

GFCCELL™ EXO VITAL



GFC Life Science Co., Ltd.



The memory of healthy skin,
experience a return of beauty.



LYOPHILIZED ASC CONDITIONED MEDIA
& PLANT EXOSOMES

GFCCELL™

No bad skin from the beginning!

There is no bad skin since birth.

There is only a difference of change depending on the environment, lifestyle, and level of care that you've been exposed to, we are all born with healthy skin.

But our skin becomes thinner and weaker overall then it makes less elastic, dries, and wrinkles according to natural aging progress.

Frequent procedures such as plastic surgery, fillers, and Botox only make our skin becomes thinner and more sensitive.

It doesn't restore natural health.

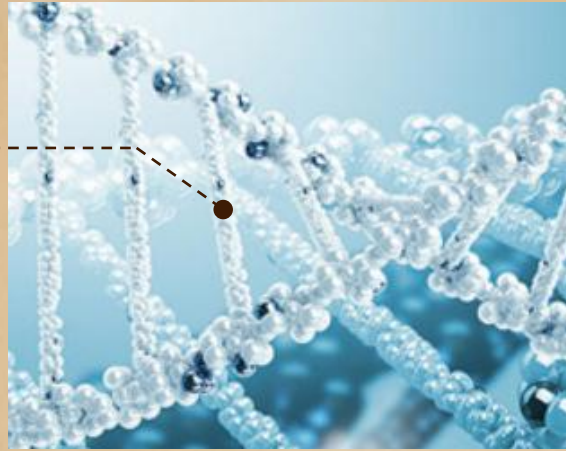
So, we found the answer for young and healthy skin through Human Adipose stem cell conditioned media and plant-derived exosome that retain healthy genetic information.



GFCCELL™ EXO COMPLEX

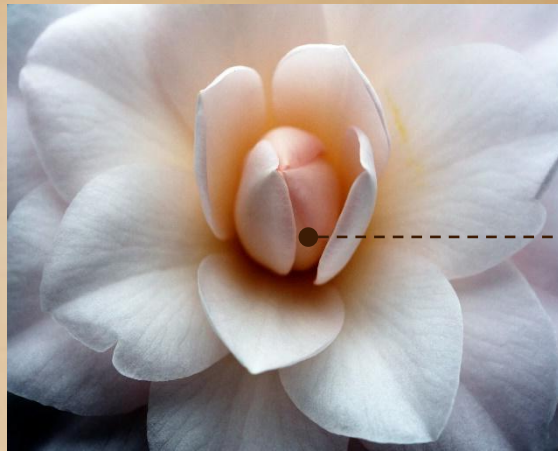
Human Adipose
Stem Cell Conditioned
Media

94%

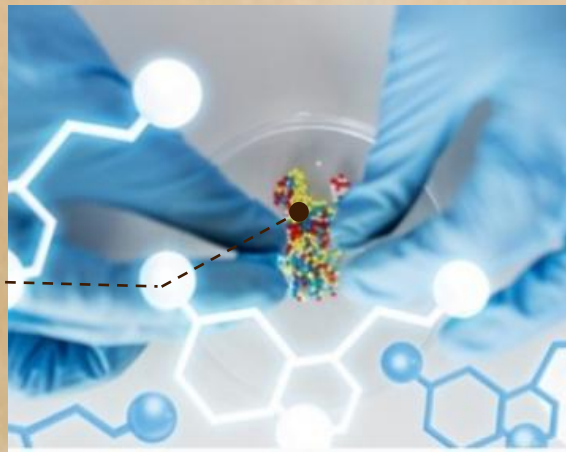


Camellia callus
exosome

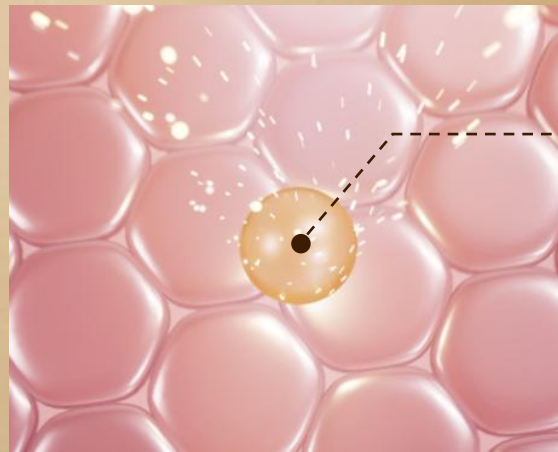
3%



PEPTIDE
SOLUTION



Various skin
active
ingredients



Skin
regeneration

Acts quickly on the aging sign of
skin, restores solid strength and
vitality to the skin is

