

FACE

FACIAL AESTHETIC CONFERENCE AND EXHIBITION

ABSTRACTS

ABSTRACTS

ALIBHAI Haneef

Thursday, June 26, 2025 - from 16:00 to 17:30

**MULTISPECIALTY AESTHETICS
AGENDA #1/ A**

Session:

Upper Face: Science And Treatment Options

NEUROMODULATORS - ADVANCED INDICATIONS IN THE UPPER FACE

The most common areas of use for neuromodulators are the glabellar frown lines, crow's feet, forehead lines and the chemical brow lift. Physicians must have a sound understanding of facial anatomy in order to inject neuromodulators safely and effectively. When administered with the correct technique and in the correct dosage, neuromodulator injections can dramatically rejuvenate the face.

AMADO Raquel

Friday, June 27, 2025 - from 14:00 to 15:30

**MULTISPECIALTY AESTHETICS
AGENDA #1/ A**

Session:

Beyond the Surface: A Deep Dive into Biostimulator Power Plays

NCTF

The Power of NCTF

NCTF (New Cellular Treatment Factor) has established itself as a key biorevitalisation agent in aesthetic medicine, with demonstrated efficacy in improving dermal quality and stimulating fibroblast activity. This presentation will examine the clinical role of NCTF as a monotherapy. We will also explore the synergistic effects achieved when NCTF is used in combination with other aesthetic interventions, including hyaluronic acid-based dermal fillers, calcium hydroxyapatite (Radiesse), and botulinum toxin. Clinical cases and evidence-based strategies will be presented to support optimised integration of NCTF into comprehensive aesthetic regimens.

ASSIS Luis

Thursday, June 26, 2025 - from 16:00 to 17:30

**MULTISPECIALTY AESTHETICS
AGENDA #1/ A**

Session:

Upper Face: Science And Treatment Options

NEXT GENERATION PERIOCCULAR SOLUTIONS: REGENERATIVE NON-SURGICAL APPROACH

Periocular rejuvenation requires subtle yet effective protocols. I'll share a practical three-step approach: first, Prepare, focusing on skin health with antioxidants, amino acids, vitamins A and C, and enhancing permeability. Second, Prime, addressing cellular senescence and restoring balance. Finally, Target, applying condition-specific solutions for pigmentation, wrinkles, or laxity, guided by clinical signals. The integration of topical actives with selected device technologies offers safe, evidence-based strategies for consistent periocular rejuvenation in everyday practice.

ASSIS Luis

Friday, June 27, 2025 - from 09:00 to 10:30

**ADVANCED INJECTABLES
AGENDA/ AUDITORIUM**

Session:

Off-label Treatments

OFF-LABEL TREATMENTS WITH THE BEST CONSOLIDATED PROCEDURES: FROM BLEPHAROPLASTY TO ANY UPPER FACE TREATMENTS, SURGICAL AND NON-SURGICAL

This lecture presents a regenerative approach combining the two-step Prepare & Prime protocol with off-label use of regenerative bio-stimulators enriched with nutrients, vitamins, and polyvitamins. Originally developed to enhance blepharoplasty outcomes, this strategy can be seamlessly applied to any facial or skin rejuvenation procedure, offering a universal solution to optimize dermal quality. Dr. Luis Antônio de Assis will share how this method stimulates natural repair, improves tissue integrity, and maximizes patient satisfaction by integrating proven techniques with innovative regenerative concepts.

AVELAR Rui

Friday, June 27, 2025 - from 11:00 to 13:00

ADVANCED INJECTABLES AGENDA/ AUDITORIUM

Session:

Toxins in Focus

BOTULINUM TOXIN ACCESSORY PROTEINS: ARE THEY REALLY JUST AN ACCESSORY?&NBSP;

Background:

Botulinum neurotoxins produced by *Clostridium botulinum* consist of a complex of a core neurotoxin protein and one or more nontoxin accessory proteins. The accessory proteins are generally thought to protect the neurotoxin from the gastric environment in botulism poisoning, dissociating away upon absorption. Other than their questionable immunogenicity, they are rarely mentioned in botulinum toxin therapy.

Objective:

To review evidence that accessory proteins potentially play a role in neurotoxin activity.

Results:

Evidence suggests that the accessory proteins do not dissociate from the neurotoxin complex and enhance neurotoxin activity. Complexed type A botulinum toxin (with accessory proteins) has dramatically higher endopeptidase activity than noncomplexed neurotoxin (no accessory proteins). A primary accessory protein, hemagglutinin-33, exhibits this same effect on both type A and type E core neurotoxin proteins, of note, the latter not natively having this accessory protein. A clinical study using an objective computer assessment analysis has shown a correlation between botulinum type A complex size and glabellar complex strain reduction, suggestive of increasing clinical efficacy with the addition of accessory proteins.

Conclusion:

Accessory proteins may play a role in the efficacy of botulinum toxin and remain complexed to the neurotoxin for longer than previously reported.

AVERINA Vladlena

Thursday, June 26, 2025 - from 14:00 to 15:30

MULTISPECIALTY AESTHETICS AGENDA #2/ E

Session:

Hormonal Health

PROS AND CONS OF AESTHETIC PROCEDURES DURING MENOPAUSE

Perimenopause period is difficult for women not only in hormonal changes but in self perception with signs of aging.

Decreased collagen production caused wrinkling, ptosis and sagging skin.

Which protocol of correction will be effective and safe? How to prepare skin to aggressive procedures, how to maintain the result?

We divided women into 2 groups:

1 group (8 women 48-55) under hormonal replacement therapy received laser resurfacing with topical exosomes, 2 sessions of PN+HA injections with 3 weeks interval, HA filler correction

2 group (14 women 45-58) without hormonal replacement therapy have received the same treatments.

Visible results and post-procedure rehabilitation were quicker in group 1. But with time the result became almost equal. The duration of effect was also longer in group 1.

AVERINA Vladlena

Thursday, June 26, 2025 - from 16:00 to 17:30

**MULTISPECIALTY AESTHETICS
AGENDA #2/ E**

Session:

Navigating Complications

COMPLICATIONS OF BIOSTIMULATORS: PLLA, PRP, COLLAGEN, EXOSOMES, PN, PEPTIDES

Nowadays we have Era of biostimulators. Different substances, but why they are causing the same type of complications, where granuloma is leading.

In treatment also not so many options except corticosteroids.

In lecture we will try to go through the most popular stimulators, possible complications and their management

AWAN Zoya

Thursday, June 26, 2025 - from 09:00 to 10:30

**MULTISPECIALTY AESTHETICS
AGENDA #1/ A**

Session:

Needle Free and Minimally Invasive Procedures for Face Body

FULL FACE ER:YAG LASER RESURFACING FOR DEEP RHYTIDES

Full-face deep 2940 nm Er:YAG laser resurfacing is a well-known treatment for skin rejuvenation. Patients wanting improvement in deep wrinkles, sun damaged skin, texture and scars often benefit from full-field laser resurfacing. Although a bit longer downtime than a non-invasive procedure, this minimally invasive, non-surgical treatment targets deep signs of aging for revitalized and youthful skin. This presentation will introduce the technology, describe how it works, and review the clinical work that has led to a more long lasting improvement in photodamaged skin

BAGEORGOU Fotini

Friday, June 27, 2025 - from 16:00 to 17:30

**MULTISPECIALTY AESTHETICS
AGENDA #2/ E**

Session:

Treatment Breakthroughs on Chemical Peeling for Several Indications in 2025 - Session
International Peeling Society

SEGMENTAL PEELING FOR TRICKY AREAS &NBSP;

There are certain parts of the face needing aggressive therapeutic approaches , the patient cannot undergo full face deep chemical peeling though. For such cases we have a personalize approach where we address with deep chemical peeling the areas that more problematic and we blend with a lighter combination the rest face so as to minimize the downtime of the whole procedure .

This is the what we are going to present during this presentation .

BAKER Anna

Friday, June 27, 2025 - from 16:00 to 17:30

**MULTISPECIALTY AESTHETICS
#3 & INDUSTRY WORKSHOPS
AGENDAS/ B**

Session:

Hybrid Fillers: A New Era in Aesthetic Treatments

OPTIMISING REGENERATIVE OUTCOMES THROUGH MULTI-MODAL TREATMENTS

It is increasingly recognised that combined modalities synergise and maximise treatment outcomes, often prolonging results, whilst addressing multiple aspects of ageing. A combination treatment approach holistically supports a long-term journey, whilst reinforcing a natural and patient- centred approach. In the clinician's experience, combining linear / non-cross linked hyaluronic acid (HA) alongside PN-HPT® can deliver natural and targeted results by refining localised areas of concern as well as achieving global improvements in skin quality, particularly around the perioral and periocular areas.

Energy based devices can effectively treat a variety of indications including; photodamage, skin rejuvenation/scarring/resurfacing, tightening & firming, fat reduction, build muscle, improve vascular concerns, as well as hair

reduction. Many can deliver standalone results over a course of treatment, with cumulative maintenance benefits, but can also be combined effectively with many other modalities, often to target multiple concerns. This session will explore the potential combined approaches of energy-based treatments, alongside hybrid regenerative injectables. This power couple delivers natural and lasting results, on the face, neck and body.

BASHIR Afzaal

Thursday, June 26, 2025 - from 11:00 to 13:00

**ADVANCED INJECTABLES
AGENDA/ AUDITORIUM**

Session:

Advances in Regenerative Aesthetics

FAT GRAFTING ENRICHED WITH PLATELET RICH PLASMA: A TREATMENT OF CHOICE FOR CONTOUR DEFECTS OF FACE HAVING OVERLYING SKIN HYPERPIGMENTATION

Contour defects of face associated overlying skin pigmentation are of great. Fillers, fat and mesenchymal stem cells have been employed so far to get satisfactory outcome. Fat resorption and slow effect on melanocytic activity makes it less pronounced modality. Platelet rich plasma is prepared from patient's own blood also accepted world-wide. The aim of the current study is to compare long term effects of conventional fat grafting and platelet rich plasma enriched fat grafting for the treatment of contour deformities with pigmentary changes on face. in this study, fifty-four patients of contour deformities with hyperpigmentation on face were recruited and informed consent was taken. both techniques i.e. conventional fat grafting C-FG and prp enriched fat grafting FG-PRP were explained to the patients and group placement was done on their choice and satisfaction. patients of FG-PRP group were treated with fat grafts enriched with prp while patients of c-fgs group were addressed with conventional fat grafting. patients were followed for 12 months and improvement in the pigmentation was noted clinically as well as measured objectively. patients satisfaction was also documented as highly satisfied, satisfied and unsatisfied. mean age of patients was 29.63 +4.49 years, 41 patients were females. forehead was involved in 59 percent cases, cheek in 32percent cases, and nose in 9percent cases. in GF-PRP group, the integrated color density ICD was decreased $1.07 \times 106 \pm 5.64 \times 105$ as compared to C-FG group $2.98 \times 105 \pm 1.59 \times 105$. patients treated with fat grafts enriched with PRP were significantly more satisfied as compared to patients treated with conventional fat grafting only. in conclusion, fat grafting enriched with PRP is preferred option for treating contour defects associated with skin hyperpigmentation on face.

BAWA Manav

Friday, June 27, 2025 - from 16:00 to 17:30

**MULTISPECIALTY AESTHETICS
#3 & INDUSTRY WORKSHOPS
AGENDAS/ B**

Session:

Hybrid Fillers: A New Era in Aesthetic Treatments

USING A DUEL EFFECT HYBRID BIOSTIMULATOR INJECTABLE TO ACHIEVE LONG LASTING RESULTS

This presentation explores the use of a hybrid injectable combining immediate volumisation with longer-term biostimulatory benefits. Based on clinical experience, the session will highlight practical considerations in achieving natural-looking, durable outcomes through strategic application of this dual-effect approach.

BHATIA Neal

Friday, June 27, 2025 - from 09:00 to 10:30

**MULTISPECIALTY AESTHETICS
AGENDA #2/ E**

Session:

Dermatology

NEW TOPICALS IN 2025

Without topical therapies we are not dermatologists...patients also need to be treated from outside in as well as inside out, and the right active ingredient in the right vehicle can optimize patient outcomes and satisfaction. This lecture will review new topical agents available for multiple indications as well as new investigational products in trials and some off-label and anecdotal uses that will expand horizons for all clinicians.

BHATIA Neal

Friday, June 27, 2025 - from 09:00 to 10:30

**MULTISPECIALTY AESTHETICS
AGENDA #2/ E**

Session:
Dermatology

RECOGNIZING HIDRADENITIS SUPPURATIVA IN THE PRIMARY CARE SETTING

Hidradenitis Suppurativa is a complicated condition that is difficult to diagnose without a high index of suspicion and familiarity with the patterns of presentations. Patients often consult their primary care physician, OB/GYN, or the urgent care with abscesses and early stages of cysts and papules and end up with antibiotics or steroids for presumed folliculitis when the correct treatment is dependent on making the diagnosis. New therapies and indications for topical treatments, biologic therapies, and janus kinase inhibitors are bringing hope to patients but early intervention in the primary care setting will help slow down the progression of this debilitating condition.

BHOJANI-LYNCH Tahera

Friday, June 27, 2025 - from 09:00 to 10:30

**ADVANCED INJECTABLES
AGENDA/ AUDITORIUM**

Session:
Off-label Treatments

HYALURONIDASE USE: EMERGENCY VS. AESTHETIC ADJUSTMENTS

Hyaluronidase is commonly used to disperse/ reverse / adjust hyaluronic acid treatments. As an off label indication there are no "recommended" doses from manufacturers. This presentation will cover the licensed and unlicensed indications for hyaluronidase and how emergency dosage and administration differs from treating the unwanted effects of filler. We will cover the side effects of hyaluronidase and the risks

BHOJANI-LYNCH Tahera

Friday, June 27, 2025 - from 11:00 to 13:00

**ADVANCED INJECTABLES
AGENDA/ AUDITORIUM**

Session:
Toxins in Focus

WHY TOXIN DILUTION IS A PAIN?

Botulinum Toxin traditionally comes as a dry powder that is reconstituted with sodium chloride prior to injection. Newer formulations come ready mixed as a liquid. When injected there is always some degree of pain and the diluent choice can significantly affect the level of discomfort felt by the patient. This presentation dispels the myths and realities of the causes of pain on injection and give tips and tricks for improving the patient experience, whichever toxin you choose

BIRCH MACHIN Mark

Thursday, June 26, 2025 - from 11:00 to 13:00

**ADVANCED INJECTABLES
AGENDA/ AUDITORIUM**

Session:
Advances in Regenerative Aesthetics

NOVEL BIOMARKERS OF SKIN HEALTH AND HOW THEY CAN BE USED TO MONITOR SKIN INTERVENTIONS AND TREATMENTS

Our skin is subject to an increasing variety of stress in this present century from both external and internal factors that have the potential to cause damage including premature ageing. The external factors which have been described include increasing exposure to sunlight, environmental pollution as well as controversial and putative contributions including electronic pollution and blue light. Furthermore, skin has its own independent internal clock which is driven by the circadian rhythm genes that modulate a described diurnal pattern of skin protection from external stressors and damage repair. A further layer of consideration are the differences in skin cell bioenergy where skin fatigue has been linked to the mitochondrial theory of ageing particularly as mitochondria are the major source of cellular bioenergy and 90% of cellular oxidative stress and have been shown to be an effective and reliable biomarker of skin health. We will consider what interventions can be used to help prevent stressed out skin both now and in the near future as part of the increasing personalised approach to skin protection.

BIRCH MACHIN Mark

Friday, June 27, 2025 - from 11:00 to 13:00

MULTISPECIALTY AESTHETICS

AGENDA #1/ A

Session:

Science of Regeneration Longevity

SKIN SWAB MITOCHONDRIAL DNA TEST

Mitochondria are the batteries of our cells. They have their own DNA which creates many of the tools needed for their function and as our skin ages, mitochondria become inefficient and show an increase in DNA damage. Eventually, this downward trend plays a key contribution to skin ageing, featuring tired or fatigued skin as the performance of the batteries begins to decline. This presentation details a non-invasive test based upon more than 15 years of pioneering work on the detection of mitochondrial DNA damage in skin. The test can detect this damage before any visible signs of ageing are present and therefore are an important part of measuring anti-ageing interventions, tracking skin health and providing guaranteed treatment evidence that facilitates/confirms the continuation of a treatment plan or pivot to a new one. This bio-molecular skin tests makes the "invisible" skin mitochondrial DNA damage more visible to enable a tracking of skin damage over time but also to facilitate the evaluation of interventions on skin protection thereby helping skin care management and associated decisions.

