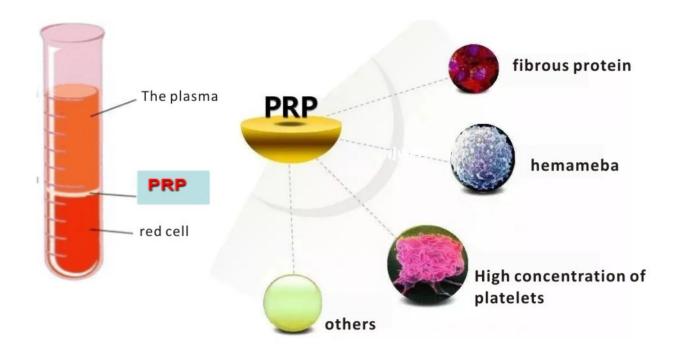




PRP extraction tube

PRP rapid extraction of vacuum blood collection tube

A skin regeneration procedure that uses autologous blood to regenerate the skin. The technique is commonly used to remove dark circles, wrinkles, puffy eyes, and other comprehensive skin regeneration and wound recovery, as well as to help treat hair loss.



PRODUCT DESCRIPTION

PRP is a platelet concentrate extracted from whole blood by centrifugation, containing a high concentration of platelets, white blood cells, and fibrin, uses the body's healing cells, platelets, to treat joints, cartilage, tendons, Ligament damage and even skin rejuvenation. When a vein or artery ruptures, platelets are our blood leaking into damaged cells. As a basic building block, injured cells signal platelets to know where to activate and release growth factors to begin the healing process.

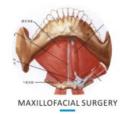
PRP in a very simple way using the process, plasma, platelets and through centrifuge extracted with light catalysis, usually, the body itself will be carried out in this kind of treatment, but sometimes when the injured area insufficient blood or tissue aging, can through the concentration of growth factors, prevent painful and debilitating inflammation to solve. At this point, the injured cells send out scattered signals to attract the activated platelets brought by IPRP, and the new growth factors begin to encourage healthy cells to multiply and replace injured or dead cells.

PRP is a simple, rapid, low-risk, non-surgical and natural procedure that we can use to shorten the healing process, reduce pain and reverse aging.

APPLICABLE DEPARTMENT















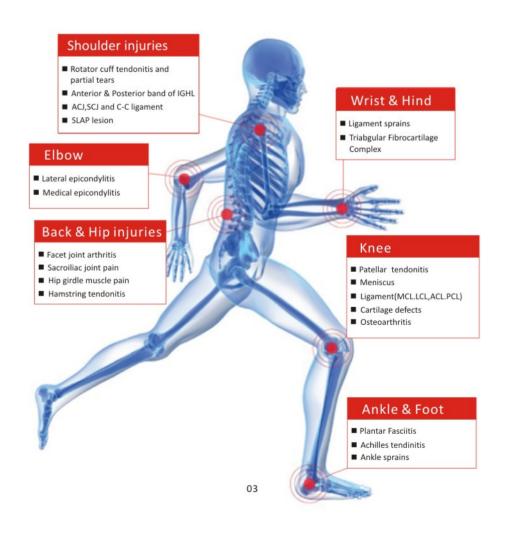
Orientation Symptom

- Knee osteoarthritis, traumatic arthritis and other arthritis
- Rotator cuff partial injury, periarthritis of shoulder, supraspinatus tendinopathy and other shoulder diseases
- External humerus inflammation, patellar tendinitis, Achilles tendinitis, plantar aponeurosis and other tendon terminal diseases
- Chronic refractory wound surface
- High-risk fracture, such as femoral neck fracture, scaphoid fracture, tibia fracture and so on
- Delayed fracture union and nonunion
- Necrosis of femoral head
- Using bone graft
- Arthroscopic surgery
- Plastic surgery Department

PRP AUTOLOGOUS SERUM SKIN ADAPTATION GROUPS -



PLATELET RICH PLASMA TREATMENT AREAS —



Advantage

- PRP is endogenous, free of disease transmission, immune rejection, and concerns that xenogeneic recombinant products may alter human genetic structure.
- PRP has a variety of high concentration of growth factors and the proportion of each a growth factor is consistent with the normal proportion in vivo so that there is the best synergistic effect between growth factors.
- PRP can coagulate into the gel and stick on the tissue defect to prevent platelet loss and secrete growth factor for a long time in the local area.
- PRP contains a large amount of fibrin, which provides a good scaffold for repairing cells. It can also shrink the wound surface, promote coagulation, stimulate tissue regeneration and promote wound healing.
- PRP contains a large number of white blood cells and monocytes, which can better play a role in preventing infection.
- It is simple to make and has little damage to patients. Production material green environmental protection.