GFCCELL™

EXO COMPLEX

Clear skin
tone

Elastic skin
without
wrinkle

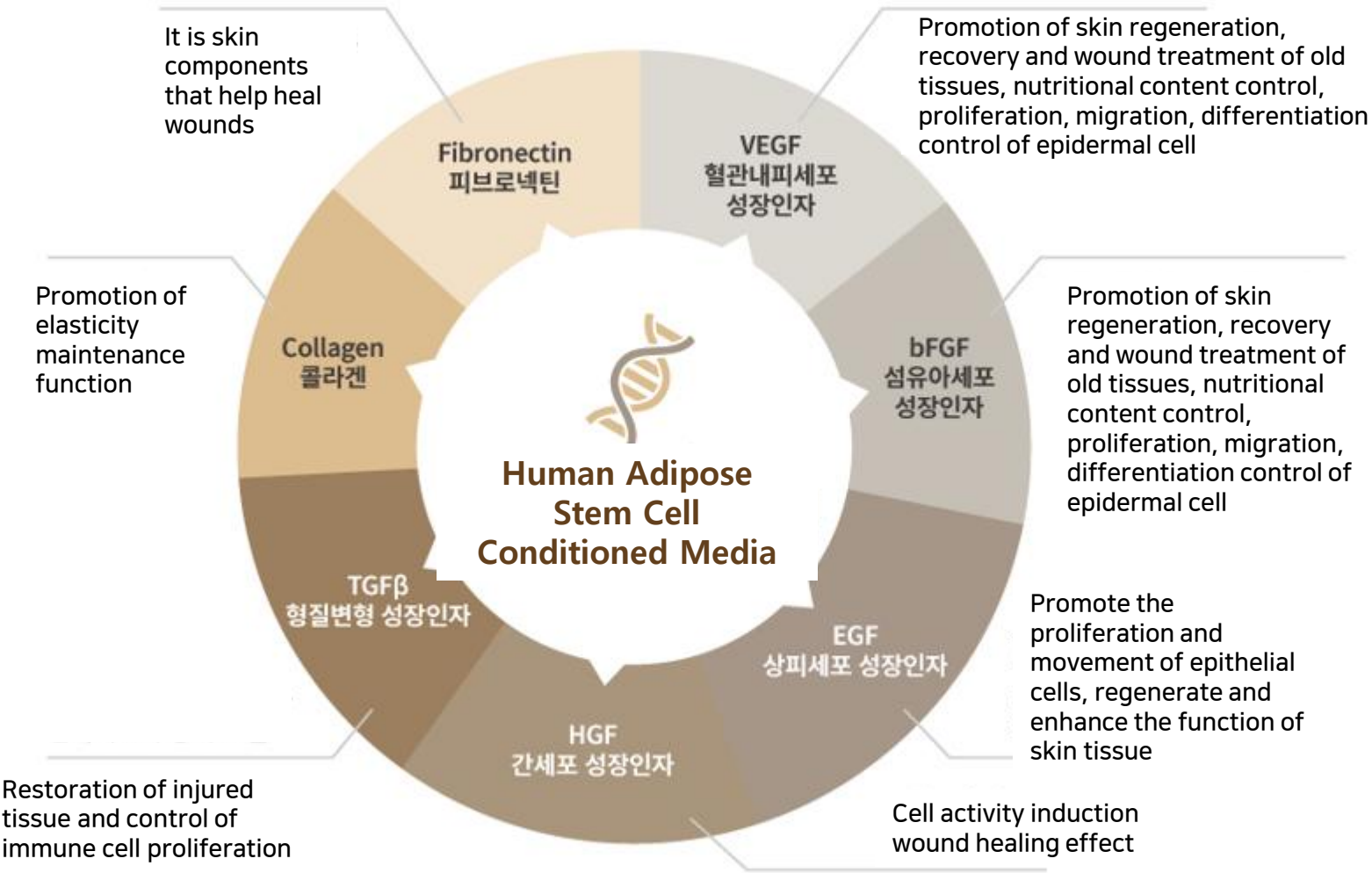
Smooth skin
texture

Perfect moist

Shiny skin

Healthy skin
barrier

GFCCELL™ EXO | Key Ingredient ① – Human Adipose Stem Cell Conditioned Media



Contains around 250 growth factors
(Promotes cell division or growth and differentiation)

- ◎ HGF Hepatocellular Growth Factor : Efficacy of cell activity induction and surgical wound treatment
- ◎ VEGF Vascular Endothelial cell Growth Factor : Cell proliferation and angiogenesis promotion
- ◎ α-EGF Epithelial cell Growth Factor : Promotes epithelial cell proliferation and promotes the production of collagen, hyaluronic acid and SOD in fibroblasts
- ◎ β-FGF Fibroblast Growth Factor : Skin dermal regeneration factor which is effective in wound treatment
- ◎ EGF Epidermal cell Growth Factor : Promotes cell turnover by expressing epidermal cell growth signals
- ◎ KGF Keratinocyte Growth Factor : Promoting the growth of keratinocytes
- ◎ IGF-1 Insulin-like Growth Factor : Contains Exosome of regeneration and tissue growth promotion
- ◎ Exosome only exist 0.1% ratio in stem cell conditioned media
- ◎ Exosome is nano vesicles of 50~200nm size, containing various genetic information substance in cells

GFCCELL™ EXO | Key Ingredient ① – Human Adipose Stem Cell Conditioned Media

01

Acquiring adipose tissue and securing adipose stem cell (signing a joint research agreement with Lee Young Clinic)

Securing adipose tissue



Securing adipose stem cell



Securing adipose stem cell conditioned media



02

Confirmation of donor eligibility

Confirmation of donor eligibility

공여자 적격성 확인서
Confirmation of Agreement for Eligibility of Donor safety

본 확인서는 지방조직을 채취할 채취 대상자를 위한 안전을 확보하기 위한 것으로, 채취 대상자 공여자가 안전 및 건강에 대해 본인 만족을 얻은 후만 실시 가능하며, 공여자가 건강을 확인하는 것입니다.

지방조직 공여자는 자발적, 무상, 고품질 지방 조직을 제공하며, 공여자가 안전을 확보한 후, 공여자의 안전을 위한 건강검진 결과 결과 확인 시점 소견이 양호함을 확인합니다.

구분	내용
성명	
성별	
주민등록번호	
주소	
연락처	

공여자: 김민준
 본 목적: 인체실험용
 담당자: 김민준
 주소: 서울 서대문구 갈매동 455-1 우정빌딩 110호
 대표 번호: 02-2333-0000

Confirmation of innate or chronic disease examine

선천성 또는 만성질환 검사 확인서
Confirmation of Agreement for Test of Congenital and Chronic Disease

본 확인서는 지방조직 채취 대상자를 위한 안전을 확보하기 위한 것으로, 채취 대상자가 선천성 또는 만성질환에 대해 본인 만족을 얻은 후만 실시 가능하며, 공여자가 건강을 확인하는 것입니다.

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Confirmation of infectious spongiform encephalopathy examine

전염성 해면성 상태 검사 확인서
Confirmation of Agreement for Test of TSE

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Agreement for the use of adipose tissue

