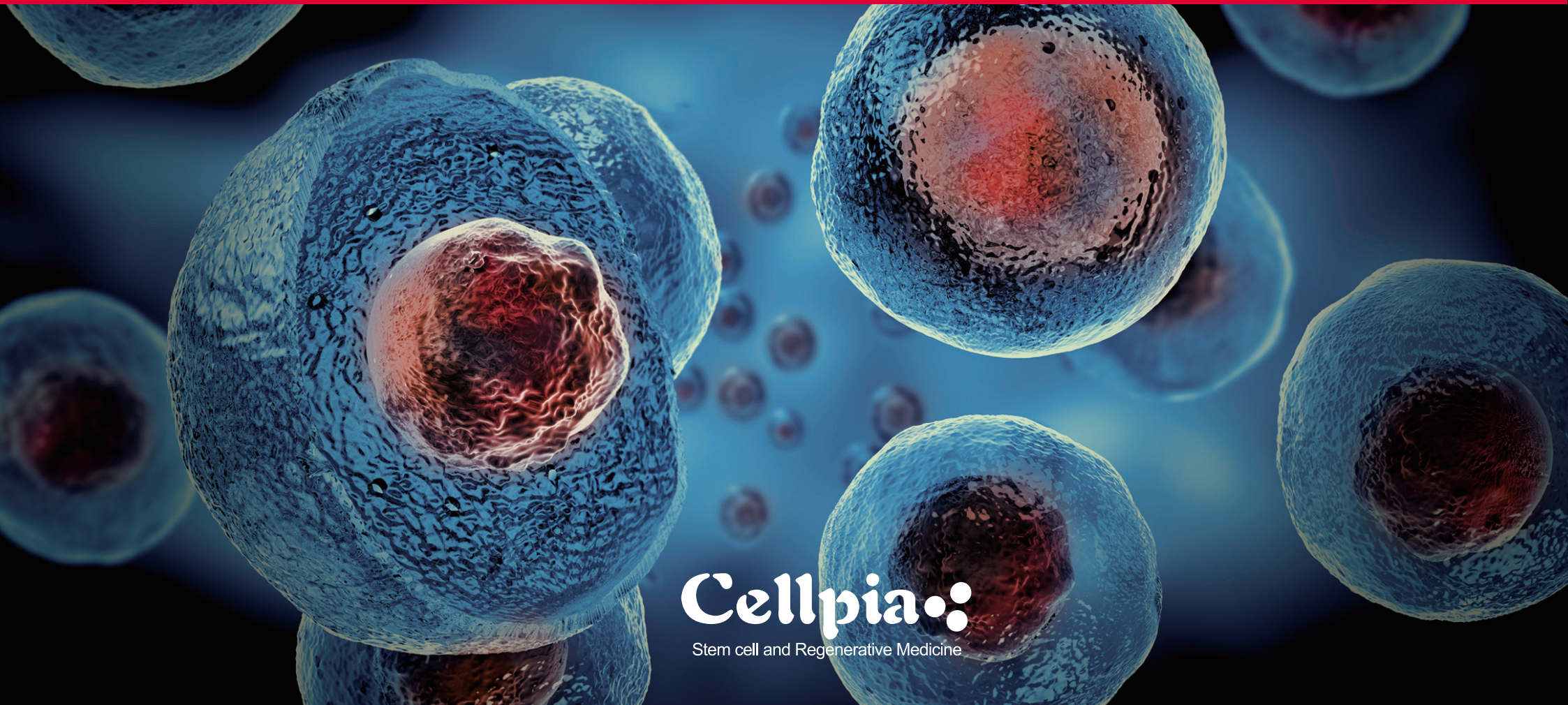
CELLPIA STEM CELL

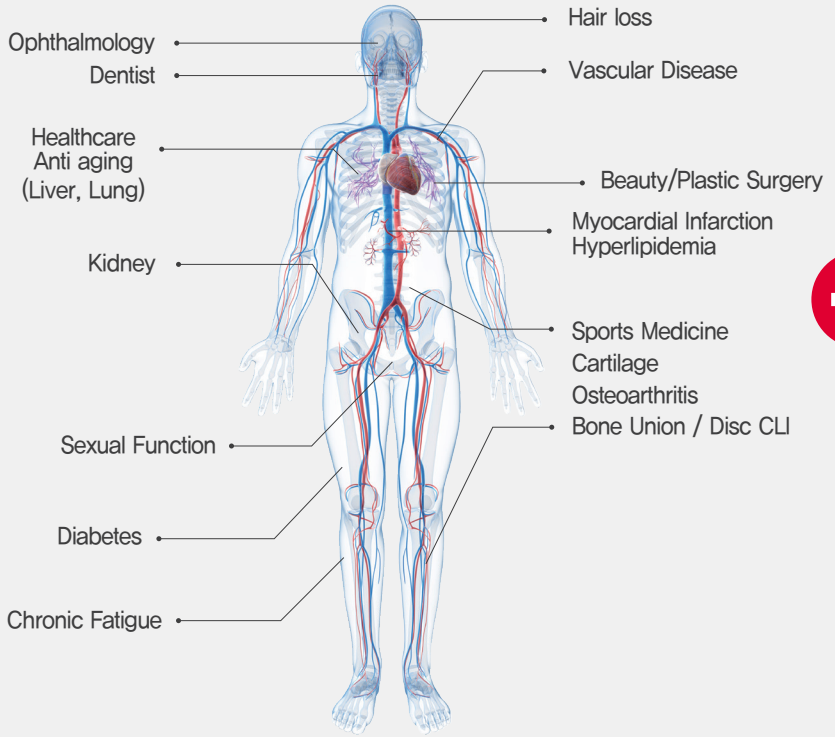


CELLPIA STEM CELL

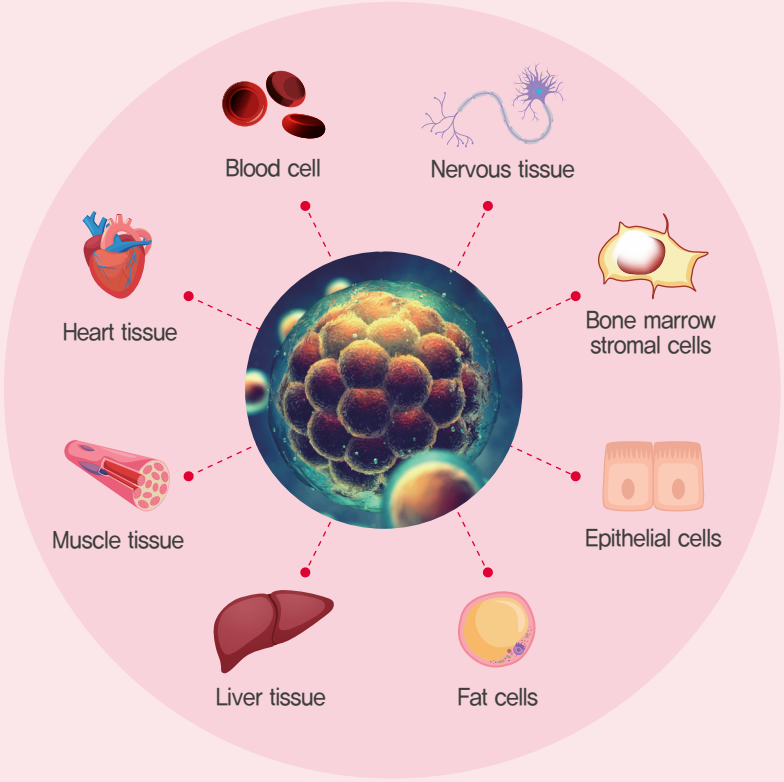
STEM CELL

Superior Treatment Effect with Advanced Regenerative Medical Method

Treatment Area



Stem Cell Regenerative Medicine Application



CELLPIA Stem Cell

What make CELLPIA Stem Cells different?

CELLPIA STEM CELL

CELLPIA Stem Cells...

CELLPIA stem cells are the safest and highest quality stem cells, immune cells, and growth factors by the world's best cell extraction technology.

CELLPIA provides an automated system with all processes and a high level of stem cells which are safe from the risk of contamination and cell transformation compared to the whole blood.

Advanced CELLPIA Stem Cell System

Safe with no side effects

There is no inflammatory reaction or side effects because own cells are used and not cultured.

Not culturing

We do not tolerate the risk of infection and cell transformation that may occur during the culture process.

Only licensed stem cells are used

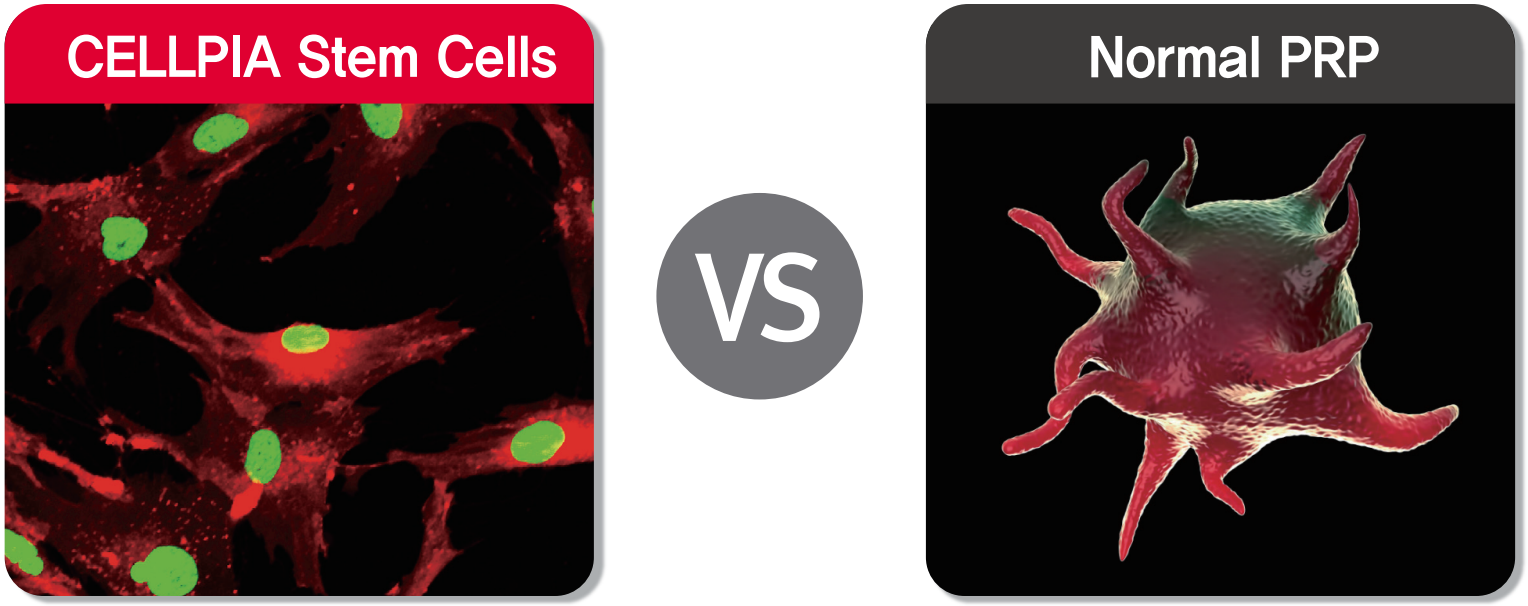
It is performed only with stem cells and treatment methods recognized for their safety and effectiveness locally and abroad.

Only the best stem cells are used

We only use proven and qualified products.

CELLPIA STEM CELL

CELLPIA Stem Cells are different



CELLPIA stem cells focus on the isolation and extraction of hematopoietic stem cells, not platelets, and graft only the optimal cell members to enhance regeneration.

The well-known PRP (or blood injection) is an abbreviation of platelet-rich plasma. It is extracted by a simple centrifugation method and applied to the procedure by focusing on platelets among blood components, so the existence of stem cells is insignificant and the regeneration effect is low.

CELLPIA STEM CELL

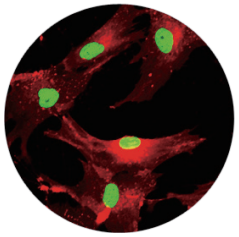
CELLPIA Stem cells are different

CELLPIA Stem Cells guarantees differentiated performance and excellent safety

The most important part of the cell isolation/extraction system is safety, guaranteeing cell viability and recovery rate, and providing cell members capable of tissue regeneration, the purpose of cell therapy.

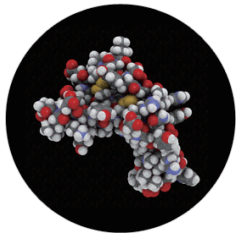
In order to clinically realize tissue regeneration, total cells including stem cells that differentiate into necessary tissues, immune cells that prevent inflammation, growth factors and cytokines signal substances that induce movement to the treatment site, and platelets.

01 Stem Cell



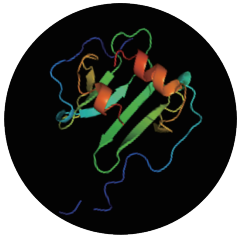
Pluripotent stem cells capable of differentiating into any body tissue or organ

02 Groeth Factor



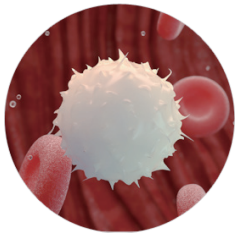
Supports stem cell differentiation by promoting various cell division, growth and differentiation

03 SDF-1α



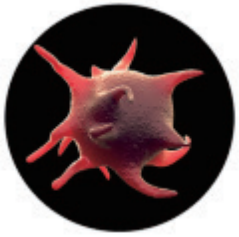
Signaling substances that move stem cells to the required site

04 Immune Cell



Immune cells that defend against and attack infection

05 Platelet



Responsible for the hemostasis process, contains α–granules with healing ability, and stimulate stem cell

CELLPIA STEM CELL

A Different Level of Stem Cell System Technology

Safe treatment
without side effects
(Using autologous stem cells)

Non–cultured cell for
no risk of infection
and cell transformation

Patented technology
(14 patents, 8 design patents
for cell extraction technology)

Approved by Ministry of
Health and Welfare,
KFDA, CE,
ISO 13485, ISO 9001

Fully automatic system,
same–day
treatment available

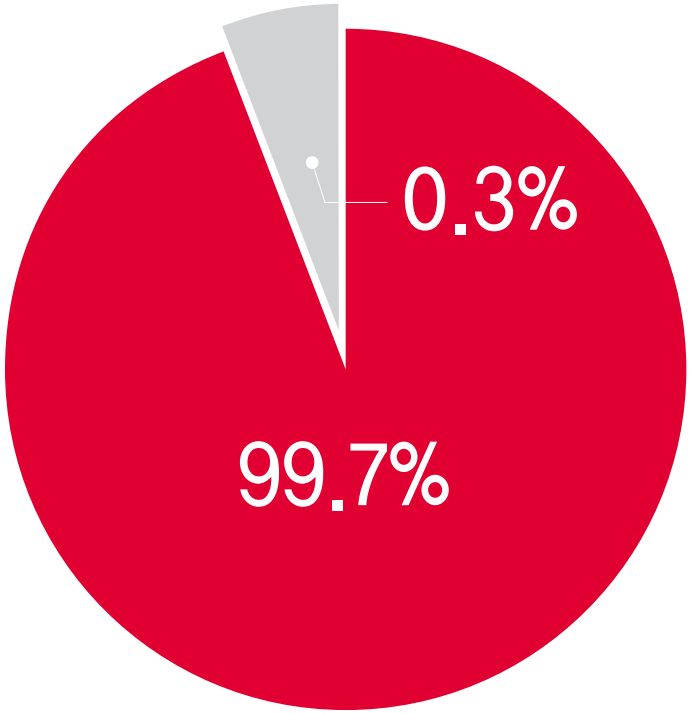
NET health technology
certified technology

NeT 신기술인증 NEW EXCELLENT TECHNOLOGY

FDA KFDA GMP CE ISO 9001:2015 ISO 13485:2016 NECA

CELLPIA STEM CELL

Total Cell Viability



Total cell count test report	CELLPIA Stem Cell
Viability (%)	99.7
Live (cell/ml)	5.28E+07
Total (cell/ml)	5.59E+07

Living Cell Dead Cell

(Source: Intrenal Data)

CELLPIA STEM CELL

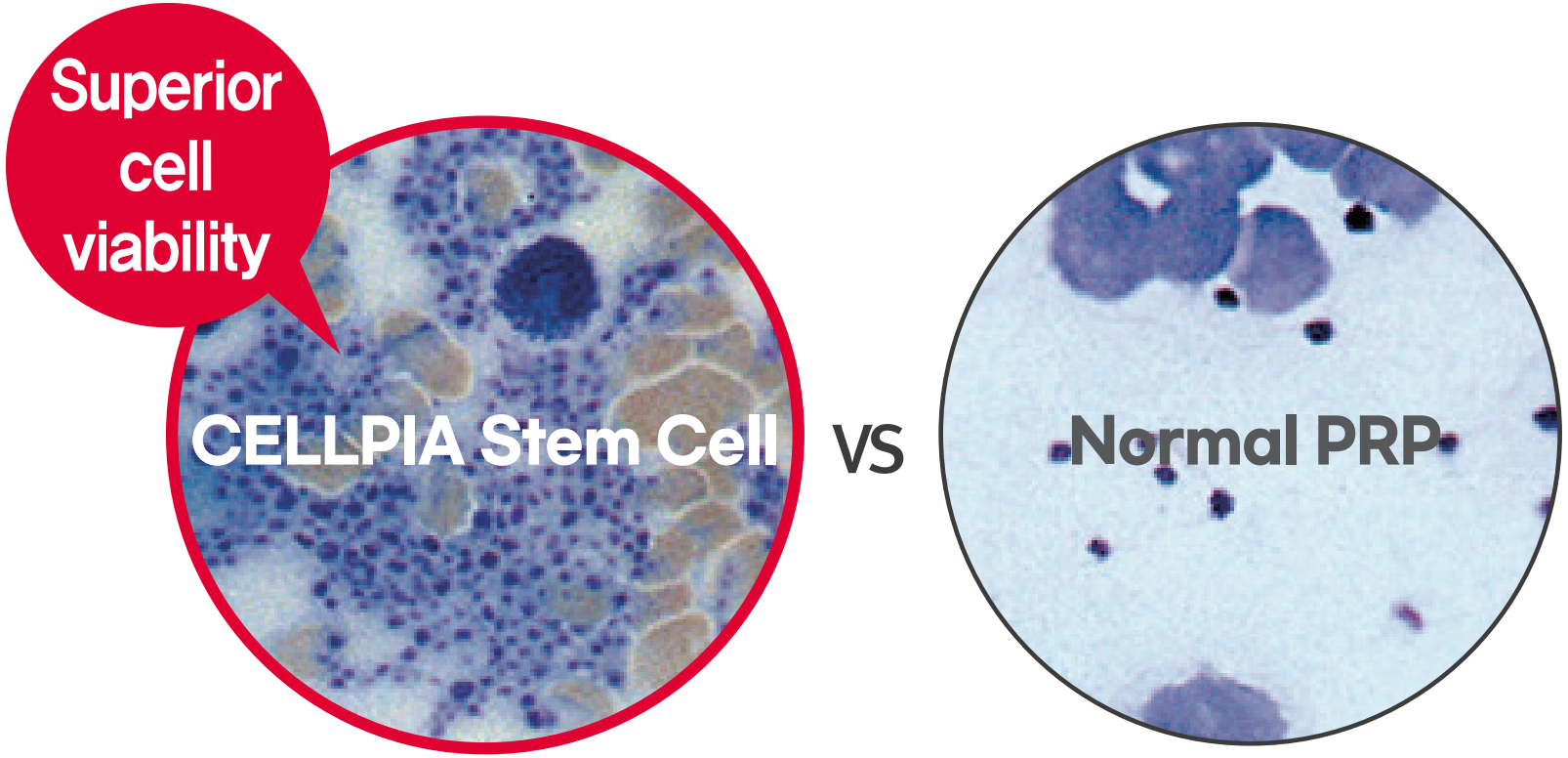
Comparison of CELLPIA Stem Cells and Normal PRP

Category	CELLPIA Stem Cells	Normal PRP
Extraction function	Detailed density calculation with the double chamber structure generates fine classification of the stem cells (14 patents, 8 designs)	Unidirectional centrifugation & uses Test tube
Concentration method	Automatic System	Manual System
Cell comparison	Extraction of total cells directly involved in tissue regeneration such as platelets.	2times of platelet only Decrease after concentration ofother cells
Cell viability	80~99% Coefficient of variation (CV) value: less than 5%, activation p-selection value: less than 8%	about 50%
Cell safety	Safe Closed system (complete air-sealed, generate steady outcome)	Unstable Open system (risk of air exposure)
Stem Cell	Large amount of stem cell(blood), Mesenchymal stem cell(Bone Marrow)	Incomplete

CELLPIA STEM CELL

Comparison of CELLPIA Stem Cells and Normal PRP

CELLPIA Stem Cells guarantee the number and quality of cells.