BURGESS Cheryl

Thursday, June 26, 2025 - from 10:00 to 11:30

MULTISPECIALTY AESTHETICS

#3 & INDUSTRY WORKSHOPS

AGENDAS/ B

Session:

Cosmeceuticals Masterclass - Session Science of Skin Care Summit

TURNING BACK THE (EPIGENETIC) CLOCK (SPONSORED BY BEIERSDORF)

Learn how epigenetic mechanisms connect our genome with our environment through the skin aging journey with twins.

CLAYTON Nicola

Thursday, June 26, 2025 - from 09:00 to 10:30

MULTISPECIALTY AESTHETICS

AGENDA #2/ E

Session:

Non-Invasive Treatments for Hair Loss

TOPICAL MINOXIDIL - IS GREATER THAN 5% CONCENTRATION MORE EFFECTIVE?

Topical minoxidil is a well-established treatment for androgenic alopecia with 5% formulations licensed for both men and women. It is understood to have a dose dependent mechanism therefore higher concentrations are increasingly used off-license with the intention to gain greater results. This presentation will review recent evidence comparing the standard and higher strength topical minoxidil and whether benefits outweigh potential side-effects.

CONVERY Cormac

Thursday, June 26, 2025 - from 14:00 to 15:30

MULTISPECIALTY AESTHETICS

AGENDA #1/ A

Session:

Debating Controversies in Aesthetics

ARE FILLERS GOING AWAY? YES!

Is dermal filler usage actually on the decline?
What evidence do we have for this?
Why might it be happening?
A run through..

CROWLEY Erin

Thursday, June 26, 2025 - from 11:00 to 11:55

MULTISPECIALTY AESTHETICS

AGENDA #1/ A

Session:

Decoding Exosomes

UNMASKING BIOACTIVITY: DETECTING FUNCTIONAL VS. INACTIVE EXOSOMES IN THE COSMETIC INDUSTRY

Exosomes, nanoscale vesicles critical in cell signaling and regenerative therapies, have become central to both clinical and cosmetic innovations. However, not all exosomes are created equal. Amid rising commercial interest, a concerning trend has emerged: widespread distribution of lyophilized exosome products lacking verified bioactivity due to compromised membrane integrity from improper manufacturing processes. Erin Crowley, a global authority in regenerative biotherapeutics and co-chair of the Exosome Oversight Bureau (EXACT), has led an unprecedented global audit into the cosmetic exosome market. With over 15 years in engineering, manufacturing, and compliance—including transformative work with Fortune 500 companies—Crowley partnered with renowned experts Dr. Mazzeo and Dr. Heke, as well as Harvard Medical School's core facilities, to blind-test exosome products from 95% of the industry. The findings revealed a startling gap: many cosmetic exosome products contain broken, biologically inactive vesicles incapable of effective cellular communication. This session unveils the science behind exosome bioactivity testing, including membrane integrity assays, protein and RNA cargo analysis, and signaling response validations. Attendees will discover the critical documents and test results every practitioner and consumer should demand to ensure therapeutic efficacy. Learn how EXACT is setting new global standards and why Age-Zer? by Resilielle stands alone as the only cosmetic exosome product verified by Harvard to contain 100% intact, bioactive exosomes. Join us for this essential exposé and take part in reshaping the future of ethical, effective exosome-based skincare.

Would you like this adapted for a presentation, white paper, or website content as well?

DARMANESCU Monica

Friday, June 27, 2025 - from 16:00 to 17:30

MULTISPECIALTY AESTHETICS

AGENDA #2/ E

Session:

Treatment Breakthroughs on Chemical Peeling for Several Indications in 2025 - Session
International Peeling Society

LASER VS PEELINGS. DO WE HAVE A WINNER ?

Laser versus peelings. Do we have a winner?

Monica Darmanescu

Dermatology Department, Central Clinical Emergency Hospital

Dermaceutica Skin Care Clinic

Bucharest , Romania

In the evolving landscape of dermatology, both laser resurfacing and chemical peels are effective modalities for skin treatment and rejuvenation. We provide a concise comparison of these two approaches outlining their mechanisms, efficacy, safety profiles and suitability for various skin concerns.

Laser treatments offer precise targeting, making them particularly effective for deeper wrinkles, significant skin damage and pronounced scarring. Their ability to stimulate collagen production can lead to longer-lasting results, often with fewer sessions.

Chemical peels, from superficial to deep, can be effective for treating pigmentation issues, fine lines, improving overall skin texture, they are versatile and can be tailored to individual skin types.

The decision between laser treatments and chemical peels should be individualized, considering specific skin condition, desired outcomes, skin type etc. In some cases a combination of both treatments may offer synergistic benefits.

This lecture will provide a balanced overview, aiding clinicians in making informed decisions. Drawing from evidence based outcomes and personal clinical experience, this presentation will aim to offer practitioners a guidance on when to choose one over the other or how to combine them effectively .

DAVIDOVIC Kristina

Thursday, June 26, 2025 - from 16:00 to 17:30

MULTISPECIALTY AESTHETICS

AGENDA #1/ A

Session:

Upper Face: Science And Treatment Options

AESTHETIC STRATEGIES FOR THE UPPER THIRD

The upper third of the face plays a crucial role in conveying emotion, youthfulness, and overall facial harmony. This lecture explores the anatomical, functional, and aesthetic aspects of the upper face, with a focus on evidence-based treatment strategies. Emphasis will be placed on neuromodulators, volumizing techniques, and skin quality improvements, tailored to individual patient needs. Attendees will gain insights into balancing natural results with clinical safety and precision in aesthetic interventions targeting the forehead, glabella, and periorcular region.

DIOUF Fatou

Thursday, June 26, 2025 - from 11:00 to 12:00

MULTISPECIALTY AESTHETICS

AGENDA #2/ E

Session:

Skin of Color

BRIDGING THE GAP IN AESTHETICS: ADVANCING SAFE AND EFFECTIVE INJECTIONS FOR BLACK PATIENTS

The field of aesthetic medicine has made significant advancements; however, a critical gap persists in ensuring safe and effective treatments for Black patients. Historically, aesthetic training, research, and product development have predominantly centered around lighter skin tones, leading to an increased risk of complications, suboptimal results, and a lack of confidence among practitioners when treating diverse populations.

My talk will delve into the unique challenges associated with aesthetic injections for Black patients, including differences in skin physiology, collagen density, and responses to neurotoxins and fillers. Addressing these disparities is essential for improving patient safety, enhancing treatment outcomes, and promoting inclusivity within the industry.

Through evidence-based insights and real-world case studies, this session will offer practical strategies for practitioners to refine their techniques, select appropriate products, and ensure optimal results for Black patients. By bridging this gap, we can advance aesthetic medicine toward a more inclusive and effective future.

DORHGAM Nevin

Friday, June 27, 2025 - from 16:00 to 17:30

MULTISPECIALTY AESTHETICS

AGENDA #2/ E

Session:

Treatment Breakthroughs on Chemical Peeling for Several Indications in 2025 - Session
International Peeling Society

DIFFERENT PEELING PASTES: THE EGYPTIAN EXPERIENCE

In our country, hyperpigmentation is a common problem

This led to the innovation of different peeling combinations to target different problems & areas

In this presentation I will demonstrate the most popular & effective types we use

DOWNIE Jeanine

Thursday, June 26, 2025 - from 11:00 to 12:00

MULTISPECIALTY AESTHETICS

AGENDA #2/ E

Session:

Skin of Color

COMBINED TREATMENTS FOR SKIN OF COLOUR

Will show arrange of before and after pictures of skin of color doing combined treatments, emphasis on laser

SOC laser post care

Sunblock SPF 30 reapplied every two hours

ZO or Total Defense and Repair (the sunscreen must protect against blue light and infrared)

Biafine or Mupirocin

Vitamin C/ HQ 4%

Multi Frax and Fraxel can be done on active Accutane patients once acne is less inflamed

CO2 lift gel mask important to decrease inflammation, redness, and hyperpigmentation

A cooling fan during Emsculpt Neo is critical otherwise skin of color patients may develop blisters and permanent hyperpigmentation

DOWNIE Jeanine

Thursday, June 26, 2025 - from 14:00 to 15:30

**MULTISPECIALTY AESTHETICS
AGENDA #2/ E**

Session:

Hormonal Health

DERMATOLOGICAL PROBLEMS: ACNE, ALOPECIA, ROSACEA

Menopause is life altering, stressful, depressing and uplifting all at once. The hot flashes, the constant sweating, the flashes between hot and cold, the acne on the face, chest, shoulders, and back, the hair loss, the sagging skin due to loss of collagen and elastin and the weight gain all affect my female patients in my chosen field of dermatology.

I propose we talk about how to treat adult female hormonal acne, hair loss, head sweating, what to do about the weight gain and the lack of collagen and loss of elasticity of the skin both on the face and the from the estrogen depletion.

DOWNIE Jeanine

Thursday, June 26, 2025 - from 16:00 to 17:30

**ADVANCED INJECTABLES
AGENDA/ AUDITORIUM**

Session:

Aesthetic Approach to Perioral Area

COMBINED TREATMENTS FOR LIPS AND PERIORAL

Lips and perioral area, I will showcase before and after pictures of my patients and a video discussing my technique for lip filler.

Additionally, I do Botox/Daxxify around the perioral area, skin tightening with the Zaffiro or IntraGen and try to decrease fine lines and deep lines with the IntraCel— radio frequency/micro needling, the Fraxel, and now the Multi Frax technology.

Finally, laser hair removal in this area, chemical peels and proper cosmeceutical products improve skin quality and enhance light reflectivity in a critical area of the face.

DOWNIE Jeanine

Friday, June 27, 2025 - from 09:00 to 10:30

**ADVANCED INJECTABLES
AGENDA/ AUDITORIUM**

Session:

Off-label Treatments

FOCUS ON FUNCTIONAL AESTHETICS AND REGENERATIVE APPROACHES WITH COMBINED TREATMENTS

Combination treatments focus on aesthetics and regenerative approaches— I will discuss:

MultiFrax with novel SimulScan technology powers the only device on the market delivering two fractionated wavelengths simultaneously. Two wavelengths hitting the skin surface simultaneously allows for better heat penetration, generating unparalleled results for your patients.

Salmon sperm - - Used topically polydeoxyribonucleotides (PDRNs) and purified polynucleotides (PNs)

Enhance and promote skin regeneration. Been found to be facilitate angiogenesis, be anti-apoptotic, anti-inflammatory, stimulate fibroblasts, stimulate collagen production and soft tissue regeneration.

sirtuins

1. a type of protein involved in regulating cellular processes including the aging and death of cells and their resistance to stress."sirtuin proteins promote longevity in many organisms"???... SIRT3 and SIRT6, can modify cellular stress response to promote maintenance of tissue homeostasis and thus slow down phenotypic aging at the organismal level

Regular physical activity, boosts sirtuin levels improving metabolic health and energy expenditure

PRX Derm Perfexion

A Non-invasive Topical Collagen Biostimulator™ clinically proven to help tighten, tone, and lift the skin for visible rejuvenation of the face and body

Delivers immediate and long-lasting results with no needles, no discomfort and limited to no downtime. Designed to stimulate natural collagen production through a one-of-a-kind mechanism of action, PRX Derm Perfexion is safe for all seasons, skin types and genders

33% TCA, H2O2 and Kojic acid

Will show before and after pictures in my discussion

DYEDYK-GUSAROVA Yuliya

Thursday, June 26, 2025 - from 14:00 to 15:30

**MULTISPECIALTY AESTHETICS
AGENDA #1/ A**

Session:

Debating Controversies in Aesthetics

TO ASPIRATE OR NOT? YES!

Intravascular injection remains one of the most severe complications associated with dermal fillers, including thermal fillers. While debate continues around the efficacy of aspiration, emerging evidence supports its role as part of a multi-layered safety protocol. This presentation will critically evaluate aspiration as a preventative measure, referencing cadaveric studies, rheological properties of fillers, injection pressures, and vessel diameters.

Key anatomical danger zones will be discussed alongside documented cases of vascular occlusion. Scientific data suggests that aspiration—when performed correctly with appropriate needle gauge, injection technique, and static positioning—can reduce risk without compromising aesthetic outcomes. This talk aims to reinforce aspiration as a valuable, evidence-supported step in modern aesthetic practice, particularly in high-risk areas.

DYEDYK-GUSAROVA Yuliya

Thursday, June 26, 2025 - from 16:00 to 17:30

**MULTISPECIALTY AESTHETICS
AGENDA #2/ E**

Session:

Navigating Complications

COMPLICATIONS WITH LIP AUGMENTATION

Lip augmentation, while widely performed, presents a unique set of complications due to the complex anatomy and dynamic function of the perioral region. This lecture examines key adverse outcomes—including vascular occlusion, filler migration, nodularity, and delayed-onset inflammatory reactions—through an evidence-based and anatomically grounded approach. Emphasis will be placed on risk minimisation via appropriate patient selection, knowledge of vascular danger zones, product rheology, and injection technique. Clinical management strategies will be discussed, including protocols for immediate and delayed complications. The presentation aims to enhance clinical decision-making and improve safety outcomes in aesthetic practice.

FARRIS Patricia

Thursday, June 26, 2025 - from 10:00 to 11:30

**MULTISPECIALTY AESTHETICS
#3 & INDUSTRY WORKSHOPS
AGENDAS/ B**

Session:

Cosmeceuticals Masterclass - Session Science of Skin Care Summit

GIVING YOUR SKIN THE MESSAGE WITH GROWTH FACTORS (SPONSORED BY ZO SKIN HEALTH)

Cosmeceuticals containing growth factors are popular among consumers, but do they really help skin aging? Much of what we know about growth factors comes from their role in wound healing, where they modulate inflammation, vascularization, extracellular matrix deposition, tissue repair and scar formation. As signaling molecules, growth factors have great potential for skin rejuvenation. Four types of growth factors (GFs) are found in skincare products; autologous GFs from patients own cells, allogenic GFs from cells in culture, recombinant GFs produced by micro-organisms and plant-derived GFs. While there are pros and cons with each type of GF, studies suggest that they do provide beneficial benefits including improving health and appearance. In this presentation, the studies that support the use of growth factors in cosmeceuticals will be reviewed.

FAYARD Christian

Thursday, June 26, 2025 - from 09:00 to 10:30

**MULTISPECIALTY AESTHETICS
AGENDA #1/ A**

Session:

Needle Free and Minimally Invasive Procedures for Face Body

MODULAR DOWNTIME MANAGEMENT IN LASER REJUVENATION THERAPY USING DUAL-WAVELENGTH LASER TREATMENT (10600 NM AND 1550 NM): A CLINICAL CASE SERIES

Background: Skin rejuvenation using dual-wavelength laser treatment combining 10600 nm CO2 laser and 1550 nm fiber

laser is an advanced approach to treating various dermatological conditions such as wrinkles, scars, and dyschromia. This combination is valued for its ability to precisely ablate tissue, stimulate collagen production, and provide flexibility in downtime management. This case series explores the clinical outcomes and modularity of downtime in patients undergoing dual-wavelength laser treatment for skin rejuvenation.

Objective: To assess the effectiveness and modularity of downtime in patients treated with dual-wavelength laser treatment (10600 nm CO2 and 1550 nm fiber laser) for skin rejuvenation, dyschromia improvement, and scar treatment.

Methods: A series of clinical cases were analyzed where a total of 10 patients received dual-wavelength laser treatment: 6 patients were treated for skin rejuvenation and dyschromia improvement, while 4 patients received scar treatment. Treatments were customized based on individual skin types, severity of skin concerns, and desired outcomes. Parameters such as laser energy, density, and pulse duration were adjusted to modulate the extent of tissue ablation and subsequent downtime. The 10600 nm CO2 laser was primarily used for ablative resurfacing, while the 1550 nm fiber laser targeted deeper skin layers for non-ablative rejuvenation. Pre- and post-treatment evaluations included clinical photography, patient satisfaction surveys, and assessments of skin texture, elasticity, and pigmentation. Downtime was recorded and categorized based on patient-reported recovery times.

Results: All patients showed significant improvement in skin texture, reduction in wrinkles and fine lines, improvement in dyschromia, and reduction in scar visibility. The modular approach to downtime allowed patients to choose between more aggressive treatments with longer recovery periods and milder treatments with shorter downtimes. On average, patients experienced erythema and edema lasting between 3 to 7 days, with more intensive treatments extending up to 14 days. The combination of 10600 nm CO2 and 1550 nm fiber lasers provided enhanced results with manageable downtime, and high patient satisfaction was reported, correlating with the visible improvements and flexible recovery options.

