BIOLUMINA™ · REGENERATIVE AESTHETICS · THE ROOT & SCALP SPA, LAKEWAY TX

Harnessing the Regenerative Power of Birth Tissues

FOR ADVANCED AESTHETICS APPLICATIONS

WHARTON'S JELLY · AMNIOTIC FLUID · EXOSOME SERUM · ALMA TED DELIVERY

PRODUCT	APPLICATION	DELIVERY	CLASSIFICATION
BioLumina™	Hair Rejuvenation	Alma TED	Topical Cosmetic

I Introduction

BioLumina™ is at the forefront of regenerative aesthetics, pioneering the development of advanced cosmetic applications derived from Wharton's Jelly and Amniotic fluid. These tested biological materials, sourced from consented, screened, donor mothers, are rich in growth factors, cytokines, peptides, microRNA, messenger RNA, exosomes, and extracellular vesicles known for their regenerative properties.

Most importantly, we are preserving the original perfect combination of these agents and their associated signaling pathways to enhance replication of the optimal environment for a newborn's growth and development, Mother Nature's Miracle. Our philosophy is that isolating, culturing, denaturing, diluting, or otherwise modifying this optimal solution cannot preserve the full regenerative effects intended by Mother Nature.

The proprietary BioPur process ensures the highest quality and safety of these products, preserving their full therapeutic potential.

II Why Source & Process Matter

> *Isolating, culturing, denaturing, diluting, or otherwise modifying this optimal solution cannot preserve the full regenerative effects intended by Mother Nature. BioLumina™ preserves the source, unadulterated, in full.*

Not all exosomes are created equal. The regenerative potential of any exosome product is directly determined by two non negotiable factors: where they come from and how they are processed. Compromise either, and the therapeutic value is fundamentally diminished.

01 · Source Matters. BioLumina™ is derived exclusively from Wharton's Jelly and Amniotic fluid, birth tissues recognized as among the most potent regenerative sources in human biology, containing the most concentrated, naturally occurring levels of growth factors, cytokines, microRNA, messenger RNA, and extracellular vesicles found anywhere in the body.

Wharton's Jelly, the umbilical cord matrix, delivers a dense concentration of mesenchymal stem cell derived signaling factors and structural proteins essential for tissue regeneration.

Amniotic fluid contains the full complement of growth factors clinically shown to improve hair density and thickness, with anti inflammatory cytokines that support follicle health.

Birth tissue derived exosomes carry the most diverse payload of bioactive miRNA and mRNA sequences, the molecular instructions that guide cellular behavior, repair, and regeneration.

02 · Process Matters. Even the finest source material can be rendered ineffective through improper processing. Isolating individual components, culturing cells outside their natural environment, denaturing proteins, or diluting the final product each destroys the complex signaling architecture that makes exosomes therapeutically active.

Dilution reduces therapeutic concentration below clinically meaningful thresholds, producing a product that may contain exosomes but lacks the density required for measurable effect.

Denaturation, through improper temperature, pH, or chemical processing, permanently damages exosomal membranes and destroys the miRNA and mRNA cargo they carry.

The BioPur process preserves the full unadulterated composition of the source: sterile capture, advanced filtration, nanoparticle isolation, and zero donor DNA, intact from collection to application.

III The BioPur Process: Preserving Nature's Gift

A meticulously designed, multi step approach that maximizes the regenerative potential of ethically sourced Wharton's Jelly and Amniotic fluid while ensuring safety and efficacy.

RIGOROUS DONOR SCREENING & CONSENT

Medical History, comprehensive review to identify potential health risks.

Serology, blood tests to prevent transmission of infectious diseases.

Family History, review for genetic or hereditary conditions.

COVID-19 Screen, ensuring donors are free from SARS-CoV-2 infection.

C-Section Preference, to reduce contamination and ensure clean capture.

ETHICALLY SOURCED COLLECTION

Clean Capture, sterile collection immediately after delivery.

Filtering Process, advanced filtration for an acellular final product.

No DNA Transfer, no donor DNA present in the final product.

Nanoparticle Capture, isolation of exosomes crucial to regenerative properties.

Exosomes, miRNA & mRNA, preserved bioactive molecules for tissue support.

IV The Root Method, 3 Steps to Aesthetic Hair Rejuvenation

BioLumina™ is delivered through The Root Method™, a clinically sequenced three step protocol designed to stimulate, infuse, and deliver regenerative biologics to the follicle. No needles · No pain · No downtime · 3 sessions · 4 weeks apart · 90 minutes each · visible results in 2 to 4 weeks

01

STEP 01 · STIMULATE FOLLICLES

Laser Activation, FoLix Laser by Lumenis

FDA cleared · Non invasive · LLLT

The first FDA cleared fractional laser for hair rejuvenation. Low Level Light Therapy uses specific wavelengths to trigger ATP production, extending the Anagen growth phase and improving microcirculation. Microscopic thermal channels open beneath the skin while the stratum corneum remains intact, creating the optimal environment for the BioLumina™ serum applied in Step 02.