지방 조직 사용 동의서
Consent of Agreement for Adipose Tissue

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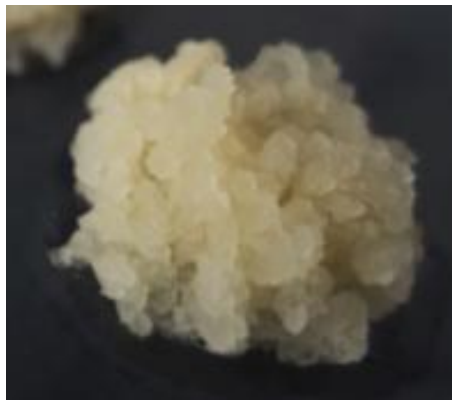
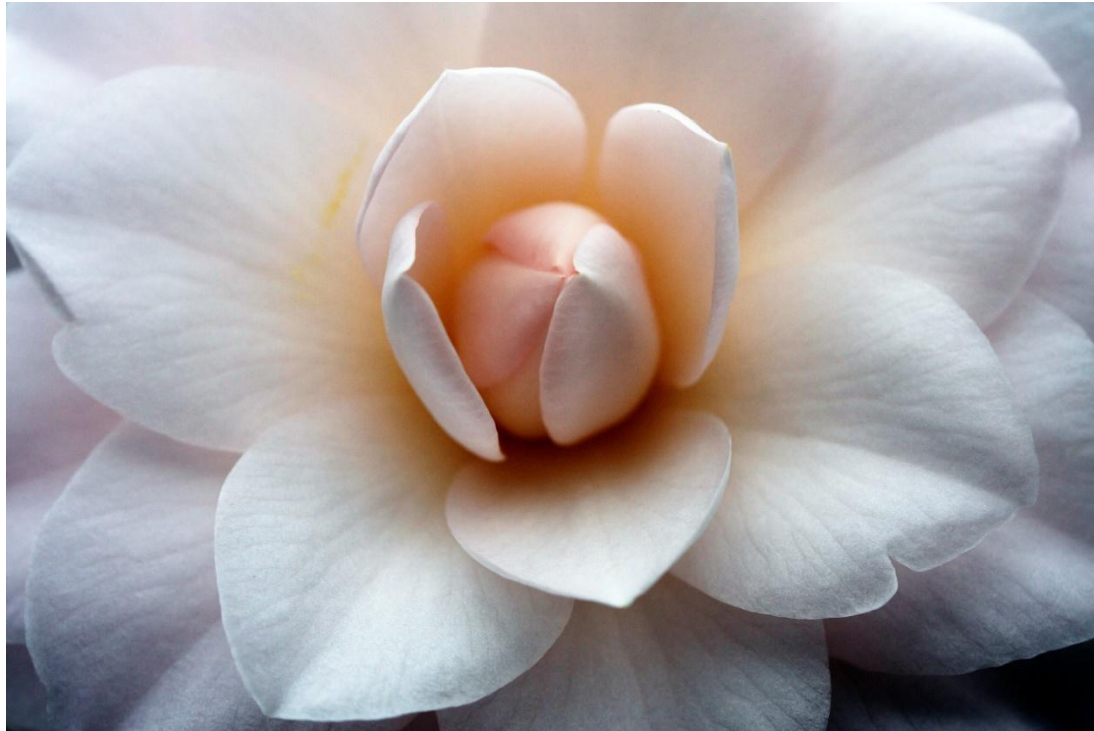
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GFCCELL™ EXO | Key Ingredient ② – Camellia stem cell derived Exosome



Camellia japonica, the winner of winter

- ◎ The excellent anti-oxidant effect of "polyphenol" prevents skin aging by removing free radicals that promote aging
- ◎ It is rich in "oleic acid" to prevent skin loss and moisturize and soothe skin
- ◎ Tanin helps with skin diseases such as atopy and acne by removing inflammation
- ◎ Catechin helps skin to become more active by converging and calming the tired skin
- ◎ Rich vitamin C prevents melanin pigmentation, improving spots and freckles
- ◎ High purity exosome isolated and purified directly from camellia callus

Plant-derived Exosome

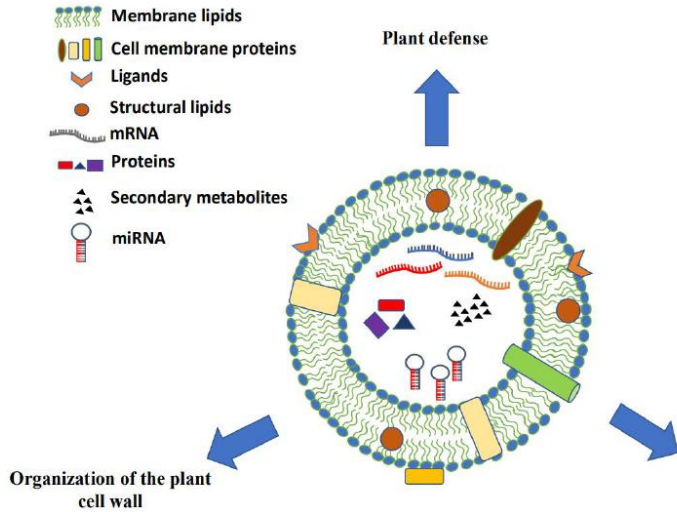
- ◎ Physiological function of plant-derived Exosome in apoplast which is a free space formed between cell membranes and cell walls in plant and serve as a movement of nutrient and moisture

Physiological function of plant-derived Exosome

- ◎ Plant Exosome has various functions such as cell proliferation, inflammation control, anti-cancer, anti-oxidant, immune control, tissue regeneration and intestinal symbiotic control
- ◎ In particular, it has the advantage of being able to act as a drug carrier without side-effects, and various studies are currently being conducted