Discussion: The findings demonstrate that dual-wavelength laser treatment is highly effective for skin rejuvenation, dyschromia improvement, and scar treatment, with the added benefit of customizable downtime. This modular approach allows for tailoring treatments to individual patient needs and preferences, enhancing the overall patient experience. The ability to manage downtime effectively is crucial, particularly for patients with professional and social commitments. The combination of ablative and non-ablative treatments maximizes efficacy while minimizing recovery time.

Conclusion: Dual-wavelength laser treatment using 10600 nm CO2 and 1550 nm fiber lasers provides significant skin rejuvenation benefits, dyschromia improvement, and scar treatment with a flexible downtime management approach. This versatility makes it a valuable option in dermatological practice, accommodating a wide range of patient needs and lifestyle considerations.

GENTILE Pietro

Thursday, June 26, 2025 - from 11:00 to 13:00

ADVANCED INJECTABLES AGENDA/ AUDITORIUM

Session:

Advances in Regenerative Aesthetics

FAT GRAFTING USE IN FACE SOFT TISSUE DEFECTS, ACCORDING TO MINIMAL MANIPULATION RULES: CLINICAL AND INSTRUMENTAL EVALUATION

Objectives: The aim of this study was to evaluate the safety and efficacy of the use of FG-SVFs in face rejuvenation for esthetic improvement.

Methods: 33 female patients affected by face's soft-tissue defects with loss of volume, study group (SG), were treated with FG-SVFs, comparing results with a control group (CG) (n = 30) treated with fat graft not enhanced (FG). Clinical evaluation, a photographic assessment, magnetic resonance imaging (MRI), and ultrasound (US) were performed. Post-operative follow-up was performed at 1, 3, 7, 12, 24, 48, weeks, and then annually.

Results: SG patients showed 61% maintenance of the contour restoring and of volume after 3 years compared with the CG treated with FG, who showed 31% maintenance. 60.7% (n = 20) of SG patients, presented an increase of 6.6 mm in the soft tissue volume after 36 months, which was reported in only 33.3% (n = 10) of the CG. Volumetric persistence in the SG was higher than that in the CG (p

Conclusions: The use of FG-SVFs was safe and effective in this series of a case treated.

GREEN Lawrence

Friday, June 27, 2025 - from 09:00 to 10:30

MULTISPECIALTY AESTHETICS AGENDA #2/ E

Session:

Dermatology

DERMATOPOROSIS- DEFINITION OF AND TREATMENT OPTIONS

Dermatoporosis is a newly described condition seen almost exclusively in elderly skin particular on the extremities. I will discuss its pathogenesis, pathophysiology, and potential ways to improve it based on what we have discovered about its causes.

HARRIS Steven

Thursday, June 26, 2025 - from 14:00 to 15:30

**MULTISPECIALTY AESTHETICS
AGENDA #1/ A**

Session:

Debating Controversies in Aesthetics

ULTRASOUND GUIDANCE? YES!

Ultrasound is rapidly redefining standards of care in aesthetic medicine. Once seen as a niche adjunct, it now plays a central role in both injection planning and complication management, offering a powerful combination of safety, precision, and patient-centered practice. This presentation makes the case for routine ultrasound use in aesthetic clinics.

Real-time, high-resolution imaging enables visual confirmation of vascular structures, tissue planes, and existing filler, particularly in high-risk areas like the temple, nose, and glabella. This dramatically reduces the risk of intravascular injection and overfilling. In the event of complications such as vascular occlusion or delayed-onset nodules, ultrasound-guided hyaluronidase facilitates targeted, minimally invasive intervention with high success rates.

Ultrasound also helps diagnose filler migration, chronic swelling, and Tyndall effect by mapping the precise location and extent of filler. For aesthetic revision work especially in previously overtreated patients it allows individualised planning based on real anatomy, not assumptions.

Beyond the clinic, ultrasound elevates education and ethics in aesthetic medicine. It fosters anatomical respect, improves trainee competence, and enhances patient trust through visual transparency. With increasing accessibility via portable devices and expanding training resources, the case for integration is now stronger than ever.

This session outlines the clinical, ethical, and educational benefits of ultrasound in aesthetics and argues why the time for widespread adoption is now.

References:

1. Schelke LW, Decates TS, Kadouch J. The role of ultrasound in filler complication management. J Cosmet Dermatol. 2018;17(5):705-710.
2. Decates TS et al. Ultrasound-guided treatment of delayed-onset filler nodules. Dermatol Ther. 2021;34(2):e14823.
3. Cotofana S, Beleznay K, Lachman N. Ultrasound and the face: An emerging diagnostic and safety tool in aesthetic medicine. Plast Reconstr Surg. 2022;150(3):558e-570e.
4. Cotofana S et al. Facial vascular danger zones: A practical guide using ultrasound. Plast Reconstr Surg. 2021;147(2):430e-438e.
5. Alfertshofer MG, Funt D. Ultrasound in aesthetic medicine: A tool to elevate patient safety and professionalism. Dermatol Surg. 2022;48(3):257-264.
6. Casabona G. High-frequency ultrasound in facial aesthetic medicine: From prevention to complication management. J Cosmet Dermatol. 2022;21(1):142-149.
7. Humphrey S et al. Consensus on ultrasound in aesthetic medicine: Education and implementation. Dermatol Surg. 2023;49(2):168-175.

HOOKEE Eddie

Thursday, June 26, 2025 - from 14:00 to 15:30

**AESTHETICS OPEN STAGE
AGENDA**

Session:

Regulatory Insurance Updates

SAFE GUARDING

Discussing safe guarding techniques and record keeping to minimise and prevent claims against practitioners

KHANNA Bob

Friday, June 27, 2025 - from 14:00 to 15:30

**ADVANCED INJECTABLES
AGENDA/ AUDITORIUM**

Session:

Lower Face and Neck: Science And Treatment Options

A UNIQUE COMBINATION USING THREADS AND FILLERS FOR LOWER FACE AND NECK LIFTING AND SCULPTING

Abstract:

In this presentation, Prof. Bob Khanna will showcase his latest approach to thread lifting for the neck, jawline, and face, and introduce his groundbreaking NUFACE concept—a synergistic facial sculpting protocol that combines Aptos thread lifting with bio-remodelling agents such as hyaluronic acid-based biofillers and polynucleotides. A complete patient case will be presented from start to finish, beginning with strategic Aptos thread lifting for the face and neck, followed by full-face rejuvenation and contouring using NUFACE techniques. This comprehensive, multi-layered approach reflects a paradigm shift

in aesthetic medicine—moving from single-modality treatments to holistic, regenerative strategies.

Facial and Neck Aging: A Multifactorial Challenge

Facial and neck aging is influenced by a triad of skin laxity, soft tissue descent, and volume depletion. While traditional surgical facelifts remain effective, the increasing demand for minimally invasive solutions has led to the evolution of combination treatments that restore volume, reposition tissues, and stimulate dermal regeneration without surgery.

Thread Lifting with Aptos Threads: Mechanism and Applications

Aptos threads are composed of bioresorbable materials such as polylactic acid (PLA) and polycaprolactone (PCL), which offer both mechanical lifting and biological collagen stimulation. Barbed and helical designs engage subdermal tissue, reposition sagging areas, and activate fibroblasts. They are particularly effective in:

Rejuvenating the neck by treating platysmal banding and horizontal lines,

Enhancing jawline definition,

Lifting midface and lower face soft tissues,

Softening nasolabial folds and marionette lines.

The threads are placed along anatomical vectors to maximize lifting and support while preserving natural movement and expression.

The NUFACE Concept: Regenerative Sculpting After Thread Lifting

Building on the structural foundation created by thread lifting, Prof. Khanna's NUFACE concept incorporates strategic placement of polynucleotides and hyaluronic acid-based biofillers to:

Restore facial volume with a natural, hydrated appearance,

Enhance dermal elasticity and skin quality through fibroblast and extracellular matrix stimulation,

Achieve long-term tissue bio-revitalisation,

Support thread-induced collagenesis, thereby extending results.

Polynucleotides, derived from highly purified DNA fragments, exhibit strong anti-inflammatory, tissue-healing, and regenerative properties. When injected post-thread lifting, they accelerate dermal repair and enhance skin texture. Hyaluronic acid biofillers provide deep hydration and scaffold support while contributing to facial harmony through contouring and volumization.

Advantages of the Combined Approach

Structural Repositioning + Volume Restoration: Threads lift and support, while fillers refine contours.

Biostimulation + Hydration: Polynucleotides and HA promote deep dermal regeneration.

Natural-Looking Results: The synergy of lifting and sculpting enhances outcomes without overcorrection.

Longevity and Patient Satisfaction: Multimodal stimulation yields sustained improvements in firmness, elasticity, and appearance.

Clinical Case Showcase

A full patient journey will be demonstrated, illustrating each phase of treatment:

Phase I - Aptos thread lifting for midface, jowls, and neck.

Phase II - NUFACE facial sculpting with hyaluronic acid biofillers and polynucleotides. The stepwise protocol, technique nuances, and results (immediate and long-term) will be presented, alongside safety, downtime, and aftercare considerations.

Conclusion

The integration of Aptos thread lifting with Prof. Khanna's NUFACE concept offers a comprehensive solution for non-surgical facial rejuvenation. This multi-layered technique addresses both gravitational descent and volumetric depletion while enhancing skin quality. The synergistic use of lifting threads, polynucleotides, and HA biofillers exemplifies the future of aesthetic medicine: regenerative, customized, and minimally invasive.

Selected References:

Do?an, M., et al. (2020). Outcomes in Thread Lift for Face, Neck, and Nose. *Journal of Cosmetic Dermatology*. [Link](#)

Pavlenko, A.A., et al. (2022). A New Complex Minimally Invasive Thread Lift Method for One-Time Three-Step Face and Neck Lifting. *PRS Global Open*. [Link](#)

Sulamanidze, S., et al. (2002). Facial Lifting with APTOS Threads. *Dermatologic Surgery*. [Link](#)

Pavlenko, A.A., et al. (2022). Contemporary View on Thread Lifting: Histological and Anatomical Considerations. *Russian Open Medical Journal*. [Link](#)

Kim, H.S., et al. (2021). Efficacy of Polynucleotide-Based Skin Rejuvenation Treatments. *Aesthetic Surgery Journal Open Forum*. [Link](#)

Sundaram, H., et al. (2015). Hyaluronic Acid Fillers: Insights into Multi-layered Facial Restoration. *Dermatologic Surgery*. [Link](#)

Wu, S.S.W., Kaminer, A.J. (2021). The Safety Profile of Thread Lifts on the Face and Neck. *JAAD*. [Link](#)

KHANNA Bob

Friday, June 27, 2025 - from 14:45 to 15:30

MULTISPECIALTY AESTHETICS #3 & INDUSTRY WORKSHOPS AGENDAS/ B

Session:

Battle of the Threads: Comparing the Best Lifting Solutions

APTOS -THE NEXT GENERATION OF OPTIMISING THREAD LIFTING FOR THE FACE AND NECK

In this presentation Prof Bob Khanna will showcase his latest approach to thread lifting for the neck, jowl and face:

Facial and neck aging is a multifactorial process influenced by skin laxity, soft tissue descent, and volume loss. Traditional surgical facelifts and neck lifts have long been the gold standard for reversing these signs of aging. However, the demand for minimally invasive procedures with minimal downtime has led to the development of innovative non-surgical techniques, such as Aptos thread lifting. Aptos threads are a revolutionary approach to skin tightening, lifting, and collagen stimulation, offering patients a non-surgical alternative to achieve facial and neck rejuvenation. This abstract explores the mechanism, benefits,

applications, and clinical effectiveness of Aptos threads in neck lifting, face rejuvenation, and skin tightening.

Mechanism of Action

Aptos threads are bioabsorbable sutures composed of polylactic acid (PLA) and polycaprolactone (PCL), which are known for their biocompatibility and collagen-stimulating properties. The threads contain barbs, cones, or spiral designs that grip the subdermal tissue, creating an immediate lifting effect. Over time, the threads stimulate fibroblast activity and neocollagenesis, leading to progressive skin tightening and improved skin texture. The dual action of mechanical lifting and biological regeneration makes Aptos threads a highly effective tool for addressing age-related skin laxity.

Applications in Neck Lifting and Tightening

The neck is one of the most challenging areas to treat due to its thin skin, lack of deep supportive structures, and susceptibility to aging-related changes. Aptos threads effectively target:

- Platysmal banding, which contributes to the appearance of an aged neck.
- Sagging skin and loss of jawline definition, by repositioning soft tissues and stimulating collagen production.
- Horizontal neck lines ("tech neck"), through improved skin elasticity and tightening effects.

By inserting threads in strategic vectors along the jawline, submental region, and lateral neck, practitioners can restore contour and definition without the need for extensive surgical intervention.

Applications in Face Rejuvenation and Tightening

Aptos threads are widely used for facial rejuvenation due to their ability to:

- Lift sagging cheeks and jowls, restoring youthful facial contours.
- Improve nasolabial folds and marionette lines, reducing deep creases and wrinkles.
- Enhance skin firmness and elasticity, through long-term collagen stimulation.
- Refine the midface and lower face, achieving a natural and harmonious appearance.

Aptos thread placement follows specific anatomical guidelines, ensuring optimal results while preserving natural facial expressions. The procedure is particularly beneficial for patients with mild to moderate skin laxity, offering a bridge between non-invasive treatments (e.g., fillers and Botox) and surgical facelifts.

Advantages of Aptos Thread Lifting

Compared to traditional facelift surgery, Aptos threads offer several advantages:

- Minimally invasive: Performed under local anesthesia with no incisions.
- Immediate results: Visible lifting effects right after the procedure.
- Progressive improvement: Collagen stimulation enhances results over time.
- Minimal downtime: Patients can resume daily activities within days.
- High safety profile: Low risk of complications when performed by skilled practitioners.

Clinical Effectiveness and Longevity

Studies have demonstrated the effectiveness of Aptos thread lifting, with sustained results lasting 12-24 months, depending on the patient's age, skin quality, and lifestyle factors. The incorporation of biostimulatory materials like PLA and PCL extends the longevity of results, making it a preferred option for patients seeking natural-looking, long-term rejuvenation.

Conclusion

Aptos thread lifting has revolutionized non-surgical facial and neck rejuvenation, offering a safe, effective, and minimally invasive solution for age-related skin laxity. By combining instant mechanical lifting with long-term collagen induction, Aptos threads provide a comprehensive approach to facial and neck tightening. As technology continues to advance, thread lifting techniques will further refine, expanding treatment possibilities and enhancing patient outcomes in aesthetic medicine. 1. Outcomes in Thread Lift for Face, Neck, and Nose: A Prospective Chart Review

Authors: M. Doğan, M. Doğan, M. Özkaya, et al.

Journal: Journal of Cosmetic Dermatology

Year: 2020

Summary: This study evaluated the surgical efficacy and outcomes of midface, mandible, neck, and nose lifting using APTOS threads in 58 patients over a one-year period. Results indicated significant improvements in facial aesthetics with high patient satisfaction and minimal complications.

Link: <https://pubmed.ncbi.nlm.nih.gov/32267994/>

2. A New Complex Minimally Invasive Thread Lift Method for One-Time Three-Step Face and Neck Lifting

Authors: A. A. Pavlenko, A. V. Pavlenko, A. A. Pavlenko Jr., et al.

Journal: Plastic and Reconstructive Surgery - Global Open

Year: 2022

Summary: This study assessed the effectiveness and safety of an innovative one-time three-step thread facelift method that provides additional support to the ligamentous structures of the face and neck. The method demonstrated high patient and expert satisfaction over a two-year follow-up period.

Link: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9142270/>

3. Facial Lifting with APTOS Threads

Authors: S. Sulamanidze, G. Paikidze, A. Sulamanidze, et al.

Journal: Dermatologic Surgery

Year: 2002

Summary: This article discusses the use of APTOS threads, which are polypropylene threads with unidirectional cogs, for

facial lifting. The technique allows for gathering of soft tissues, creating lift and volume, and is presented as a minimally invasive alternative to traditional facelift procedures.

Link: https://www.researchgate.net/publication/244890519_Facial_lifting_with_APTOS_threads

4. Outcomes in Thread Lift for Face and Neck: A Study Performed with Happy Lift™ Revitalizing

Authors: M. Doğan, M. Doğan, M. Özkaya, et al.

Journal: Journal of Cosmetic Dermatology

Year: 2017

Summary: This study evaluated the outcomes of facial and neck thread lifting using Happy Lift™ Revitalizing threads in 148 patients. The results demonstrated high levels of patient satisfaction and significant aesthetic improvements, with minimal adverse effects reported.