PRP Preparation Steps

FLOW CHART OF PRP INJECTION









Blood collected

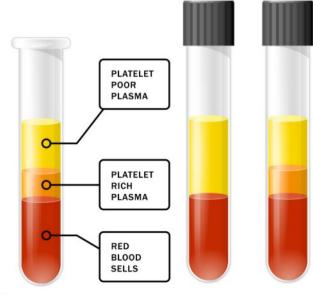
Centrifugal separation

Extraction of PRP

PRP injection

- Step1 To prepare, first of all, prepare all the consumables we need in the process of operation, including anticoagulant collection vessels, rubber tubes, disinfectant, cotton swabs, syringes, syringes, long needles, 30G needle fungal gauze, etc.
- step2

 Blood was drawn. Peripheral blood was collected by the conventional blood drawing process, about 10ml, mixed upside down and fully mixed with the anticoagulant in the blood collection tube.
- Step3 For the first centrifugation, put the collecting vessel into a centrifuge, preferably a tilt centrifuge. After increasing the slope, the platelets cover a large area and are easy to be extracted. The first centrifugal speed was 2500pm. After centrifugation, the blood vessels were taken out. At this time, obvious stratification could be seen, with serum in the upper layer, platelets in the middle and red red blood cells in the lower layer.
- Step4 For the first centrifugation, put the collecting vessel into a centrifuge, preferably a tilt centrifuge. After increasing the slope, the platelets cover a large area and are easy to be extracted. The first centrifugal speed was 2500pm. After centrifugation, the blood vessels were taken out. At this time, obvious stratification could be seen, with serum in the upper layer, platelets in the middle and red blood cells in the lower layer.
- step5 Second centrifugation. The second collection vessel was centrifuged again at 3200RPM for 8min. After centrifugation, the collection vessel was taken out.
- step6 The remaining approximately PRP is extracted with a 1ml syringe, and the whole extraction process is completed.



PRP tube for different additives



Sodium citrate solution

Platelet-rich plasma (PRP) has long been used in skin rejuvenation and hair loss treatment. Some patients require multiple intradermal injections into the face and scalp, PRP injections using Na-citrate as an anticoagulant caused less discomfort on both the face and scalp as compared with that of ACD-A.

Item No	Tube size (mm)	Tube material	Draw Volume (mL)	Additive	Cap Color
VG00H1T	16×100mm	Glass	8-10ml	Sodium Citrate	Blue
VG20H1T	16×120mm	Glass	8-15ml	Sodium Citrate	Blue
VP00H1T	16×100mm	PET	8-10ml	Sodium Citrate	Blue
VP20H1T	16×120mm	PET	8-15ml	Sodium Citrate	Blue

Note:Special specifications and cap color can be customized.



Sodium citrate solution & Gel

For collection, anticoagulation, and preparation of platelet-rich plasma containing inactive white blood cells. PRP plasma plays a very effective role in bone tissue recovery, burn treatment, chronic ulcers, ulcers (caused by diabetes) recovery and skin grafts; PRP plasma also plays an important role in eliminating wrinkles, firming skin tone, removing eye bags, reducing scars, and improving pigmentation.

Item No	Tube size (mm)	Tube material	Draw Volume (mL)	Additive	Cap Color
VG00K1T	16×100mm	Glass	8-10ml	Sodium Citrate & Gel	Blue
VG20K1T	16×120mm	Glass	8-15ml	Sodium Citrate & Gel	Blue
VP00K1T	16×100mm	PET	8-10ml	Sodium Citrate & Gel	Blue
VP20K1T	16×120mm	PET	8-15ml	Sodium Citrate & Gel	Blue

Note:Special specifications and cap color can be customized.



HA & Sodium citrate & Gel

These special vials are used to generate a high PRP concentration in single centrifugation. These tubes contain sodium citrate, gel, and hyaluronic acid to provide the best results any PRP tube can offer. Hyaluronic acid provides a more efficient result and helps with various skin or body issues such as acne, wrinkles, dark spots, discoloration and more.

