

# MEDICAL AESTHETICS

### Human Umbilical Cord Mesenchymal Stem Cell Derived

# EXOSOMES





The ONLY MSC EXOSOMES that are LEGALLY PERMITTED

to be sold and used for research and investigational use.



# WHAT ARE EXOSOMES?

Exosomes are small vesicles that are secreted by stem cells. They contain large amounts of growth factors, cytokines, and other substances with high regenerative potential that can be transferred to other cells due to their unique structure. IV INFUSION SITE INJECTIONS BUTTERFLY PUSH NEBULIZATION TOPICAL

This structure allows the exosomes to fuse with other cells in the body and to release their content into other cells. The contents of the exosomes such as cytokines, growth factors, and mRNA can then help the cell heal itself due to the actions of the transferred signaling molecules.

## OUR PROCESS

Our Medical-Grade Mesenchymal Stem Cell (MSC) derived exosomes are carefully produced using human umbilical cords sourced from healthy, full-term deliveries. Prior to donation, every mother providing the umbilical cord undergoes thorough testing to ensure safety and purity. We test for all viruses. We ensure not only that our product does not have any viruses but at no point did it ever have anything that might have been destroyed or degraded over time that could have been a risk in the past.

We extract the Mesenchymal Stem Cells from the **Wharton's Jelly** within the umbilical cord. We then put them in a cGMP lab setting and start to simulate them in-house using our proprietary

technology that we developed to upregulate the absolute highest concentration of key growth factors and anti-inflammatory factors possible. This allows us to use the newest and most potent stem cells possible. We then screen and culture them in a lab to control the safety and efficacy of the cells. We only use the first 3 passages (generations) because we have found that even after the 4th generation of Stem Cells, they will degrade too much and notice reduced loading and robustness of the exosomes.



## 20 BILLION EXOSOMES per ML Over 700 GROWTH FACTORS Verified by a 3rd Party Lab

## Certificate of Analysis Provided with Every Order

We must have a consistent product with every batch to meet the regulatory standards for consistency. By the time we get to the 4th generation, the Stem Cells become inconsistent and not potent enough to meet the regulatory standards (*Other labs will continue to culture the Stem Cells well past the 4th passage although they have degraded greatly*).

Next, we immerse them in the appropriate medium allowing them to secrete exosomes with consistent and high quantities of regenerative factors. Next, we extract the exosomes and analyze them through batch testing by sending them to Eurofins, a 3rd party laboratory approved by the FDA for pharmaceutical drug testing. They provide us with an extensive report that is inclusive of endotoxin, mycoplasma, sterility, as well as proteomic assays, mRNA sequencing, lipid



analysis assays, and surface analysis to make sure we have the right type of exosomes and particle size analysis. This is all done to make sure our product meets the 351(a) guidelines for **purity, potency, consistency, safety, and sterility**. Once we receive the test report and have been given the green light to package and make them available for use, we dilute them into saline. At that time, our product can then be used in any manner for cell-free healing and regeneration.

At that point, our product is available for lot release. A condensed version of that COA is provided to anyone purchasing the product and is shipped with the order.



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It is essential to emphasize that it is **ILLEGAL** to sell or use exosomes from any other manufacturer when administering them by injection or methods such as micro-needling and laser treatments where you break (open) the skin and apply them topically. With the exception of our product, currently, the

only legal way to use live stem cells and exosomes would be if they are derived from the patient themselves, are not manipulated in any way, and are used as a tissue transplant.

It's important to note that **exosomes are cell-free** and cannot carry vaccines, diseases, viruses, or foreign substances. Nevertheless, they have shown remarkable potential in promoting tissue regeneration and repair, reducing inflammation, and accelerating recovery from injuries, and have been associated with significant anti-aging, rejuvenation, and hair regrowth effects.

# What makes us different



We manufacture the **only MSC EXOSOMES LEGALLY permitted to be sold** and used for research and investigational use.



Our product can be legally administered via **IV Infusion** for Therapeutic Treatments, **Direct Site Injection** to help with Joint Pain, Torn Ligaments, Arthritis, etc., **Nebulization** to help with Lung Issues such as COPD and Pulmonary Fibrosis, as well as Dementia, Alzheimer's, PTSD among other Neurocognitive Issues. **Scalp Injections** for Hair Restoration, **Topically** after **Microneedling** and **Laser Treatments** for Skin Therapy or **Topically** as a cosmetic.



We prove our product is as potent with EXOSOMES and GROWTH FACTORS as stated by providing a **Certificate of Analysis** from a 3rd Party Laboratory with every order.



We are partnered with a major U.S. Based University School of Medicine.



We abide by all regulatory guidelines to ensure that we meet the purity, potency, consistency, and safety standards.

Our EXOSOMES contain a high potency of lipids, proteins, and nucleic acids such as RNA, cytokines, and microRNAs. Furthermore, our eXosomes have **over 700 Growth Factors.** 



We are currently **performing over 13 clinical studies** with our School of Medicine partner and have several more starting soon.



United States Patent on Shelf Stable EXOSOMES for Topical Applications



**Safety Studies** performed for Intravenous Administration (I.V.) using **1,000 times the normal potency** with no issues. This confirmed that you cannot overdose EXOSOMES.



Our Product is Manufactured in one of (6) ISO 5 Cleanrooms under c.G.M.P. guidelines



Our EXOSOMES can be used as an Active Product Ingredient (A.P.I.) in other regulated Products.

Exosomes have the potential to help manage degenerative conditions, tissue repair, anti-inflammation, and anti-aging because they target aging, injured, or diseased cells, instructing them to regenerate and repair. Exosome therapy delivers exosomes into the body through an IV Infusion, Butterfly Push, Nebulization, Topically or Site Injection to the target area. The exosomes, numbering in the billions, attach to target cells in the body, including blood, brain, muscle, skeletal, and organ cells.