GFCCELL™ EXO | Key Ingredient ② – Camellia stem cell derived Exosome

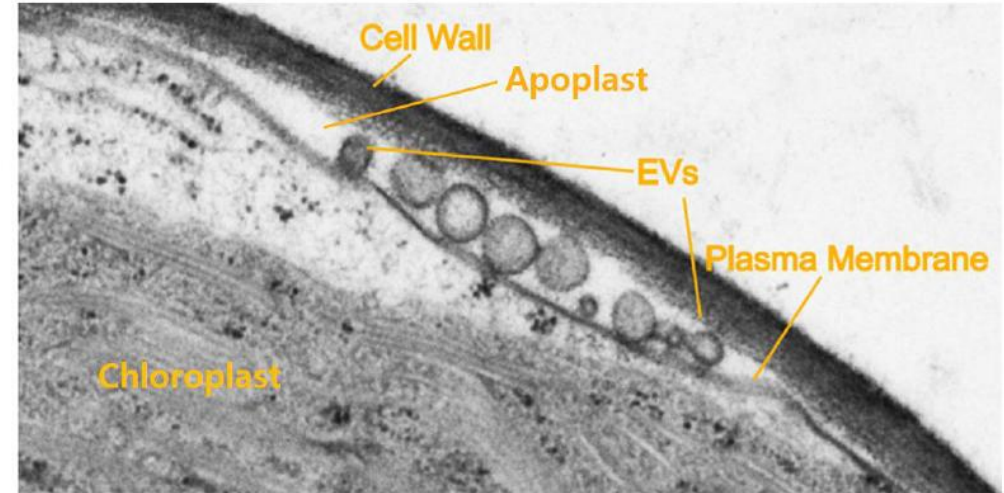
Plant-derived Exosome components



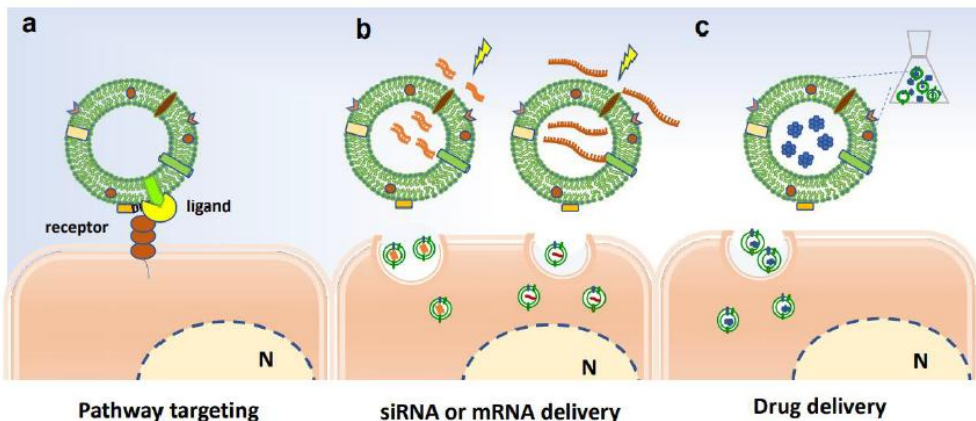
Plant-derived Exosome

- ⊙ Produced in the multi-vesicular body (MVB) in the cytoplasm and secrete into the apoplast (space between cell membrane and cell wall).
- ⊙ Directly control voltaic situation by binding to the receptor of target cell
- ⊙ Deliver siRNA, RNA of donor cell
- ⊙ Deliver drugs acting as a carrier

Plant-derived Exosome TEM picture



Ref. Linda Palmer, Plant Cells Shed Membrane-Bound Bubbles that Are Packed with Tiny RNA Molecules., The plant cell, 2019
<https://planta.org/plant-cells-shed-membrane-bound-bubbles-that-are-packed-with-tiny-rna-molecules/>



Ref. Mariaevelina Alfieri, et al., Plant-Derived Nano and Microvesicles for Human Health and Therapeutic Potential in Nanomedicine., *Pharmaceutics* 2021, 13(4), 498.

Advantage of plant-derived Exosome

1. Capable of crossing cell membranes and having biocompatibility with mammalian cells
2. When responding to normal host cells, it does not induce immune or inflammatory response compared to synthetic nanomaterials. So, it doesn't cause toxicity, immunogenicity or allergy problems
3. It can deliver anti-cancer and anti-oxidant factors to tumor cells(acting as a carriers)
4. It can pass blood-brain barrier(BBB) but can't pass placenta, so it doesn't fetus affect and is applicable to pregnant women (as a carrier, drug delivery is possible)

GFCCELL™ EXO | Key Ingredient ② – Camellia stem cell derived Exosome

01 Building a plant callus Line-Up

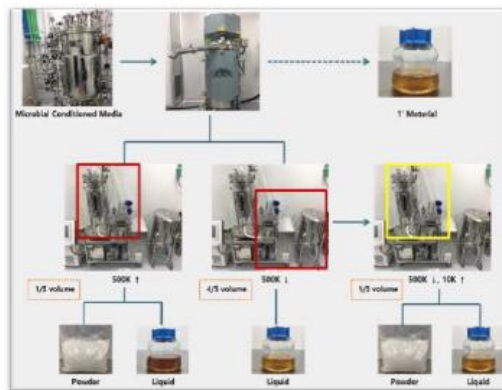


02 Proprietary method for production/isolation/inspection of Exosome

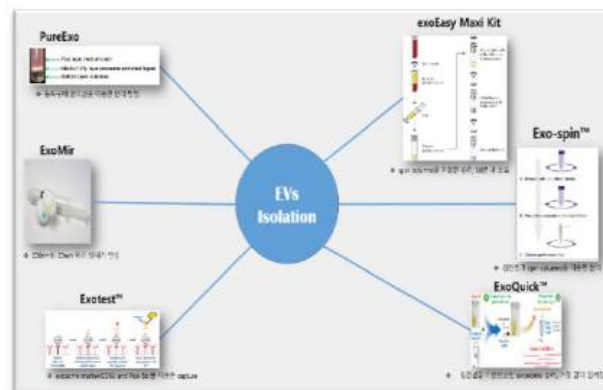
- ◎ Production : Maximize Exosome secretion
- ◎ Isolation : High-yield & high-purity Exosome
- ◎ Inspection : Introducing the latest equipment

Development and production of all Exosome materials in GFC Life Science : Aseptic factory (class 10,000)

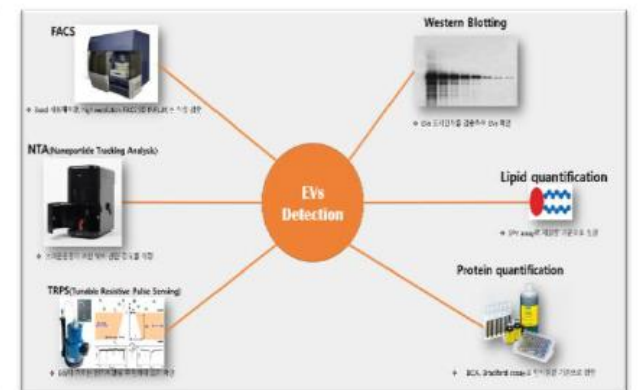
Production : Maximizing Exosome secretion