CELLPIA STEM CELL

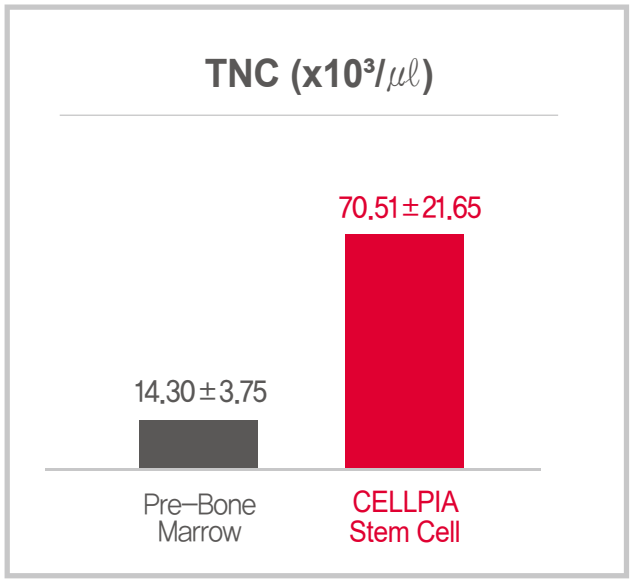
Total Cell from Bone Marrow Analysis Comparison

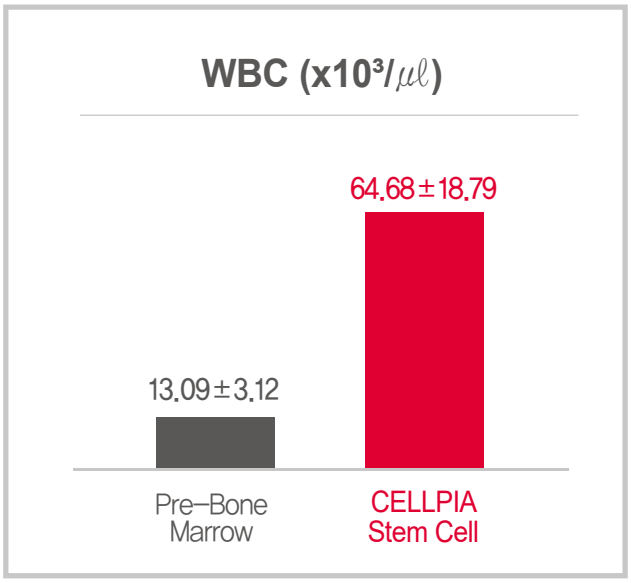
SNUH SEOUL NATIONAL UNIVERSITY BUNDANG HOSPITAL

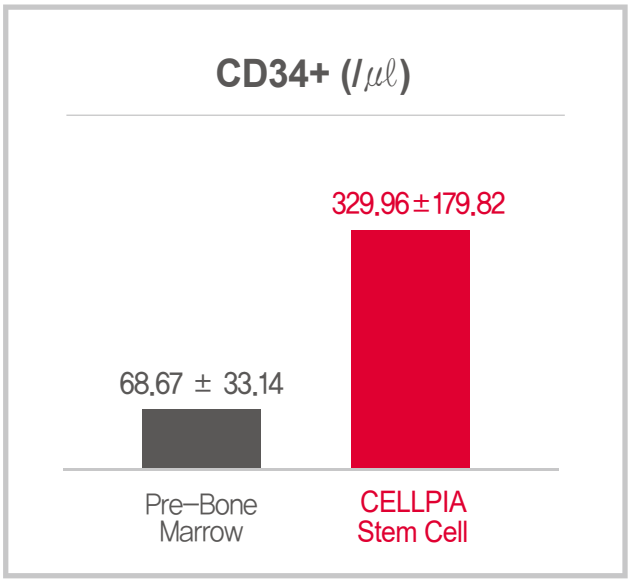
(n = 10)

	Pre-Bone Marrow	CELLPIA Stem Cell
TNC (x10³/㎕)	14.30 ± 3.75	70.51 ± 21.65
WBC (x10³/㎕)	13.09 ± 3.12	64.68 ± 18.79
CD34+ (/㎕)	68.67 ± 33.14	329.96 ± 179.82

(Source: Comparative analysis of blood-derived cell recovery rate in cell separation/concentration using BmSC (Miracell) by Bundang Seoul National University Hospital 2020)







CELLPIA STEM CELL

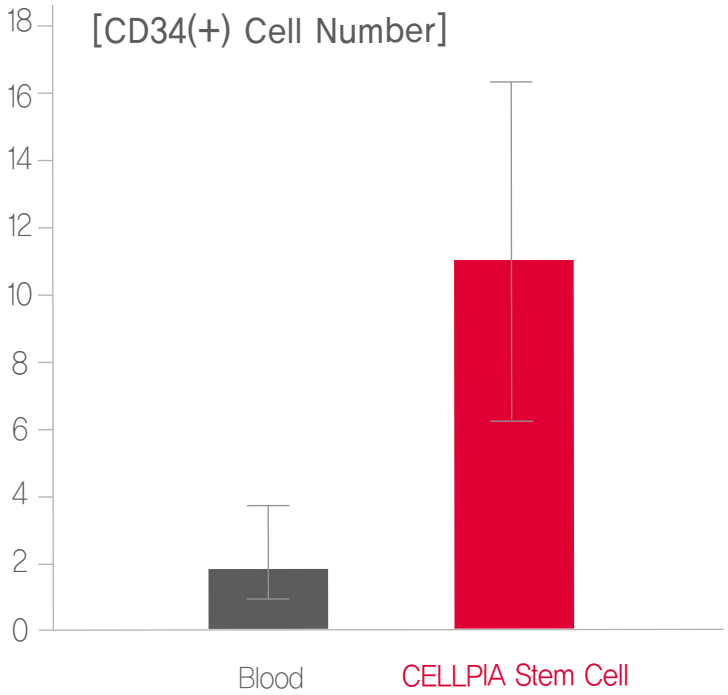
Total Cell Analysis Comparison

GBSA 경기도경제과학진흥원 SCL 품질 · 서비스 · 연구 (재)서울의과학연구소 Seoul Clinical Laboratories

(n = 15)

	Blood	CELLPIA Stem Cell
Viability (%)	99.5±0.4	**99.5±0.2**
TNC (x10³/㎕)	4.67±1.12	**14.53±4.04**
Platelets (x10³/㎕)	275.0±56.3	**1,106.6±225.7**
WBC (x10³/㎕)	5.3±1.2	**15.6±4.6**
Lymphocytes (x10³/㎕)	1.8±0.4	**8.9±2.1**
ADAMII TCD45 (x10³/㎕)	4,863.25±1221	**15,008.01±3423.1**
ADAMII TCD34 (x10³/㎕)	1.84±0.9	**11.22±4.7**

(Source: A Basic Clinical Study on the Validity Assessment Indicators of Domestic Development M-CELL2 Regenerative Medical Devices, GBSA Gyeonggi-do Economic and Scientific Promotion Agency, 2021)



* CD45 Total cell / * CD34 Hematopoietic stem cell

CD34+
hematopoietic stem cell markers

There are more than 170,000 ~ 460,000 cells, such as red blood cells and white blood cells, which normalize tissues by stimulating tissue regeneration and capillary blood vessels.

CELLPIA STEM CELL

Comparison of CELLPIA Stem Cells and Cultured Cells

CELLPIA Stem Cells are not cultured!

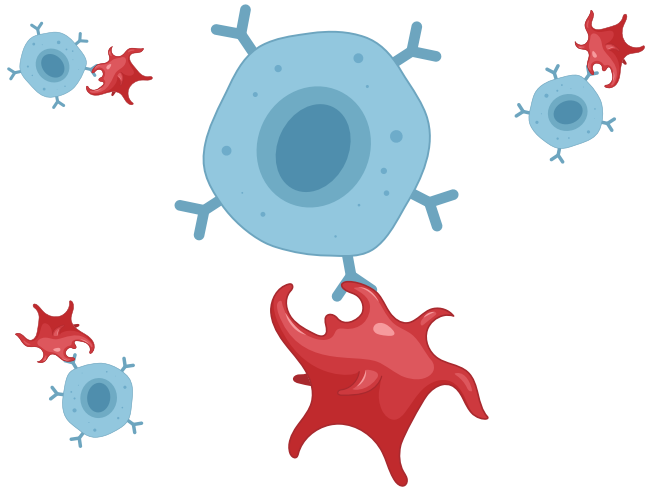
Category	Minimal manipulation (CELLPIA Stem Cells)	Cell Culture
Cell type	Hematopoietic stem cells, other growth cells, etc	1 type of immune cell (Hematopoietic stem cells cannot be cultured)
Processing period	Same day (immediate) processing available	Incubation period of about 4–6 weeks is required
Infection exposure	None (safe)	Exposure to multiple contaminants
Mutability	None (safe)	Genetically modified
Cell functionality	Maintain	Loss
Cell aging	No change	Rapid aging
Legal status	Local and foreign human body reinjection possible (legal)	Reinjection of human body at locally and abroad is not allowed (illegal)

CELLPIA STEM CELL

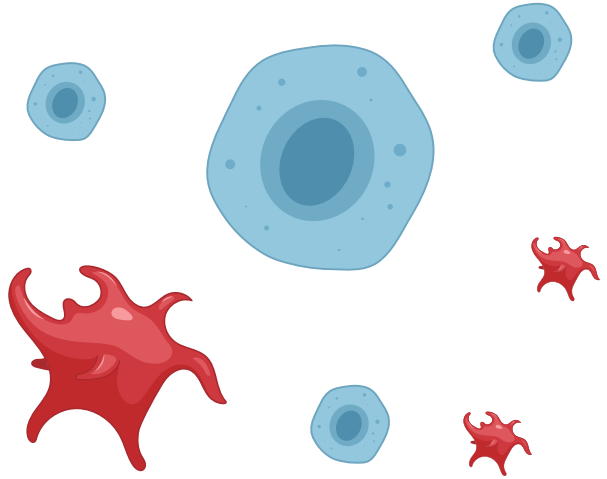
Comparison of CELLPIA Stem Cells and Cultured Cells

In order for stem cells to move to the wound site, they can move through docking (binding)with platelets.
However, when cultured cells, the formation of Ligands on the cell surface necessary for docking is impossible,
so movement is impossible.

CELLPIA Stem Cells can be docked with platelets



Impossible to dock with cultured stem cell platelets (immovable)



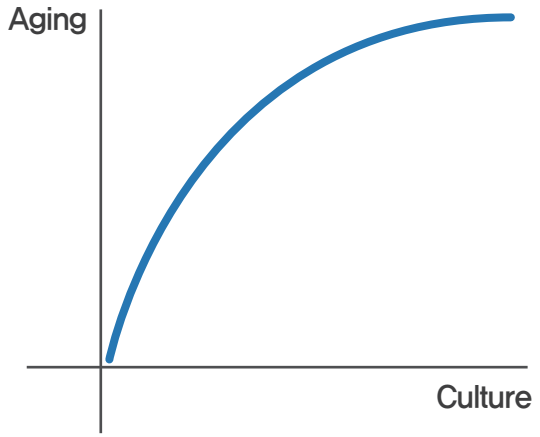
CELLPIA STEM CELL

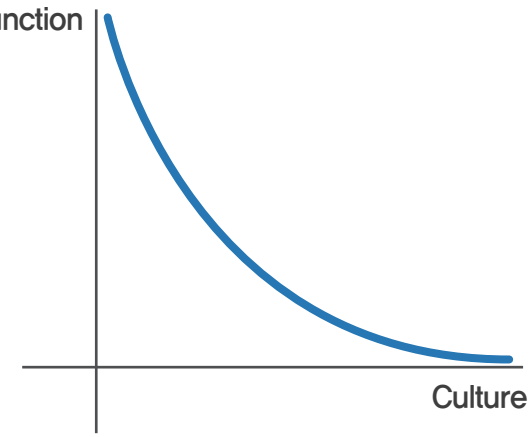
Comparison of CELLPIA Stem Cells and Cultured Cells

Cells in the artificial proliferation process rapidly age and their function may deteriorate.

Concerns about anthropogenic processes

Rapid aging & Decreased Function of Cells



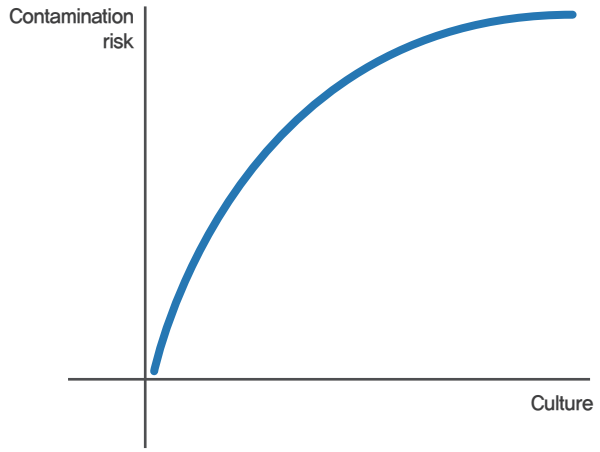


CELLPIA STEM CELL

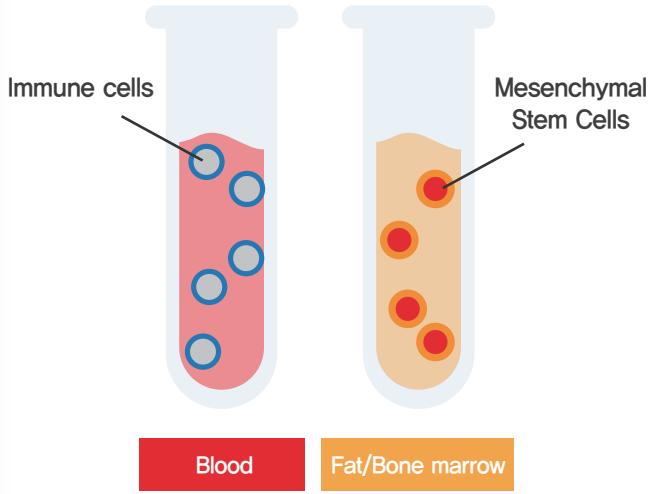
Comparison of Cellpia Stem Cells and Cultured Cells

Cells in the artificial proliferation process may be mutated or exposed to the risk of contamination, and only mononuclear cells are extracted and used.

Cell mutation possible & exposure to contanmination risk



Only one cell can be used



Cellpia Stem Cell

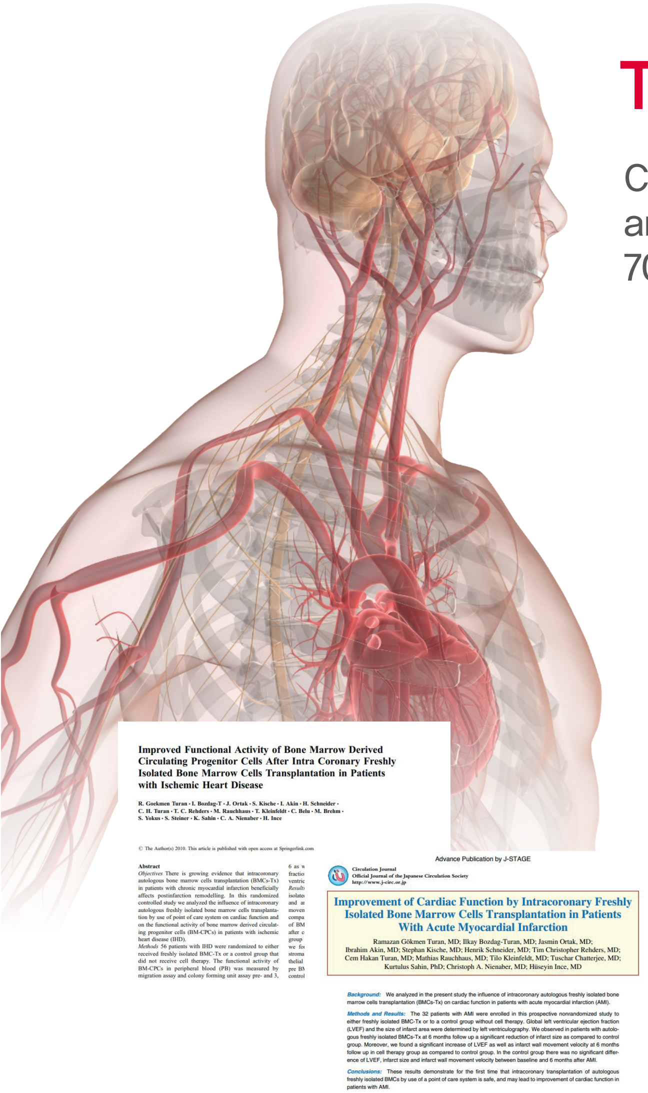
How can I receive the CELLPIA stem cells procedure?