Link: <https://onlinelibrary.wiley.com/doi/abs/10.1111/jocd.12745>

5. Thread-Lift for Facial Rejuvenation: Assessment of Long-Term Results

Authors: G. Abraham, S. Sundaram

Journal: Archives of Facial Plastic Surgery

Year: 2007

Summary: This study critically analyzes the thread-lift procedure, which has been popularized for brow, midface, jowl, and neck lifting. The authors assess the long-term results and efficacy of the procedure, providing insights into patient selection and expected outcomes.

Link: https://jamanetwork.com/journals/jama/articlepdf/407369/qua80040_178_183.pdf

6. Contemporary View on Thread Lifting: Histological and Anatomical Considerations and the Need for a Comprehensive Evaluation

Authors: A. A. Pavlenko, A. V. Pavlenko, A. A. Pavlenko Jr., et al.

Journal: Russian Open Medical Journal

Year: 2022

Summary: This article provides a contemporary overview of thread lifting procedures, including histological and anatomical considerations. The authors emphasize the importance of comprehensive evaluation and technique refinement to enhance clinical outcomes.

Link: <https://romj.org/2022-0107>

7. Outcomes in Thread Lift for Face, Neck, and Nose: A Prospective Chart Review

Authors: M. Doğan, M. Doğan, M. Özkaya, et al.

Journal: Journal of Cosmetic Dermatology

Year: 2019

Summary: This prospective study evaluated the efficacy and outcomes of APTOS thread lifting in the midface, mandible, neck, and nose regions. The findings demonstrated that APTOS thread lifting is effective, safe, and cosmetically acceptable, with minor complications.

Link: <https://onlinelibrary.wiley.com/doi/10.1111/jocd.13397>

8. The Safety Profile of Thread Lifts on the Face and Neck

Authors: S. S. W. Wu, A. J. Kaminer

Journal: Journal of the American Academy of Dermatology

Year: 2021

Summary: This study examines the safety profile of thread lifts using PDO, PLA, or PCA threads on the face and neck. The majority of adverse effects were self-resolving, while more serious, rare cases subsided with appropriate treatment.

Link: <https://www.jaad.org/article/S0190-9622%2821%2901548-6/fulltext>

9. Thread-Lift for Facial Rejuvenation: Assessment of Long-Term Results

Authors: G. Abraham, S. Sundaram

Journal: Archives of Facial Plastic Surgery

Year: 2007

Summary: This study critically analyzes the thread-lift procedure, which has been popularized for brow, midface, jowl, and neck lifting. The authors assess the long-term results and efficacy of the procedure, providing insights into patient selection and expected outcomes.

Link: https://jamanetwork.com/journals/jama/articlepdf/407369/qua80040_178_183.pdf

10. **Contemporary View on Thread Lifting: Histological and Anatomical

LAIN Ted

Friday, June 27, 2025 - from 11:00 to 13:00

MULTISPECIALTY AESTHETICS AGENDA #2/ E

Session:

Cosmeceuticals Masterclass - Session Science of Skin Care Summit

CLEAR SKIN AT THE SPEED OF LIGHT: MAXIMIZE YOUR LASER RESULTS WITH SMART SKINCARE (SPONSORED BY SCITON)

Integrated skincare, or utilizing a personalized regimen both before and after a laser procedure in order to maximize results and minimize downtime, has benefited from incredible innovation over the last few years. This presentation will present both the seminal data of this burgeoning field as well as the latest, most cutting-edge research. We will culminate with a recently published algorithm to help focus attention on pre-, peri-, and post-procedural timeframes.

LAND Steven

Friday, June 27, 2025 - from 11:00 to 13:00

**MULTISPECIALTY AESTHETICS
AGENDA #1/ A**

Session:

Science of Regeneration Longevity

THE ROLE OF NAD+ IN AESTHETIC MEDICINE

NAD+ has become a buzz term in aesthetic medicine and anti-ageing in general, but how does it actually fit into our field and how does it benefit our patients

LANGDON Selenia

Thursday, June 26, 2025 - from 16:00 to 17:30

**MULTISPECIALTY AESTHETICS
AGENDA #2/ E**

Session:

Navigating Complications

THE USE OF RECOMBINANT ENZYMES IN THE MANAGEMENT OF DELAYED-TYPE GRANULOMA REACTION TO NON-HYALURONIC ACID POLYCAPROLACTONE (PCL) DERMAL FILLER

Author/presenter: Dr Selenia Langdon; Aesthetic Physician; UK

Category: Non/minimally invasive approaches - Complications & management

Title: The use of recombinant enzymes in the management of delayed-type granuloma reaction to non-hyaluronic acid polycaprolactone (PCL) dermal filler.

Background:

Polycaprolactone (PCL)-based dermal fillers are a group of injectable gel implants that work as collagen stimulators and have shown acceptable safety as well as satisfactory immediate and long-term results. They induce neocollagenesis through a subclinical inflammatory reaction providing an immediate filling effect in the target tissue.

PCL dermal fillers are biodegradable, biocompatible and resorbable substances which have been well-received because of their claims of long-lasting results. However, as with other collagen stimulators such as PLLA (poly-L lactic acid) and CaHA (calcium hydroxyapatite), their main drawback is that they do not respond to traditional treatments when managing complications such as those used to remove hyaluronic acid-based injectables. Complications including granulomas and nodules have been reported as rare adverse events secondary to treatment with PCL.

Here I describe a delayed granuloma reaction across the midface and jawline in a 59-year-old female 27 months after the application of PCL, following the COVID-19 vaccination and its resolution with the use of recombinant enzymes, namely collagenase. The product the patient had previously been treated with consisted of PCL microspheres and carboxymethyl cellulose (CMC) as a carrier gel, designed to have up to 2 years longevity.

Following presentation, ultrasound and diagnostic biopsy confirmed the presence of multiple non-infectious soft tissue granulomas within all injection areas, that did not respond to intralesional steroid and 5-Fluorouracil injections, as well as systemic therapy with oral steroids and methotrexate. Successful resolution of the adverse reaction was finally achieved with the use of injectable recombinant enzymes that combine collagenase, lipase and lyase. A very satisfactory outcome was achieved with no recurrence.

Summary:

Recombinant enzymes containing collagenase can effectively and safely be used in the management of patients presenting with nodules or granulomas secondary to the use of non-hyaluronic acid dermal fillers such as PCL. For those experiencing complications with injectables like PCL, PLLA and CaHA, this method now offers a suitable and impactful option if other treatment modalities have failed. The use of collagenase could also ultimately aid in avoiding the need for invasive surgical management in complex treatment resistant granulomas.

LAUC Gordan

Friday, June 27, 2025 - from 11:00 to 13:00

**MULTISPECIALTY AESTHETICS
AGENDA #1/ A**

Session:

Science of Regeneration Longevity

GLYCANS - A BREAKTHROUGH IN PERSONALIZED HEALTH AND AGING BIOMARKERS

Glycans are the ultimate layer of molecular complexity generated by modifying proteins with chemical structures that integrate

genetic, epigenetic, and environmental information. Hundreds of genes are involved in the complex pathway of glycan biosynthesis and glycome composition is significantly heritable as a complex trait. Alternative glycosylation (attaching different glycans to the same glycosylation site on a protein) modulates protein function and in this way actively participates in the transition from health to disease. By analysing over 200,000 individuals we demonstrated that glycans have significant biomarker potential in predicting different age-related diseases, but also in monitoring pharmacological and lifestyle interventions aimed at decreasing the disease risk.

MAMALI Konstantina

Thursday, June 26, 2025 - from 09:00 to 10:30

MULTISPECIALTY AESTHETICS AGENDA #1/ A

Session:

Needle Free and Minimally Invasive Procedures for Face Body

COMBINATION TREATMENT PROTOCOL OF RADIOFREQUENCY MICRONEEDLING (RFMN) AND POLYNUCLEOTIDES SHOWS SUCCESSFUL RESULTS FOR THE PERIORBITAL REJUVENATION

Background/Objectives:

The periorbital area often requires a combination of treatments in order to achieve successful and long-lasting results. Besides skin laxity and wrinkles, dark circles and loss of volume may co-exist. Traditional treatments, including fillers, neurotoxins, and energy-based devices, often show unsatisfactory results. PDRN have increasingly gained prominence in aesthetic medicine globally due to their high biocompatibility and natural origin. In our trial, we tested a combination treatment of PDRN and RFMN, which showed synergistic effects in addressing the hallmarks of skin aging in the sensitive periorbital region.

Methods:

We conducted a clinical trial with thirty-two individuals (mean age 49 years, Fitzpatrick skin types I-IV, 28 female/4 male) suffering from signs of aging in the periorbital area. Subjects were treated with a combination protocol, which consisted of RFMN using non-insulated needles (penetration depth of 0.25-1mm, power level 5, 2passes) followed by PDRN, derived from trout, injected as mesotherapy (2ml). Three sessions were performed at 4-week intervals. Follow-up visits were scheduled on Days 30, 60, and 180 post treatment. Outcomes were assessed using a standardized 3-dimensional skin imaging analyzer and validated with clinical scales by both dermatologists and patients.

Results:

At all evaluation time points, the results showed a mean reduction in the perceived aging level of 3.8 years (range: 2-5 years), accompanied by improvement in skin firmness (7.5/10), horizontal lines under eyes (6.5/10) and crow's feet wrinkles (8/10). Hyperpigmentation signs as well as dark circles at tear trough subsided slightly over the trial period (6/10). Both physicians and patients rated the clinical outcome as highly improved (8/10). No relapse of skin disorders was reported during the six-month observation period. Apart from slight swelling and bruising, no serious side effects were observed.

Conclusions:

Our study highlighted the potential of PDRN and RFMN as suitable and effective treatments for skin rejuvenation of the periorbital area, showing significant improvement in skin quality, color, elasticity and the appearance of wrinkles with a low-risk profile and minimal adverse effects. This combined protocol offers a valuable addition to the armamentarium of non-invasive anti-aging treatments. Further research with extended follow-up is necessary to evaluate the sustainability of the outcomes achieved.

MANN Paula

Friday, June 27, 2025 - from 16:00 to 17:30

ADVANCED INJECTABLES AGENDA/ AUDITORIUM

Session:

Injectable Biostimulation in Aesthetic Medicine

UNLOCKING POTENTIAL BY DILUTING AND MIXING PRODUCTS

Maximising results in practice for skin regeneration using either diluted or blended products. We explore the possibilities and practical aspects of creating hybrid injectables such as Calcium hydroxyapatite, Hyaluronic acid and Glycerol and Botulinum toxin. With a focus on the lower face and neck. This combined therapy can improve the final outcome with increased ease of procedure for patient and practitioner.

MIAN Irfan

Friday, June 27, 2025 - from 11:00 to 13:00

MULTISPECIALTY AESTHETICS AGENDA #1/ A

Session:
Science of Regeneration Longevity

OZONE THERAPY

Ozone Therapy can be used in Aesthetic and Wellness Clinics to improve longevity and for pain relief. Aesthetic Medical Ozone can also be used for skin conditions, like acne and for hair growth. This short presentation will give delegates an introduction to Medical Ozone Therapy.

MIAN Irfan
Friday, June 27, 2025 - from 14:45 to 15:30

**MULTISPECIALTY AESTHETICS
#3 & INDUSTRY WORKSHOPS
AGENDAS/ B**

Session:
Battle of the Threads: Comparing the Best Lifting Solutions

CROMA

Face and body lifting threads can be made of different materials, the main one in use being PDO (Polydioxanone). The relative merits of these products will be discussed in order for Medical Aesthetic Practitioners to make an informed choice.

PASZKO Katarzyna
Friday, June 27, 2025 - from 16:00 to 17:30

**MULTISPECIALTY AESTHETICS
#3 & INDUSTRY WORKSHOPS
AGENDAS/ B**

Session:
Hybrid Fillers: A New Era in Aesthetic Treatments

AUTOLOGOUS TISSUE REFILLER IN FULL FACE VOLUMETRY

The Autologous Tissue Refiller (ATR) is an innovative tissue engineering product which allows to fill patient's face with autologous material. Autologous filler prevents the possibility of allergies or rejection of the material by the patient's body. The advantage of this product is not only its naturalness but also the amount of material obtained. During the process of preparation of the material we receive around 10 ml of filler which allows the operator to perform "full face" volumetry procedure - effective treatment of each face area. You can sculpt cheeks, define the jawline, revitalize the infraorbital area, fill wrinkles.

The filler can be combined with highly concentrated C-PRP with 300% platelet concentration obtaining a product enriched with the possibility of tissue stimulation.

The material preparation procedure consists of blood collection from the patient, spinning blood samples in collection tubes at appropriate speed in separation centrifuge, collection of platelet-rich plasma, thermal processing of the proteins, then cooling them down and in the end determining the density of the material. The ATR protein material after the thermal processing becomes a filling composite. Production of an autologous filler is only possible by means of special equipment - a centrifuge and a coagulator.

The material obtained in the coagulation process is a stiff material called „Hard". By mechanical processing its particles, we can obtain lower material densities - „Medium" and "Soft".

The Autologous Tissue Filler gives a volume effect that lasts for about 3-4 months. Extending the effects of the therapy is possible if we perform a series of treatments.

RAYMOND Isabelle
Thursday, June 26, 2025 - from 09:00 to 10:30

**MULTISPECIALTY AESTHETICS
AGENDA #2/ E**

Session:
Non-Invasive Treatments for Hair Loss

IS NUTRITION IMPORTANT FOR HAIR?

Hair loss and thinning is a complex multi-factorial condition involving a plethora of factors and signaling pathways. Androgens, genetic susceptibility, chronic inflammation, oxidative stress, internal and external environmental triggers such as ultraviolet light, pollutants, aging, poor nutrition, as well as mediators of psycho-emotional stress all contribute to dysregulation of complex follicle biology. These intrinsic and extrinsic factors can disrupt the hair follicle's regulatory mechanisms that can ultimately override the hair follicle's internal controls. Restoring hair follicles to a state of homeostasis requires embracing a

new outlook in terms of therapeutics.

Current pharmaceutical interventions often have limited success, focusing on single targets without considering the downstream effectors or the underlying pathophysiology of deregulated immune signaling and activated pro-inflammatory cascades. This lecture will focus on nutrition and how it can directly and indirectly affect hair growth and how multi-targeting therapeutic approaches that address not only androgens but also inflammation, oxidative stress, gut microbiome and nutrition. Multi-targeted therapies are increasingly recognized for their role as either standalone treatments or in combination with traditional hair loss protocols.

REDAELLI Alessio

Thursday, June 26, 2025 - from 11:00 to 13:00

**ADVANCED INJECTABLES
AGENDA/ AUDITORIUM**

Session:

Advances in Regenerative Aesthetics

SIGNALIZING MOLECULES FOR SKIN REJUVENATION

Signaling molecules such as peptides, growth factors, and cytokines have emerged as key bioactive agents in topical formulations for cosmetic and medical applications. These molecules play a critical role in modulating cellular communication, promoting tissue repair, enhancing collagen synthesis, and reducing inflammation. Incorporating them into creams offers a non-invasive strategy to support skin rejuvenation, wound healing, and barrier function. However, challenges such as molecular stability, skin penetration, and controlled delivery remain significant hurdles. This work explores the types and mechanisms of signaling molecules commonly used in dermatological creams, evaluates current formulation strategies to enhance their efficacy, and discusses their therapeutic potential in clinical and aesthetic dermatology.

REDAELLI Alessio

Friday, June 27, 2025 - from 11:00 to 13:00

**ADVANCED INJECTABLES
AGENDA/ AUDITORIUM**

Session:

Toxins in Focus

MY APPROACH WITH BTX: OFF-LABEL USES

Botulinum toxin A is a well known drug that have been used for many years. It's use off label, not supported by any company, belongs to the personal experience of any injector. Every day a new use of BoNTa appears in congresses, sometimes without an acceptable background. In this presentation the Author, a pioneer in the use of BoNTa for aestheticl uses, explains his way to use it of label:

for mid inferior face

for meso-Bonta

for few particular functional problems

Units and injection points will be explained.

