

# PERSONAL CARE MAGAZINE

Helena Rubinstein:  
Combining science  
and luxury

Cacay:  
The Amazon's  
liquid gold

## RNA-BASED 'TEXT MESSAGE' SKIN CARE

Biocogent on the capacity of skin cells to be  
more effective at taking care of themselves



# How Sesderma is continuing to pioneer in personal care in 2026

Dr. Gabriel Serrano Sanmiguel – Sesderma

In 1989, I founded Sesderma Laboratories with the mission of transforming dermatological research into effective, accessible, and personalized skincare solutions.

I have been a pioneer in several fields of dermatology and cosmetic science—introducing glycolic acid, chemical peels, and microdermabrasion protocols in Spain, and later, in 2008, becoming one of the first to apply nanoliposome technology to dermocosmetics.

This proprietary technology, developed entirely in our own laboratories, is based on advanced encapsulation methods that allow actives to reach their biological targets with unprecedented precision.

Unlike traditional creams that remain on the surface, Nanotech encapsulates each active ingredient in biocompatible, biodegradable lipid vesicles smaller than 100nm, whose structure mimics the skin's own cell membranes. This design enables actives to cross the stratum corneum intact, delivering them gradually and effectively where they are needed most. The result is greater efficacy, enhanced stability, and exceptional tolerance—even with molecules that are typically irritating such as retinoids or acids.

Our encapsulation platform allows us to formulate both hydrosoluble actives (vitamin C, niacinamide, hyaluronic acid, glycolic acid, growth factors, EGCG, lactoferrin) and liposoluble ones (vitamin E, vitamin D, ferulic acid, retinoids), ensuring complete and synergistic skin treatment. Independent in-vitro studies have shown that liposomal retinol is up to 21 % more effective in collagen synthesis than free retinol, and that liposomal azelaic acid achieves superior depigmenting action with greater safety at lower concentrations.

Beyond improving penetration, Nanotech liposomes provide controlled release over time, delivering both immediate and long-term benefits while reinforcing the skin barrier. They also exhibit intrinsic epithelial-repair, antioxidant, and sebum-regulating properties. Importantly, Sesderma designs and manufactures its own liposomes—without intermediaries—ensuring total control of composition, size, and performance.

## Continuing innovation with nanotech

Fifteen years later, this pioneering innovation continues to define our identity. Nanotech is not



just a technology—it is a philosophy of precision dermatology, now evolving into exosome-based systems that push the boundaries of molecular regeneration.

At Sesderma, we structure our innovation not by product type, but by skin need—ageing, pigmentation, hydration, or sensitivity—so every line contributes to a unified dermatological ecosystem.



This approach allows us to develop synergistic and personalized regimens. Our latest generation of serums, The Power of 5, illustrates this perfectly. RETI AGE 5 combines five retinoids encapsulated in liposomes for powerful rejuvenation with high tolerance. C-VIT 5 brings together five stabilized forms of vitamin C for radiance and antioxidant protection. HIDRADERM HYAL 5 provides multilayer hydration through five molecular weights of hyaluronic acid.

Building on this legacy, we recently introduced EXOSES, the first Sesderma dermocosmetic line formulated with *Lactobacillus*-derived exosomes, capable of enhancing cellular communication and regeneration. This innovation represents the natural evolution of our liposomal Nanotech system—transforming delivery technology into true molecular dialogue with the skin.

In parallel, our nutricosmetics division is rapidly advancing, focusing on molecules that complement topical care through systemic benefits. We are currently developing Lactoferrin-based formulations in multiple applications—Defense (immune and infectious protection), Cognitive (neurological and mental support), and Longevity (combined with zinc and vitamin D3 for anti-ageing resilience). Additionally, we are reintroducing liposomal Glutathione, a potent antioxidant and detoxifier, and creating liposomal Magnesium in advanced forms such as magnesium gluconate and magnesium bisglycinate, for optimal absorption and neuromuscular balance.

Together, these developments illustrate Sesderma's holistic approach—integrating biotechnology, dermatology, and systemic wellness—to







create solutions that work both inside and out, reinforcing skin health through a truly 360° scientific strategy.

### Mediderma solutions

Our professional brand Mediderma is the extension of our dermatological expertise. It provides physicians and aestheticians with medical-grade peels, boosters, regenerative treatments, and cutting-edge medical devices that complement the daily homecare provided by Sesderma products. The key is synergy without overlap—both lines share the same scientific backbone, based on liposomal and nanotechnological delivery systems, ensuring a seamless transition between professional treatments and home maintenance.