Anti-aging injection

Stem Cell Health Care

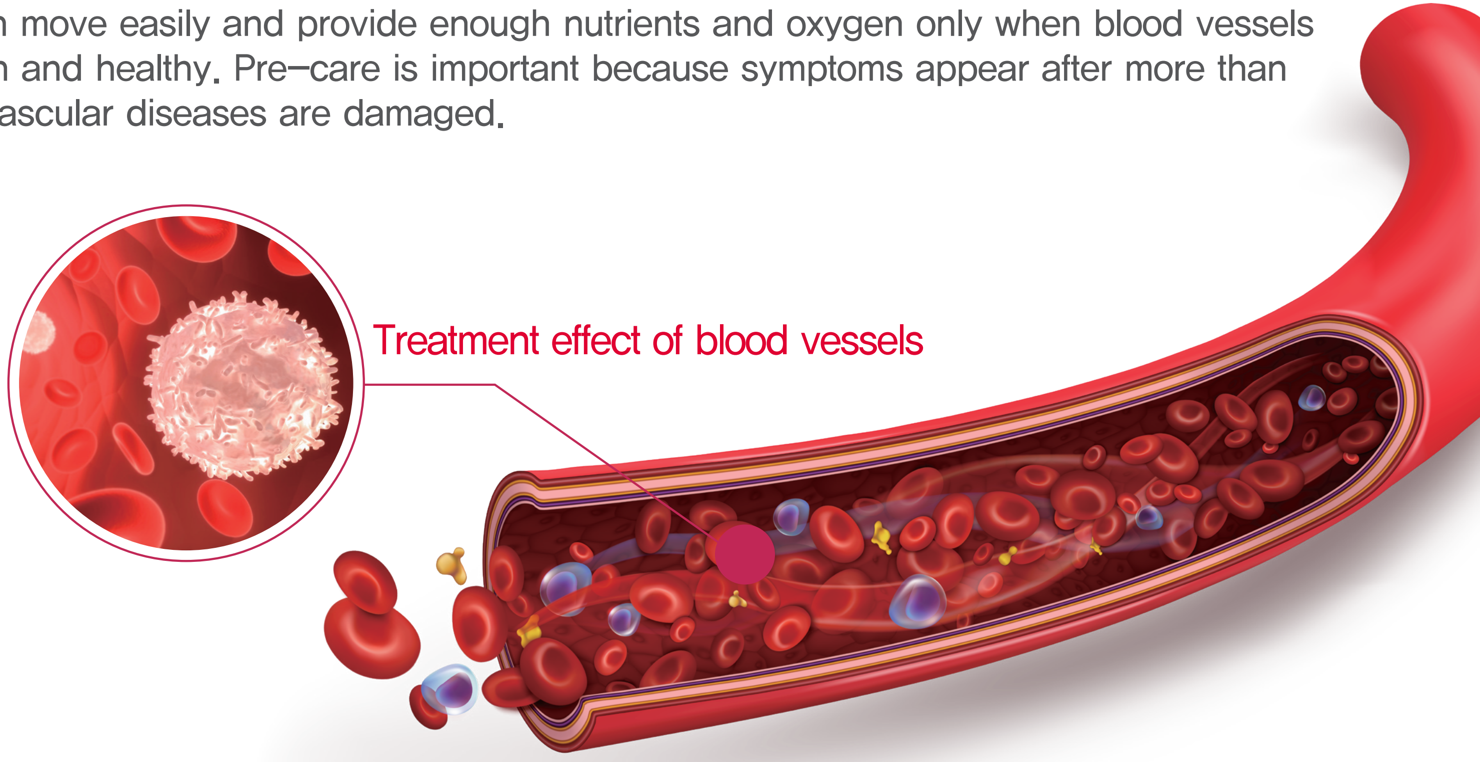
CELLPIA STEM CELL

Stem Cell Health Care



The blood vessels in the whole body must be healthy

Cells can move easily and provide enough nutrients and oxygen only when blood vessels are clean and healthy. Pre-care is important because symptoms appear after more than 70% of vascular diseases are damaged.



New Medical Technology Registered Therapy

Autologous bone marrow stem cell therapy in patients with myocardial infarction
Ministry of Health and Welfare Notice No. 2013-178

CELLPIA STEM CELL

From old cell to new cell

A new concept stem cell and immune cell procedure in which my stem cells
and immune cells are concentrated and transplanted by injection through veins or arteries

Strengthening of immunity

Strengthen functional vitality

Improvement of liver and intestinal function

Anti-aging and healthcare

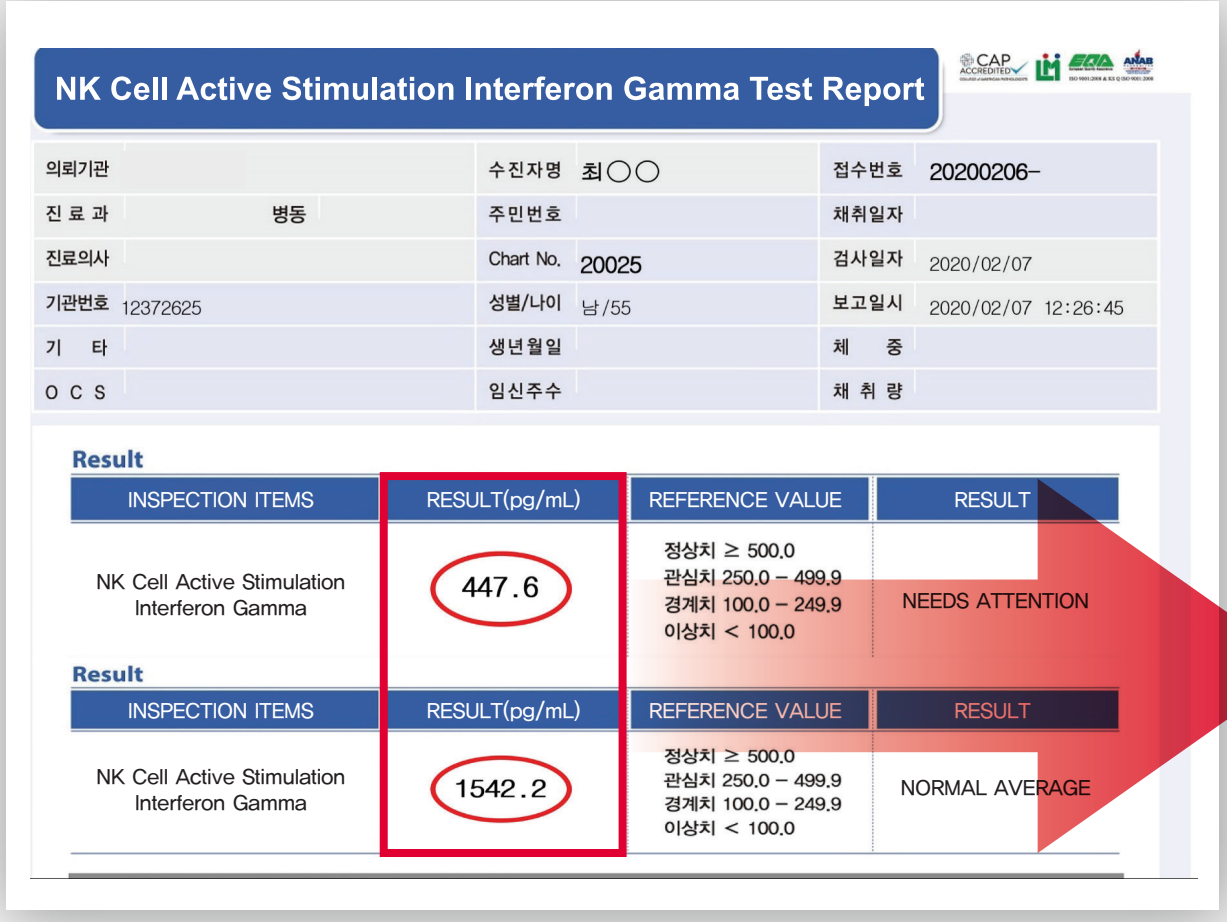
Boost your organization's resilience

Recovery from chronic fatigue

Vein-transplanted stem cells flow through blood vessels to where they are needed.
SDF-1α signaling materials act as navigation and homing-effects help to create the best Stem Cell activation.

CELLPIA STEM CELL

Stem Cell Health Care



NK Cell Active Stimulation Interferon Gamma Test Report

의뢰기관		수진자명	최○○	접수번호	20200206-
진 료 과	병동	주민번호		채취일자	
진료의사		Chart No.	20025	검사일자	2020/02/07
기관번호	12372625	성별/나이	남/55	보고일시	2020/02/07 12:26:45
기 타		생년월일		체 중	
O C S		임신주수		채 취 량	

Result

INSPECTION ITEMS	RESULT(pg/mL)	REFERENCE VALUE	RESULT
NK Cell Active Stimulation Interferon Gamma	447.6	정상치 ≥ 500.0 관심치 250.0 – 499.9 경계치 100.0 – 249.9 이상치 < 100.0	NEEDS ATTENTION

Result

INSPECTION ITEMS	RESULT(pg/mL)	REFERENCE VALUE	RESULT
NK Cell Active Stimulation Interferon Gamma	1542.2	정상치 ≥ 500.0 관심치 250.0 – 499.9 경계치 100.0 – 249.9 이상치 < 100.0	NORMAL AVERAGE

Immune cell activity
3 times more increase

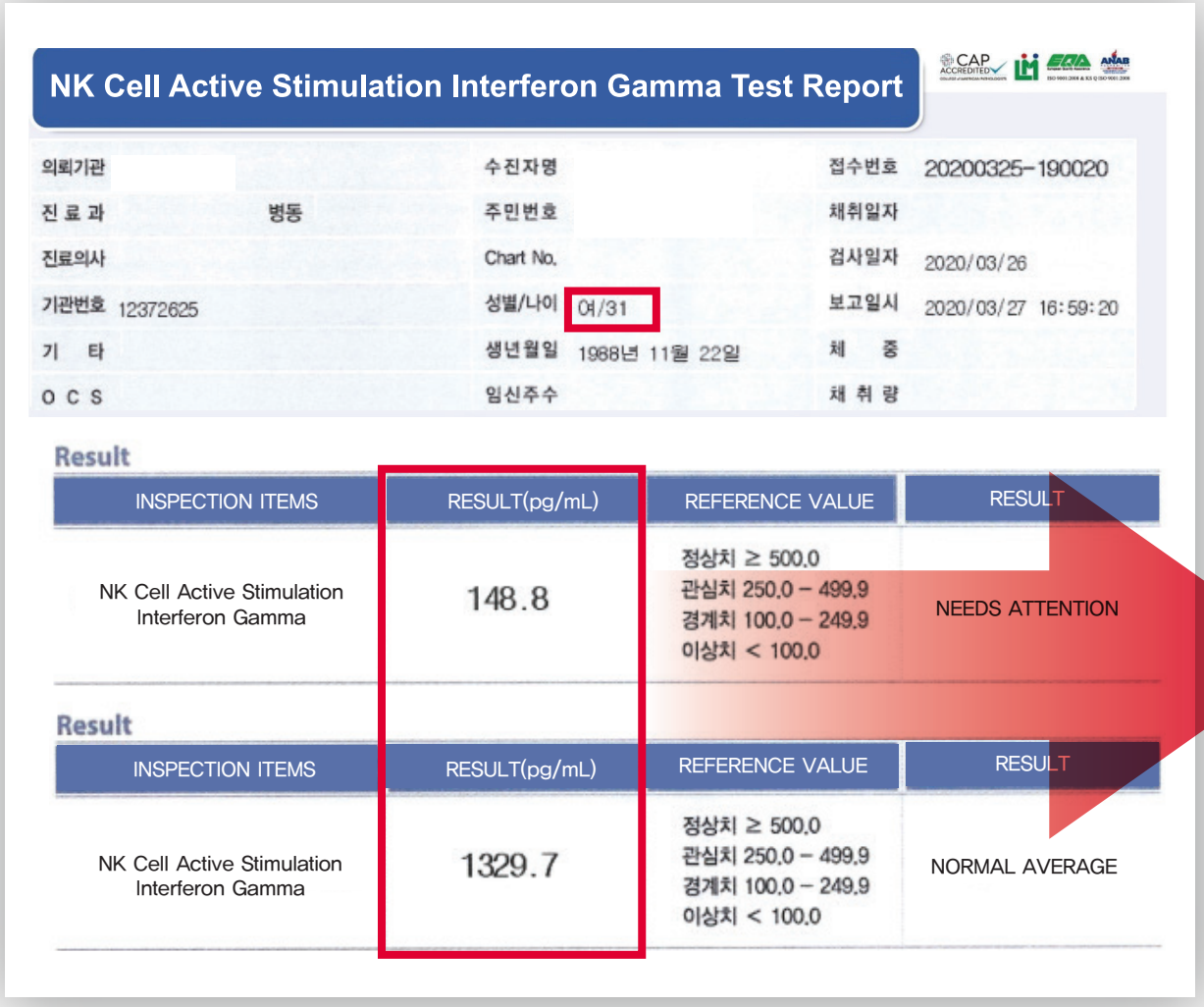
447.6

↓

1542.2

CELLPIA STEM CELL

Stem Cell Health Care



NK Cell Active Stimulation Interferon Gamma Test Report

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진 료 과	병동	주민번호		채취일자	
진료의사		Chart No.		검사일자	2020/03/26
기관번호	12372625	성별/나이	여/31	보고일시	2020/03/27 16:59:20
기 타		생년월일	1988년 11월 22일	체 중	
O C S		임신주수		채 취 량	

Result

INSPECTION ITEMS	RESULT(pg/mL)	REFERENCE VALUE	RESULT
NK Cell Active Stimulation Interferon Gamma	148.8	정상치 ≥ 500.0 관심치 250.0 – 499.9 경계치 100.0 – 249.9 이상치 < 100.0	NEEDS ATTENTION

Result

INSPECTION ITEMS	RESULT(pg/mL)	REFERENCE VALUE	RESULT
NK Cell Active Stimulation Interferon Gamma	1329.7	정상치 ≥ 500.0 관심치 250.0 – 499.9 경계치 100.0 – 249.9 이상치 < 100.0	NORMAL AVERAGE

Immune cell activity
9 times more increase

148.8

1329.7

CELLPIA STEM CELL

Stem Cell Health Care

NK Cell Active Stimulation Interferon Gamma Test Report

의뢰기관		수진자명	접수번호 20200226-190016
진 료 과	병동	주민번호	채취일자
진료의사		Chart No. 201	검사일자 2020/02/27
기관번호 12372625		성별/나이 여/42	보고일시 2020/02/27 12:43:24
기 타		생년월일 1978년 01월 13일	체 중
O C S		임신주수	채 취 량

Result

INSPECTION ITEMS	RESULT(pg/mL)	REFERENCE VALUE	RESULT
NK Cell Active Stimulation Interferon Gamma	53.7	정상치 ≥ 500.0 관심치 250.0 – 499.9 경계치 100.0 – 249.9 이상치 < 100.0	NEEDS ATTENTION

Result

INSPECTION ITEMS	RESULT(pg/mL)	REFERENCE VALUE	RESULT
NK Cell Active Stimulation Interferon Gamma	290.4	정상치 ≥ 500.0 관심치 250.0 – 499.9 경계치 100.0 – 249.9 이상치 < 100.0	NORMAL AVERAGE