Item No	Tube size (mm)	Tube material	Draw Volume (mL)	Additive	Cap Color
VG00L1T	16×100mm	Glass	8-10ml	HA & Sodium Citrate & Gel	Yellow
VG20L1T	16×120mm	Glass	8-15ml	HA & Sodium Citrate & Gel	Yellow
VP00L1T	16×100mm	PET	8-15ml	HA & Sodium Citrate & Gel	Yellow
VP20L1T	16×120mm	PET	8-10ml	HA & Sodium Citrate & Gel	Yellow

ACD features and advantages

- 1. ACD solution contains nutrients required for blood cell metabolism, which can effectively prolong the blood preservation time after blood collection.
- 2. The blood contains biotin, which has an excellent beauty effect, can repair weak and burst toenails and fingernails, and improve the health of hair. Biotin can not only prevent and repair premature gray hair caused by low biotin levels but also prevent hair loss and hair regeneration. It also keeps skin healthy. Therefore, biotin can keep skin tender and white, smooth nails, and prevent hair loss and regeneration.
- 3. Plasma with a high concentration of growth factors and biotin extracted from their blood will not cause rejection reaction.
- 4.30 minutes to complete the extraction process of blood, shortening the treatment time.
- 5. The high concentration of growth factor in plasma contains a large number of white blood cells, which greatly reduces the risk of infection.
- 6. Plasma with a high concentration of growth factors can be stored for a longer time: the storage time can be extended to 2-3 weeks.
- 7. As platelet-rich and biotin plasma is extracted from the patient's blood, it can be quickly absorbed by the body to avoid immune rejection due to its strong facial affinity and rich source, and the use of platelet-rich and biotin plasma can also avoid virus transmission.





ACD - A solution

Anticoagulant Acid Citrate Dextrose Solution, commonly known as ACD-A or Solution A is a non-pyrogenic, sterile solution. This element is utilized as an anticoagulant in the production of platelet-rich plasma (PRP) with PRP Systems for extracorporeal blood processing. Anticoagulants that are citrate-based use the ability of citrate ion to chelate ionized calcium that is present in the blood to prevent the coagulation of blood and form a non-ionized calcium-citrate complex.

Item No	Tube size (mm)	Tube material	Draw Volume (mL)	Additive	Cap Color
VG00M1T	16×100mm	Glass	8-10ml	ACD - A solution	Red
VG20M1T	16×120mm	Glass	8-15ml	ACD - A solution	Red
VP00M1T	16×100mm	PET	8-10ml	ACD - A solution	Red
VP20M1T	16×120mm	PET	8-15ml	ACD - A solution	Red

Note:Special specifications and cap color can be customized.



ACD - B solution

Blood grouping tubes are available in two formulations ACD-A and ACD-B. Both solution are comprised of trisodium citrate, citric acid and dextrose. The formulations are as follows:

ACD Solution A:

Trisodium citrate 22.0g/L, Citric Acid 8.0g/L, Dextrose 24.5g/L ACD Solution B:

Trisodium citrate 13.2g/L, Citric Acid 4.8g/L, Dextrose 14.7g/L

Item No	Tube size (mm)	Tube material	Draw Volume (mL)	Additive	Cap Colo
VG00N1T	16×100mm	Glass	8-10ml	ACD - B solution	Red
VG20N1T	16×120mm	Glass	8-15ml	ACD - B solution	Red
VP00N1T	16×100mm	PET	8-10ml	ACD - B solution	Red
VP20N1T	16×120mm	PET	8-15ml	ACD - B solution	Red

PRP tube for different additives



ACD & Gel

These special vials are used to generate a high PRP concentration in single centrifugation. These glass PRP tubes contain ACD anticoagulants as well as a special inner gel that separates PRP and provides high-quality PRP for an excellent performance.

Item No	Tube size (mm)	Tube material	Draw Volume (mL)	Additive	Cap Color
VG00Q1T	16×100mm	Glass	8-10ml	ACD-A & Gel	Blue
VG20Q1T	16×120mm	Glass	8-15ml	ACD-A & Gel	Blue
VP00Q1T	16×100mm	PET	8-10ml	ACD-A & Gel	Blue
VP20Q1T	16×120mm	PET	8-15ml	ACD-A & Gel	Blue
VG00R1T	16×100mm	Glass	8-10ml	ACD-B & Gel	Blue
VG20R1T	16×120mm	Glass	8-15ml	ACD-B & Gel	Blue
VP00R1T	16×100mm	PET	8-10ml	ACD-B & Gel	Blue
VP20R1T	16×120mm	PET	8-15ml	ACD-B & Gel	Blue

Note:Special specifications and cap color can be customized.