#### BEFORE AND AFTER USING EXOSOME GEL



**BEFORE** 

DAY 6 = 🔆 =

MICRONEEDLE + GEL

BEFORE

17 DAYS

SCALP INJECTIONS

**5mL EXOSOME** 



**BEFORE** 

**DAY 60** 



MICRONEEDLE + GEL



BEFORE

2 WEEKS

Anti-Aging **Dark Eye Circles** Acne Scars Even Skin Tone Psoriasis Rosacea Eczema Herpes/Cold Sores 300% increase in Elastin **Tighten Sagging Skin** 180% increase in Fibroblasts Immune Health Treat Lyme Disease Improves Brain Health **Migraines and Cluster Headaches** Reduction in Redness and Irritation Reduction of Scars and Skin Lesions Treats a Variety of Skin Condition Improved Skin Texture and Pore Size Visible Decrease in Fine Lines, Wrinkles, and Age Spots Improvement in Dryness and Better Overall Skin Hydration Help Manage Degenerative Conditions Liver, Kidney, Cardiovascular and Neurological Disease Contribute to the Repair and Regeneration of Cartilage

Diabetes Anti-Inflammation **Respiratory Issues** RSD Neuropathy ALS Autism Alzheimer's Bell's Palsy **COVID** Lung Parkinson's Disease Supports Metabolic Function **Boosts Immune Health Enhances Tissue Regeneration** Burns **Plantar Fasciitis** Phantom Limb Pain **Back Pain** Tennis/Golfers Elbow **Erectile Dysfunction** Reduces Chronic Pain **Tissue Regeneration** Improved Joint Function Post Herpetic Neuralgia

## Therapeutic Effects Of Mesenchymal Stem Cell EXOSOMES

#### WOUND HEALING

#### **INCREASE:**

Angiogenesis **Collagen I Expression** Extracellular Matrix Remodeling Cellular Migration And Propagation

#### **DECREASE:**

Apoptosis Inflammation **Collagen Deposition** Myofibroblast Accumulation

#### **NEUROPROTECTION**

#### **INCREASE:**

Angiogenesis Neurogenesis Axonal Density **Cell Propagation** Neurite Remodeling Oligodendrogenesis Neurological Function Neurovascular Plasticity

#### **DECREASE:**

Apoptosis Microgliosis Inflammation **Reactive Astrogliosis** Neural Degeneration Intracellular Ss-amyloid Peptides

#### CARDIOPROTECTION

#### **INCREASE:**

Angiogenesis **Cell Propagation Cardiac Function** 

#### DECREASE:

Fibrosis Apoptosis Infarct Size Inflammation **Oxidative Stress** Vascular Remodeling





#### **HEPATOPROTECTION**

**INCREASE:** Liver Function Eosinophils **Cell Propagation Collagen Maturation** 

#### **DECREASE:**

Fibrosis Apoptosis Inflammation Oxidative Stress Alanine Aminotransferase

#### **OTHER DISEASES**

#### Lung Tissue DECREASE:

Fibrosis Inflammation Vascular Remodeling Pulmonary Hypertension Bronchopulmonary Dysplasia

#### **Dermatitis DECREASE:**

**E**osinophils lge









Number of MSC Exosomes per mL (Injectable Saline)	20 Billion
Number of MSC Exosomes (15mL Topical)	100 Billion
Number of MSC Exosomes (30mL Topical)	200 Billion
Legal to Sell and Use for Research	YES
Legal to Administer via IV Infusion, Direct Injection, Nebulization, Topically	YES
Abide by <b>All Regulatory Guidelines</b>	YES
Safety Studies for Intravenous Administration (I.V.)	YES
# Active Clinical Studies	13
Patent on the Stabilization of EXOSOMES at Room Temperature	YES
3rd Party Testing on Every Batch	YES
Tested for Purity, Potency, Consistency, Safety and Sterility	YES
Certificate of Analysis (COA) Provided with Every Order	YES
Legal to <b>Ship Internationally</b>	YES
U.S.P. 85 / The United States Pharmacopeia <b>85 Bacterial Endotoxins</b>	YES
Aseptic Manufacturing Process by Batch free from contamination	YES
Product Manufactured in ISO 5 cleanroom under c.G.M.P. guidelines	YES
U.S.P. 71 / The United States Pharmacopeia 71 Sterility Tests	YES
Partnered with a Major U.S. Based School of Medicine	YES

# PRODUCTS

### **5mL MSC EXOSOME INJECTABLE SALINE**

100 BILLION EXOSOMES OVER 700 GROWTH FACTORS

#### **APPLICATIONS:**

IV INFUSION BUTTERFLY PUSH NEBULIZATION SITE INJECTION SCALP INJECTION TOPICALLY

#### **SHELF LIFE:**

Cryogenic Freezer | 18 Months Home Freezer | 4 Months Home Refrigerator | 10 Days Room Temperature | 24 Hours



### **MSC EXOSOME GEL and SERUM**

OVER 700 GROWTH FACTORS 15ml: 100 BILLION EXOSOMES 30ml: 200 BILLION EXOSOMES

APPLICATIONS: LASER + GEL or SERUM STAND-ALONE TOPICAL

**STABLE AT ROOM TEMPERATURE for 14 MONTHS** 



### **MSC EXOSOME CREAM**

OVER 700 GROWTH FACTORS 15ml: 100 BILLION EXOSOMES 30ml: 200 BILLION EXOSOMES

APPLICATIONS: MICRONEEDLE + CREAM LASER + CREAM STAND-ALONE TOPICAL

STABLE AT ROOM TEMPERATURE for 14 MONTHS



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