REDAELLI Alessio

Friday, June 27, 2025 - from 16:00 to 17:30

**MULTISPECIALTY AESTHETICS
#3 & INDUSTRY WORKSHOPS
AGENDAS/ B**

Session:

Hybrid Fillers: A New Era in Aesthetic Treatments

HYBRID FILLERS: MY EXPERIENCE

The use of different fillers should be related to the particular type of skin and aging you are facing. Over this every filler can present some particular problems during its use, enhanced by perfect or wrong technique. Ha, PLLA, CaHa and all others have pros and cons that must be known. In the last 3-4 hears appeared on the market the so called Hybrid fillers that use 2 different materials already mixed in une single vial. These materials have a synergic action that can be af interest for aesthetic doctors. The Author explains his experience in the use of hybrid fillers: preparation, indications and dangers

SALMEN Olivia

Friday, June 27, 2025 - from 11:00 to 13:00

**ADVANCED INJECTABLES
AGENDA/ AUDITORIUM**

Session:
Toxins in Focus

DAXIBOTULINUMTOXINA

In this lecture, Olivia Salmen will educate on the key differences seen with daxibotulinumtoxinA compared to other neurotoxins in regards to clinical effect, longevity, effects on the skin, spread of effect, patient satisfaction, and the effect of the peptide formulation RTP004 that sets daxibotulinumtoxinA apart. RTP004 better stabilizes the botulinumtoxinA molecule giving it a better affinity for receptor attachment, which is responsible for the differences we see in onset and longevity. We have so many options for neurotoxin on the market that we have the power to choose what we think is best for our patients based on the science and differences between these products. Olivia Salmen has been injecting daxibotulinumtoxinA in the United States since 2022 and served on Revance's prelude trial team before the launch of daxibotulinumtoxinA as well as their advisory board during the roll out of the neurotoxin.

SCHENCK Thilo

Thursday, June 26, 2025 - from 14:00 to 15:30

ADVANCED INJECTABLES AGENDA/ AUDITORIUM

Session:
Nose and Tear Through

SAFE AND EFFICIENT TREATMENT OF THE NOSE TEAR THROUGH WITH DERMAL FILLERS

Treatments of the nose with hyaluronic acid, also known as liquid rhinoplasties are constantly gaining popularity. They have become a tempting alternative to surgical nose corrections which are known to have a long learning curve. Compared to surgery, the correction of the nose by fillers is regarded as easy but is known to be a procedure with the risk of severe complications. Reports of blindness and tissue necrosis raise the question for recommendations on how to treat the nose safe and efficiently. Treatment of the tear trough is far more frequently performed but is still regarded as a challenging region.

The contribution will start with an overview on the injection-relevant anatomy of the nose and tear trough including images from anatomic dissections. Next, a summary will be presented, on what we know on how to avoid complications when treating these areas, such as avoiding large volume injections, treating in the right plane, respect the vascular anatomy and choosing the right material. A short discussion on the use of canula and needle will be included.

The practical, part of this talk will dive into patient assessment and planning of the treatment. Cases will illustrate how to analyze the individual patient and how to develop a tailored treatment plan respecting patients' demands and the possibilities of the technique.

Special emphasis will be given on the aesthetic dynamics of nose corrections and the limits of volume that should be respected for the tear trough. The presented cases will demonstrate how precisely placed small volumes can lead to good aesthetic outcomes while reducing the risks of complications. Also a case of a severe complication of a filler injection to the nose and the management of the complication will be presented.

The aim of the talk is to show the safest possible way to treat the nose and tear trough efficiently with hyaluronic acid.

Lit: Josipovic LN, Sattler S, Schenck TL, Sattler G. Five-point liquid rhinoplasty: Results from a retrospective analysis of a novel standardized technique and considerations on safety. J Cosmet Dermatol. 2022 Nov;21(11):5614-5620

SCHENCK Thilo

Thursday, June 26, 2025 - from 16:00 to 17:30

ADVANCED INJECTABLES AGENDA/ AUDITORIUM

Session:
Aesthetic Approach to Perioral Area

ANATOMICAL CONSIDERATIONS FOR LIPS TREATMENT

Background: Lips are considered a key element of facial attractiveness and lip injections are among the most frequently performed aesthetic treatments.

Methods: Using anatomic dissections and sonography the 3-dimensional pathway of the superior and inferior labial arteries within the lips were measured and described to increase safety during labial soft tissue filler injections.

Results: The position of the labial arteries within the lips, depth of the arteries, cranio-caudal location of each artery in relation to the vermillion border, and diameter of the superior/inferior labial arteries were recorded.

The most frequent location of both the superior and inferior labial arteries was the submucosal plane (58.5%) followed by intramuscular (36.2%) and subcutaneous (5.3%) planes. The depth of the superior labial artery in the upper lip was 5.6 ± 0.13 mm, whereas the depth of the inferior labial artery in the lower lip was 5.2 ± 0.14 mm. Both arteries were more frequently located within the red lip: upper lip (83% vs 18.7%) and lower lip (86.2% vs 13.8%). In the midline, the artery coursed within the red lip in all investigated volunteers.

Conclusions: Clinically, results of this study favor a superficial injection plane for lip volumization procedures. A superficial approach to the lip might increase safety because the artery is located most frequently in the depth. Due to the more likely location within the red part of the lip, injections outside the red lip, can also be regarded as safer than within the red lip.

Lit: Anatomy of the Superior and Inferior Labial Arteries Revised: An Ultrasound Investigation and Implication for Lip Volumization. Aesthet Surg J. 2020 Nov 19 Sebastian Cotofana, Michael Alfertshofer, Thilo L Schenck, (...) Konstantin Frank

SCHENCK Thilo

Thursday, June 26, 2025 - from 16:00 to 17:30

MULTISPECIALTY AESTHETICS AGENDA #2/ E

Session:
Navigating Complications

DANGER ZONES AND DANGER LAYERS

Background:

Injection treatments with dermal fillers are among the most common aesthetic treatments. However, they are still associated with risks, such as vascular occlusion and blindness. Accurate knowledge of the facial anatomy can contribute to safer treatments and also more aesthetically pleasing results.

Methodology:

Based on the current literature and our own publications, an overview of the anatomy and biomechanics of the facial layers and vasculature will be given. Images and videos of dissections are demonstrated for illustrative purposes.

Results:

There will never be a facial injection without any risk at all. Anyhow, understanding the systematic of the facial layers and distribution of vessels will allow the well-trained injector to identify safer injection techniques for every facial region.

Discussion:

Conclusions from anatomical studies can be transferred to individual patients only to a limited extent, due to high inter-individual differences. Nevertheless, some general recommendations for injections with hyaluronic acid can be derived. Due to the current data situation, the warning against hyaluronic acid injections in some parts such as the glabella area must be maintained.

SOFRA Xanya

Thursday, June 26, 2025 - from 11:00 to 13:00

ADVANCED INJECTABLES AGENDA/ AUDITORIUM

Session:
Advances in Regenerative Aesthetics

WHY NOBEL WINNING STUDIES FOCUS ON MOLECULAR MECHANISMS FOR SKIN REPAIR?

In the past 15 years, Nobel-winning research has demonstrated how molecular mechanisms can reverse the course of skin disorders, enhance skin health and delay aging. Going back in time as whole entities is impossible. However, a detailed scrutiny of molecular mechanisms indicates that in the quantum world of cellular communications, molecular mechanisms go forward and backward in time, routinely. We looked at 296 articles related to new discoveries on how molecular mechanisms control both age delay and the reversal and treatment of several skin disorders.

The Nobel Prize in Physiology or Medicine 2018 was awarded for discovering how to inhibit negative immune regulation. In several patients, signs of melanoma disappeared by blocking the CTLA-4 that disengages the T-cell brake allowing the immune system to attack melanoma cells relentlessly. Blocking the PD-1, another protein expressed on the surface of T-cells, has helped treat several cancers including renal, lymphoma, and melanoma.

The Nobel Prize in Physiology or Medicine 2017 was awarded the discovery that molecular mechanisms control the circadian rhythm, via two proteins. The two proteins, TIM (timeless) and PER (period). Disturbance in molecular circadian rhythms can cause premature aging as well as several skin conditions including psoriasis.

The Nobel Prize in Physiology or Medicine 2013 was awarded for the discovery of biological machinery regulating vesicle traffic, a major transport system in our cells. Cells with defective transport machinery, give rise to a situation resembling a poorly planned public transport system which ultimately speeds up aging and the formation of skin disorders which extend to neurological and immunological disorders, including diabetes.

The plethora of new research focusing on molecular mechanisms composes a dynamic process of a matrix of signalling controls processes, delivered at specific times. It's an elegant, almost symphonic interaction of cellular circadian clocks, the time dimension intertwined with the multi-dimensional intra- and intercellular signalling network. Identifying and reproducing signalling processes necessary to sustain health and the discrete intervals in which they have to be delivered is the ultimate goal of the new advances in molecular harmony.

In conclusion, time reversal is only possible with molecular mechanisms

Some of the central molecular mechanisms involved in skin health are discussed

This presentation explores the research on molecular mechanisms associated with safeguarding skin health to answer the question of whether ageing can be reversed at the molecular level.

Ishida, Y., Agata, Y., Shibahara, K., & Honjo, T. (1992). Induced expression of PD-1, a novel member of the immunoglobulin gene superfamily, upon programmed cell death. *EMBO J.*, 11(11), 3887-3895.

Leach, D. R., Krummel, M. F., & Allison, J. P. (1996). Enhancement of antitumor immunity by CTLA-4 blockade. *Science*, 271(5256), 1734-1736.

Kwon, E. D., Hurwitz, A. A., Foster, B. A., Madias, C., Feldhaus, A. L., Greenberg, N. M., Burg, M.B. & Allison, J.P. (1997). Manipulation of T cell costimulatory and inhibitory signals for immunotherapy of prostate cancer. *Proc Natl Acad Sci USA*, 94(15), 8099-8103.

Nishimura, H., Nose, M., Hiai, H., Minato, N., & Honjo, T. (1999). Development of Lupus-like Autoimmune Diseases by Disruption of the PD-1 gene encoding an ITIM motif-carrying immunoreceptor. *Immunity*, 11, 141-151.

Freeman, G.J., Long, A.J., Iwai, Y., Bourque, K., Chernova, T., Nishimura, H., Fitz, L.J., Malenkovich, N., Okazaki, T., Byrne, M.C., Horton, H.F., Fouser, L., Carter, L., Ling, V., Bowman, M.R., Carreno, B.M., Collins, M., Wood, C.R. & Honjo, T. (2000). Engagement of the PD-1 immunoinhibitory receptor by a novel B7 family member leads to negative regulation of lymphocyte activation. *J Exp Med*, 192(7), 1027-1034.

Hodi, F.S., Mihm, M.C., Soiffer, R.J., Haluska, F.G., Butler, M., Seiden, M.V., Davis, T., Henry-Spires, R., MacRae, S., Willman, A., Padera, R., Jaklitsch, M.T., Shankar, S., Chen, T.C., Korman, A., Allison, J.P. & Dranoff, G. (2003). Biologic activity of cytotoxic T lymphocyte-associated antigen 4 antibody blockade in previously vaccinated metastatic melanoma and ovarian carcinoma patients. *Proc Natl Acad Sci USA*, 100(8), 4712-4717.

Iwai, Y., Terawaki, S., & Honjo, T. (2005). PD-1 blockade inhibits hematogenous spread of poorly immunogenic tumor cells by enhanced recruitment of effector T cells. *Int Immunol*, 17(2), 133-144.

Ehring, W.A., Wheeler, D.A., Reddy, P., Konopka, R.J., Kyriacou, C.P., Rosbash, M., and Hall, J.C. (1984). P-element transformation with period locus DNA restores rhythmicity to mutant, arrhythmic *Drosophila melanogaster*. *Cell* 39, 369-376.

Bargiello, T.A., Jackson, F.R., and Young, M.W. (1984). Restoration of circadian behavioural rhythms by gene transfer in *Drosophila*. *Nature* 312, 752-754.

Siwicki, K.K., Eastman, C., Petersen, G., Rosbash, M., and Hall, J.C. (1988). Antibodies to the period gene product of *Drosophila* reveal diverse tissue distribution and rhythmic changes in the visual system. *Neuron* 1, 141-150.

Hardin, P.E., Hall, J.C., and Rosbash, M. (1990). Feedback of the *Drosophila* period gene product on circadian cycling of its messenger RNA levels. *Nature* 343, 536-540.

Liu, X., Zwiebel, L.J., Hinton, D., Benzer, S., Hall, J.C., and Rosbash, M. (1992). The period gene encodes a predominantly nuclear protein in adult *Drosophila*. *J Neurosci* 12, 2735-2744.

Vosshall, L.B., Price, J.L., Sehgal, A., Saez, L., and Young, M.W. (1994). Block in nuclear localization of period protein by a second clock mutation, timeless. *Science* 263, 1606-1609.

Price, J.L., Blau, J., Rothenfluh, A., Abodeely, M., Kloss, B., and Young, M.W. (1998). double-time is a novel *Drosophila* clock gene that regulates PERIOD protein accumulation. *Cell* 94, 83-95.

Novick P, Schekman R: Secretion and cell-surface growth are blocked in a temperature-sensitive mutant of *Saccharomyces cerevisiae*. *Proc Natl Acad Sci USA* 1979; 76:1858-1862.

Balch WE, Dunphy WG, Braell WA, Rothman JE: Reconstitution of the transport of protein between successive compartments of the Golgi measured by the coupled incorporation of N-acetylglucosamine. *Cell* 1984; 39:405-416.

Kaiser CA, Schekman R: Distinct sets of SEC genes govern transport vesicle formation and fusion early in the secretory pathway. *Cell* 1990; 61:723-733.

Perin MS, Fried VA, Mignery GA, Jahn R, Südhof TC: Phospholipid binding by a synaptic vesicle protein homologous to the regulatory region of protein kinase C. *Nature* 1990; 345:260-263.

Sollner T, Whiteheart W, Brunner M, Erdjument-Bromage H, Geromanos S, Tempst P, Rothman JE: SNAP receptor implicated in vesicle targeting and fusion. *Nature* 1993; 362:318-324.

Hata Y, Slaughter CA, Südhof TC: Synaptic vesicle fusion complex contains unc-18 homologue bound to syntaxin. *Nature* 1993; 366:347-351.

- Wegener AM, Letourneur F, Hoeveler A, Brocker T, Luton F, Malissen B. The T cell receptor/CD3 complex is composed of at least two autonomous transduction modules. *Cell*. 1992 Jan 10;68(1):83-95. [PubMed] [Google Scholar]

- Williams AF, Barclay AN. The immunoglobulin superfamily--domains for cell surface recognition. *Annu Rev Immunol*. 1988;6:381-405. [PubMed] [Google Scholar]

- Yonehara S, Ishii A, Yonehara M. A cell-killing monoclonal antibody (anti-Fas) to a cell surface antigen co-downregulated with the receptor of tumor necrosis factor. *J Exp Med*. 1989 May 1;169(5):1747-1756. [PMC free article] [PubMed] [Google Scholar]

- Allen RD, Marshall JD, Roths JB, Sidman CL. Differences defined by bone marrow transplantation suggest that *lpr* and *gld* are mutations of genes encoding an interacting pair of molecules. *J Exp Med*. 1990 Nov 1;172(5):1367-1375. [PMC free article] [PubMed] [Google Scholar]

- Ashwell JD, Cunningham RE, Noguchi PD, Hernandez D. Cell growth cycle block of T cell hybridomas upon activation with antigen. *J Exp Med*. 1987 Jan 1;165(1):173-194. [PMC free article] [PubMed] [Google Scholar]

- Benhamou LE, Cazenave PA, Sarthou P. Anti-immunoglobulins induce death by apoptosis in WEHI-231 B lymphoma cells. *Eur J Immunol*. 1990 Jun;20(6):1405-1407. [PubMed] [Google Scholar]

- Britten RJ, Graham DE, Neufeld BR. Analysis of repeating DNA sequences by reassociation. *Methods Enzymol*. 1974;29:363-418. [PubMed] [Google Scholar]

- Cohen JJ, Duke RC. Glucocorticoid activation of a calcium-dependent endonuclease in thymocyte nuclei leads to cell death. *J Immunol*. 1984 Jan;132(1):38-42. [PubMed] [Google Scholar]

- Cohen PL, Eisenberg RA. *lpr* and *gld*: single gene models of systemic autoimmunity and lymphoproliferative disease. *Annu Rev Immunol*. 1991;9:243-269. [PubMed] [Google Scholar]

- Ellis RE, Yuan JY, Horvitz HR. Mechanisms and functions of cell death. *Annu Rev Cell Biol*. 1991;7:663-698. [PubMed]

[Google Scholar]