Immune cell activity
5 times more increase

53.7

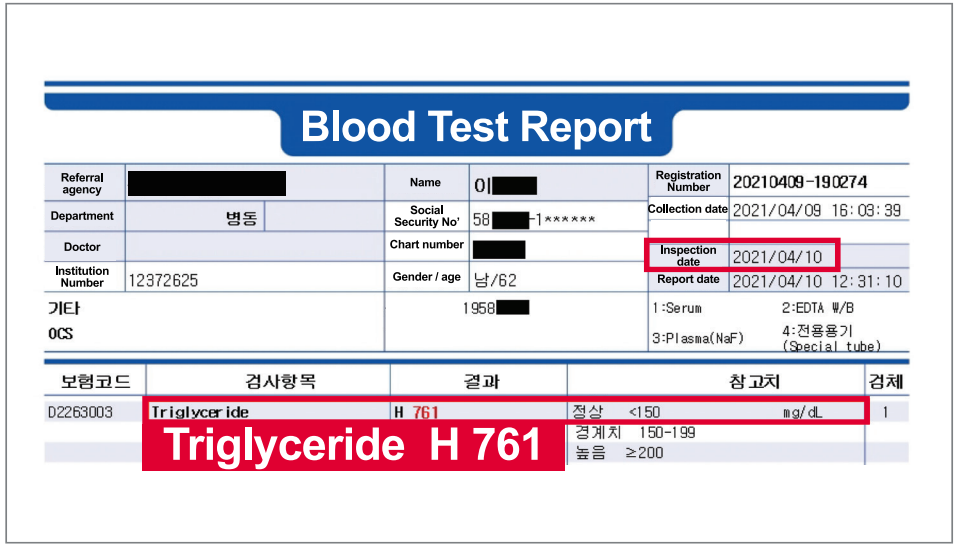
290.4

CELLPIA STEM CELL

Stem Cell Health Care

Triglyceride

After 1 month

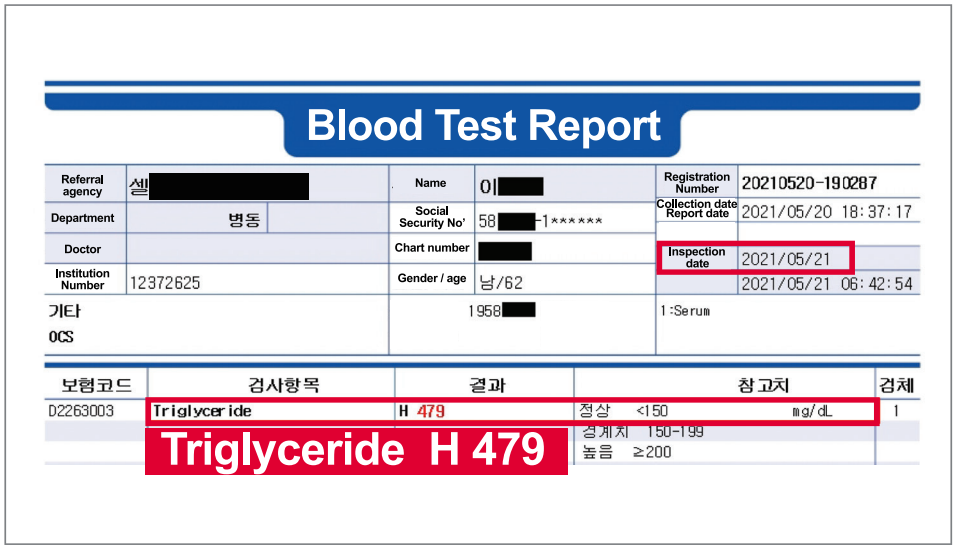


Blood Test Report

Referral agency	[redacted]	Name	이[redacted]	Registration Number	20210409-190274
Department	병동	Social Security No'	58[redacted]-1******	Collection date	2021/04/09 16:03:39
Doctor		Chart number	[redacted]	Inspection date	2021/04/10
Institution Number	12372625	Gender / age	남/62	Report date	2021/04/10 12:31:10
기타		1958[redacted]		1:Serum	2:EDTA W/B
OCS				3:Plasma(NaF)	4:전용용기 (Special tube)

보험코드	검사항목	결과	참고치	검체
D2263003	Triglyceride	H 761	정상 <150 mg/dL 경계치 150-199 높음 ≥200	1

Triglyceride H 761



Blood Test Report

Referral agency	셀[redacted]	Name	이[redacted]	Registration Number	20210520-190287
Department	병동	Social Security No'	58[redacted]-1******	Collection date Report date	2021/05/20 18:37:17
Doctor		Chart number	[redacted]	Inspection date	2021/05/21
Institution Number	12372625	Gender / age	남/62		2021/05/21 06:42:54
기타		1958[redacted]		1:Serum	
OCS					

보험코드	검사항목	결과	참고치	검체
D2263003	Triglyceride	H 479	정상 <150 mg/dL 경계치 150-199 높음 ≥200	1

Triglyceride H 479

CELLPIA STEM CELL

Stem Cell Health Care

Anti-Aging Injection Premium Program (Bone Marrow & Blood)

Premium Program	1 (1 times)	2 (3 times)	3 (5 times)	4 (7 times)	5 (10 times)	6 (15 times)
1 month	Approx. 900 million cells BmSC – 60mL BSC – 60mL	Approx. 2 billion cells BmSC – 120mL BSC – 180mL	Approx. 3.4 billion cells BmSC – 240mL BSC – 180mL	Approx. 5.2 billion cells BmSC – 360mL BSC – 300mL	Approx. 7.1 billion cells BmSC – 540mL BSC – 480mL	Approx. 10 billion cells BmSC – 720mL BSC – 480mL
2 months						
3 months	Activation Care					
4 months		Activation Care	Activation Care	Activation Care	Activation Care	Activation Care
5 months						
6 months						
7 months						
8 months						
9 months						
10 months						
11 months						
12 months						
Procedure price	USD 11,900	USD 23,800	USD 35,800	USD 59,600	USD 83,400	USD 107,300

Anti-Aging injection (blood stem cell intravenous injection)

BSC 120mL (Approx. 400 million cells)	USD 4,800
BSC 240mL (Approx. 800 million cells)	USD 9,500
BMSC 120mL (Approx. 1.4 billion cells)	USD 16,700
BMSC 240mL (Approx. 2.8 billion cells)	USD 33,400

※The number of cells may vary depending on the individual's health condition.
※Price including tax

■ What is Activation Care?

CELLPIA'S special care that helps stem cells engraft and grow!

Health condition and nutrition check → Primary care doctor 1:1 consultation → Antioxidant/parental nutrition/hormonal supplement Active cell induction therapy

CELLPIA STEM CELL

Procedure Precautions

Precautions before procedure

Avoid taking aspirin–type drugs that interfere with blood circualtion

Precautions after procedure

1. Keep your body warm for smooth blood circulation.

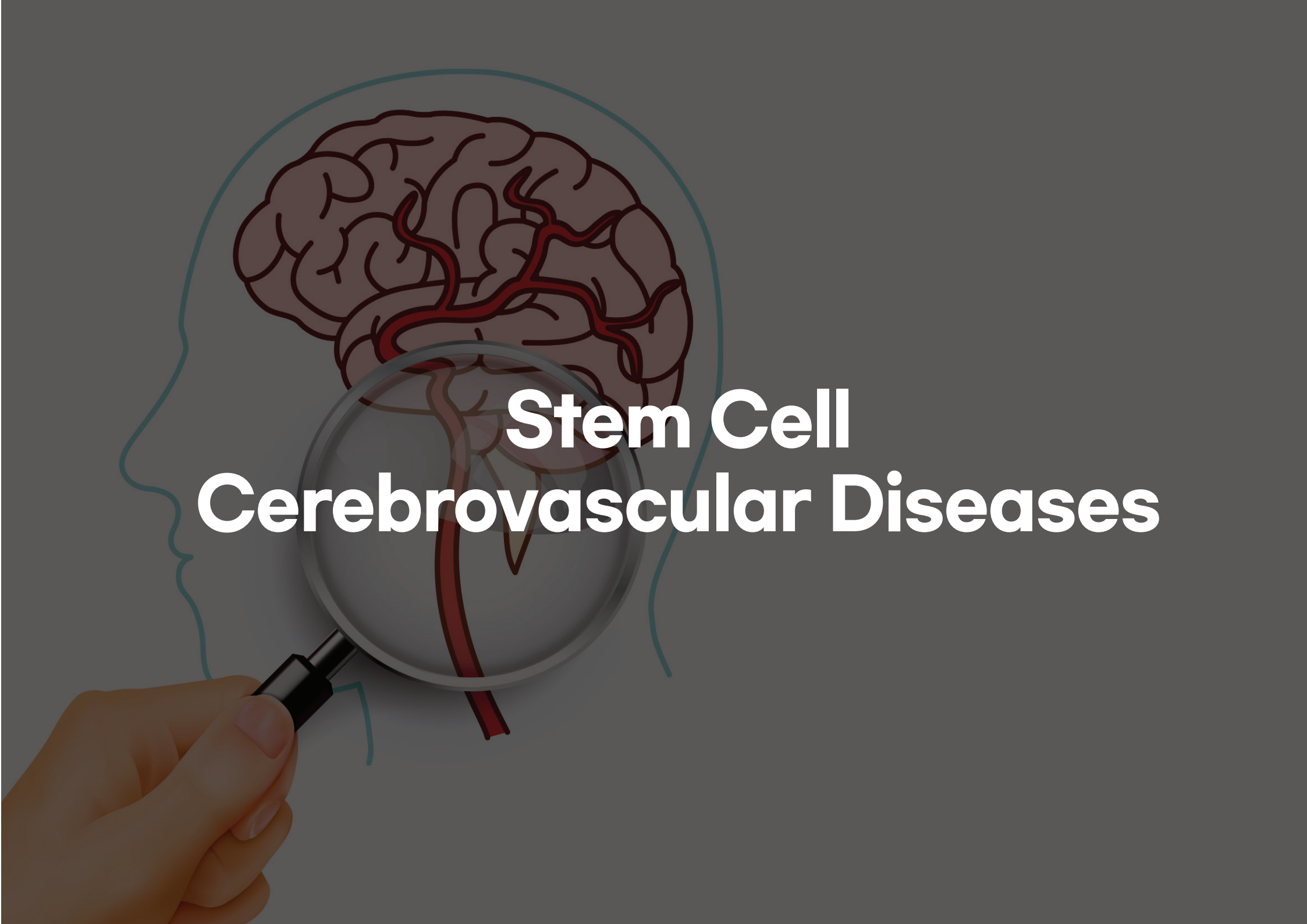
2. For the best effect of the procedure, please refrain from drinking and smoking for at least 2 weeks.

3. Avoid steroids, anti–inflammatory drugs, and pain relief patches that interfere with stem cell regeneration for at least two weeks.

4. Depending on the individual's physical condition, body aches (muscle pain) may occur for one to two days after the procedure.

5. If the pain is severe, take a Tylenol pain reliever.

6. Please take oriental medicine after consulting with the doctor.



Stem Cell Cerebrovascular Diseases

CELLPIA STEM CELL

Stem Cell Cerebrovascular Diseases

Stem Cell brain disease prevention procedures

It is a procedure in which patient's stem cells are concentrated and transplanted into cerebrovascular and facial blood vessels through the carotid artery.

Stem cells present in adult bone marrow and blood can be differentiated into cells of specific tissues when necessary and have excellent regenerative capacity. Cells transferred to cerebral blood vessels regenerate cerebrovascular endothelial damage and strengthen existing blood vessels to facilitate oxygen and nutrition supply.

Atrophy of the brain

Normal brain

CELLPIA STEM CELL

Stem Cell Cerebrovascular Diseases

Stem Cells protect brain function and blood vessels

Cerebrovascular disease is a disease that occurs in blood vessels present in the brain.
Blood vessels flowing to the brain must be strong and thick to provide sufficient blood and oxygen to the brain tissue.
The weight of the brain accounts for only about 2% of our body, but for the brain to work, we have to use 20 to 25% of the oxygen we breathe.
As much as it requires a large amount of oxygen, blood going up to the brain is blocked, and even if the oxygen supply is stopped for 15 seconds,
a person loses consciousness, and after more than four minutes, brain cells are damaged so badly that they cannot be restored.
Therefore, the role of blood vessels in transporting blood to the brain is very important and routine care is essential.

Effect of Stem Cell cerebrovascular disease prevention and treatment

CELLPIA STEM CELL

Stem Cell Cerebrovascular Diseases

BSC 120mL (Approx. 400 million cells)	USD 4,800
BSC 240mL (Approx. 800 million cells)	USD 9,500

※※The number of cells may vary depending on the individual's health condition.

※Price including tax

CELLPIA STEM CELL

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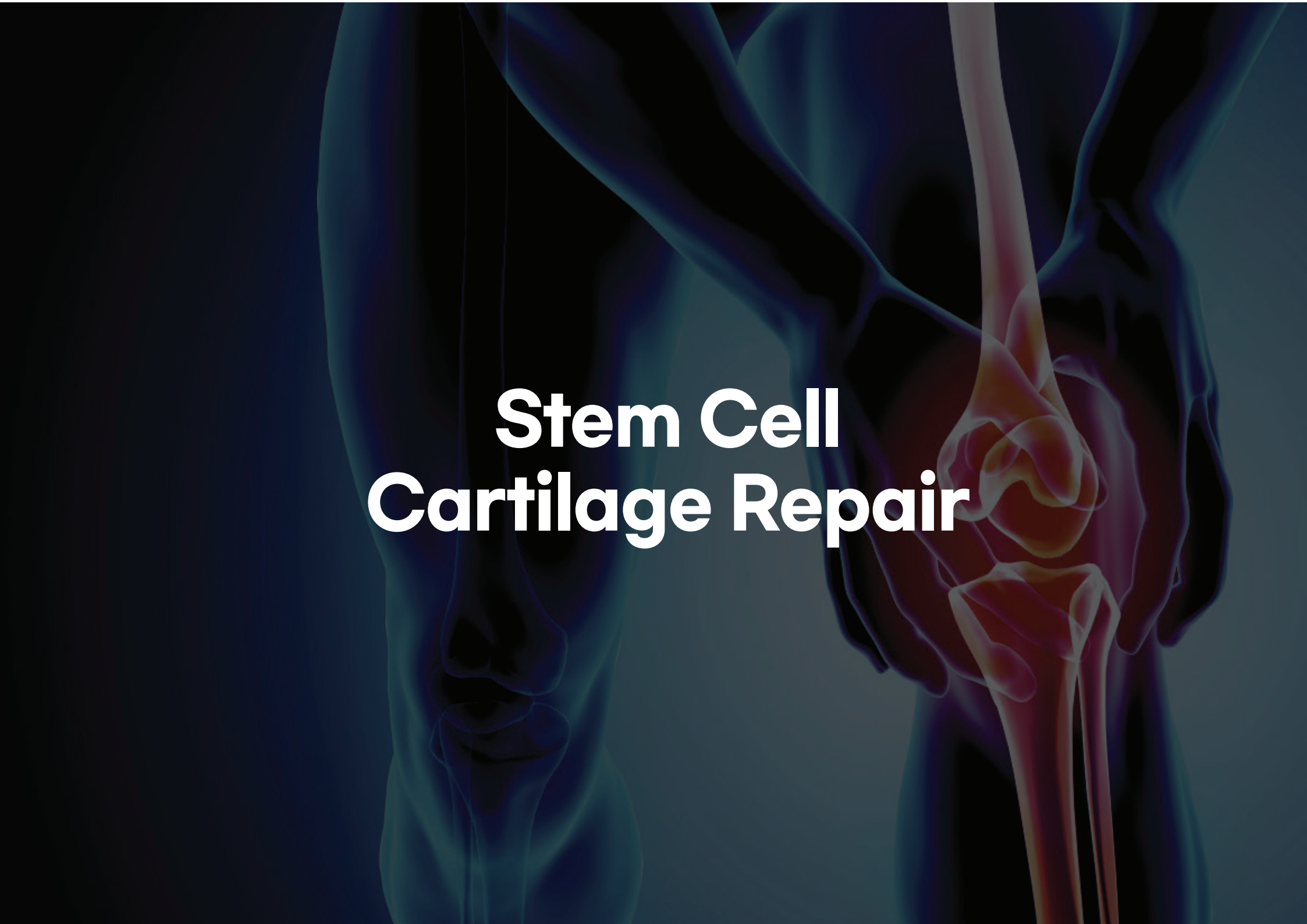

Stem Cell
Cartilage Repair

CELLPIA STEM CELL

Stem Cell Cartilage Repair

The importance of cartilage

The cartilage is highly elastic, so it acts as a buffer to protect the knee bones like a kind ofcushion and helps the joints move with little friction.
In the case of trauma and degenerative knee pain, early diagnosis and quick treatment should be prioritized.
Early diagnosis and quick treatment are very important for knee pain.
One stem cell procedure is sufficient for early treatment, and shows quick recovery.

Osteochondral Lesions of the Knee: A New One-Step Repair Technique with Bone-Marrow-Derived Cells

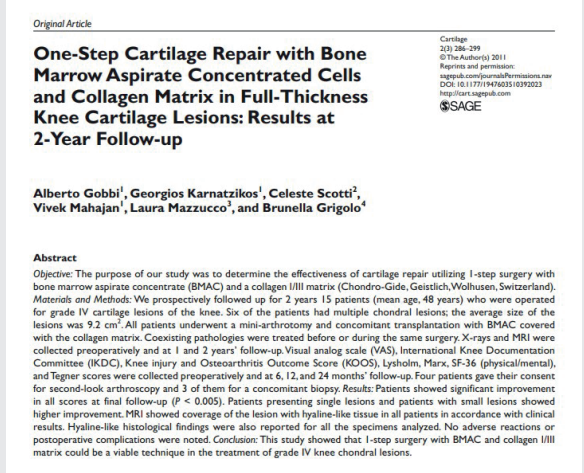
By Roberto Buda, MD, Francesca Vannini, MD, PhD, Marco Cavallo, MD, Brunella Grigolo, PhD, Annarita Cenacchi, MD, and Sandro Giannini, MD

Osteochondral lesions of the knee are defects of the cartilaginous surface and underlying subchondral bone, most frequently traumatic in origin[1]. These lesions are predominantly located on the medial femoral condyle, and associated ligamentous or meniscal pathology is reported in 40% of cases[2,3] (Fig. 1). Biomechanical studies have demonstrated increased stress concentration on the rim of the osteochondral defect, which may have important implications for cartilage longevity[4]. Due to poor hyaline cartilage repair capability, larger osteochondral lesions of the knee are associated both with immediate significant clinical impairment and with symptoms appearing approximately one decade earlier than the degenerative cartilage changes that are associated with idiopathic osteoarthritis[5].

Surgery is frequently needed to treat knee symptoms in patients with osteochondral lesions of the knee and to restore

Fig. 1
Fig. 1 Osteochondral lesions can affect all areas of articular cartilage, but the femoral condyle is most often involved. **Fig. 2** Bone marrow is aspirated from the posterior iliac crest.

Fig. 2



Original Article

One-Step Cartilage Repair with Bone Marrow Aspirate Concentrated Cells and Collagen Matrix in Full-Thickness Knee Cartilage Lesions: Results at 2-Year Follow-up

Cartilage
2(3) 286–299
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sagepub.com/journalsPermissions.nav
DOI: 10.1177/1947603510392023
http://cart.sagepub.com
SAGE

Alberto Gobbi[1], Georgios Karnatzikos[1], Celeste Scotti[2], Vivek Mahajan[1], Laura Mazzucco[3], and Brunella Grigolo[4]

Abstract

Objective: The purpose of our study was to determine the effectiveness of cartilage repair utilizing 1-step surgery with bone marrow aspirate concentrate (BMAC) and a collagen I/III matrix (Chondro-Gide, Geistlich,Wolhusen, Switzerland). *Materials and Methods:* We prospectively followed up for 2 years 15 patients (mean age, 48 years) who were operated for grade IV cartilage lesions of the knee. Six of the patients had multiple chondral lesions; the average size of the lesions was 9.2 cm^2. All patients underwent a mini-arthrotomy and concomitant transplantation with BMAC covered with the collagen matrix. Coexisting pathologies were treated before or during the same surgery. X-rays and MRI were collected preoperatively and at 1 and 2 years' follow-up. Visual analog scale (VAS), International Knee Documentation Committee (IKDC), Knee injury and Osteoarthritis Outcome Score (KOOS), Lysholm, Marx, SF-36 (physical/mental), and Tegner scores were collected preoperatively and at 6, 12, and 24 months' follow-up. Four patients gave their consent for second-look arthroscopy and 3 of them for a concomitant biopsy. *Results:* Patients showed significant improvement in all scores at final follow-up ($P < 0.005$). Patients presenting single lesions and patients with small lesions showed higher improvement. MRI showed coverage of the lesion with hyaline-like tissue in all patients in accordance with clinical results. Hyaline-like histological findings were also reported for all the specimens analyzed. No adverse reactions or postoperative complications were noted. *Conclusion:* This study showed that 1-step surgery with BMAC and collagen I/III matrix could be a viable technique in the treatment of grade IV knee chondral lesions.

