How is used XL Hair®?

XL Hair® is usually injected in the scalp dermis, at the level of hair roots. It also can be used transdermally, together with microneedling.

What volume is necessary for one treatment?

3 ml are usually sufficient by session.

Is any scalp preparation necessary before treatment?.

Scalp should be clean, a disinfectant shampoo can be recommended. Hair should be dry and disinfected before injection.

Is injection painful?

No anaesthetic is necessary before injection; the solution is not painful when injected.

What are the contraindications?

Allergy to one of the components; local active infections or irritations; No study have been done for pregnant or breastfeeding women.

Is any combination treatment necessary?

XL Hair® injections should be associated to the daily application of AD Daily Care Hair spray.

How quickly are expected the first results?

First results appear quickly: visible signs of regrowth can be seen after 3 to 6 sessions.

What is the bio-stimulating solution of XL Hair®?

XL Hair® biostimulating solution is made of 47 active elements restoring an ideal perifollicular matrix structure for a renewed hair growth.

What are the best indications of XL Hair®?

XL Hair® has showed results in case of male or female hairloss aswell as in case of alopecia areata.

Are there evidences of activity?

Cultivation of human hair dermal papillae cells, mainly specialized fibroblasts, showed an increase of proliferation by 25%, after 48 hours, demonstrating in vitro the exceptional activity of XL Hair® solution.

Frequent
Q&A
Questions & Answers

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First results appear quickly: visible signs of regrowth can be seen after 3 to 6 sessions.
How to maintain the results?

A maintenance program, combining injections of XL Hair®, sessions of microneedling for enhancing the transdermal penetration of XL Hair® and regular application of AD Daily Care Hair solution allow a long term maintenance of results.

What is Reparestim® hair and how to use it?

Reparsestim® Hair TD is a sterile solution, without conservative, specially made for a transdermal application, using a microneedling device. Its formula is similar to XL Hair® formula.

When to use microneedling vs injections?

Microneedling is generally used for treating large surfaces and injections for treating smaller surfaces or alopecia areata.

What is AD Daily Care Hair?

AD Daily Care Hair is a solution that has been specially formulated for helping to keep or increase the results of the medical treatment with XL Hair® or Reparestim® Hair TD. The patient applies it on a daily basis or every other day.

Could AD Daily Care Hair be used as a sole treatment?

AD Daily Care Hair can definitively be used as a sole treatment in any case of hair loss, with good results.
HAIR RESTORATION

Hairs are different

Problems are different

Solution is unique!

XL Hair®