- Gillis S, Smith KA. Long term culture of tumour-specific cytotoxic T cells. *Nature*. 1977 Jul 14;268(5616):154-156.[PubMed] [Google Scholar]
- Golstein P, Ojcius DM, Young JD. Cell death mechanisms and the immune system. *Immunol Rev*. 1991 Jun;121:29-65.[PubMed] [Google Scholar]
- Hasbold J, Klaus GG. Anti-immunoglobulin antibodies induce apoptosis in immature B cell lymphomas. *Eur J Immunol*. 1990 Aug;20(8):1685-1690. [PubMed] [Google Scholar]
- Itoh N, Yonehara S, Ishii A, Yonehara M, Mizushima S, Sameshima M, Hase A, Seto Y, Nagata S. The polypeptide encoded by the cDNA for human cell surface antigen Fas can mediate apoptosis. *Cell*. 1991 Jul 26;66(2):233-243.[PubMed] [Google Scholar]
- Karasuyama H, Melchers F. Establishment of mouse cell lines which constitutively secrete large quantities of interleukin 2, 3, 4 or 5, using modified cDNA expression vectors. *Eur J Immunol*. 1988 Jan;18(1):97-104. [PubMed] [Google Scholar]
- Kinashi T, Inaba K, Tsubata T, Tashiro K, Palacios R, Honjo T. Differentiation of an interleukin 3-dependent precursor B-cell clone into immunoglobulin-producing cells in vitro. *Proc Natl Acad Sci U S A*. 1988 Jun;85(12):4473-4477. [PMC free article] [PubMed] [Google Scholar]
- Lanier LL, Warner NL. Cell cycle related heterogeneity of Ia antigen expression on a murine B lymphoma cell line:analysis by flow cytometry. *J Immunol*. 1981 Feb;126(2):626-631. [PubMed] [Google Scholar]
- Leo O, Foo M, Sachs DH, Samelson LE, Bluestone JA. Identification of a monoclonal antibody specific for a murine T3 polypeptide. *Proc Natl Acad Sci U S A*. 1987 Mar;84(5):1374-1378. [PMC free article] [PubMed] [Google Scholar]
- Letourneur F, Klausner RD. Activation of T cells by a tyrosine kinase activation domain in the cytoplasmic tail of CD3 epsilon. *Science*. 1992 Jan 3;255(5040):79-82. [PubMed] [Google Scholar]
- MacDonald HR, Lees RK. Programmed death of autoreactive thymocytes. *Nature*. 1990 Feb 15;343(6259):642-644. [PubMed] [Google Scholar]
- Martin DP, Schmidt RE, DiStefano PS, Lowry OH, Carter JG, Johnson EM., Jr Inhibitors of protein synthesis and RNA synthesis prevent neuronal death caused by nerve growth factor deprivation. *J Cell Biol*. 1988 Mar;106(3):829-844. [PMC free article] [PubMed] [Google Scholar]
- Nuñez G, London L, Hockenbery D, Alexander M, McKearn JP, Korsmeyer SJ. Deregulated Bcl-2 gene expression selectively prolongs survival of growth factor-deprived hemopoietic cell lines. *J Immunol*. 1990 May 1;144(9):3602-3610.[PubMed] [Google Scholar]
- Oppenheim RW. Cell death during development of the nervous system. *Annu Rev Neurosci*. 1991;14:453-501. [PubMed] [Google Scholar]
- Oppenheim RW, Prevette D, Tytell M, Homma S. Naturally occurring and induced neuronal death in the chick embryo in vivo requires protein and RNA synthesis: evidence for the role of cell death genes. *Dev Biol*. 1990 Mar;138(1):104-113.[PubMed] [Google Scholar]
- Palacios R, Karasuyama H, Rolink A. Ly1+ PRO-B lymphocyte clones. Phenotype, growth requirements and differentiation in vitro and in vivo. *EMBO J*. 1987 Dec 1;6(12):3687-3693. [PMC free article] [PubMed] [Google Scholar]
- Reth M. Antigen receptor tail clue. *Nature*. 1989 Mar 30;338(6214):383-384. [PubMed] [Google Scholar]
- Romeo C, Amiot M, Seed B. Sequence requirements for induction of cytolysis by the T cell antigen/Fc receptor zeta chain. *Cell*. 1992 Mar 6;68(5):889-897. [PubMed] [Google Scholar]
- Rubin BY, Smith LJ, Hellermann GR, Lunn RM, Richardson NK, Anderson SL. Correlation between the anticellular and DNA fragmenting activities of tumor necrosis factor. *Cancer Res*. 1988 Nov 1;48(21):6006-6010. [PubMed] [Google Scholar]
- Sanger F, Nicklen S, Coulson AR. DNA sequencing with chain-terminating inhibitors. *Proc Natl Acad Sci U S A*. 1977 Dec;74(12):5463-5467. [PMC free article] [PubMed] [Google Scholar]
- Schwartz LM, Kosz L, Kay BK. Gene activation is required for developmentally programmed cell death. *Proc Natl Acad Sci U S A*. 1990 Sep;87(17):6594-6598. [PMC free article] [PubMed] [Google Scholar]
- Sentman CL, Shutter JR, Hockenbery D, Kanagawa O, Korsmeyer SJ. bcl-2 inhibits multiple forms of apoptosis but not negative selection in thymocytes. *Cell*. 1991 Nov 29;67(5):879-888. [PubMed] [Google Scholar]
- Shi YF, Sahai BM, Green DR. Cyclosporin A inhibits activation-induced cell death in T-cell hybridomas and thymocytes. *Nature*. 1989 Jun 22;339(6226):625-626. [PubMed] [Google Scholar]
- Smith CA, Williams GT, Kingston R, Jenkinson EJ, Owen JJ. Antibodies to CD3/T-cell receptor complex induce death by apoptosis in immature T cells in thymic cultures. *Nature*. 1989 Jan 12;337(6203):181-184. [PubMed] [Google Scholar]
- Strasser A, Harris AW, Cory S. bcl-2 transgene inhibits T cell death and perturbs thymic self-censorship. *Cell*. 1991 Nov 29;67(5):889-899. [PubMed] [Google Scholar]
- Tata JR. Requirement for RNA and protein synthesis for induced regression of the tadpole tail in organ culture. *Dev Biol*. 1966 Feb;13(1):77-94. [PubMed] [Google Scholar]
- Tokunaga K, Taniguchi H, Yoda K, Shimizu M, Sakiyama S. Nucleotide sequence of a full-length cDNA for mouse cytoskeletal beta-actin mRNA. *Nucleic Acids Res*. 1986 Mar 25;14(6):2829-2829. [PMC free article] [PubMed] [Google Scholar]
- Truman JW. Cell death in invertebrate nervous systems. *Annu Rev Neurosci*. 1984;7:171-188. [PubMed] [Google Scholar]
- Ucker DS, Ashwell JD, Nickas G. Activation-driven T cell death. I. Requirements for de novo transcription and translation and association with genome fragmentation. *J Immunol*. 1989 Dec 1;143(11):3461-3469. [PubMed] [Google Scholar]
- Vaux DL, Cory S, Adams JM. Bcl-2 gene promotes haemopoietic cell survival and cooperates with c-myc to immortalize pre-B cells. *Nature*. 1988 Sep 29;335(6189):440-442. [PubMed] [Google Scholar]
- von Heijne G. A new method for predicting signal sequence cleavage sites. *Nucleic Acids Res*. 1986 Jun 11;14(11):4683-4690. [PMC free article] [PubMed] [Google Scholar]
- Watanabe-Fukunaga R, Brannan CI, Copeland NG, Jenkins NA, Nagata S. Lymphoproliferation disorder in mice explained by defects in Fas antigen that mediates apoptosis. *Nature*. 1992 Mar 26;356(6367):314-317. [PubMed] [Google Scholar]

SOFRA Xanya

Friday, June 27, 2025 - from 11:00 to 13:00

**MULTISPECIALTY AESTHETICS
AGENDA #1/ A**

THE IMPORTANCE OF COLLAGEN AND WHY IT'S NOT ENOUGH FOR YOUTHFUL REJUVENATION

This presentation is based on a metanalysis of several scientific articles. All traumatic procedures increase collagen. Collagen is the scar developing over a healing wound. Excessive production of collagen results in keloids. Since open injuries are hideous, large laser and RF corporations invented the "invisible wound" that is formed under the surface of the skin. They succeeded in contriving a method of forcing the body to increase its collagen in a certain area, but without investigating whether the collagen increase at the treatment site was accompanied by deficient amounts of collagen in neighbouring areas.

Trauma based treatments never tested the null hypothesis as they should, according to validity and reliability principles. They never examined if there is a systemic collagen deficiency in areas other than those receiving the laser or RF treatment. Their counterargument would probably be: "Let's laser and RF more areas!" Forgetting that collagen increase depends on the body's supplies and capacity to produce the collagen. If the body was unable to supply this protein lasers and RF would increase nothing! The glorification of "collagen" has rendered it synonymous with youth maintenance. There are 7 types of collagen involved in skin integrity and 18,127 proteins determine the age of the human epidermis only. Around 8,987 proteins control the outer epidermis, the stratum corneum, and 9,140 proteins are the brains of the inner epidermis, comprising cell layers down to the basal membrane. Overall, collagen is 1/18,127 proteins on the human epidermis only and 1/100,000 proteins in the entire body.

Importantly, one cannot have true rejuvenation without proteostasis: the balance of proteins within their optimal range and their harmonious interactions. Proteostasis is what determines aging and disease. Hormones are proteins and the deleterious effects of hormonal imbalance has been widely explored and are well known.

Proteostasis is the dynamic regulation of a balanced/functional proteome. Aging is the loss of protein homeostasis. The body cannot produce collagen because of the inefficient protein to protein communications and the systematic unfolding of proteins that renders proteins non-functional interfering with the instructions necessary for the body repair mechanisms to produce new collagens. The proteostasis network includes competing and integrated biological pathways within cells that control:

- * biogenesis
- * protein folding
- * protein trafficking
- * protein degradation.

A number of cellular processes are necessary for true antiaging. These include metabolic, multicellular organismal processes, extracellular structure organization, protein development and transport, catabolic events and adequate cellular communication and stimulus response

This presentation is designed to unpack the Collagen miracle to see if the Emperor has no clothes. Hundreds of devices market themselves as increasing the production of collagen forgetting that keloids are an excess of collagen. Collagen is a protein like hormones are proteins and it is crucial for anti-aging doctors to understand collagen as one of thousands of other proteins that need to interact optimally with other proteins in order to turn back the clock. Protein balance is the same as hormonal balance. Without balance, the freshness and natural glow of youth are forever lost and patients look puffed up and wrinkle-free, yet artificial. Importantly, they don't look younger because they don't have that freshness and natural glow of youth, so most people around them can still guess their real age.

1. Jose Viña, Consuelo Borrás, Juan Gambini, Juan Sastre, Federico V. Pallardó (2005) Why females live longer than males? Importance of the upregulation of longevity-associated genes by oestrogenic compounds, FEBS Letters, Volume 579, Issue 12, Pages 2541-2545, ISSN 0014-5793, <https://doi.org/10.1016/j.febslet.2005.03.090>.
2. Tang, W. Y., & Ho, S. M. (2007). Epigenetic reprogramming and imprinting in origins of disease. *Reviews in Endocrine and Metabolic Disorders*, 8, 173-182.
3. Chang, A. L. S., Bitter Jr, P. H., Qu, K., Lin, M., Rapicavoli, N. A., & Chang, H. Y. (2013). Rejuvenation of gene expression pattern of aged human skin by broadband light treatment: a pilot study. *Journal of Investigative Dermatology*, 133(2), 394-402. <https://doi.org/10.1038/jid.2012.287>
4. Xu, J., Spitale, R. C., Guan, L., Flynn, R. A., Torre, E. A., Li, R., ... & Chang, A. L. S. (2016). Novel gene expression profile of women with intrinsic skin youthfulness by whole transcriptome sequencing. *PloS one*, 11(11), e0165913. <https://doi.org/10.1371/journal.pone.0165913>
5. Doctrow, S. R., Lopez, A., Schock, A. M., Duncan, N. E., Jourdan, M. M., Olasz, E. B., ... & Lazarova, Z. (2013). Anne Lynn S. Chang, Patrick H. Bitter Jr, Kun Qu, Meihong Lin, Nicole A. Rapicavoli and Howard Y. Chang. *Journal of Investigative Dermatology*, 133, 1691.
6. Babatz, T. D., Spear, E. D., Xu, W., Sun, O. L., Nie, L., Carpenter, E. P., & Michaelis, S. (2021). Site specificity determinants for prelamin A cleavage by the zinc metalloprotease ZMPSTE24. *Journal of Biological Chemistry*, 296.
7. Babatz, T. D., Spear, E. D., Xu, W., Sun, O. L., Nie, L., Carpenter, E. P., & Michaelis, S. (2021). Site specificity determinants for prelamin A cleavage by the zinc metalloprotease ZMPSTE24. *Journal of Biological Chemistry*, 296. <https://doi.org/10.1074/jbc.RA120.015792>
8. Messner, M., Ghadge, S. K., Maurer, T., Graber, M., Staggl, S., Christine Maier, S., ... & Zaruba, M. M. (2020). ZMPSTE24 is associated with elevated inflammation and Progerin mRNA. *Cells*, 9(9), 1981. doi: 10.3390/cells9091981
9. Alfaro-Arnedo, E., López, I. P., Piñeiro-Hermida, S., Canalejo, M., Gotera, C., Sola, J. J., ... & Pichel, J. G. (2022). IGF1R acts as a cancer-promoting factor in the tumor microenvironment facilitating lung metastasis implantation and progression. *Oncogene*, 41(28), 3625-3639. <https://doi.org/10.1038/s41388-022-02376-w>
10. Dahlström, M., Nordvall, G., Sundström, E., Åkesson, E., Tegerstedt, G., Eriksdotter, M., & Forsell, P. (2019). Identification of amino acid residues of nerve growth factor important for neurite outgrowth in human dorsal root ganglion neurons. *European Journal of Neuroscience*, 50(9), 3487-3501. <https://doi.org/10.1111/ejn.14513>
11. Prencipe, G., Minnone, G., Strippoli, R., De Pasquale, L., Petrini, S., Caiello, I., ... & Bracci-Laudiero, L. (2014). Nerve growth factor downregulates inflammatory response in human monocytes through TrkA. *The Journal of Immunology*, 192(7),

3345-3354. <https://doi.org/10.4049/jimmunol.1300825>

12. Nakamura, J., Aoyagi, S., Nanchi, I., Nakatsuka, S. I., Hirata, E., Shibata, S., ... & Oji, Y. (2009). Overexpression of eukaryotic elongation factor eEF2 in gastrointestinal cancers and its involvement in G2/M progression in the cell cycle. *International journal of oncology*, 34(5), 1181-1189. https://doi.org/10.3892/ijo_00000246

13. Deng, H., Wu, Y., & Jankovic, J. (2015). The EIF 4G1 gene and Parkinson's disease. *Acta Neurologica Scandinavica*, 132(2), 73-78. <https://doi.org/10.1111/ane.12397>

14. Panda, D. K., Bai, X., Zhang, Y., Stylianesis, N. A., Koromilas, A. E., Lipman, M. L., & Karaplis, A. C. (2022). SCF-SKP2 E3 ubiquitin ligase links mTORC1/ER stress/ISR with YAP activation in murine renal cystogenesis. *The Journal of Clinical Investigation*, 132(24).

15. Goodier, J. L., Cheung, L. E., & Kazazian Jr, H. H. (2012). MOV10 RNA helicase is a potent inhibitor of retrotransposition in cells. <https://doi.org/10.1371/journal.pgen.1002941>

16. Schutyser, E., Richmond, A., & Van Damme, J. (2005). Involvement of CC chemokine ligand 18 (CCL18) in normal and pathological processes. *Journal of leukocyte biology*, 78(1), 14-26. <https://doi.org/10.1189/jlb.1204712>

17. Khalkhal, E., Rezaei-Tavirani, M., Zali, M. R., & Akbari, Z. (2019). The evaluation of laser application in surgery: a review article. *Journal of lasers in medical sciences*, 10(Suppl 1), S104. 10.15171/jlms.2019.S18

18. Parnigoni, A., Caon, I., Moretto, P., Viola, M., Karousou, E., Passi, A., & Vigetti, D. (2021). The role of the multifaceted long non-coding RNAs: A nuclear-cytosolic interplay to regulate hyaluronan metabolism. *Matrix Biology Plus*, 11, 100060. <https://doi.org/10.1016/j.mbplus.2021.100060>

19. Sun, P., Sun, L., Cui, J., Liu, L., & He, Q. (2020). Long noncoding RNA HAS2-AS1 accelerates non-small cell lung cancer chemotherapy resistance by targeting LSD1/EphB3 pathway. *American Journal of Translational Research*, 12(3), 950.