New Medical Technology Registered Therapy

Autologous bone marrow stem cell therapy in patients with cartilage defects Ministry of Health and Welfare Notice No. 2012–1
– Cartilage damage due to traumatic osteochondritis

CELLPIA STEM CELL

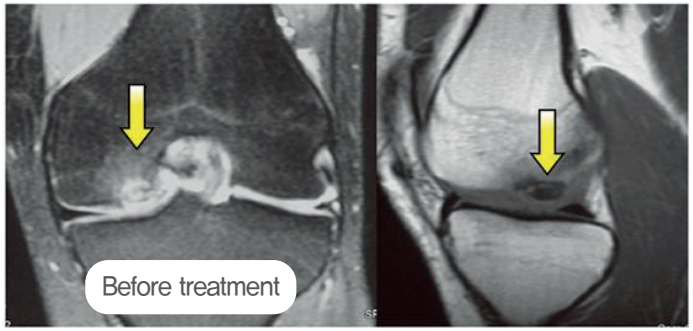
Stem Cell Cartilage Repair

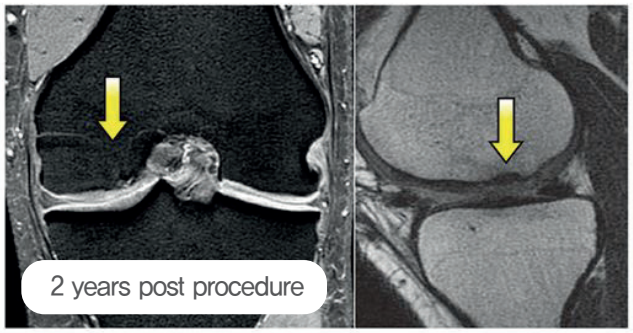
Effect of mesenchymal cartilage regeneration procedure

- Cartilage Regeneration
- Pain relief
- Strengthening of Ligaments
- Inflammation Treatment

Osteochondral Lesions of the Knee: A New One-Step Repair Technique with Bone-Marrow-Derived Cells

By Roberto Buda, MD, Francesca Vannini, MD, PhD, Marco Cavallo, MD, Brunella Grigolo, PhD, Annarita Cenacchi, MD, and Sandro Giannini, MD





80% of cartilage defects patients were **cured with a single stem cell procedure**

CELLPIA STEM CELL

Stem Cell Cartilage Repair

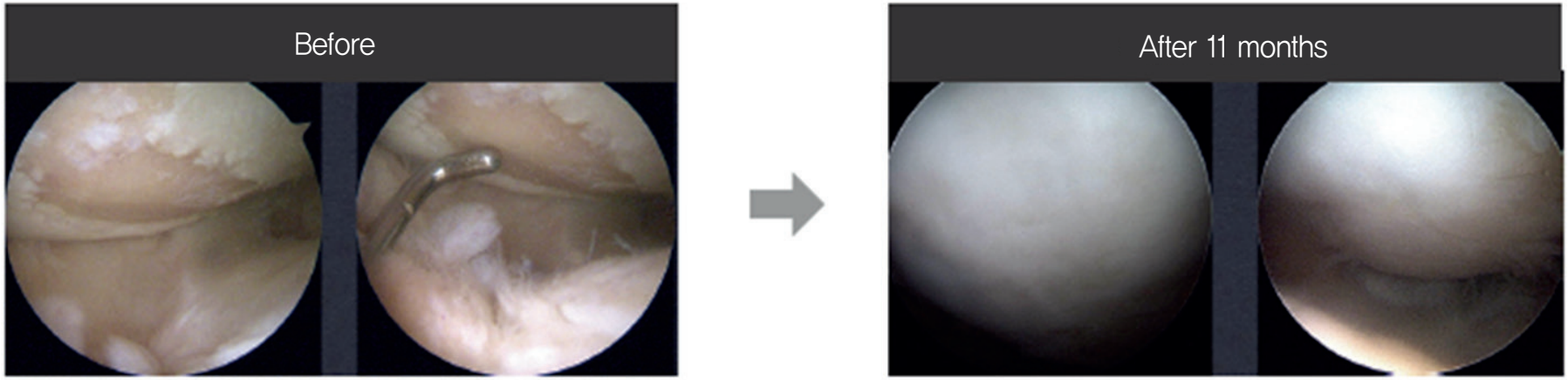


FIGURE 1. A sagittal magnetic resonance imaging scan shows a large osteochondral lesion of the posteromedial talar dome.

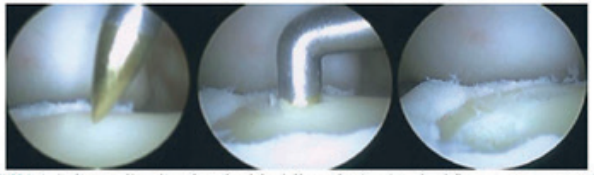


FIGURE 6. A microfracture awl is used to perforate the subchondral bone at 3 to 4-mm intervals and allow marrow to aggregate to the defect site.

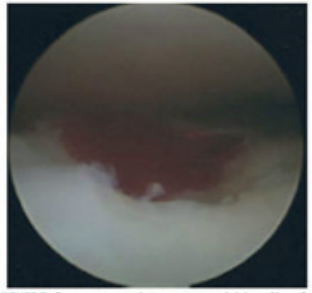


FIGURE 7. Bone marrow aspirate concentrate is injected into the defect after bone marrow stimulation.

Ankle Cartilage
Stem Cell Procedure

CELLPIA STEM CELL

Stem Cell Cartilage Repair

BmSC 60mL (Approx. 700 million cells + fat)	USD 8,300

※The number of cells may vary depending on the individual's health condition.

※Price including tax

CELLPIA STEM CELL

Procedure Precautions

Precautions before procedure

Avoid taking aspirin–type drugs that interfere with blood circualtion

Precautions after procedure

1. For the best effect of the procedure, please refrain from drinking and smoking for at least 2 weeks.
2. Avoid steroids, anti–inflammatory drugs, and pain relief patches that interfere with stem cell regeneration for at least two weeks.
3. The treatment area must be thoroughly disinfected until the stitches are removed.
4. Swelling and bruising may occur in the treated area, which usually disappears in 1 to 2 weeks.
5. If the pain in the treatment area is severe, take Tylenol analgesic.
6. You can shower 2–3 days after removing the stitches.
7. Please refrain from excessive exercise that stimulates the treated area.
8. Be careful not to put weight on your knees for a long time, and you can walk without overdoing it in a pain–free range.
9. It is recommended to do light joint exercise to prevent muscle contraction after the procedure.
10. Please take oriental medicine after consulting with the doctor.


Stem Cell
Pain Medicine

CELLPIA STEM CELL

Stem Cell Pain Medicine

Musculoskeletal Pain Disease

CELLPIA Stem Cells are effective in relieving pain by injecting large amounts of growth factors white blood cells, as well as stem cells essential for regeneration, regenerating cell damage, treating inflammation of surrounding tissues and strengthening muscles.

CELLPIA STEM CELL

Stem Cell Pain Medicine

A treatment to enrich my stem cells and implant them directly into the pain area

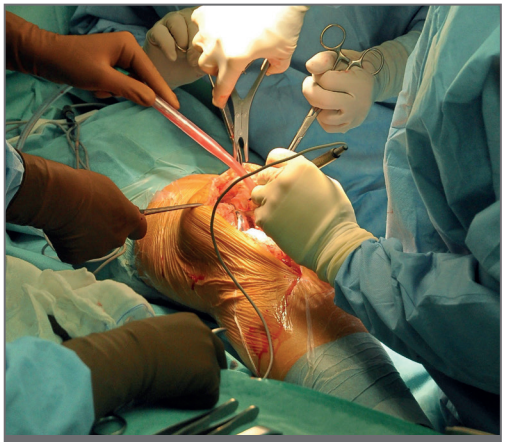
Fascia Regeneration

Strengthening of Surrounding Tissues

Pain Relief

Inflammation Treatment

CELLPIA Stem Cells help treat the causes of pain by treating and helping white blood cells regenerate infected tissue.
Only cells necessary for tissue regeneration and muscle rupture regeneration are selectively selected and placed directly in surgical damage, so the effect is fast and the return to daily life is also fast. If you haven't seen any therapeutic effects, please meet CELLPIA Stem Cells



Surgical Treatment

Non-Surgical Treatment
(Cellpia Stem Cell)

Clinical outcome of autologous bone marrow aspirates concentrate (BMAC) injection in degenerative arthritis of the knee

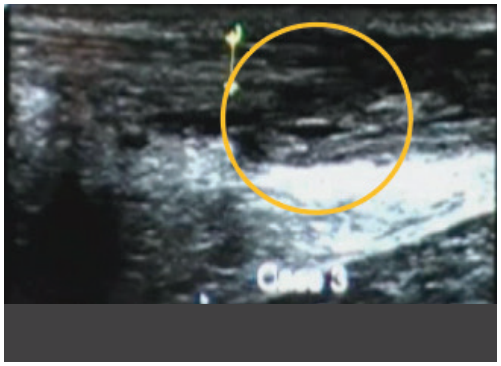
NEW MEDICAL TECHNOLOGY REGISTERED THERAPY

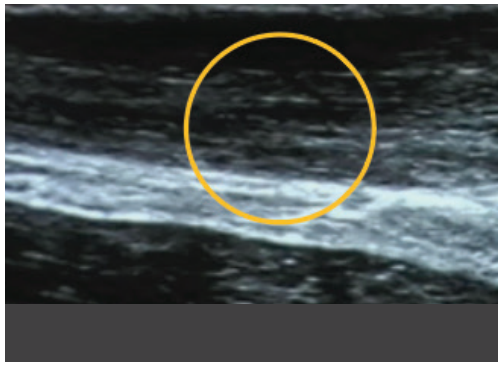
Clinical outcome of autologous bone marrow aspirates
concentrate (BMAC) injection in degenerative arthritis of the knee, 2013

CELLPIA STEM CELL

Professional golfer Tiger Woods treatment case

Unable to participate in the Masters Tournament held in Augusta, USA Tiger Woods, who was hesitant to participate a few months ago due to a partial rupture of his Achilles tendon, underwent a total of 6 blood stem cell procedures 1–2 times a week, and the ruptured tissue was treated and It became possible for him to participate.
Since only one's own stem cells are used for the procedure, there are no side effects, and since it is not cultured, the procedure and discharge can be safely performed on the same day without the risk of cell infection and genetic modification.





Professional golfer Tiger Woods – Augusta National GC interview excerpt

"When I was receiving treatment for my Achilles tendon and knee injuries for two years in a row, I put it around my knee, and my condition improved and I was able to resume my normal professional activities.

CELLPIA STEM CELL

Stem Cell Pain Medicine

BSC 60mL (Approx. 200 million cells)	USD 3,600
BSC 120mL (Approx. 400 million cells)	USD 4,800
BmSC 60mL (Approx. 400 million cells)	USD 8,300

※The number of cells may vary depending on the individual's health condition.

※Price including tax

CELLPIA STEM CELL

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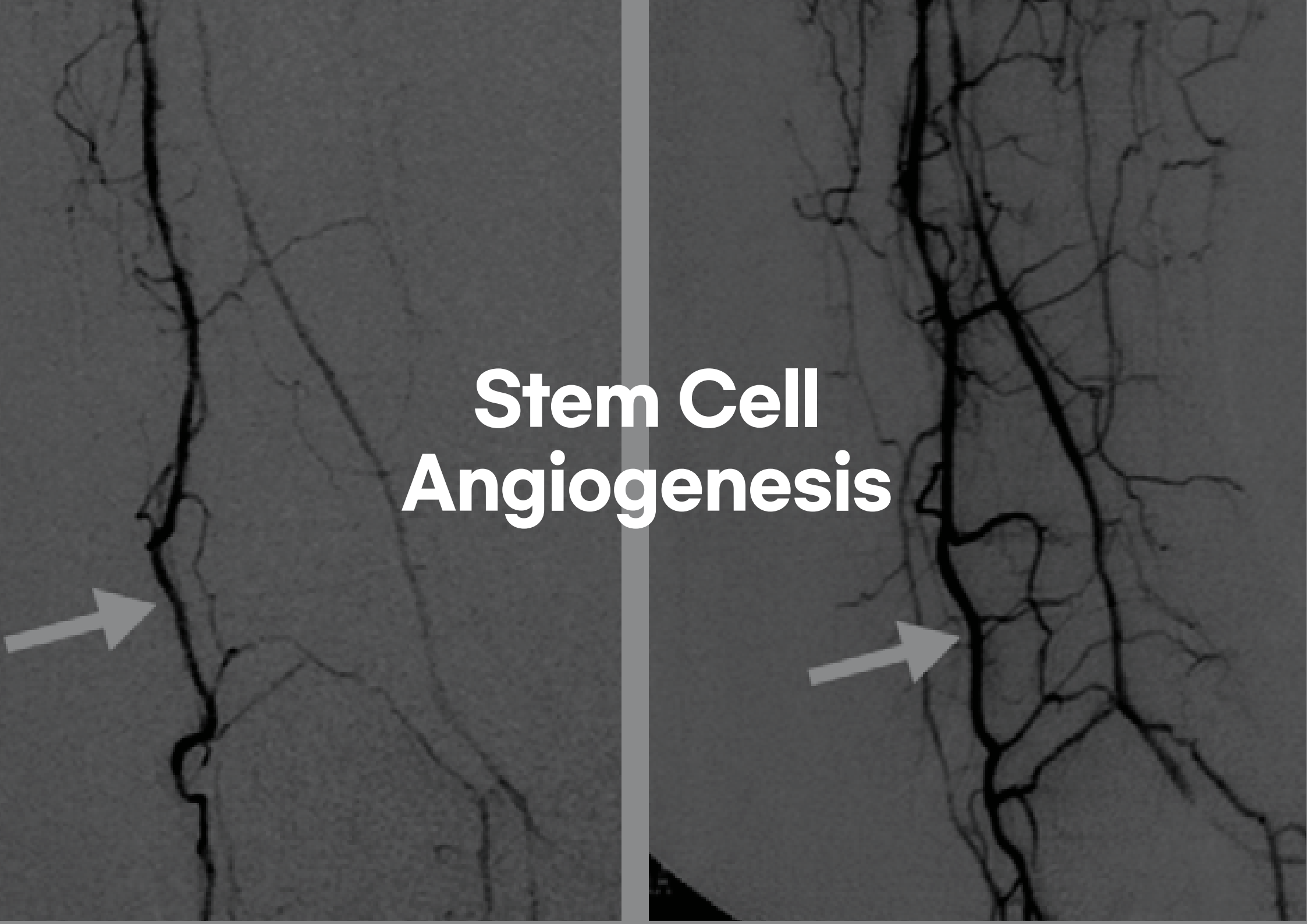
2. Avoid steroids, anti–inflammatory drugs, and pain relief patches that interfere with stem cell regeneration for at least two weeks.
3. Swelling and bruising may occur in the treated area, which usually disappears in 1 to 2 weeks.
4. Severe pain in the treated area may last for 2–3 days, and warm compresses are helpful.
5. If the pain in the treatment area is severe, take Tylenol analgesic.
6. You can shower from the day after the procedure.
7. Please refrain from activities that stimulate the treatment area or excessive exercise.
8. It is helpful to do stretching and light exercise to prevent muscle contraction after the procedure.
9. Please take oriental medicine after consulting with the doctor.


Stem Cell
Angiogenesis

CELLPIA STEM CELL

Stem Cell Angiogenesis

Critical Limb Ischemia

Critical Limb Ischemia is a disease in which tissue dies due to severe blockage of peripheral arteries and poor blood supply.
So far, the cause is unknown and there is no cure. Symptoms can be unfavorable due to adult diseases such as diabetes,
and the wound does not heal easily. There are severe wounds on the internal wall of the blood vessel, and there are many lime components
in the blood vessel, which results in turbidity of the blood vessel

Benoit et al. Journal of Translational Medicine 2011, 9:165
http://www.translational-medicine.com/content/9/1/165

JOURNAL OF TRANSLATIONAL MEDICINE

RESEARCH Open Access

The role of amputation as an outcome measure in cellular therapy for critical limb ischemia: implications for clinical trial design

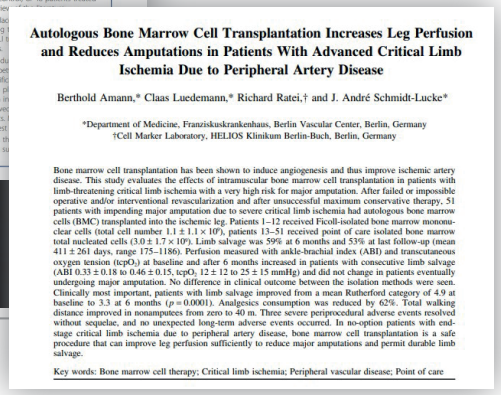
Eric Benoit[1], Thomas F O'Donnell Jr[1], Mark D Iafrati[1], Enrico Asher[2], Dennis F Bandyk[3], John W Hallett[4], Alan B Lumsden[5], Gregory J Pearl[6], Sean P Roddy[7], Krishnaswami Vijayaraghavan[8] and Amit N Patel[9*]

Abstract

Background: Autologous bone marrow-derived stem cells have been ascribed an important therapeutic role in No-Option Critical limb Ischemia (NO-CLI). One primary endpoint for evaluating NO-CLI therapy is major amputation (AMP), which is usually combined with mortality for AMP-free survival (AFS). Only a trial which is double blinded can eliminate physician and patient bias as to the timing and reason for AMP. We examined factors influencing AMP in a prospective double-blinded pilot RCT (2:1 therapy to control) of 48 patients treated with site of service obtained bone marrow cells (BMAC) as well as a systematic review

Methods: Cells were injected intramuscularly in the CLI limbs as either BMAC or plac
month AMP rates were compared between the two arms. Both patient and treating
assignment in follow-up examinations. A search of the literature identified 9 NO-CLI t
which were used to determine 6 month AMP rates and the influence of tissue loss.