Isolation : High-yield & high-purity Exosome



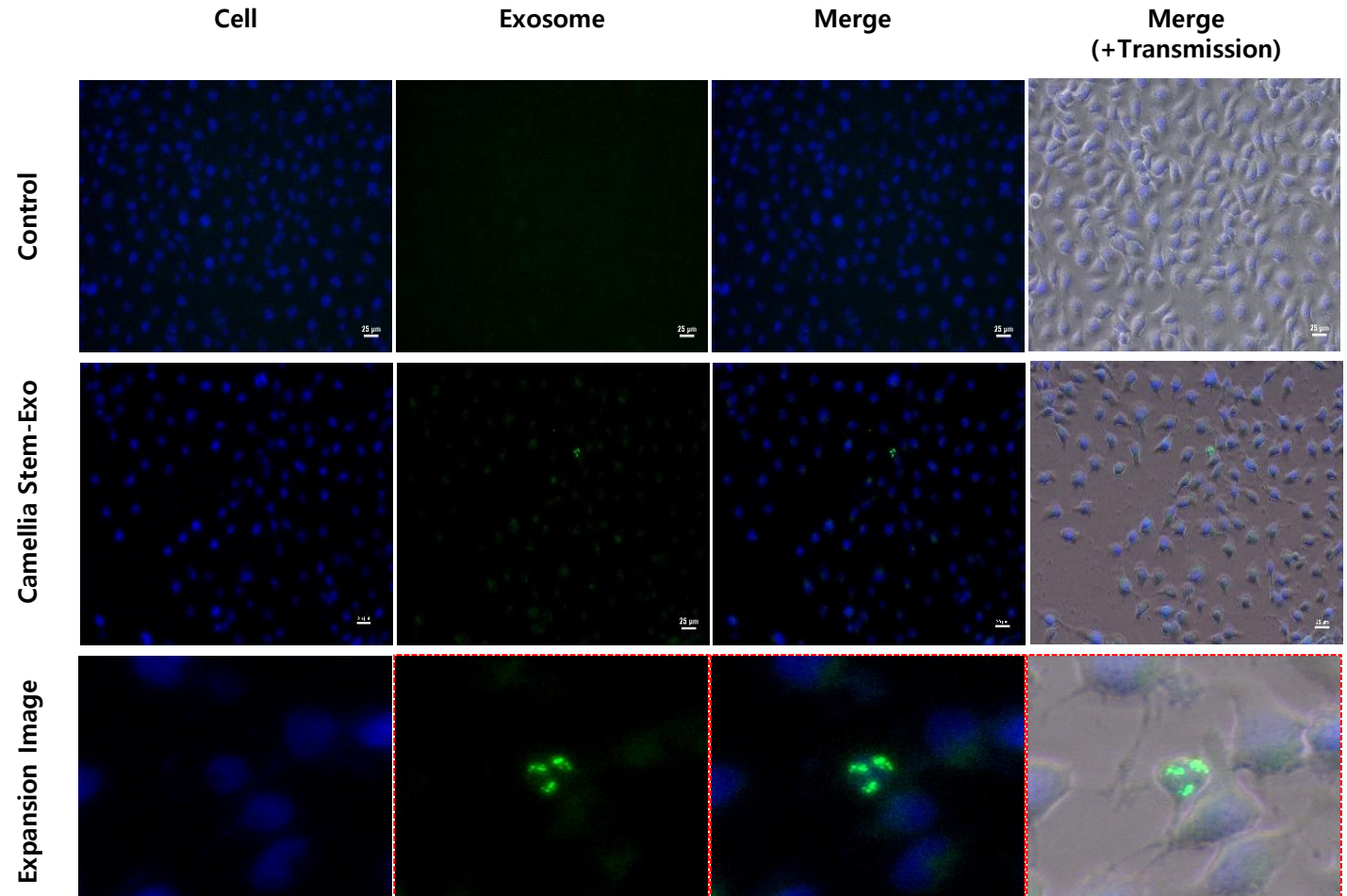
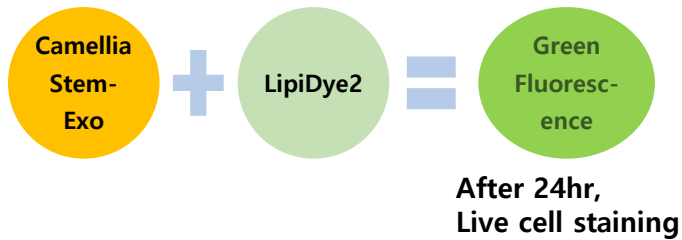
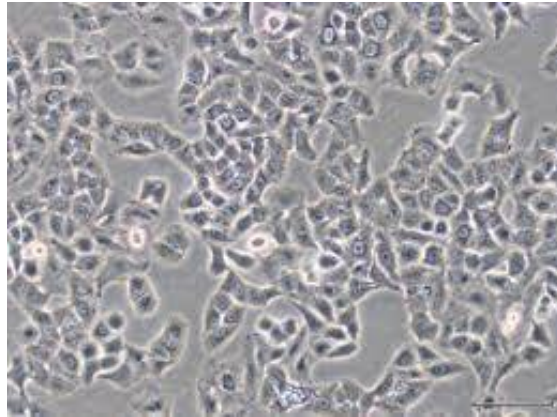
Inspection : Introducing the latest equipment



GFCCELL™ EXO | Key Ingredient ② – Camellia stem cell derived Exosome

Exosome uptake analysis

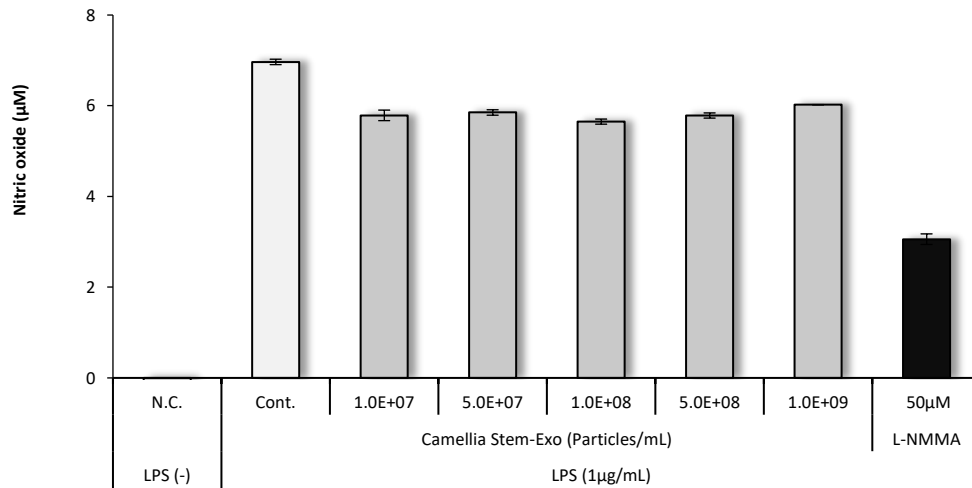
➤ Camellia Stem-Exo can quickly penetrate skin cells and have brightening & anti-inflammatory effects



➤ The merge images show Exosome(green) rapidly penetrate the cell(blue)