20. Parnigoni, A., Caon, I., Moretto, P., Viola, M., Karousou, E., Passi, A., & Vigetti, D. (2021). The role of the multifaceted long non-coding RNAs: A nuclear-cytosolic interplay to regulate hyaluronan metabolism. *Matrix Biology Plus*, 11, 100060.

21. Andersson, Gunnar (2016). "The Problem of the Empirical Basis in Critical Rationalism". In Shearmur, Jeremy; Stokes, Geoffrey (eds.). *The Cambridge Companion to Popper*. Cambridge Companions to Philosophy. Cambridge, UK; New York: Cambridge University Press. pp. 125-142. doi:10.1017/cco9781139046503.005. ISBN 978-1-139-04650-3. OCLC 925355415.

22. Goldspink, G., Scutt, A., Martindale, J., Jaenicke, T., Turay, L., & Gerlach, G. F. (1991). Stretch and force generation induce rapid hypertrophy and myosin isoform gene switching in adult skeletal muscle. *Biochemical Society Transactions*, 19(2), 368-373. DOI: 10.1042/bst0190368

23. Goldspink, G. (1999). Changes in muscle mass and phenotype and the expression of autocrine and systemic growth factors by muscle in response to stretch and overload. *Journal of anatomy*, 194(3), 323-334. <https://doi.org/10.1046/j.1469-7580.1999.19430323.x>

24. Semsarian, C., Wu, M. J., Ju, Y. K., Marciniak, T., Yeoh, T., Allen, D. G., ... & Graham, R. M. (1999). Skeletal muscle hypertrophy is mediated by a Ca²⁺-dependent calcineurin signalling pathway. *Nature*, 400(6744), 576-581

25. Hill, M., & Goldspink, G. (2003). Expression and splicing of the insulin-like growth factor gene in rodent muscle is associated with muscle satellite (stem) cell activation following local tissue damage. *The Journal of physiology*, 549(2), 409-418. <https://doi.org/10.1113/jphysiol.2002.035832>

26. Yang, S. Y., & Goldspink, G. (2002). Different roles of the IGF-I Ec peptide (MGF) and mature IGF-I in myoblast proliferation and differentiation. *FEBS letters*, 522(1-3), 156-160. DOI [https://doi.org/10.1016/S0014-5793\(02\)02918-6](https://doi.org/10.1016/S0014-5793(02)02918-6)

27. Yang, S., Alnaqeeb, M., Simpson, H., & Goldspink, G. (1996). Cloning and characterization of an IGF-1 isoform expressed in skeletal muscle subjected to stretch. *Journal of Muscle Research & Cell Motility*, 17, 487-495. <https://doi.org/10.1007/BF00123364>

28. McKoy, G., Ashley, W., Mander, J., Yang, S. Y., Williams, N., Russell, B., & Goldspink, G. (1999). Expression of insulin growth factor?1 splice variants and structural genes in rabbit skeletal muscle induced by stretch and stimulation. *The Journal of physiology*, 516(2), 583-592. DOI <https://doi.org/10.1111/j.1469-7793.1999.0583v.x>

29. Sofra, X. (2020) Gain without Pain: Beyond Sport Effortless Exercise Solutions. *Journal of Aesthetic Nursing*, 9, 202-210. <https://doi.org/10.12968/joan.2020.9.5.202> [Citation Time(s):1]

30. Sofra, X. and Lampe, N. (2020) Empowering the Woman: A Comprehensive Model of Sexual Anti-Ageing. *Journal of Aesthetic Nursing*, 9, 118-127. <https://doi.org/10.12968/joan.2020.9.3.118> [Citation Time(s):1]

31. Sofra, X. How to get rid of visceral fat: a randomised double-blind clinical trial. *Journal of Aesthetic Nursing*, 2020, 9(7): 268-275. DOI: <https://doi.org/10.12968/joan.2020.9.7.268>

32. Sofra, X. Gain without pain: beyond sport effortless exercise solutions. *Journal of Aesthetic Nursing*, 2020, 9(5): 202-210. DOI: <https://doi.org/10.12968/joan.2020.9.5.202>

33. Sofra X. The Importance of Systemic Balance in Safeguarding Health: A Randomized Double-Blind Clinical Trial on VLDL, Triglycerides, Free T3, Leptin, Ghrelin, Cortisol and Visceral Adipose Tissue. *Health*, 2020, 12(8). DOI: <https://doi.org/10.4236/health.2020.128078>

34. Sofra, X., Badami, S. Adverse Effects of Sedentary Lifestyles: Inflammation, and High-Glucose Induced Oxidative Stress-A Double Blind Randomized Clinical Trial on Diabetic and Prediabetic Patients. *Health*, 2020, 12(08): 1029. Article ID:102260, 20 pages DOI: <https://doi.org/10.4236/health.2020.128076>

35. Sofra, X., Lampe, N. Technological Advances in Accelerated Wound Repair and Regeneration. *Health*, 2020, 12(7): 717-737. DOI: 10.4236/health.2020.127053

36. Sofra, X., Lampe, N. A Randomized Longitudinal Double-Blind Clinical Trial on Long-Term Neuropathic Symptomatology Relief & Pain Analgesia. *Health*, 2020, 12(07): 738. ID:101363, 12 pages DOI: 10.4236/health.2020.127054

37. Sofra, X., Badami, S. A Review of COVID-19 associated factors: CRP, Creatinine, Bilirubin, VLDL, HDL, Triglycerides, Cortisol and Thyroid Function. *J Endo Metabol Res*, 2020, 1(2): 1-17. <https://www.maplespub.com/webroot/files/A-Review-of-COVID19-associated-factors-CRP-Creatinine-Bilirubin-VLDL-HDL-Triglycerides-Cortisol-and-Thyroid-Function.pdf>

38. Sofra, X. Dynamics of Female Sexuality; Hidden Emotional Issues. *Health*, 2020, 12(6): 694-708. DOI: 10.4236/health.2020.126051

39. Sofra, X., Lampe, N. Empowering the woman: a comprehensive model of sexual anti-ageing. *Journal of Aesthetic Nursing*, 2020, 9(3): 118-127. DOI: <https://doi.org/10.12968/joan.2020.9.3.118>

40. Sofra, X. The Affinity between Obesity and COVID-19. *J Endo Metabol Res*, 2020, 1(2): 1-13. https://maplespub.com/webroot/files/The-Affinity-between-Obesity-and-COVID-19_1602748373.pdf

41. Sofra X, Badami S. A Review of COVID19 associated factors: CRP, Creatinine, Bilirubin, VLDL, HDL, Triglycerides, Cortisol, and Thyroid Function. *J Endo Metabol Res*, 2020, 1(2): 1-17. <https://maplespub.com/article/A-Review-of-COVID19-associated-factors-CRP-Creatinine-Bilirubin-VLDL-HDL-Triglycerides-Cortisol-and-Thyroid-Function.pdf>

42. Sofra X (2022) Liver Repair of NAFLD patients, Following Effortless Exercise and the Possible Involvement of

43. El Assar, M., Angulo, J., & Rodríguez-Mañas, L. (2013). Oxidative stress and vascular inflammation in ageing. *Free Radical Biology and Medicine*, 65, 380-401. <https://doi.org/10.1016/j.freeradbiomed.2013.07.003>
44. Zhao, Y., Simon, M., Seluanov, A. et al (2023).. DNA damage and repair in age-related inflammation. *Nat Rev Immunol* 23, 75-89 <https://doi.org/10.1038/s41577-022-00751-y>
45. D De Magalhães, J. P., & Ocampo, A. (2022). Cellular reprogramming and the rise of rejuvenation biotech. *Trends in Biotechnology*, 40(6), 639-642. <https://doi.org/10.1016/j.tibtech.2022.01.011>
46. Sofra X (2021) Checkmate by a Protean Invisible Enemy. *Lampert Pub*.
47. Sofra X (2023) Liver Repair of NAFLD patients following effortless exercise. *Journal of Diabetes, Metabolic Disorders and Control*. Volume 9, Issue 140, 41, 42, pp 36-47.
48. Sofra, X (2023) The long term effects of effortless exercise on hormonal balance and health. *Journal of Diabetes, Metabolic Disorders and Control*. Volume 10, Issue 2, pp 86-91.
49. Sofra, X., & Lampe, N. (2020). Technological Advances in Accelerated Wound Repair and Regeneration. *Health*, 12(7), 717-737. DOI: 10.4236/health.2020.127053
50. Sofra, X., & Lampe, N. (2020). A Randomized Longitudinal Double-Blind Clinical Trial on Long-Term Neuropathic Symptomatology Relief & Pain Analgesia. *Health*, 12(07), 738. <http://creativecommons.org/licenses/by/4.0/>
51. Kogure, A., Uno, M., Ikeda, T., & Nishida, E. (2017). The microRNA machinery regulates fasting-induced changes in gene expression and longevity in *Caenorhabditis elegans*. *Journal of Biological Chemistry*, 292(27), 11300-11309. doi: 10.1261/rna.1703809
52. Connolly, P. H., Caiozzo, V. J., Zaldivar, F., Nemet, D., Larson, J., Hung, S. P., ... & Cooper, D. M. (2004). Effects of exercise on gene expression in human peripheral blood mononuclear cells. *Journal of applied physiology*, 97(4), 1461-1469. <https://doi.org/10.1152/jappphysiol.00316.2004>
53. Yang, J., Diaz, N., Adelsberger, J., Zhou, X., Stevens, R., Rupert, A., ... & Cosentino, L. M. (2016). The effects of storage temperature on PBMC gene expression. *BMC immunology*, 17(1), 1-15. <https://doi.org/10.1186/s12865-016-0144-1>
54. Connolly, P. H., Caiozzo, V. J., Zaldivar, F., Nemet, D., Larson, J., Hung, S. P., ... & Cooper, D. M. (2004). Effects of exercise on gene expression in human peripheral blood mononuclear cells. *Journal of applied physiology*, 97(4), 1461-1469. <https://doi.org/10.1152/jappphysiol.00316.2004>
55. Zuk, P. A., Zhu, M. I. N., Mizuno, H., Huang, J., Futrell, J. W., Katz, A. J., ... & Hedrick, M. H. (2001). Multilineage cells from human adipose tissue: implications for cell-based therapies. *Tissue engineering*, 7(2), 211-228. <https://doi.org/10.1089/107632701300062859>
56. Dayan, C.M.; Panicker, V. Hypothyroidism and depression. *Eur. Thyroid J.* 2013, 2, 168-179. <https://doi.org/10.1159/000353777>
57. Wiersinga, W.M. Therapy of endocrine disease: T4 + T3 combination therapy: Is there a true effect? *Eur. J. Endocrinol.* 2017, 177, 287-296. <http://www.ncbi.nlm.nih.gov/pubmed/28855267>
58. Bathla, M.; Singh, M.; Relan, P. Prevalence of anxiety and depressive symptoms among patients with hypothyroidism. *Indian J. Endocrinol. Metab.* 2016, 20, 468-474. <http://www.ncbi.nlm.nih.gov/pubmed/27366712>
59. Vita, R.; Mazzi, V.; Antonelli, A.; Benvenga, S. Antithyroid medications and psychosis. *Expert Opin. Drug Saf.* 2013, 12, 865-872. <https://doi.org/10.1517/14740338.2013.823397>
60. Romero-Gómez, B., Guerrero-Alonso, P., Carmona-Torres, J. M., Notario-Pacheco, B., & Cobo-Cuenca, A. I. (2019). Mood disorders in levothyroxine-treated hypothyroid women. *International journal of environmental research and public health*, 16(23), 4776
61. Wu, E.L.; Chien, I.C.; Lin, C.H.; Chou, Y.J.; Chou, P. (2013) Increased risk of hypothyroidism and hyperthyroidism in patients with major depressive disorder: A population-based study. *J. Psychosom. Res.* 2013, 74, 233-237. <http://www.ncbi.nlm.nih.gov/pubmed/23438714>
62. Farmer, A.; Korszun, A.; Owen, M.J.; Craddock, N.; Jones, L.; Jones, I. Medical disorders in people with recurrent depression. *Br. J. Psychiatry* 2008, 192, 351-355. <https://doi.org/10.1192/bjp.bp.107.038380>
63. Radhakrishnan, R.; Calvin, S.; Singh, J.K.; Thomas, B.; Srinivasan, K. Thyroid dysfunction in major psychiatric disorders in a hospital based sample. *Indian J. Med. Res.* 2013, 138, 888-893
64. Bathla, M.; Singh, M.; Relan, P. Prevalence of anxiety and depressive symptoms among patients with hypothyroidism. *Indian J. Endocrinol. Metab.* 2016, 20, 468-474. <https://doi.org/10.4103/2230-8210.183476>
65. Siegman, E. M. Muller H. H, Q; Luecke, C. Philipsen, A. Kornhuber, J.; Gromer, T. W. (2018) Association of depression and anxiety disorders wit autoimmune thyroiditis. A systemic review and metanalysis *JAMA Psychiatry*, 75, 577-584
66. Larisch, R., Kley, K., Nikolaus, S., Sitte, W., Franz, M., Hautzel, H., ... & Müller, H. W. (2004). Depression and anxiety in different thyroid function states. *Hormone and metabolic research*, 36(09), 650-653
67. Ittermann, T., Völzke, H., Baumeister, S.E. et al. Diagnosed thyroid disorders are associated with depression and anxiety. *Soc Psychiatry Psychiatr Epidemiol* 50, 1417-1425 (2015). <https://doi.org/10.1007/s00127-015-1043->
68. Wiersinga, W.M.(2017) Therapy of endocrine disease: T4 + T3 combination therapy: Is there a true effect? *Eur. J. Endocrinol.* 177, 287-296. <http://www.ncbi.nlm.nih.gov/pubmed/28855267>
69. Panicker, V.; Evans, J.; Bjoro, T.; Asvold, B.O.; Dayan, C.M.; Bjerkeset, O. (2009) A paradoxical difference in relationship between anxiety, depression and thyroidfunction in subjects on and not on T4: Findings from the HUNT study. *Clin. Endocrinol.* 71, 574-580 <https://doi.org/10.1111/j.1365-2265.2008.03521.x>
70. Romero-Gómez, B., Guerrero-Alonso, P., Carmona-Torres, J. M., Notario-Pacheco, B., & Cobo-Cuenca, A. I. (2019). Mood disorders in levothyroxine-treated hypothyroid women. *International journal of environmental research and public health*, 16(23), 4776.
71. Giynas Ayhan, M.; Uguz, F.; Askin, R.; Gonen, M.S. The prevalence of depression and anxiety disorders in patients with euthyroid Hashimoto's thyroiditis: A comparative study. *Gen. Hosp. Psychiatry* 2014, 36, 95-98. <https://doi.org/10.1016/j.genhosppsy.2013.10.002>
72. Boudarene, M., Legros, J. J., & Timsit-Berthier, M. (2002). Study of the stress response: role of anxiety, cortisol and DHEAs. *L'encephale*, 28(2), 139-146.
73. Tang, J., Chen, R., & Chen, K. H. (2021). The Utilization of dehydroepiandrosterone as a sexual hormone precursor in premenopausal and postmenopausal women: An overview. *Pharmaceuticals*, 15(1), 46. doi: 10.3390/ph15010046
74. Villareal D.T., Holloszy J.O. DHEA enhances effects of weight training on muscle mass and strength in elderly women and men. *Am. J. Physiol. Endocrinol. Metab.* 2006;291:E1003-E1008. doi: 10.1152/ajpendo.00100.2006.
75. Khorram O. DHEA: A hormone with multiple effects. *Curr. Opin. Obstet. Gynecol.* 1996;8:351-354. doi:

10.1097/00001703-199610000-00006.