Results: Fifteen amputations occurred during the 6 month period, 86.7% of these du
amputation occurred in a Rutherford 4 patient. The difference in amputation rate bet
(5.6%) and those with tissue loss (46.7%), irrespective of treatment group, was signific
with tissue loss, treatment with BMAC demonstrated a lower amputation rate than pl
0.1337). The Kaplan-Meier time to amputation was longer in the BMAC group than in
0.067). Projecting these results to a pivotal trial, a bootstrap simulation model showe
between BMAC and placebo with a power of 95% for a sample size of 210 patients.
confirmed a difference in amputation rate between patients with tissue loss and rest
Conclusions: BMAC shows promise in improving AMP-free survival if the trends in th
a larger pivotal trial. The difference in amp rate between Rutherford 4 & 5 patients su
should be stratified in future RCTs.



Autologous Bone Marrow Cell Transplantation Increases Leg Perfusion and Reduces Amputations in Patients With Advanced Critical Limb Ischemia Due to Peripheral Artery Disease

Berthold Amann,* Claas Luedemann,* Richard Ratei,† and J. André Schmidt-Lucke*

*Department of Medicine, Franziskuskrankenhaus, Berlin Vascular Center, Berlin, Germany
†Cell Marker Laboratory, HELIOS Klinikum Berlin-Buch, Berlin, Germany

Bone marrow cell transplantation has been shown to induce angiogenesis and thus improve ischemic artery disease. This study evaluates the effects of intramuscular bone marrow cell transplantation in patients with limb-threatening critical limb ischemia with a very high risk for major amputation. After failed or impossible operative and/or interventional revascularization and after unsuccessful maximum conservative therapy, 51 patients with impending major amputation due to severe critical limb ischemia had autologous bone marrow cells (BMC) transplanted into the ischemic leg. Patients 1–12 received Ficoll-isolated bone marrow mononuclear cells (total cell number $1.1 \pm 1.1 \times 10^9$), patients 13–51 received point of care isolated bone marrow total nucleated cells ($3.0 \pm 1.7 \times 10^9$). Limb salvage was 59% at 6 months and 53% at last follow-up (mean 411 ± 261 days, range 175–1186). Perfusion measured with ankle-brachial index (ABI) and transcutaneous oxygen tension ($tcpO_2$) at baseline and after 6 months increased in patients with consecutive limb salvage (ABI 0.33 ± 0.18 to 0.46 ± 0.15, $tcpO_2$ 12 ± 12 to 25 ± 15 mmHg) and did not change in patients eventually undergoing major amputation. No difference in clinical outcome between the isolation methods were seen. Clinically most important, patients with limb salvage improved from a mean Rutherford category of 4.9 at baseline to 3.3 at 6 months ($p = 0.0001$). Analgesics consumption was reduced by 62%. Total walking distance improved in nonamputees from zero to 40 m. Three severe periprocedural adverse events resolved without sequelae, and no unexpected long-term adverse events occurred. In no-option patients with end-stage critical limb ischemia due to peripheral artery disease, bone marrow cell transplantation is a safe procedure that can improve leg perfusion sufficiently to reduce major amputations and permit durable limb salvage.

Key words: Bone marrow cell therapy; Critical limb ischemia; Peripheral vascular disease; Point of care

NEW MEDICAL TECHNOLOGY REGISTERED THERAPY

Autologous bone marrow stem cell therapy for severe ischemic disease.
Ministry of Health and Welfare Notice No. 2016–87
– Patients with obstructive peripheral artery disease,
obstructive thromboembolism

CELLPIA STEM CELL

Stem Cell Angiogenesis

Occlusive Peripheral Arteries

Chronic (wound), 63 years old man

Stem Cells introduced
after 2 femoral bypasses failed

3 Months after bone marrow stem cell procedure,
wound healing

Diabetic Foot Ulcer

chronic wound, 58 years old man

Stem Cells introduced
after 2 times failed lower limb bypasses

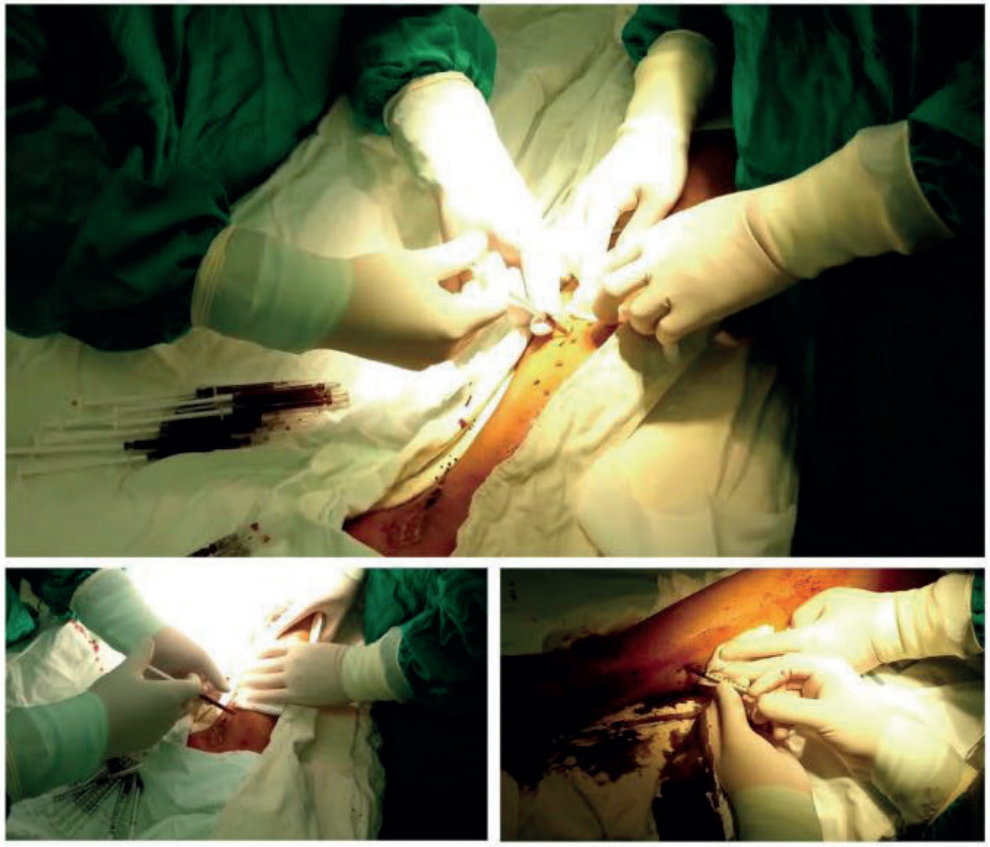
3 Months after bone marrow stem cell procedure,
wound healing

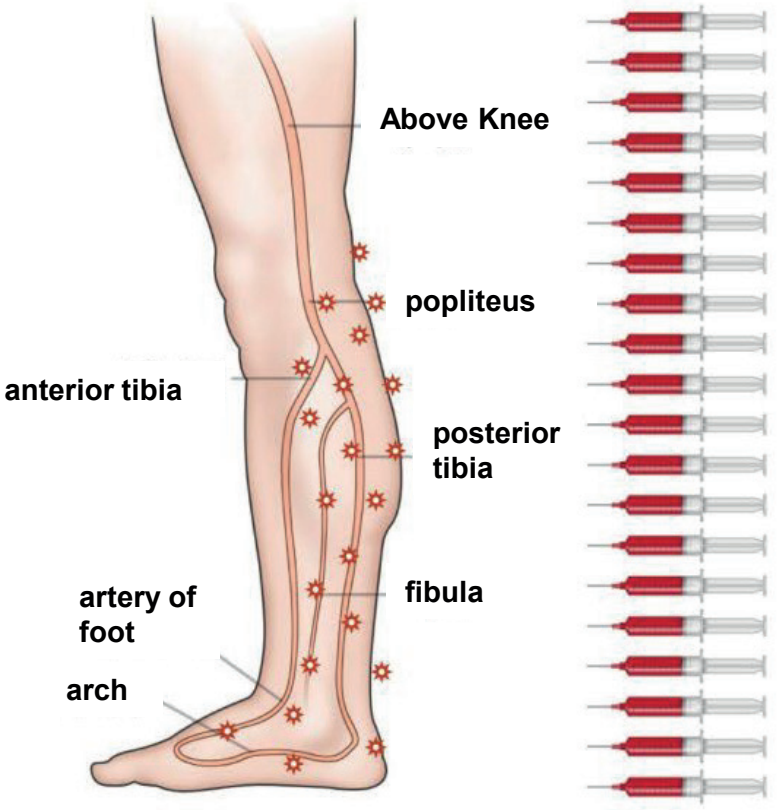
(A) A 63–year–old male diabetic with Rutherford cat. 5, chronic wound for 3 months, two failed crural bypasses, TcpO2 5 mmHg, ABI 0.3. (B) Four months after aBMT: complete wound healing, tcpO2 37 mmHg, ABI 0.63. Rutherford cat. 3.
(C) A 58–year–old male, Rutherford cat. 5, two failed bypasses (crural + pedal), tcpO2 0 mmHg, ABI >2 (media sclerosis). (D) Three months after aBMT wound healing, tcpO2 52 mmHg. Rutherford cat.3.

CELLPIA STEM CELL

Stem Cell Angiogenesis

Peripheral Artery Disease / Diabetic Foot Ulcer

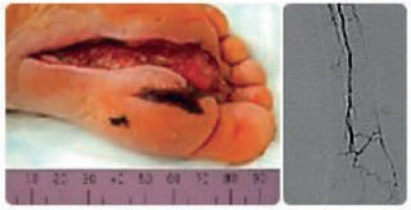
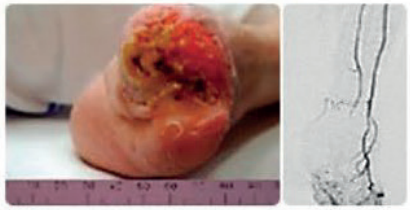




CELLPIA STEM CELL

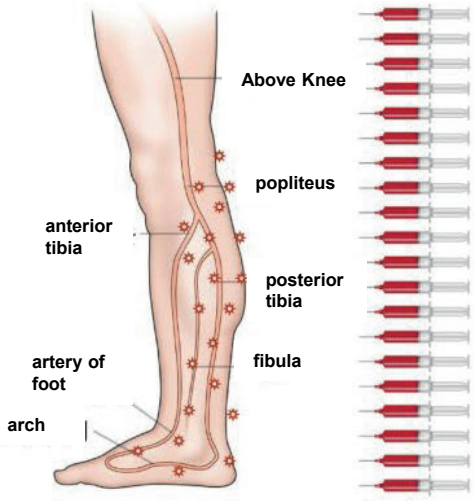
Stem Cell Angiogenesis

3 months after Autologous Bone Marrow treatment

Patient	Day 0	Day 90
Case 1		
Case 2		
Case 3		
Case 4		

Cell Therapy, a New Standard in Management of Chronic Critical Limb Ischemia and Foot Ulcer

Figure 5. Representative photographs of limb ulcers before and 90 days after ABMSC therapy.
During 90 days after ABMSC therapy all ulcers associated with CLI healed in those patients
(100%) with normal lymphocyte and thrombocyte counts in BMC at the time of procedure.



CELLPIA STEM CELL

Stem Cell Angiogenesis Procedure Price

BmSC 60mL (Approx. 700 million cells)	USD 8,300
BmSC 120mL (Approx. 1.4 billion cells)	USD 16,700
BmSC 240mL (Approx. 2.8 billion cells)	USD 33,400

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CELLPIA STEM CELL

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5. If the pain in the treatment area is severe, take Tylenol analgesic.
6. You can shower 2–3 days after removing the stitches.
7. Please refrain from excessive exercise that stimulates the treated area.
8. It is recommended to do light joint exercise to prevent muscle contraction after the procedure.
9. Please take oriental medicine after consulting with the doctor.


Stem Cell
Skin Regeneration

CELLPIA STEM CELL

Stem Cell Intractable Skin Disease

Stem cells normalize immune system & improve rare and intractable psoriasis

Stem cell procedures help balance the body and stabilize immunity to prevent allergic reactions by strengthening skin immunity by overreactin from various germs, viruses, and external stimuli. Stem cells can improve psoriasis, a rare and intractable disease caused by toxins in systemic blood vessels.

| Anti-aging of whole body skin |

Reinforced skin barrier. Collagen Regeneration. Elasticity and Wrinkle improvement.

It is a procedure that corrects cell regeneration and immunity by injecting concentrated stem cells through veins like intravenous injections

| Intensive Skin Regeneration |

Wounds, Tendencies, Partial Atopy

It is a treatment that relieves cell regeneration, immunity, and dryness on the skin surface by injecting concentrated stem cells directly into areas that need intensive regeneration.

CELLPIA STEM CELL

Stem Cell Intractable Skin Disease

Psoriasis Improvement with Stem Cells

One-time improvement of skin psoriasis stem cell treatment

Before

After 6 weeks

Before

After 8 weeks

CELLPIA STEM CELL

Stem Cell Intractable Skin Disease

Psoriasis Improvement with Stem Cells

One-time improvement of skin psoriasis stem cell treatment

Before

After 8 weeks

Before

After 11 weeks

CELLPIA STEM CELL

Stem Cell Intractable Skin Disease

Psoriasis Improvement with Stem Cells

One-time improvement of skin psoriasis stem cell treatment

Before

After 3 months

Before

After 3 months

CELLPIA STEM CELL

Stem Cell Intractable Skin Disease

Psoriasis Improvement with Stem Cells

One-time improvement of skin psoriasis stem cell treatment

Before | After 3 months

Before | After 3 months

CELLPIA STEM CELL

Stem Cell Intractable Skin Disease

BSC 240mL (Approx. 800 million cells)	→	USD 9,500
BSC 240mL + BmSC 60mL (Approx. 1.5 billion cells)	→	USD 17,900
BSC 240mL + BmSC 120mL (Approx. 2.3 billion cells)	→	USD 26,200

※The number of cells may vary depending on the individual's health condition.

※ Price including tax

CELLPIA STEM CELL

Stem Cell Skin Regeneration

Anti-Aging

The skin layer thins, loses elasticity and wrinkles form as aging progresses.
Stem cells regenerate collagen and elastin to improve elasticity, skin tone, and wrinkles.

CELLPIA STEM CELL

Stem Cell Skin Regeneration

BSC 30mL (Approx. 90 million cells)	USD 2,400
BSC 60mL (Approx. 200 million cells)	USD 3,600
BSC 120mL (Approx. 400 million cells)	USD 4,800

※※The number of cells may vary depending on the individual's health condition.

※ Price including tax

CELLPIA STEM CELL

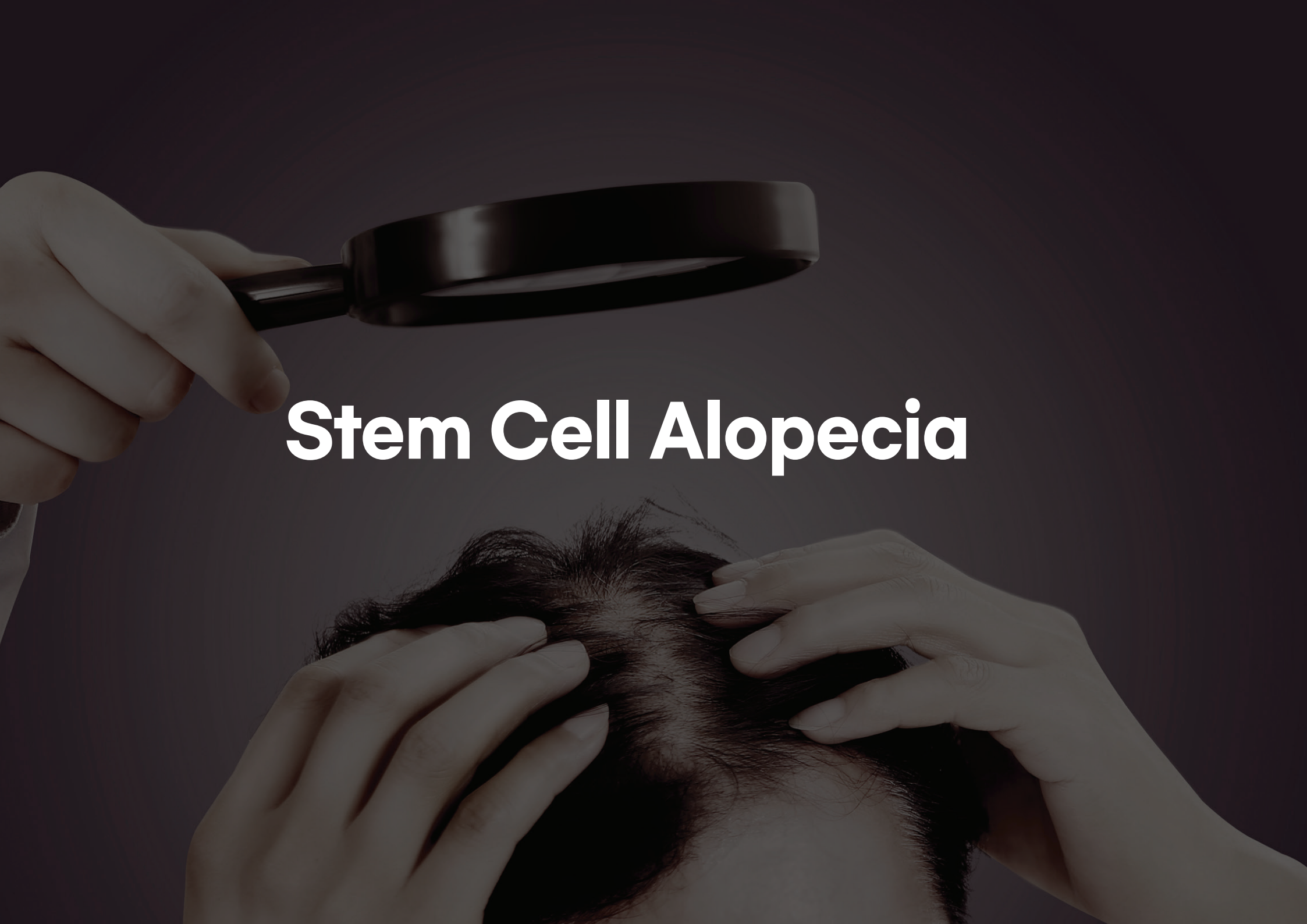
Procedure Precautions

Precautions before procedure

Avoid taking aspirin–type drugs that interfere with blood circualtion

Precautions after procedure

1. Keep your body warm for smooth blood circulation.
2. For the best effect of the procedure, please refrain from drinking and smoking for at least 2 weeks.
3. Avoid steroids, anti–inflammatory drugs, and pain relief patches that interfere with stem cell regeneration for at least two weeks.
4. Swelling and bruising may occur in the treated area, which usually disappears in 1 to 2 weeks.
5. You can wash your face and shower from the day after the procedure.
6. When washing the face, do not stimulate the treated area too hard.
7. If a scab is formed, do not remove it forcibly and leave it until it falls off naturally.
8. If the pain in the treated area is severe, please take a Tylenol pain reliever
9. Please take oriental medicine after consulting with the doctor.