GFCCELL™ EXO | Key Ingredient ② – Camellia callas Exosome (Camellia Stem-Exo)

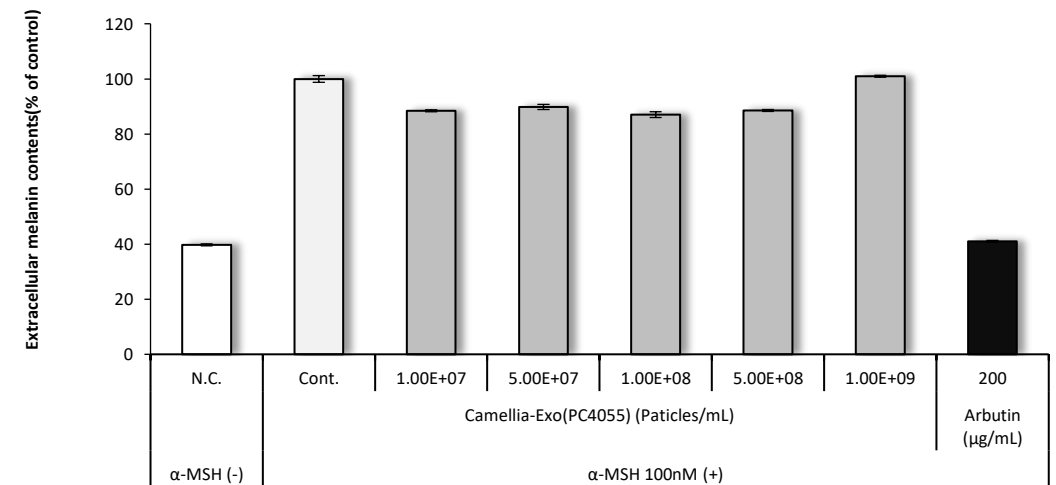
Efficacy of anti-inflammatory – Inhibition of NO production test



⇒ **18.86% reduction in nitric oxide** when treated with a concentration of 1.0E+8 particles/mL

⇒ **Expected to have anti-inflammatory effect**

Efficacy of brightening – Extracellular Melanin Production



⇒ **13.00% reduction in Extracellular melanin production** when treated with a concentration of 1.0E+8 particles/mL

⇒ **Expected to have whitening effect**



GFCCELL™ EXO VITAL 9403 POWDER

“Freeze dried solution containing high-concentrated GFCCELL™ EXO complex 97%”

GFCCELL™ EXO VITAL 9403 POWDER

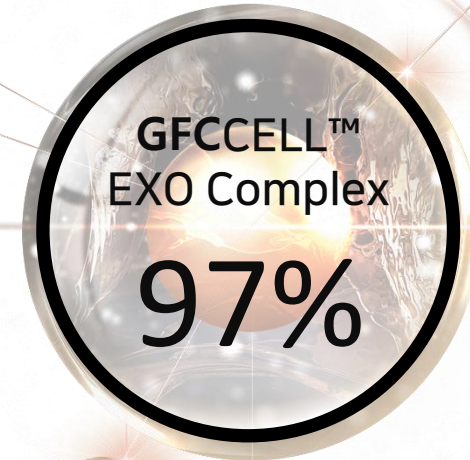
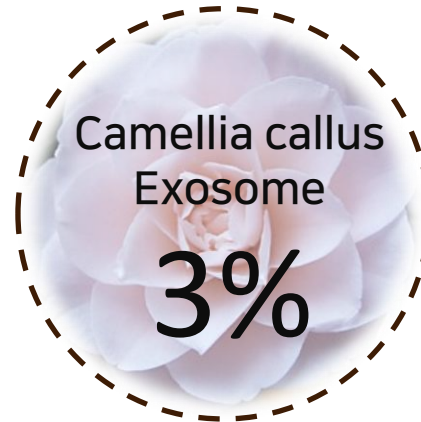
[1st agent | Freeze dried human adipose stem cell conditioned media]



180mg x 5vials



+



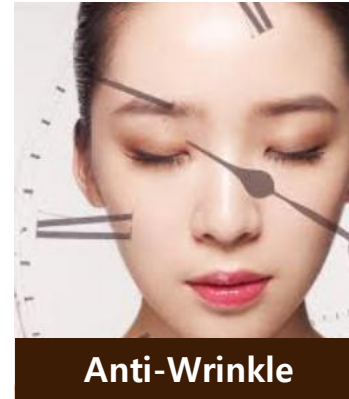
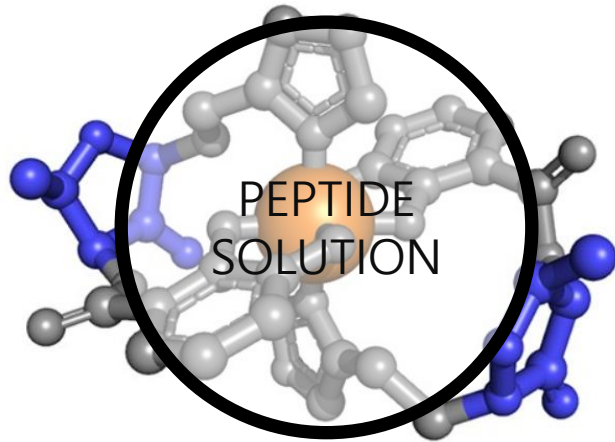
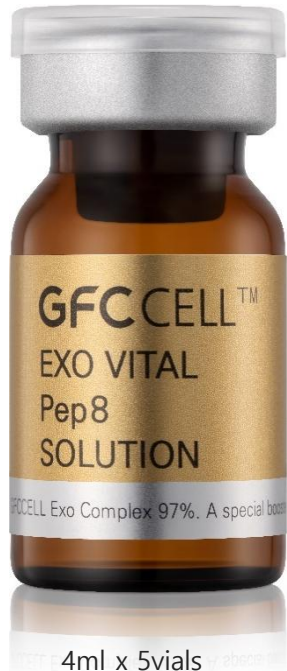
- Human Adipose Stem Cell Conditioned Media
: **Strong skin improvement effect by containing around 250 growth factors**
 - Camellia callus Exosome : Skin anti-inflammatory effect by inhibiting nitric oxide
 - Take care of young and healthy skin with concentrated nutrition to skin that begins to age
- [Ingredients] Human Adipose Stromal Cell Conditioned Media(94%), Camellia Japonica Callus Extracellular Vesicles(3%), Mannitol