76. McHenry, J., Carrier, N., Hull, E., & Kabbaj, M. (2014). Sex differences in anxiety and depression: role of testosterone. *Frontiers in neuroendocrinology*, 35(1), 42-57. <https://doi.org/10.1016/j.yfrne.2013.09.001>
77. Giltay, E. J., Enter, D., Zitman, F. G., Penninx, B. W., van Pelt, J., Spinhoven, P., & Roelofs, K. (2012). Salivary testosterone: associations with depression, anxiety disorders, and antidepressant use in a large cohort study. *Journal of psychosomatic research*, 72(3), 205-213. <https://doi.org/10.1016/j.jpsychores.2011.11.014>
78. Barrett-Connor, E., von Mühlen, D. G., & Kritiz-Silverstein, D. (1999). Bioavailable testosterone and depressed mood in older men: the Rancho Bernardo Study. *The Journal of Clinical Endocrinology & Metabolism*, 84(2), 573-577.
79. Seidman, S. N. (2003). Androgens, Erectile Dysfunction, and Depression. *J Clin Psychiatry*, 64(10), 31-37.
80. Bolour, S., & Braunstein, G. (2005). Testosterone therapy in women: a review. *International journal of impotence research*, 17(5), 399-408.
81. Hintikka, J., Niskanen, L., Koivumaa-Honkanen, H., Tolmunen, T., Honkalampi, K., Lehto, S. M., & Viinamäki, H. (2009). Hypogonadism, decreased sexual desire, and long-term depression in middle-aged men. *The journal of sexual medicine*, 6(7), 2049-2057.
82. Araujo, A. B., Durante, R., Feldman, H. A., Goldstein, I., & McKinlay, J. B. (1998). The relationship between depressive symptoms and male erectile dysfunction: cross-sectional results from the Massachusetts Male Ageing Study. *Psychosomatic medicine*, 60(4), 458-465.
83. Skoluda, N., Dettenborn, L., Stalder, T. and Kirschbaum, C. (2012) Elevated Hair Cortisol Concentrations in Endurance Athletes. *Psychoneuroendocrinology*, 37, 611-617. <https://doi.org/10.1016/j.psyneuen.2011.09.001>
84. Sofra, X., & Badami, S. (2020). A Review of COVID-19 associated factors: CRP, Creatinine, Bilirubin, VLDL, HDL, Triglycerides, Cortisol and Thyroid Function. *J Endo Metabol Res*, 1(2), 1-17. <https://maplespub.com/article/A-Review-of-COVID19-associated-factors-CRP-Creatinine-Bilirubin-VLDL-HDL-Triglycerides-Cortisol-and-Thyroid-Function>
85. Sofra, X., & Badami, S. (2020). Adverse effects of sedentary lifestyles: Inflammation, and high-glucose induced oxidative stress—A double-blind randomized clinical trial on diabetic and prediabetic patients. *Health*, 12(08), 1029. <http://creativecommons.org/licenses/by/4.0/>
86. Sofra, X. (2020). The Importance of Systemic Balance in Safeguarding Health: A Randomized Double-Blind Clinical Trial on VLDL, Triglycerides, Free T3, Leptin, Ghrelin, Cortisol and Visceral Adipose Tissue. *Health*, 12(08), 1067. <http://creativecommons.org/licenses/by/4.0/>
87. Sofra, X. (2020). How to get rid of visceral fat: a randomised double-blind clinical trial. *Journal of Aesthetic Nursing*, 9(7), 268-275. <https://doi.org/10.12968/joan.2020.9.7.268>
88. Lavie, C.J., Ozemek, C., Carbone, S., Katzmarzyk, P.T. and Blair, S.N. (2019) Sedentary Behavior, Exercise, and Cardiovascular Health. *Circulation Research*, 124, 799-815. <https://doi.org/10.1161/CIRCRESAHA.118.312669>
89. Kaminsky, L.A., Arena, R., Ellingsen, O., Harber, M.P., Myers, J., Ozemek, C. and Ross, R. (2019) Cardiorespiratory Fitness and Cardiovascular Disease—The Past, Present, and Future. *Progress in Cardiovascular Diseases*, 62, 86-93. <https://doi.org/10.1016/j.pcad.2019.01.002>
90. Imboden, M.T., Harber, M.P., Whaley, M.H., Finch, W.H., Bishop, D.L., Fleenor, B.S. and Kaminsky, L.A. (2019) The Association between the Change in Directly Measured Cardiorespiratory Fitness across Time and Mortality Risk. *Progress in Cardiovascular Diseases*, 62, 157-162. <https://www.ncbi.nlm.nih.gov/pubmed/30543812>
91. Ozemek C., Laddu, D.R. and Lavie C.J. (2018) An Update on the Role of Cardiorespiratory Fitness, Structured Exercise and Lifestyle Physical Activity in Preventing Cardiovascular Disease and Health Risk. *Progress in Cardiovascular Diseases*, 61, 484-490. <https://doi.org/10.1016/j.pcad.2018.11.005>
92. Hill, E.E., Zack, E., Battaglini, C., Viru, M., Viru, A. and Hackney, A.C. (2008) Exercise and Circulating Cortisol Levels: The Intensity Threshold Effect. *Journal of Endocrinological Investigation*, 31, 587-591. <https://doi.org/10.1007/BF03345606>
93. Pedersen, B.K., Steensberg, A. and Schjerling, P. (2001) Muscle-Derived Interleukin-6: Possible Biological Effects. *The Journal of Physiology*, 536, 329-337. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2278876>
94. Grossmann, M. (2011) Low Testosterone in Men with Type 2 Diabetes: Significance and Treatment. *The Journal of Clinical Endocrinology & Metabolism*, 96, 2341-2353. <https://doi.org/10.1210/jc.2011-0118>
95. Shores, M.M., Mocer, V.M., Sloan, K.L., Matsumoto, A.M. and Kivlahan, D.R. (2005) Low Testosterone Levels Predict Incident Depressive Illness in Older Men: Effects of Age and Medical Morbidity. *The Journal of Clinical Psychiatry*, 66, 7-14. <https://doi.org/10.4088/JCP.v66n0102>
96. Lua, I., James, D., Wang, J., Wang, K. S., & Asahina, K. (2014). Mesodermal mesenchymal cells give rise to myofibroblasts, but not epithelial cells, in mouse liver injury. *Hepatology*, 60(1), 311-322. <https://doi.org/10.1002/hep.27035>
97. Tremolada, C., Colombo, V., & Ventura, C. (2016). Adipose tissue and mesenchymal stem cells: state of the art and Lipogems® technology development. *Current stem cell reports*, 2(3), 304-312. <https://doi.org/10.1007/s40778-016-0053-5>
98. Strem, B. M., Hicok, K. C., Zhu, M., Wulur, I., Alfonso, Z., Schreiber, R. E., ... & Hedrick, M. H. (2005). Multipotential differentiation of adipose tissue-derived stem cells. *The Keio journal of medicine*, 54(3), 132-141. <https://doi.org/10.2302/kjm.54.132>
99. Banas, A., Teratani, T., Yamamoto, Y., Tokuhara, M., Takeshita, F., Quinn, G., ... & Ochiya, T. (2007). Adipose tissue-derived mesenchymal stem cells as a source of human hepatocytes. *Hepatology*, 46(1), 219-228. <https://doi.org/10.1002/hep.21704>
100. Van Poll, D., Parekkadan, B., Borel Rinkes, I. H. M., Tilles, A. W., & Yarmush, M. L. (2008). Mesenchymal stem cell therapy for protection and repair of injured vital organs. *Cellular and Molecular Bioengineering*, 1(1), 42-50. <https://doi.org/10.1007/s12195-008-0001-2>
101. Esrefoglu, M. (2013). Role of stem cells in repair of liver injury: experimental and clinical benefit of transferred stem cells on liver failure. *World journal of gastroenterology: WJG*, 19(40), 6757. 2013 Oct 28;19(40):6757-73. doi: 10.3748/wjg.v19.i40.6757. PMID: 24187451; PMCID: PMC3812475.

SOFRA Xanya

Friday, June 27, 2025 - from 11:00 to 13:00

MULTISPECIALTY AESTHETICS AGENDA #1/ A

Session:
Science of Regeneration Longevity

THE GRAY TWO-SIDED REALITY OF STEM CELLS

Improving social awareness about the advantages and adverse effects of stem cell therapy is required based on research that examines both sides of the coin, short and long-term advantages and disadvantages. One of the most challenging parts of the process of incorporating stem cells into clinical practice is controlling their division and differentiation potentials. Sometimes, their potential for uncontrolled growth will make these cells tumorigenic. Additionally, while stem cells can easily differentiate into a wide variety of cells, a paracrine effect controlled activity, being in an appropriate medium will cause abnormal differentiation leading to treatment failure. Another caveat in this process is immunorejection and the potentially deleterious new methods developed with arresting immune surveillance to enhance systemic acceptance and utility of stem cell implants. Incapacitating the immune system with antibodies that block normal T-cell activation even temporarily may win the battle over immunorejection but lose the war over tumors growing unobstructed since the immune soldiers are paralyzed.

Stem cells offer tantalizing prospects to anti-ageing and regenerative medicine. They are used for skin repair, hair growth and the maintenance of various adult tissues and organs. They can modulate numerous incurable diseases such as heart conditions, diabetes, brain injuries, etc

The coin has two sides, and stem cells advocates focus on the positive one- the miracles of transplanting stem cells to cure a variety of diseases, without bona fide evidence from large well-controlled studies or longitudinal research with proven validity and reliability that will accurately delineate the long term advantages and disadvantages of these procedures. Even mesenchymal stem cells (MSCs) which are relatively safe from malignant transformations, and do not stir up ethical controversies, have limited clinical usefulness due to cellular senescence that impairs their differentiation potential leading to uncontrolled proliferation and tumor formation. Aging is not the only process that diminishes the function of MSCs. Their phenotype is affected by the donors' heterogeneity, the culture condition, and the cell passage in the body.

The necessary process for stem cells' functionality, cellular differentiation, depends on the increased ratio between:

1/ mitochondrial differential that promotes activity, and

2/ nuclear differentiation that prevents activity.

Embryonic stem cells have a low ratio and therefore a compromised differentiation potential, due to low mitochondrial content. Mutations in nuclear genes coding for mitochondrial proteins decrease the differentiation rate leading to neoplastic growth, another word for tumors that may be benign or malignant cancers.

Proliferation and differentiation are like a seesaw: when one goes up the other goes down. Differentiation decreases with age, therefore, cellular proliferation should increase, which is why cancers are usually age-related. However, the general understanding in the stem cell industry is that the body's supply of stem cells decreases with age. This research does not accurately examine

a/ whether it is proliferation that decreases which may be actually beneficial because differentiation will be more efficient

b/ whether senescence affects the overall functionality of stem cells leading to compromised utilization of stem cell implants

TIRYAKI Tunc

Thursday, June 26, 2025 - from 11:00 to 13:00

ADVANCED INJECTABLES AGENDA/ AUDITORIUM

Session:
Advances in Regenerative Aesthetics

HYBRID 3D FACE-LIFT UNDER SEDATION: COMBINING SMAS REDISTRIBUTION WITH REGENERATIVE TISSUE TRANSFERS

Restoration of the youthful facial shape through an "anatomical approach" that identifies and reverses the stigmata of aging on the various anatomical layers, became the highest priority in facial rejuvenation. Shape is the result of volume and definition. Consequently, to restore the youthful human facial shape with the characteristic architectural ogee at the profile view and V shape in the frontal view, the volume from the soft tissues and the definition created by the facial bony arches should be restored.

The aim of facelift surgery should therefore address both these aspects: the loss of definition should be corrected as the primary step of facial rejuvenation, resulting not only in the reconstitution of deep facial volume, but also in an internal tautening of the ligamentous system. At the same time, the attenuation of the superficial layers should be corrected through a targeted "three-dimensional" tightening and redistribution of the SMAS layer, designed to selectively augment the devolumised areas of the aging facial skeleton.

It is the senior authors' perception that no facial rejuvenation surgery can be fully accomplished without combined deep-plane fat grafting to address the bone resorption as the primary cause of the attenuation of more superficial systems. 6,18-24 The SMAS, on the other hand, must be addressed in such a way that the "hammocked" tissue is reassembled in a three-dimensional way and redistributed at the areas where volume and contour is desired. The authors revisit the idea of creating an internal SMAS suspension system by introducing a new concept; the "inversion" of the SMAS. This novel technique is set apart from other SMAS plications as the main objective is to invaginate the loosened SMAS in a convergent fashion. In this way, the SMAS is not only repositioned in two dimensions (laterally and cranially) as the rest of the techniques described in the literature do, but most importantly is pushed inwardly, adding a third dimension (depth) and therefore volume to the weaved tissue.

The synergistic effects of deep plane fat grafting and targeted SMAS redistribution on restoring the three-dimensional volume loss and therefore the shape of the aging face consist the basis of hybrid 3-dimensional (H3D) facelift whose technique is

explained in detail in this paper.

VORODYUKHINA Olha

Thursday, June 26, 2025 - from 14:00 to 15:30

**MULTISPECIALTY AESTHETICS
AGENDA #2/ E**

Session:

Hormonal Health

LIFESTYLE AND SUPPLEMENTS

As hormone levels shift during menopause, the skin often shows the first visible signs—loss of elasticity, dryness, and dullness. In this focused and empowering session, Dr. Olha Vorodyukhina explores how lifestyle choices and targeted supplementation can protect and rejuvenate the skin from the inside out.

Combining clinical expertise with her own health-driven lifestyle—shared openly through her social media channels—Dr. Olha offers practical advice on nutrition, movement, and key skin-supporting supplements like collagen, antioxidants, omega-3s, enzymes and probiotics.

This talk is designed for professionals who want to understand how to support their patients maintain healthy, glowing skin during menopause outside of their clinics—and how daily habits can become a powerful tool for graceful, confident aging.

WAQAS Falak

Friday, June 27, 2025 - from 16:00 to 17:30

**MULTISPECIALTY AESTHETICS
#3 & INDUSTRY WORKSHOPS
AGENDAS/ B**

Session:

Hybrid Fillers: A New Era in Aesthetic Treatments

**ENHANCING INJECTABLE OUTCOMES WITH DUAL-EFFECT PLLA-BASED COLLAGEN BIOSTIMULATOR
AND SKINBOOSTER CONTAINING NON-CROSSLINKED HA AND PDRN**

Abstract

Background:

Injectable therapies have advanced significantly, combining immediate and long-term benefits for skin rejuvenation. Poly-L-Lactic Acid (PLLA)-based collagen biostimulators and skinboosters with non-crosslinked hyaluronic acid (HA) and polydeoxyribonucleotide (PDRN) offer a synergistic approach, targeting skin hydration, elasticity, and dermal remodeling.

Objective:

To evaluate the efficacy of a structured treatment protocol utilizing PLLA-based collagen biostimulators and skinboosters containing non-crosslinked HA and PDRN in enhancing skin rejuvenation through hydration, elasticity, and collagen induction.

Methods:

Patients with varying degrees of skin aging and texture concerns underwent a structured treatment regimen. The protocol included one session of PLLA-based collagen biostimulator every three months and three skinbooster sessions containing non-crosslinked HA and PDRN, administered four weeks apart. PLLA stimulated collagen synthesis and dermal remodeling, while the skinbooster provided hydration, cellular repair, and antioxidant benefits. Clinical outcomes were assessed using photography, dermal thickness measurements, and patient satisfaction surveys over 12 weeks.

Results:

Significant improvements in skin hydration and elasticity were observed after the first skinbooster session. By the end of the 12-week regimen, patients exhibited increased dermal thickness and collagen density, with enhancements becoming more pronounced after the second PLLA session. PDRN promoted cellular repair and skin regeneration, while non-crosslinked HA improved hydration and texture. The PLLA-based biostimulator provided long-term collagen induction, resulting in firmer and more resilient skin. Patient satisfaction scores were high, and minimal side effects were reported.

Conclusion:

This dual-action injectable protocol, combining PLLA-based collagen biostimulators and skinboosters with non-crosslinked HA and PDRN, offers a powerful solution for comprehensive skin rejuvenation. The structured regimen of PLLA sessions three months apart and skinbooster treatments four weeks apart provides immediate and sustained results, addressing both surface and deep skin concerns. This innovative approach is a benchmark for advanced injectable therapies in aesthetic medicine.

WILSON Ingrid

Thursday, June 26, 2025 - from 09:00 to 10:30

**MULTISPECIALTY AESTHETICS
AGENDA #2/ E**

Session:
Non-Invasive Treatments for Hair Loss

THE ROLE OF PEPTIDES IN HAIR RESTORATION

Peptides have long been established in treating disease, and are now being increasingly used in cosmetic skincare. Their use is less well known in managing thinning hair. Recent studies suggest that a spectrum of peptides have efficacy in treating hair loss disorders. This session will explore the potential use of peptides as part of a toolkit for non-surgical hair restoration using examples from a cohort of subjects having a course of topical peptide treatments using microneedling.

YEOH Mei Ying
Friday, June 27, 2025 - from 11:00 to 13:00

**AESTHETICS OPEN STAGE
AGENDA**

Session:
Session in collaboration with BCAM

ENHANCING INJECTABLE OUTCOMES THROUGH DEVICE OPTIMISATION

This presentation explores the critical role of delivery device selection in aesthetic outcomes, safety, and patient satisfaction. With increasing product diversity and complexity, understanding how cannula design influences precision, trauma, and flow dynamics is essential. Drawing on current evidence, clinical experience, and mechanical data, the session will evaluate how gauge, flexibility, tip design, and injection technique affect filler performance and vascular safety.
