PHYTEXOM

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The EXOSOME Science of Eternal Youth

Plant stem cell technologies for
ensuring skin cell regeneration and prompt restoration.

PHYTEXOM **is an advanced** *Lithospermum Erythrorhizon* **stem cell EVs.**
It contains countless miRNAs and proteins.

It maximizesthe revitalizing effects of your skin and hair follicles with its unique EVs and phytochemicals[1)] formula.

1)Phytochemicals (plant physiologically active substances)

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Precision Science

Powder | 50mg

Lithospermum Erythrorhizon Evs

(Extracellular Vesicles)

Botulinum Polypeptide

Polyphenols(phytochemicals)

Hyaluronic Acid

LEXosome™

Active Solution | 5ml

Hyaluronic Acid

Amino Acids

Vitamins

Peptides

Glutathione

The natural active EVs in our PHYTEXOM are a pure and rich mixture of

precision peptides, cytokines, miRNAs and polyphenols that target damaged skin and hair cellular structures topically,

by providing the nutrients and resources necessary to facilitate the repair of cells.

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ABOUT PHYTEXOM

Anti-pigmentation

Inhibit melanin synthesis
Inhibit tyrosinase activity in B16 melanoma cells

Anti-oxidation

Contain diverse antioxidant proteins
Increase cell survival against oxidative stress
Induce the activities of antioxidants in HDFs

Anti-wrinkle

- Increase proliferation of HDFs
- Increase collagen synthesis
- Increase dermal thickness

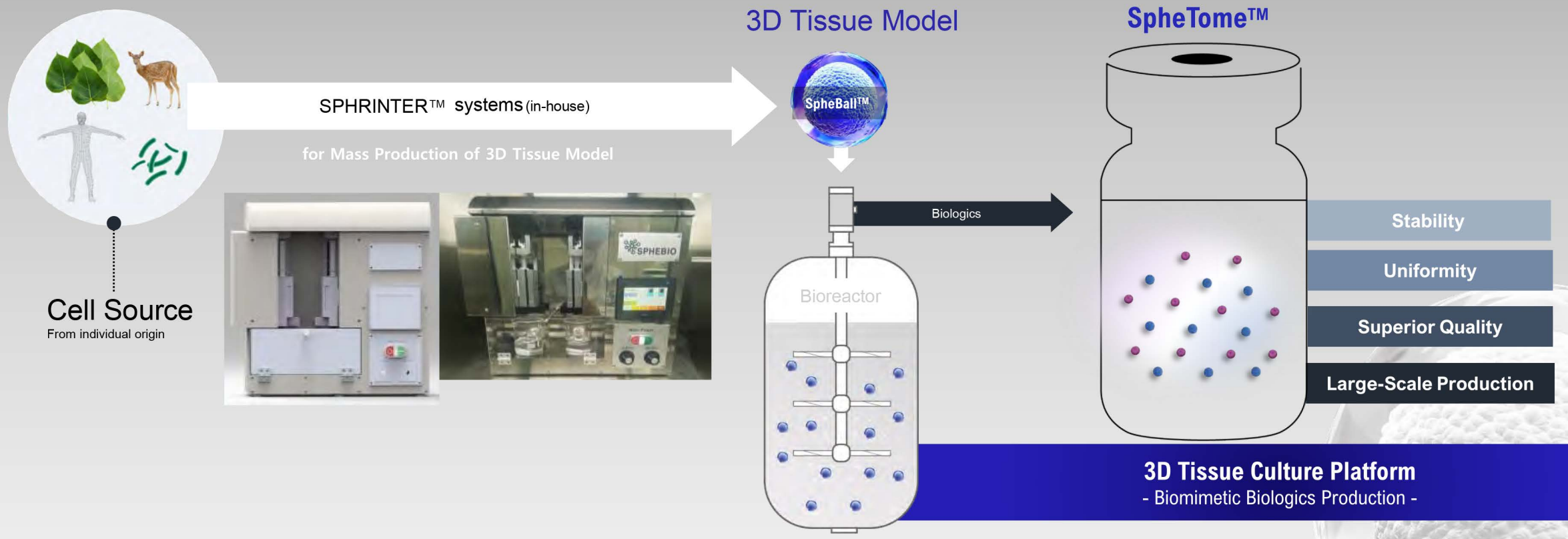
Wound healing

- Increase the migration of dermal fibroblasts
- Activate keratinocytes to accelerate wound healing

Hair Restoration | Whitening | Anti-Inflammatory | Skin Regeneration | Maintain Elasticity