GFCCELL™ EXO VITAL Pep8 SOLUTION

“Peptide activating solution that Exosome powder and active ingredients combine to maximize absorption and efficacy”

GFCCELL™ EXO VITAL Pep8 SOLUTION

[2ND agent | Liquid solution]



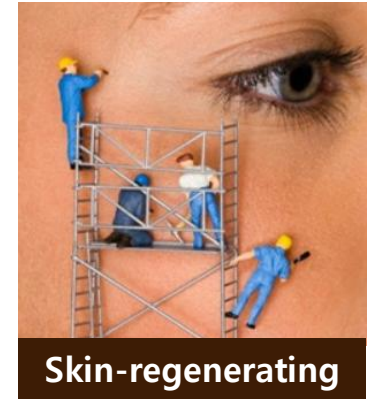
Anti-Wrinkle

+ Acetyl Hexapeptide-8
+ Palmitoyl Tetrapeptide-7
+ Palmitoyl Tripeptide-1
+ Palmitoyl Pentapeptide-4



Whitening

+ Nonapeptide-1



Skin-regenerating

+ Copper Tripeptide-1
+ Hexapeptide-9
+ Tripeptide-1

- Combination of 8 kinds of peptides for anti-aging, anti-wrinkle and whitening effects
- Care of firm elasticity with synergy of Exosome and peptide to the skin that start to age
- Anti-oxidant effect UP by containing various skin active ingredients such as Adenosine, Collagen and Panthenol

[Ingredients] Water, Butylene Glycol, Glycerin, Copper Tripeptide-1, Tripeptide-1, Acetyl Hexapeptide-8, Hexapeptide-9, Palmitoyl Pentapeptide-4, Palmitoyl Tetrapeptide-7, Palmitoyl Tripeptide-1, Nonapeptide-1, Sodium Hyaluronate, Niacinamide, Adenosine, Collagen, Panthenol, Tranexamic Acid, Glutathione, Glucose, Sodium PCA, Sodium lactate, Arginine, Aspartic Acid, PCA, Glycine, Alanine, Serine, Valine, Proline, Threonine, Isoleucine, Histidine, Phenylalanine, Caprylyl Glycol, 1,2-Hexanediol



Most skin friendly and efficient biological skin booster
**Reminding healthy skin condition's memory to
improve the skin is**

GFCCELL™ EXO VITAL KIT

The solution to maximize synergy of GFCCELL™ EXO,
it provides nutrients to skin and

Enhancement

Enhancing strength
of skin to restore
aging in the skin

Turnover

Normalize skin
turnover by
improving skin
environment

Self-sustainability

Enhancing skin's
natural self-
sustainability

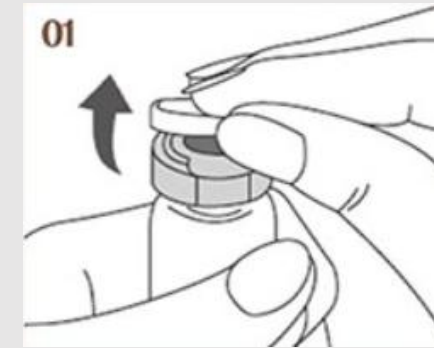
Freeze dried powder[1st agent] containing high content and high efficacy of growth factor from GFCCELL™ EXO

+

Activating solution[2nd agent] that born from golden ratio's combination of various skin active ingredients and 8 kinds of Peptides



Maximize skin booster function



① Remove the transparent cap of the 1st agent powder container by lifting it in the direction of the arrow.



② Grasp the aluminum cap handle and pull it down, then turn it to the side and open.



③ Remove the cap and rubber of 2nd agent solution same as 1st agent then mix with 1st agent powder.



GFCCELL™ EXO VITAL KIT

Capacity and configuration : (180mg + 4ml) * 5 sets
= 1box

[1st agent] 180mg + [2nd agent] 4ml = 1set (a dose of medicine)
total 5 doses configuration

Active ingredients : 970,000 ppm

How to use

- Mix the 2nd agent liquid solution in the 1st freeze dried powder
- After completely dissolving the 1st agent freeze dried powder, leave it still for up to 3~5 minutes to remove air bubbles before using it
- Use mixture dissolved freeze dried powder within a maximum of 3 hours to ensure the stability of product

Subject of advice

- GFCCELL™ EXO VITAL is recommended to be used at least 3 times, on average 5 times
- GFCCELL™ EXO VITAL 1 set which is a mixture of 1st agent and 2nd agent is used once per person
- To maintain the efficacy of content, it is recommended to store it in refrigerator condition below 5°C



Recommend this type of skin!

- Skin with weakened self-sustainability
- Skin that is troubled by uneven skin condition such as pores and facial-redness
- Skin trouble by acne scars
- Thin and sensitive skin due to congenital, environmental reason or reason of frequent procedures
- Skin that is beginning to show signs of aging

No recommend this type of skin!

- Healthy skin with good self-sustainability
- Expecting artificial volume effect
- Expecting temporary improvement of deep wrinkles



VITAL & SCALP PROTOCOL

Protocol | Skin Regeneration & Hair Loss Programs

Type	Method	Period	1W	2W	3W	4W	5W	6W	7W	8W
Pore minimizing, tone-up, reducing fine lines	MTS+Exo Vital (0.25~0.5mm)	5 weeks	MTS 9403 POWDER Pep8 SOLUTION	MTS 9403 POWDER Pep8 SOLUTION	MTS 9403 POWDER Pep8 SOLUTION	MTS 9403 POWDER Pep8 SOLUTION	MTS 9403 POWDER Pep8 SOLUTION			
Acne & scar	① Fractional Laser ② Exo Vital	5 weeks	Fractional Laser 9403 POWDER Pep8 SOLUTION	Fractional Laser 9403 POWDER Pep8 SOLUTION	Fractional Laser 9403 POWDER Pep8 SOLUTION	Fractional Laser 9403 POWDER Pep8 SOLUTION	Fractional Laser 9403 POWDER Pep8 SOLUTION			
Elasticity	① Thermage ② MTS+Exo Vital (0.25~0.5mm)	8 weeks	Thermage	MTS 9403 POWDER Pep8 SOLUTION		MTS 9403 POWDER Pep8 SOLUTION		MTS 9403 POWDER Pep8 SOLUTION		MTS 9403 POWDER Pep8 SOLUTION
Blemish	① Pico Laser ② MTS+Exo Vital (0.25~0.5mm)	8 weeks	Pico Laser	MTS 9403 POWDER Pep8 SOLUTION		MTS 9403 POWDER Pep8 SOLUTION		MTS 9403 POWDER Pep8 SOLUTION		MTS 9403 POWDER Pep8 SOLUTION
Scalp & hair loss care	MTS+Exo Scalp (1mm)	8 weeks	MTS 9700 POWDER Pep9 SOLUTION	MTS 9700 POWDER Pep9 SOLUTION	MTS 9700 POWDER Pep9 SOLUTION	MTS 9700 POWDER Pep9 SOLUTION	MTS 9700 POWDER Pep9 SOLUTION	MTS 9700 POWDER Pep9 SOLUTION	MTS 9700 POWDER Pep9 SOLUTION	MTS 9700 POWDER Pep9 SOLUTION

For injections, once every two to three weeks is recommended. !