Among our most successful innovations are the NANOPORE devices, such as NANOPORE Stylus 02 and NANOPORE Pen 02, which have become international benchmarks in microneedling technology, outperforming other systems in precision, safety, and clinical efficacy. Recently, we also introduced NANOPORE EMSES RF, a device whose efficacy lies in the synergy of four advanced technologies: Radiofrequency (RF) improves elasticity, reduces sagging, and smooths wrinkles; Microcurrent (EMS) stimulates new collagen synthesis and enhances microcirculation; Blue LED light improves active absorption and delivers anti-inflammatory, soothing effects; and rotational stimulation reinforces the lifting and tightening action. The result is visibly firmer, revitalized skin achieved through advanced, non-invasive technology.

In parallel, Mediderma continues to innovate in exosome-based therapies, working closely with Sesderma on the EXOSSES Medical line—a new generation of regenerative treatments that use probiotic-derived exosomes (*Lactobacillus brevis*) combined with liposomal lactoferrin to stimulate the skin's natural repair mechanisms

and collagen production up to four times more effectively. These protocols—EXOSSES LB+, LA, LW, and GF—offer tailored medical-aesthetic solutions for luminosity, firmness, depigmentation, and hair restoration, providing visible results from the very first sessions.

### Growth

Our growth model is based on scientific discipline and logistical resilience. We mitigate supply-chain risk through dual sourcing of key ingredients, validated alternative manufacturers, and strategic raw-material reserves. Regulatory divergence is addressed via a centralized regulatory-intelligence team monitoring every market—from the EU Omnibus Acts to MoCRA and Asian standards.

Brand coherence is protected through strict training and content control. Every distributor and subsidiary undergoes scientific onboarding so that a Sesderma product in Dubai or Bogotá delivers the same message and results as in Valencia. Our digital education ecosystems and KOL networks ensure that global expansion never compromises the integrity of the brand.

### EXOSSES line of exosomes

Exosomes are one of the most exciting frontiers in dermatological research—microscopic messengers that enable cell-to-cell communication and natural skin regeneration. Sesderma was the first Spanish laboratory to incorporate exosomes into cosmetic formulations, launching EXOSSES Serum and Cream, which deliver visible improvements in firmness, elasticity, and luminosity within 28 days.

Our EXOSSES products use *Lactobacillus*-derived exosomes, combined with advanced actives such as HP Retinoate, niacinamide, hyaluronic acid, organic silicon, and arbutin, all

encapsulated in our Nanotech liposomes for optimal penetration and tolerance. Objective testing showed up to +38 % firmness and +17 % elasticity after four weeks.

In parallel, our professional brand Mediderma introduced EXOSSES Medical, a regenerative treatment line based on probiotic-derived exosomes (*Lactobacillus brevis*) and liposomal lactoferrin, capable of stimulating collagen synthesis up to four times more effectively. These protocols—EXOSSES LB+, LA, LW, and GF—offer visible improvements in luminosity, firmness, pigmentation, and hair density from the first sessions.

Currently, our R&D department is also developing a new generation of exosomes derived from milk combined with liposomal lactoferrin, exploring their anti-ageing, depigmenting, and hair-loss-prevention potential. This research represents the next step in Sesderma's mission to translate molecular science into safe, effective, and truly regenerative skincare.

### Novel uses of exosomes

Beyond EXOSSES, several new projects are underway to extend the application of exosomes into specific dermatological and intimate-care areas. One of them is AZELAC RU Dark Circles with Exosomes, a breakthrough treatment designed to target periorbital pigmentation and microcirculatory imbalance, improving luminosity and reducing dark circles through regenerative communication pathways.

Another innovative product, NANO CARE Intimate with Exosomes, addresses female intimate wellness by improving tone, elasticity, and muscle firmness, while promoting healthy lubrication and tissue regeneration. Its formula combines papaya extract, wheat germ, rucinol,

lactic acid, and lactoferrin, creating a vaginal tightening gel that enhances comfort and tissue vitality through natural bio-signaling.