Patented 3D Tissue Culture Platform

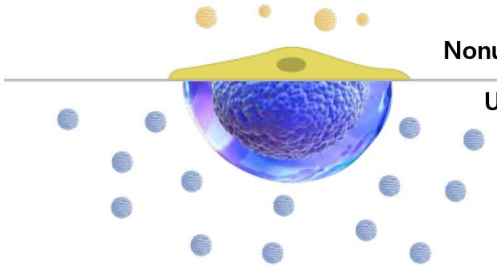
SpheBall™ and SpheTome™, as a Patented 3D Tissue Culture Platform , can produce qualitatively and quantitatively superior exosomes from any source, including human, plant, animal, and microbiome.



2D vs. 3D Production

Old Fashioned Production

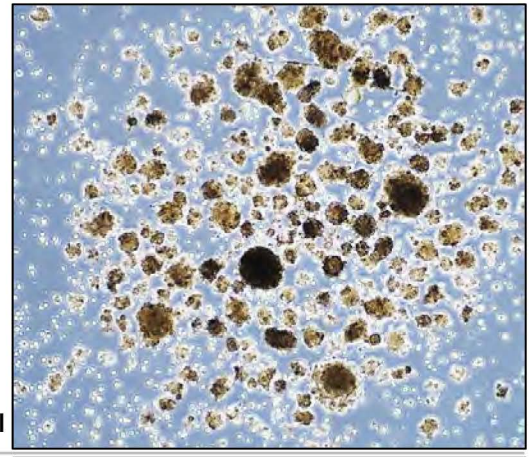
2D



3D

Innovative Production by

SpheBall™ SpheTome™



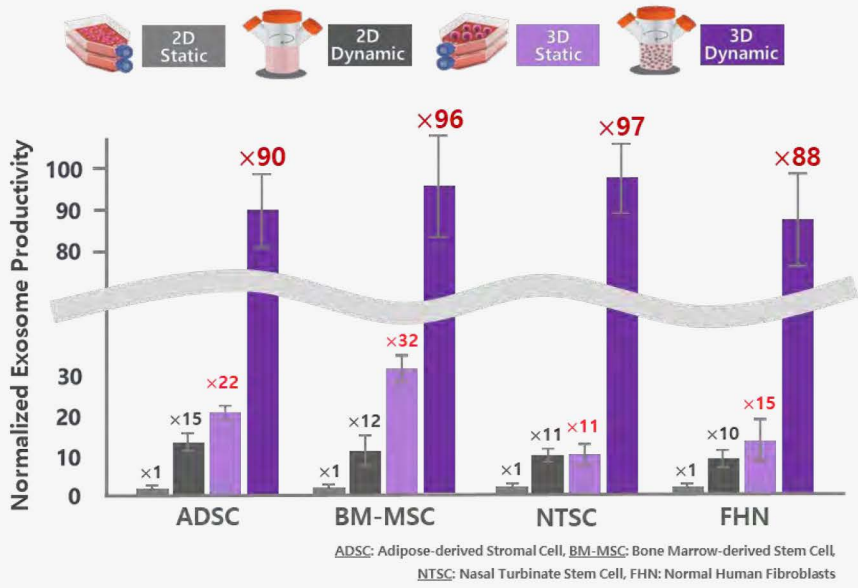
Ref. Sphebio R&D

SpheBall™

Uniformity	Productivity
4× precision	30× higher

SpheTome™

Productivity	Quality Control
90×~ Higher (vs. 2D)	Excellent



ADSC: Adipose-derived Stromal Cell, BM-MSC: Bone Marrow-derived Stem Cell,
NTSC: Nasal Turbinate Stem Cell, FHN: Normal Human Fibroblasts