Skin Program | Skin regeneration, Pore minimizing, tone-up, reducing fine lines

Step 1 Local anesthesia



- ① Cleanse and exfoliate before anesthesia.
- ② Apply local anesthetic cream to the face, neck or other treatment area.
- ③ Remove local anesthetic cream thoroughly after 20~30 mins.



Step 2 MTS + Exo Vital



- ① Mix Exo Vital 1st agent powder and 2nd agent peptide based liquid solution
- ② Apply the mixed solutions to the treatment area
- ③ Repeat MTS treatment



Step 3 Skin absorption



- ① With electroporation, effectively absorb GFC CELL Exo mixture



Step 4 Soothing & sunscreen



- ① Apply a soothing mask and settle for 20-30 minutes.
- ② After the treatment, apply the regeneration cream and sunscreen for skin protection.

For laser treatments, Customized laser treatment → MTS + Exo Vital → Soothing & sunscreen / proceed in order

Skin Program | Skin changes over time after injection



Right after injection



One hour after injection



20 hours after injection

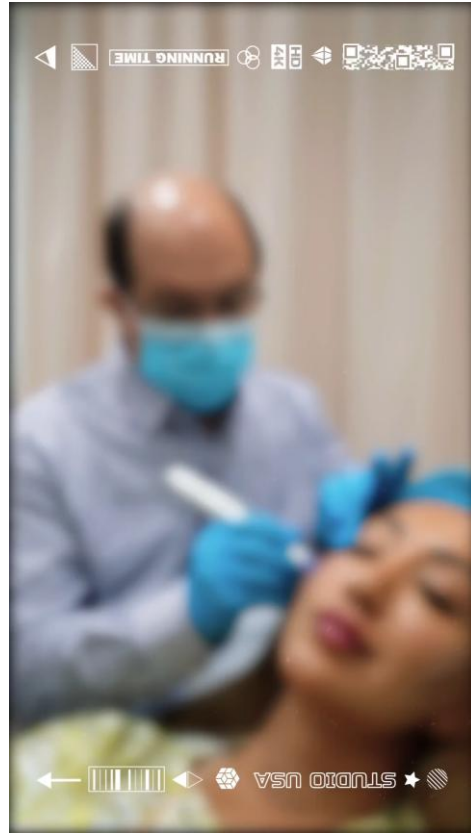
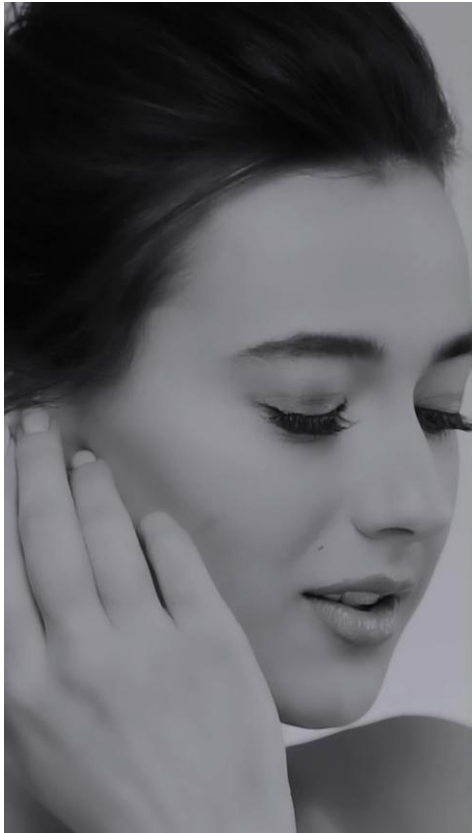
Skin Program | Skin changes over time after injection



Skin Program | Skin changes over time after injection



Skin Program | Short Video clip for Session



Before & After Result

Acne / trouble alleviation

Before



After



Female, 3 sessions every two weeks (GFCCELL™ with Injection)

Before & After Result

Acne / trouble alleviation

Before



After



Female, 3 sessions every two weeks (GFCCELL™ with Injection)

Before & After Result

Acne / trouble alleviation

Before



After



Female, 3 sessions every two weeks (GFCCELL™ with Injection)

Before & After Result

Pigmentation alleviation

Before



After



Female, 3 sessions every two weeks (GFCCELL™ with Injection)

Before & After Result

Acne / trouble alleviation

Before



After



Male, 5 sessions every 1 week (GFCCELL™ with auto MTS 0.6mm)

Before



After



Female, 5 sessions every 1 week (GFCCELL™ with auto MTS 0.6mm)

Before & After Result

Acne / trouble alleviation

Before



After



Male, 5 sessions every 1 week (GFCCELL™ with auto MTS 0.6mm)

Before



After



Female, 5 sessions every 1 week (GFCCELL™ with auto MTS 0.6mm)

Before & After Result

Melanin reduction

Before



After



Pore minimizing & tightening

Before



After



Female, 5 sessions every 1 week (GFCCELL™ with auto MTS 0.6mm)

Female, 5 sessions every 1 week (GFCCELL™ with auto MTS 0.6mm)

Before & After Result

Extreme dryness improvement

Before



After



Female, 5 sessions every 1 week (GFCCELL™ with auto MTS 0.6mm)

Skin brightness

Before



After



Female, 5 sessions every 1 week (GFCCELL™ with auto MTS 0.6mm)

Before & After Result

Scar

Before



After

Female, 2ml dermapen + 2ml injection. 11days after one time treatment with GFC CELL Exo Vital

THANK YOU!