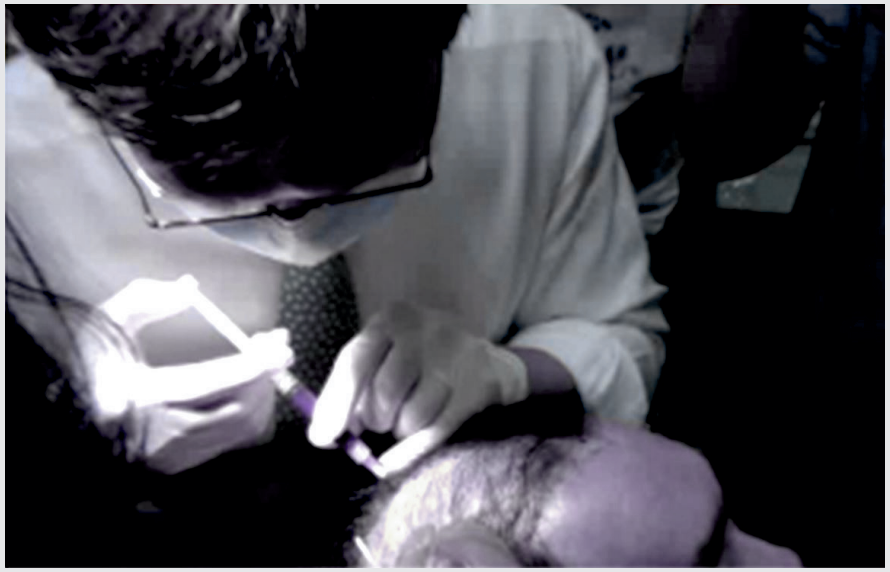

Stem Cell Alopecia

CELLPIA STEM CELL

Stem Cell Alopecia

Find confidence with Cellpia Stem Cells

A treatment where my stem cells are concentrated and injected directly into the hair loss area.
Stem cells are undifferentiated cells that can be differentiated into cells of specific tissues when necessary, and their excellent regeneration ability promotes hair follicle cell proliferation and hair growth, resulting in increased hair count and improved thickness. It also prevents scalp antioxidant and improves collagen components in the dermis layer.



ORIGINAL ARTICLE

The effect of CD34+ cell–containing autologous platelet–rich plasma injection on pattern hair loss: a preliminary study

J.–S. Kang,Z. Zheng,M.J. Choi,S.–H. Lee,D.–Y. Kim,S.B. Cho

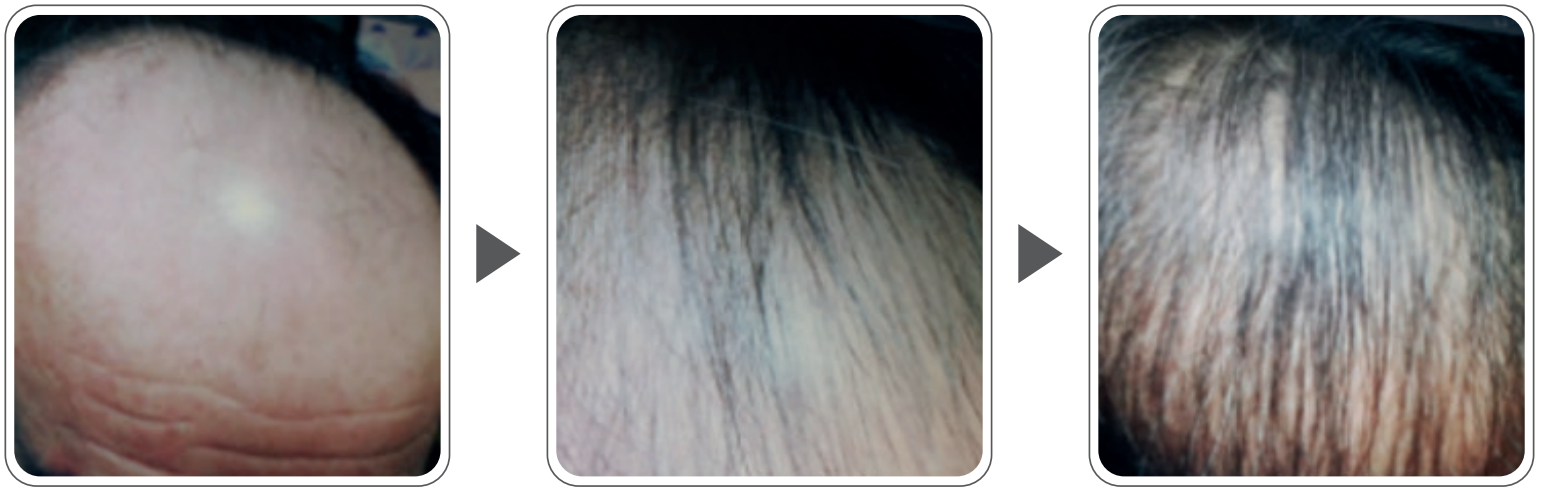
CELLPIA STEM CELL

Stem Cell Alopecia

Methods and Principles of Stem Cell Hair Loss Improvement Procedure

Concentrated stem cells are injected into the root depth in the direction of hair growth.
The injected stem cells reconnect capillaries to the hair roots, which were not supplied smoothly with oxygen,
making the thinned hair thick and powerful.

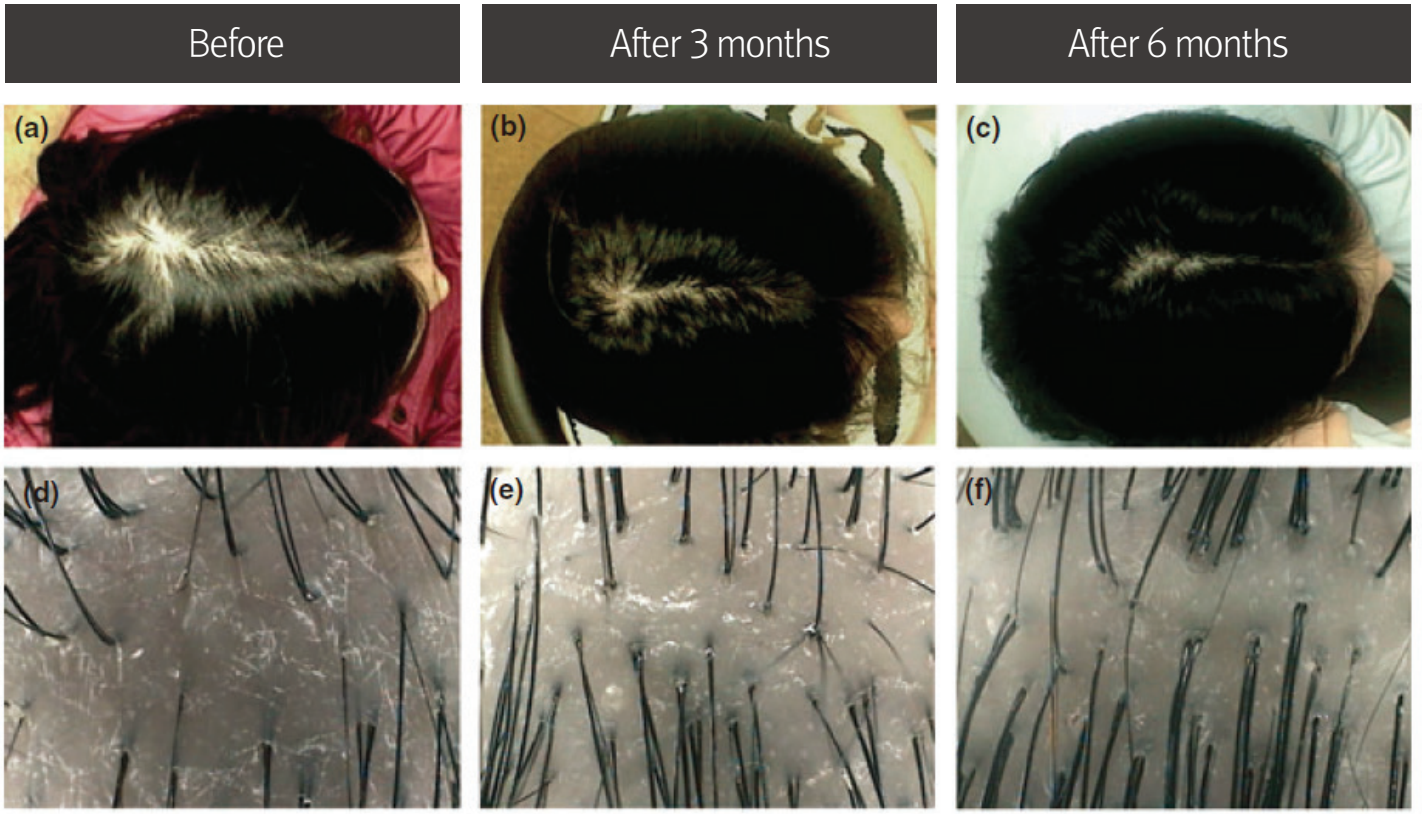
It also helps to proliferate new hair follicle cells and existing hair follicle cells.



Before the treatment | After 3 months | After 6 months

CELLPIA STEM CELL

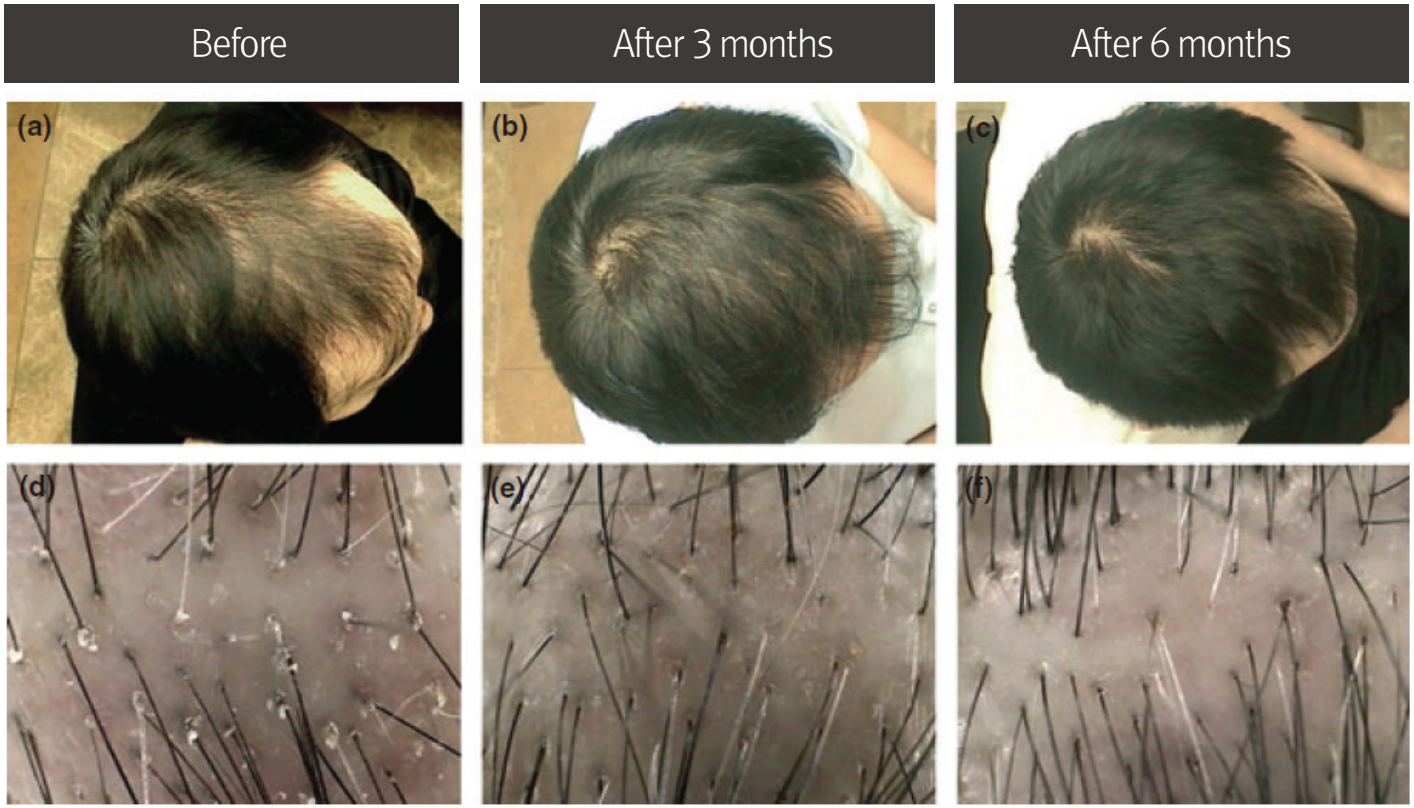
Stem Cell Alopecia Improvement Case



The effect of CD34+ cell–containing autologous platelet rich plasma injection on pattern hair loss: a preliminary study, JEADV 2012.

CELLPIA STEM CELL

Stem Cell Alopecia Improvement Case



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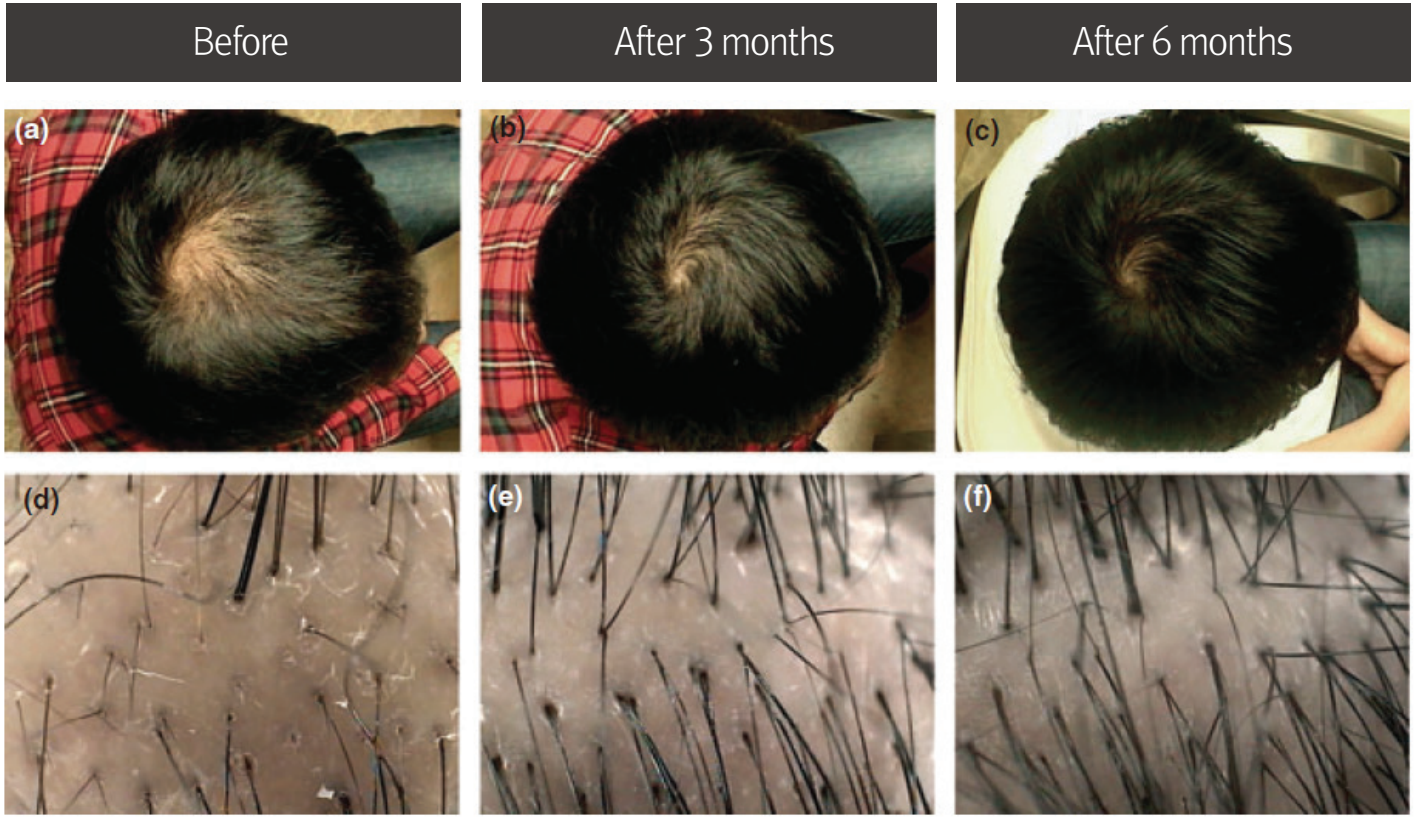
CELLPIA STEM CELL

Stem Cell Alopecia Improvement Case



The effect of CD34+ cell–containing autologous platelet rich plasma injection on pattern hair loss: a preliminary study, JEADV 2012.

CELLPIA STEM CELL

Stem Cell Alopecia

BSC 30mL (Approx. 90 million cells) x 3 times	USD 6,000
BSC 60mL (Approx. 200 million cells) x 3 times	USD 9,500
BSC 120mL (Approx. 400 million cells) x 3 times	USD 11,900

※The number of cells may vary depending on the individual's health condition.