Why PHYTEXOM

Overwhelming Quantity Advantage & Qualitative Superiority

EV Concentration

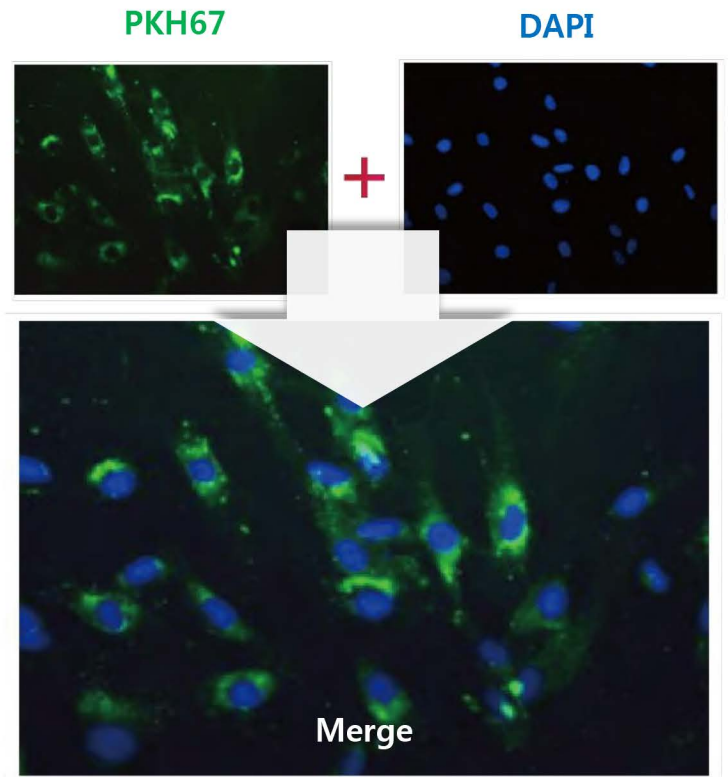
- PHYTEXOM is the culmination of many years of research to create the ideal combination of ingredients designed for one purpose; helping you maintain glowing, younger-looking skin

- By taking the strength of amino acids known as the building blocks of life, hyaluronic acid's hydration capabilities, and the power of phytochemicals, and combining them with the cell signaling power of Exosomes,

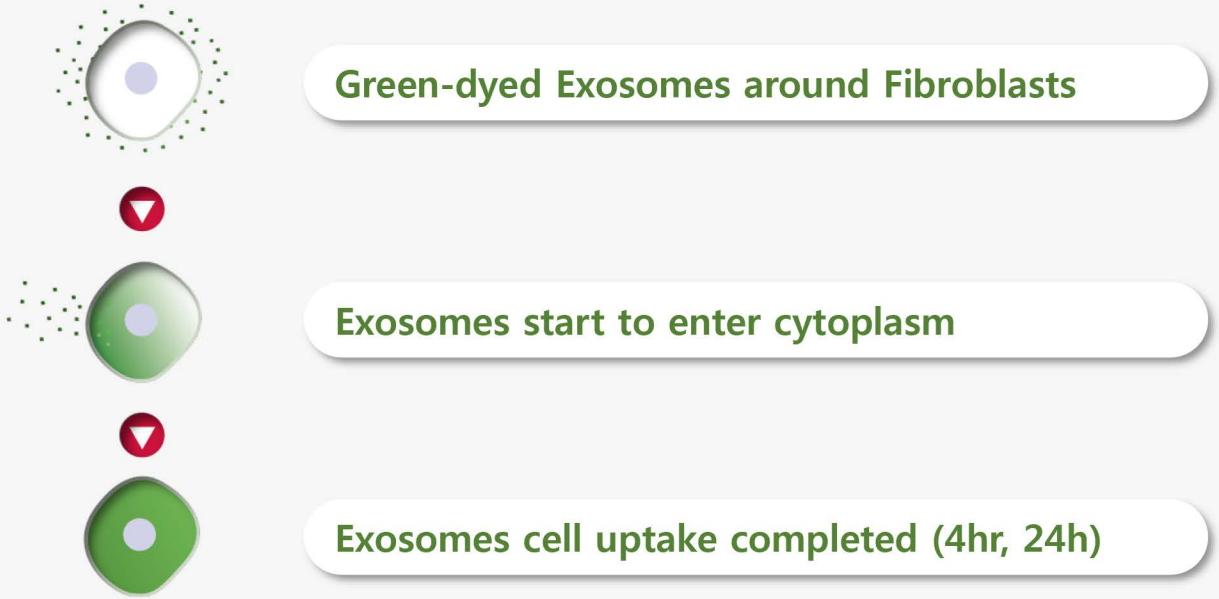
SPHEBIO has created the "Golden Ratio"

LEXosome™ (Lithospermum Erythrorhizon eXosome)