Sets the foundation for steps 2 and 3.

02

STEP 02 · INFUSE FOLLICLES

BioLumina™ Day Zero Exosome Serum

Exclusive biologic formula

Our proprietary BioLumina™ exosome serum, the formula of Wharton's Jelly and Amniotic Fluid, carries microRNA and messenger RNA to facilitate essential cell communication for follicle rejuvenation. Growth factors and cytokines remain unadulterated and highly active, preserving the full regenerative potential of the source material.

U.S. produced · AATB accredited laboratory · third party tested

03

STEP 03 · DELIVER TO FOLLICLES

Trans Epidermal Delivery (TED), Alma TED System

FDA cleared · Needle free · No downtime

FDA cleared acoustic sound wave technology drives BioLumina™ exosomes deep into the scalp, beyond the reach of other topical applications. Air pressure and high frequency electromagnetic waves ensure penetration to effective depth. The experience is completely non invasive and painless, with most clients reporting a warm buzzing sensation and resuming daily activities immediately.

Visible cosmetic improvements in density noted over the 3 session protocol.

Follicle Support & Ongoing Maintenance. Nutrafol™ intracellular hair nutrition addresses internal root causes of thinning including stress, hormones, and oxidative damage. Physician formulated compounded topicals deliver targeted daily protection against follicle miniaturization, personalized to each patient's specific pattern and biology.

V Scientific Basis & Clinical Evidence

Extensive research supports the use of Wharton's Jelly and Amniotic fluid for regenerative purposes. Each finding below is drawn from the peer reviewed literature cited in the bibliography.

REF. 1 · BIOMEDICINES, 2022 · AMNIOTIC FLUID

"Amniotic fluid contains potent hair growth factors that can significantly improve hair density and thickness."

Bowen CM, et al. Cell-Free Amniotic Fluid and Regenerative Medicine. Biomedicines. 2022;10(11):2960.

REF. 2 · SYSTEMATIC REVIEW · 11 CLINICAL STUDIES

"These nano vesicles facilitate intercellular communication and contain a variety of bioactive molecules that can potentially stimulate hair follicle regeneration."

Al Ameer MA, et al. Exosomes and Hair Regeneration. Clin Cosmet Investig Dermatol. 2025;18:2215.

REF. 3 · ANDROGENETIC ALOPECIA · 16 STUDIES

"Topical exosome therapy demonstrated significant increases in hair density and thickness in androgenetic alopecia patients. No significant adverse reactions have been reported."

Gupta JA, et al. Exosome Treatment in Hair Restoration. J Cosmet Dermatol. 2023;22:2424.

REF. 4 · PROSPECTIVE STUDY · 30 PATIENTS · P < 0.05

"A statistically significant increase in hair density was observed at weeks 4 and 12 following exosome treatment, with sustained patient satisfaction. No side effects were observed."

Effectiveness of Exosome Treatment in Androgenetic Alopecia. Aesthetic Plastic Surgery. 2024.

REF. 5 · CLINICAL REVIEW · PRECLINICAL & CLINICAL

"Findings from preclinical and clinical research underline exosomes' potential to improve hair density, thickness, and scalp condition, a minimally invasive method with incredible potential to transform hair loss management."

Al Abadie M, et al. Exosome Therapy for Hair Loss. Int J Clin Expl Dermatol. 2025;10(2).

REF. 6 · 40 STUDIES · 9 TO 31 NEW HAIRS / CM²

"Clinical reports noted density increases of 9 to 31 hairs per cm², with improvements in count, length, and thickness, alongside activation of the Wnt/□-catenin pathway and enhanced follicle stem cell function."

Exosome-Based Therapies for Alopecia Areata. NIH / PubMed Central. 2025. PMC12785886.

VI Conclusion

BioLumina™ is a full strength, premium topical aesthetic designed to maximize the effects of Mother Nature's Miracle, Amniotic fluid and Wharton's Jelly. Complex and intricate signaling pathways between the various growth factors in this pure and unadulterated carrier create an optimal environment for growth and regeneration. By harnessing the innate regenerative power of birth tissues, and maintaining purity and safety through the BioPur process, BioLumina™ offers safe, effective, and innovative solutions for enhancing natural beauty and addressing cosmetic concerns.

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