Additionally, we are developing REPASKIN HEAT, a next-generation photothermal sunscreen designed for individuals exposed to intense heat environments—such as professionals in the Middle East or those working in kitchens—where melasma and dermal damage are aggravated by high temperatures. This SPF 50 formulation combines *Physalis pubescens* fruit juice, quercetin, vitamin C (ethyl or liposoluble), and vitamin E, along with exosomes and glycyrrhethinic acid derivatives, to provide antioxidant defense against reactive lipids and heat-induced free radicals. Enhanced with cacay oil and water resistance, REPASKIN HEAT protects and restores the skin from photo- and thermo-induced stress.

Because human-cell exosomes remain restricted in most regions, we exclusively use non-human, probiotic, or biocompatible sources, fully compliant with cosmetic regulations. For me, exosomes are the logical evolution of liposomes—intelligent, biocompatible carriers that teach the skin to regenerate itself safely and effectively.

### Cacay oil and future formulations

At Sesderma we believe that innovation also comes from nature. One of our most significant recent advances is SESCACAY, a line built around cacay oil, one of the richest natural sources of pure, bioavailable retinol and essential fatty acids. With new European regulations limiting synthetic retinol concentrations, cacay oil has emerged as a powerful, skin-friendly alternative thanks to its exceptional regenerating, antioxidant, and anti-ageing properties.

Clinical studies show that SESCACAY significantly improves firmness (+92%), comfort (+93%), and overall luminosity in just 28 days. Because of these results, we are now extending its use beyond the SESCACAY line: cacay oil will be progressively incorporated into other Sesderma products and existing formulas to boost cell renewal, barrier restoration, elasticity, firmness, and overall skin vitality, while maintaining excellent tolerance even for sensitive skin.

But SESCACAY is more than scientific innovation. Since cacay is cultivated in the Amazon region, Dr. Serrano is launching a solidarity program to support the indigenous communities in Colombia who harvest it sustainably. The initiative will focus on fair trade, education, healthcare, and economic development, while preserving ancestral cultivation practices and protecting biodiversity.

For Sesderma, cacay oil represents the perfect convergence of science, sustainability, and social responsibility, and will play an essential role in the evolution of our formulations in the coming years.

### Dr. Gabriel Serrano Longevity Centres

Longevity medicine is the natural extension of my lifelong philosophy: the skin is a reflection of total human health. Ageing is not only biological—it is neurological, nutritional, emotional and dermatological. For this reason, we are launching



the Dr. Gabriel Serrano Longevity Centres in Doha, Dubai, Qatar, Bogotá, Bayahibe, Madrid, Valencia, Shanghai and Moscow, with several additional international openings planned for the coming months.

These centres are the first of their kind globally, integrating advanced dermatology with cutting-edge neurostimulation technologies, including photobiomodulation and electrical brain-stimulation therapy. These techniques have shown extraordinary benefits for migraines, anxiety, emotional stress, mild depression, cognitive fatigue and overall mental performance. By stimulating specific neural pathways, we help improve mood regulation, concentration, memory and emotional balance.

In addition, the Longevity Centers will include a specialised programme of cerebral photobiostimulation, using Sesderma products in combination with specific light-based protocols. This approach is designed to support cognitive enhancement, reduce migraines, alleviate depressive symptoms and contribute to overall neurological wellbeing.

However, longevity goes far beyond the brain. Our centres also incorporate personalised nutritional programmes, targeted micronutrient supplementation, and lifestyle protocols designed to optimise cellular function. We are developing a new range of functional foods, including antioxidant-rich beverages, yogurts and advanced nutraceutical formulations aimed at improving immune resilience, metabolic balance, physical strength and cognitive longevity.

The goal of the Dr. Gabriel Serrano Longevity Centres is simple but powerful: longevity is not

about adding years to life, but adding quality to those years—helping individuals maintain strong skin, a healthy body and a sharp mind as they age. These centres represent a new frontier where dermatology, neuroscience, nutrition and regenerative science come together to empower people to live longer, healthier and more vibrant lives.

### Social Impact: Supporting Youth Through Sport

In addition, Dr. Gabriel Serrano is developing a new social initiative in the Dominican Republic aimed at supporting vulnerable children and young people. His objective is to offer them a safe environment, discipline and opportunities for growth through sport. To achieve this, he has acquired land to build what will become the largest football stadium in the area, along with the creation of youth teams in Bayahibe and on Saona Island. The project seeks to help children and teenagers move away from life on the streets and channel their potential through structured sports training. For those who demonstrate exceptional talent, Dr. Serrano intends to open pathways for them to continue their football development in Spain, with the possibility of joining first-division clubs such as Valencia CF, Sevilla FC or Real Madrid.



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