Exosome cell uptake



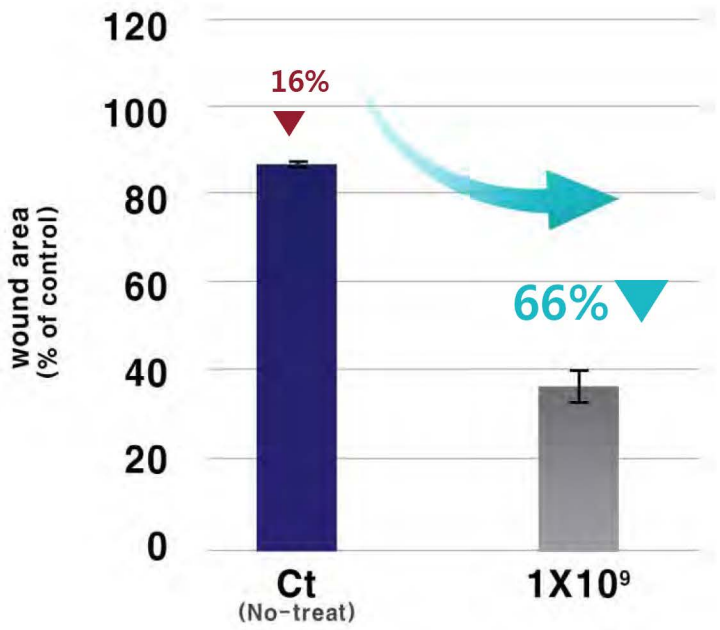
- PKH67: stained LEXosome
- DAPI: stained human fibroblast nucleus
- Merge: LEXosome delivered into human fibroblast cytoplasm



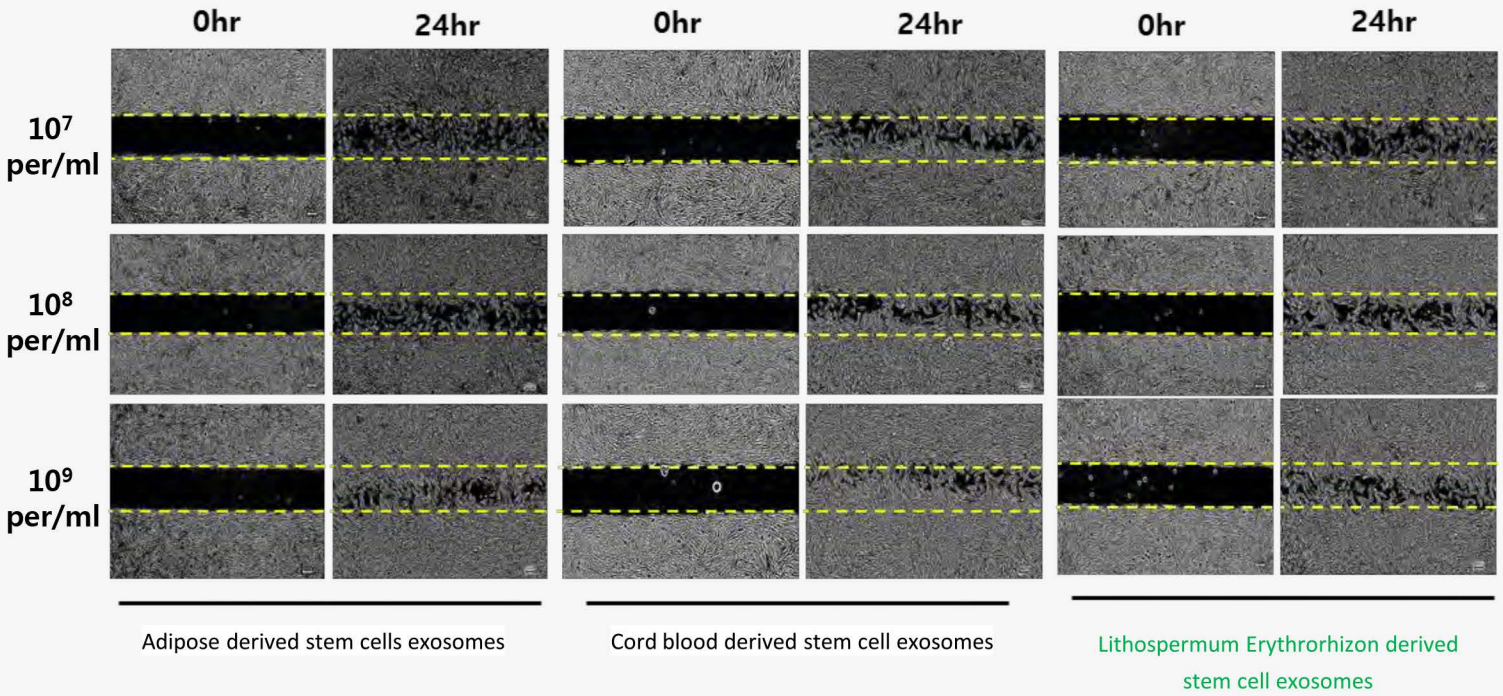
- After staining *Lithospermum Erythrorhizon* Exosomes with a green fluorescent marker, the extent of fibroblast infiltration was examined.