※※Price including tax

CELLPIA STEM CELL

Procedure Precautions

Precautions before procedure

Avoid taking aspirin–type drugs that interfere with blood circualtion

Precautions after procedure

1. For the best effect of the procedure, please refrain from drinking and smoking for at least 2 weeks.
2. Avoid steroids, anti–inflammatory drugs, and pain relief patches that interfere with stem cell regeneration for at least two weeks.
3. Swelling and bruising may occur in the treated area, which usually disappears in 1 to 2 weeks.
4. The pain at the treated area may last for 2 to 3 days, or more than 1 week at the longest.
5. You can shower 24 hours after the procedure.
6. When shampooing, do not stimulate the treated area too strongly.
7. If a scab is formed, do not force it off and leave it until it falls off naturally.
8. If the pain is severe, take a Tylenol pain reliever.
9. Please take oriental medicine after consulting with the doctor.

Stem Cell Sexual Funtcion [Female]

CELLPIA STEM CELL

Stem Cell Sexual Funtcion | Female

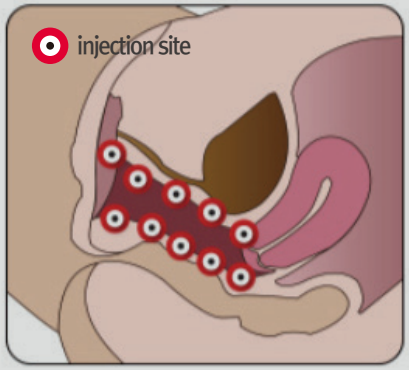
Reborn as a sexy woman

Solve your problems by improving sexual factors such as vaginal dryness caused by decreased secretion of female hormones after middle age.

Functional Improvement

Neural Regeneration & Vascular Strengthening, Increased Vaginal Muscle Sensitivity

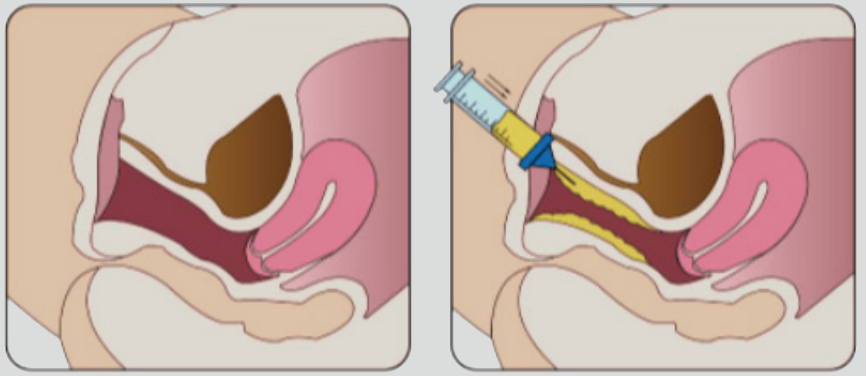
A procedure in which stem cells are injected directly into and around the vagina to regenerate blood vessels and nerves, which are the causes of female dysfunction, and pain-free procedures are performed by partial anesthesia/sleep anesthesia.



Remodeling

Fat Transplantation & Nerve Regeneration, Sexual Sensitivity Recovery

In addition, the fat of the lower abdomen is transplanted into the vaginal inner wall to form a volume of the vaginal inner wall, which not only increases sensitivity but also increases satisfaction and confidence in sex with the volume of the vaginal inner wall.



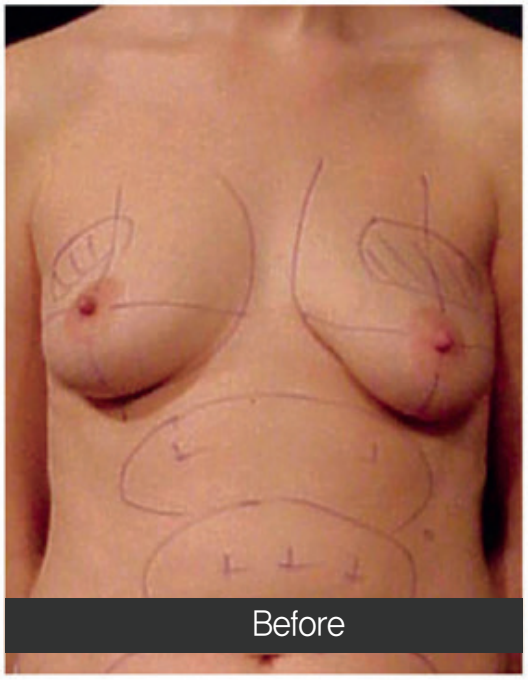
CELLPIA STEM CELL

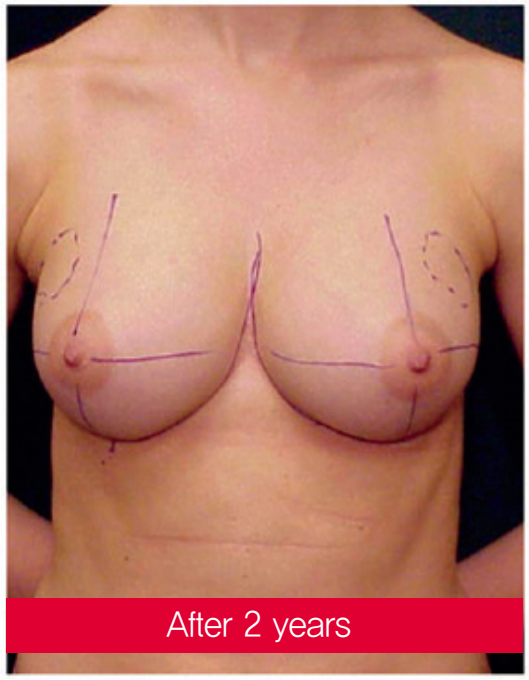
Stem Cell Sexual Funtcion | Female

Breast Plastic Surgery

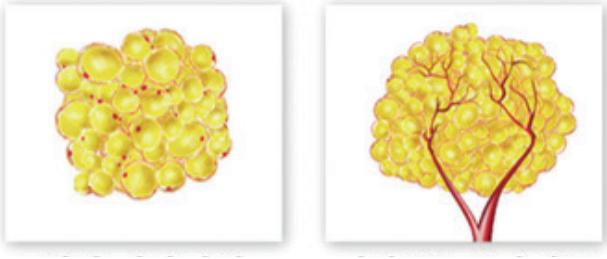
Long-lasting Prosthesis-free Procedures

Existing fat grafting was not sustainable for a long time. Natural treatment without implants is possible.





Alexander, R.W. Autologous Fat Grafting, Springer 2009



Existing fat grafting

Stem cell fat grafting

Fat graft retention below 30% → 80%

Healing potential / necrotic barrier (anti-inflammatory)

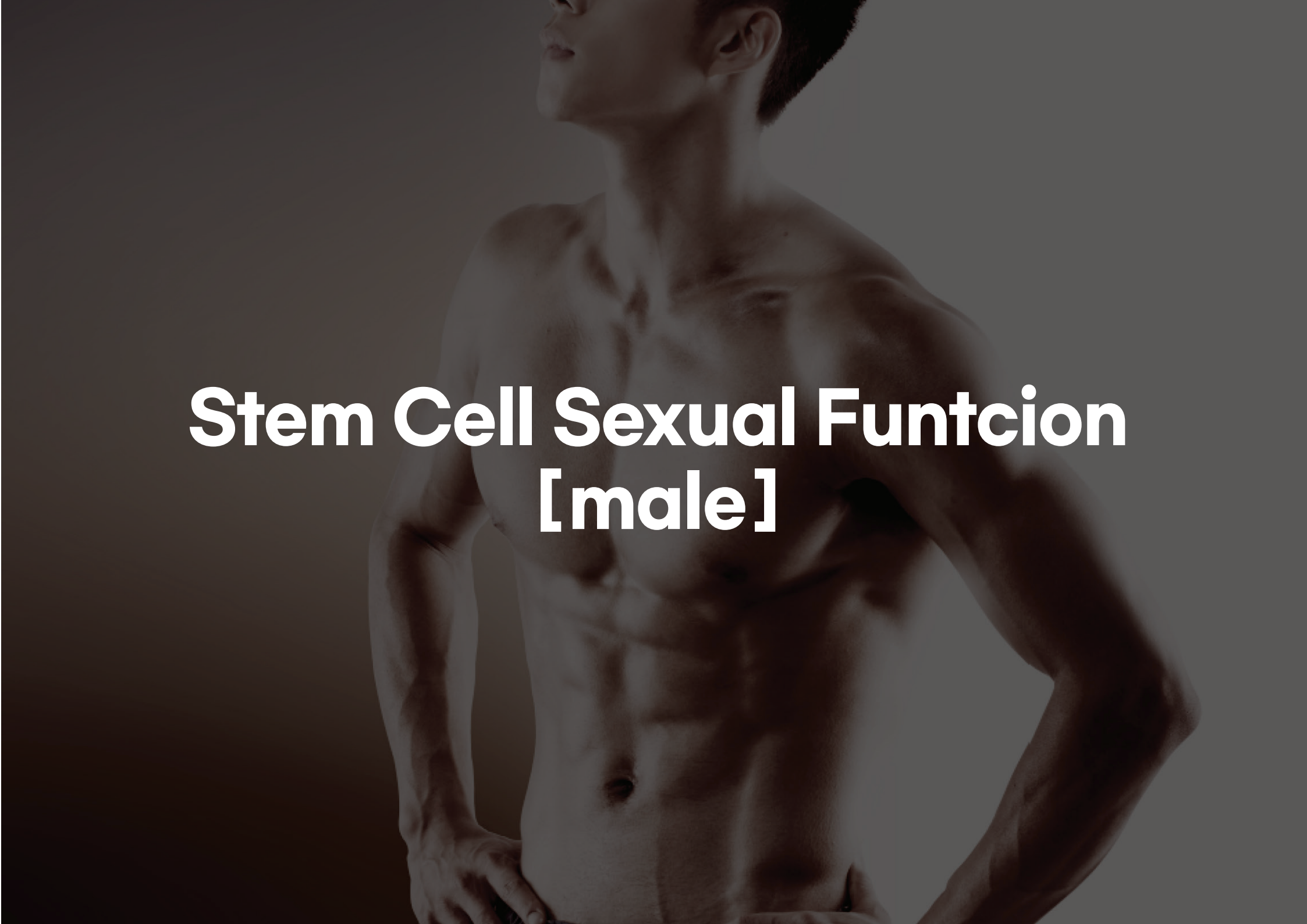
CELLPIA STEM CELL

Stem Cell Sexual Funtcion | Female

BSC 120mL (Approx. 400 million cells)	USD 4,800
BSC 180mL (Approx. 600 million cells)	USD 7,200
BmSC 60mL (Approx. 700 million cells)	USD 8,300
For additional fat procedure	USD 1,100

※The number of cells may vary depending on the individual's health condition.

※Price including tax


Stem Cell Sexual Funtcion
[male]

CELLPIA STEM CELL

Stem Cell Sexual Funtcion | male

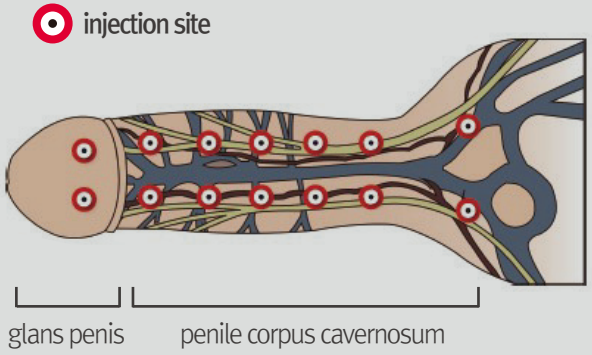
We give you the confidence to be recognized

The physical cause of male functional decline is the balance of the nervous system, blood vessels, and endocrine systems, and the nerves become weak and blood vessels narrow, making it difficult to supply smooth blood and deliver oxygen, resulting in decreased stiffness and sensitivity during erection. Direct injection or indirect injection increases erectile strength, stiffness, and persistence, so you can compare the feeling before and after the procedure.

Improved function

Vascular Strengthening & Nerve Regeneration, increased Stiffness & Sensitivity

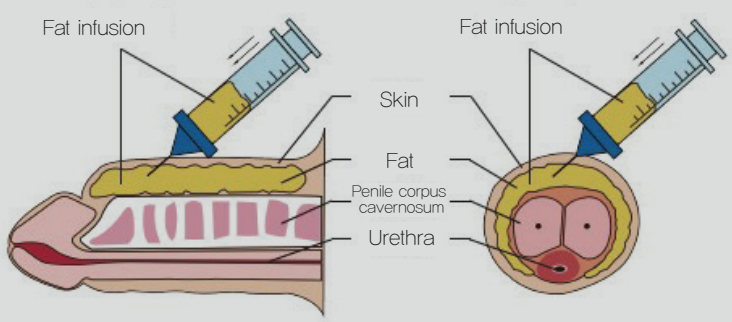
It is a procedure in which stem cells are injected directly around the spongy blood vessels to regenerate the blood vessels and nerves that cause male dysfunction, and pain-free procedures are performedby partial anesthesia/sleep anesthesia



Remodeling

Fat transplant & Vascular Strengthening, Satisfaction! Confidence up!

It is a procedure to upgrade the size by transplanting the fat in the lower abdomen with a genital along with stem cell injections for the cause of male dysfunction, and you can proceed with sleep anesthesia and receive the procedure without pain



CELLPIA STEM CELL

Stem Cell Sexual Funtcion | male

BSC 120mL (Approx. 400 million cells)	USD 4,800
BSC 180mL (Approx. 600 million cells)	USD 7,200
BmSC 60mL (Approx. 700 million cells)	USD 8,300
For additional fat procedure	USD 1,100

※The number of cells may vary depending on the individual's health condition.

※Price including tax

CELLPIA STEM CELL

Procedure Precautions

Precautions before procedure

1. Prohibition of taking aspirin-type drugs that interfere with blood circulation
2. Precautions before sleep anesthesia

Precautions after procedure

1. For the best effect of the procedure, please refrain from drinking alcohol and smoking for at least two weeks.
2. Avoid steroids, anti-inflammatory drugs, and pain relief patches that interfere with stem cell regeneration for at least 2 weeks.
3. Swelling and bruising may occur in the treated area, which usually disappears in 1 to 2 weeks.
4. The pain at the treated area may last for 2 to 3 days, or more than 1 week at the longest.
5. If the pain is severe, take a Tylenol pain reliever.
6. You can shower 24 hours after the procedure.
7. Do not stimulate the treated area for at least one month and refrain from sexual intercourse.
8. Please take oriental medicine after consulting with the doctor.

Precautions after fat grafting

1. For the best effect of the procedure, please refrain from drinking alcohol and smoking for at least two weeks.
2. Avoid steroids, anti-inflammatory drugs, and pain relief patches that interfere with stem cell regeneration for at least 2 weeks.
3. Swelling and bruising may occur in the treated area, which usually disappears in 1 to 2 weeks.
4. The pain at the treated area may last for 2 to 3 days, or more than 1 week at the longest.
5. If the pain is severe, take a Tylenol pain reliever.
6. You can shower 24 hours after the procedure.
   (Be careful not to let water come into contact with the treated area for 24 hours)
7. Please refrain from using sauna for at least one month. It prevents engraftment of transplanted fat.
8. Do not stimulate the treated area for at least one month and refrain from sexual intercourse.
   (It can be a problem because fat is pushed)
9. Please take oriental medicine after consulting with the doctor.

CELLPIA Stem Cell

Frequently Asked Questions

CELLPIA STEM CELL

Frequently Asked Questions

Q **What are stem cells?**

A Stem cells are cells with the ability to restore cells and tissues in the human body to their original functions. Currently, the most safe stem cells to use are adult stem cells that exist in my body right now.

Q **I've heard that stem cell therapy should be done by culturing. Is it true?**

A Currently in Korea cell therapy through cell culture is not approved because its safety has not been proven.

Q **What is the difference between stem cells obtained from blood, bone marrow and fat?**

A Blood stem cells are the easiest to collect and are suitable for mild treatment or cosmetic purposes.
Bone marrow stem cells are collected relatively easily from the strongest pelvic bones, and contain a large amount of stem cells and growth factors to be used for severe treatment.
Adipose stem cells go through the process of liposuction, which is cumbersome to collect and requires a large amount of fat. Although the largest number of stem cells are found in fat, cells such as growth factors and leukocytes that support the regeneration effect are insignificant, so the effect is different for the purpose that requires regeneration.

CELLPIA STEM CELL

Frequently Asked Questions

Q **When does the effect of stem cell therapy appear, and is it permanent?**

A There are differences between the application area and the individual, but on average, the effect is shown from 2 to 3 months, and you can see a fast effect from about 2 weeks for skin diseases except for hair loss. The effect of stem cell treatment varies from person to person, but you can see the effect with just one treatment, or you may need periodic treatment.

Q **Why should I receive stem cell procedure?**

A Stem cells are the cells responsible for the regeneration of our body.
Stem cell differentiation and tissue regeneration are constantly taking place without our knowledge.
However, until a tissue or organ receives an external shock, a large amount of stem cells are not released or active at once.
CELLPIA stem cell procedure is a friendly procedure that increases the regenerative capacity of the body by directly providing a large amount of stem cells and cells necessary for regeneration to the necessary parts of my cells, which are not artificial or chemically mixed.

CELLPIA STEM CELL

Frequently Asked Questions

Q **Is stem cell therapy safe?**

A Non-cultured autologous stem cell therapy is the safest treatment method among existing cell therapies. Our clinic is a safe system that has received domestic and international certification, and as a rule, the patient's own cells are collected and treated on the same day, so you can receive the procedure with confidence without worrying about cell mutation, contamination, or side effects.

Q **How is it different from stem cell treatment performed in other hospitals?**

A Most of the stem cell treatment currently being performed in many hospitals and clinics is PRP, in which blood is treated with a general centrifuge.
When blood is processed by a general centrifuge, the existence of stem cells, growth factors and white blood cells essential for regeneration is insufficient, and it is plasma containing platelets, the main components of blood, and a small amount of growth factors. Separation of simple blood does not mean stem cells.
CD34, a marker indicating mesenchymal stem cells or hematopoietic stem cells, must be detected, and technology that maintains most of the cells in an inactive state must be supported. Cells are activated before they are injected into the body, but they are considered waste products and are excreted.