LEXosome™ (Lithospermum Erythrorhizon eXosome)

Wound healing effect



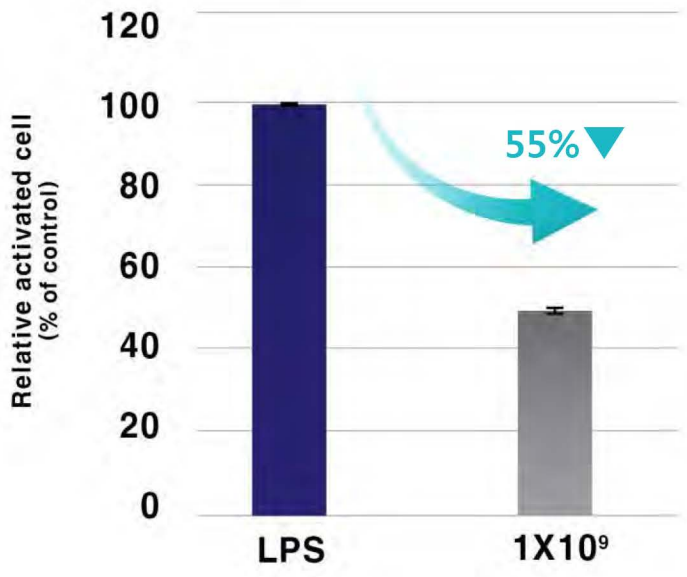
- Fibroblasts are cells that are predominantly distributed in the upper part of the dermis and are responsible for synthesizing extracellular matrix and collagen.



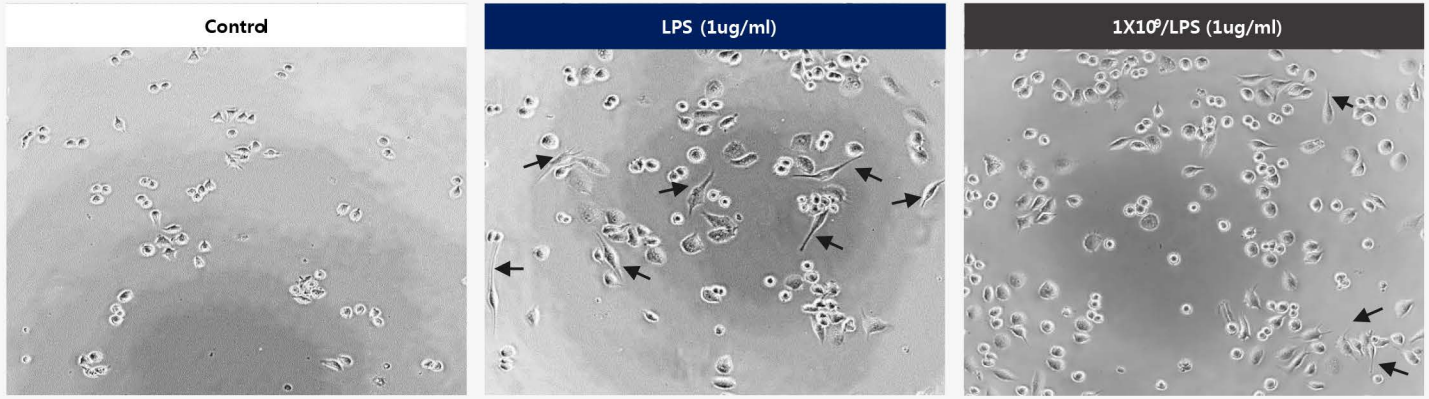
- At Day 1 of wound treatment, the wound recovery rates were as follows: untreated control (0) was 12.1%, exosomes at 1x10⁹ particles/ml were 68.8%.
- Wound healing in fibroblasts improved by 468% with the application of exosomes.
- *Lithospermum Erythrorhizon* Exosomes have a beneficial effect on wound recovery.
- There is no significant difference in cell activity between human-derived stem cell exosomes and *Lithospermum Erythrorhizon* stem cell exosomes.

LEXosome™ (Lithospermum Erythrorhizon eXosome)

Anti-inflammatory effect



*LPS: Lipopolysaccharide (LPS) is the major component of the outer membrane of Gram-negative bacteria and induce of inflammatory.

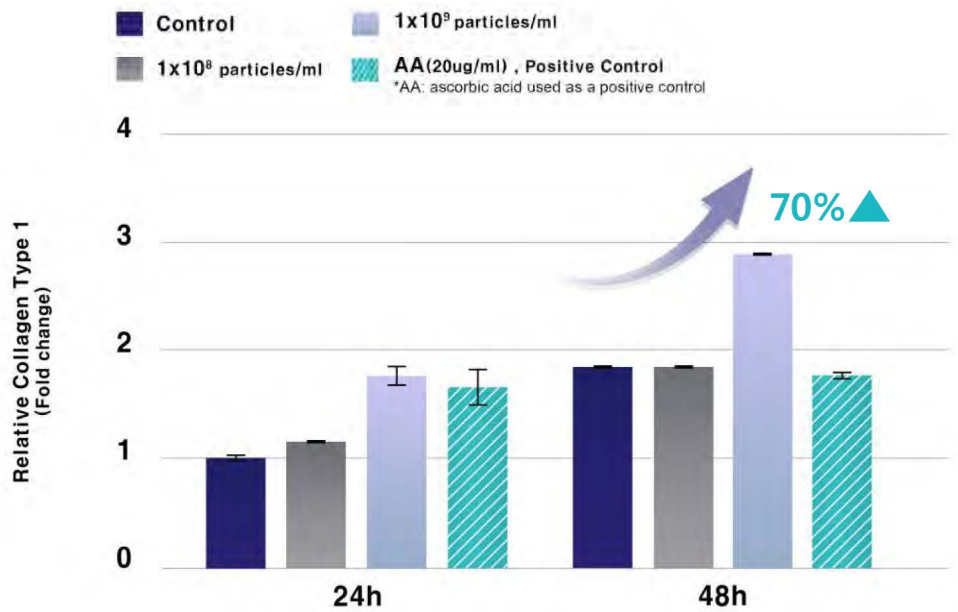


Ref. Sphebio R&D

- Macrophages, when exposed to the inflammatory substance LPS, transform into a dendritic shape with extended branches.
- *LithospermumErythrorhizon*Exosomes hinder the transformation of macrophages into a dendritic shape induced by LPS, thereby alleviating the inflammatory response.
- Cosmetics incorporating exosomes can be expected to alleviate inflammation induced by external stimuli and microorganisms.

LEXosome™ (Lithospermum Erythrorhizon eXosome)

Collagen synthesis



- *Lithospermum Erythrorhizon* Exosomes Promotes the production of collagen type I, which acts as a crosslink in the dermal layer.
- Cellular wound repair and cell proliferation are associated with collagen synthesis
- Identified collagen I synthesis in LEXosome-treated fibroblasts
- LEXosome increased the synthesis of collagen at 24 hours, similar to that of the positive control (AA).
- LEXosome collagen synthesis was increased 70% over positive control up to 48 hours post treatment

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HOW TO TREAT

For skin

①Diagnosis

Diagnose skin condition

②Pre treatment

Wash the face and remove cosmetic residue. Once anesthetic cream is applied evenly on the face, proceed the laser toning.

Cleansing

Anesthetic Cream

Laser Toning

③Main treatment - PHYTEXOM

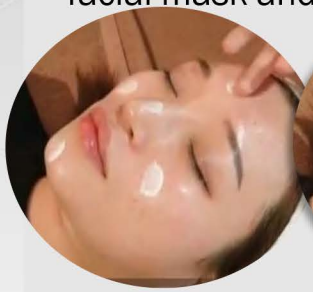
On a biweekly or monthly basis, apply PHYTEXOM on a patient's skin with MTS or RF micro needling device

PHYTEXOM

MTS 0.5mm or Injector device

④Post treatment

Apply ultrasonic wave to increase the absorption of PHYTEXOM , and complete the procedure with facial mask and sunscreen



Sunscreen

Mask

Ultrasonic Wave

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HOW TO TREAT

For hair

①Diagnosis

Diagnose scalp condition

②Pre treatment

With shampoo, remove residues on the patient's scalp.
(Hair steamer is optional)

③Main treatment - PHYTEXOM

On a biweekly or monthly basis, apply PHYTEXOM on a patient's scalp with MTS device

PHYTEXOM

MTS 0.5mm or Injector device

④Post treatment

Laser treatment helps intensive transdermal delivery of PHYTEXOM

Iontophoresis | LED Lighting | LLLT

The EXOSOME Science of Eternal youth

THANK YOU