ACD & Gel & Biotin

These special vials are used to generate a high PRP concentration in single centrifugation. These glass PRP tubes contain ACD anticoagulants as well as a special inner gel that separates PRP and provides high-quality PRP for an excellent performance. Some tubes contain biotin containing advanced nutrients that are essential for hair growth. (Ideal for hair/hair loss)

Item No	Tube size (mm)	Tube material	Draw Volume (mL)	Additive	Cap Color
VG00S1T	16×100mm	Glass	8-10ml	ACD & Gel & Biotin	Purple
VG20S1T	16×120mm	Glass	8-15ml	ACD & Gel & Biotin	Purple
VP00S1T	16×100mm	PET	8-10ml	ACD & Gel & Biotin	Purple
VP20S1T	16×120mm	PET	8-15ml	ACD & Gel & Biotin	Purple

Note:Special specifications and cap color can be customized.



Sodium citrate solution & Gel & Biotin

These special vials are used to generate a high PRP concentration in single centrifugation. These glass PRP tubes contain a special inner gel that separates PRP and provides high-quality PRP for an excellent performance. These tubes contain sodium citrate, gel, and Biotin to provide the best results any PRP tube can offer. Biotin provides a more efficient result and helps for hair growth. (Ideal for hair/hair loss)

Item No	Tube size (mm)	Tube material	Draw Volume (mL)	Additive	Cap Color
VG00T1T	16×100mm	Glass	8-10ml	Sodium citrate solution & Gel & Biotin	Blue
VG20T1T	16×120mm	Glass	8-15ml	Sodium citrate solution & Gel & Biotin	Blue
VP00T1T	16×100mm	PET	8-10ml	Sodium citrate solution & Gel & Biotin	Blue
VP20T1T	16×120mm	PET	8-15ml	Sodium citrate solution & Gel & Biotin	Blue

PRP tube for different additives



Biotin

The blood collection tube contains biotin, which has excellent cosmetic properties, can repair weak cracked toenails and fingernails, and improve the health of hair. Biotin can not only prevent and repair premature gray hair due to low biotin levels, but also prevent hair loss and hair regrowth. It also maintains skin health. Therefore, biotin has significant effects in keeping skin white, nails smooth, preventing hair loss and regeneration.

Item No	Tube size (mm)	Tube material	Draw Volume (mL)	Additive	Cap Color
VG00U1T	16×100mm	Glass	8-10ml	Biotin	Purple
VG20U1T	16×120mm	Glass	8-15ml	Biotin	Purple
VP00U1T	16×100mm	PET	8-10ml	Biotin	Purple
VP20U1T	16×120mm	PET	8-15ml	Biotin	Purple

Note:Special specifications and cap color can be customized.



Calcium chloride

Some clinicians have suggested that the addition of a small amount of CaCl2 can help reduce the painful burning / stinging sensation that many patients experience during PRP injections. This phenomenon may be explained by the effects that CaCl2 solution has on the pH of PRP. The combination of CaCl2 and thrombin create platelet-rich fibrin. The calcium chloride inhibits citrate which allows the plasma to coagulate while thrombin causes fibrin to polymerize resulting in a coagulated gel. The combination results in a soft gel that can be applied in the operating room to increase post-operative wound healing. Platelets inside the soft gel will degranulate and release growth factors into surrounding tissues to increase angiogenesis, chondrogenesis, and collagen secretion.

Item No	Tube size (mm)	Tube material	Draw Volume (mL)	Additive	Cap Color
VG00V1T	16×100mm	Glass	8-10ml	Calcium Chloride	Green
VG20V1T	16×120mm	Glass	8-15ml	Calcium Chloride	Green
VP00V1T	16×120mm	PET	8-10ml	Calcium Chloride	Green
VP20V1T	16×120mm	PET	8-15ml	Calcium Chloride	Green

Note:Special specifications and cap color can be customized.



PRE

PRF, or platelet-rich fibrin, is a new generation of blood products derived entirely from the human body through special processing. PRF effectively simulates the formation process of fibrin in blood clots under physiological conditions, without other added ingredients and avoids the risk of immune rejection and disease transmission. PRF contains nearly 100% platelets and more than 65% white blood cells, which can continuously and efficiently release cell growth factors, which can effectively regulate inflammation and promote wound healing and tissue repair and regeneration.

Item No	Tube size (mm)	Tube material	Draw Volume (mL)	Additive	Cap Color
VG00X1T	16×100mm	Glass	8-10ml	None	Red
VG20X1T	16×120mm	Glass	8-15ml	None	Red
VP00X1T	16×100mm	PET	8-10ml	None	Red
VP20X1T	16×120mm	PET	8-15ml	None	Red

PRF technology

After the inner wall of the PRF, the tube is specially treated, no substance is added into the tube. Pure own blood, and after blood collection, gel-like PDF was extracted under low speed (1000g-1200g) centrifugal force for 10min on a PRF special centrifuge, which is mainly used for soft tissue, oral shaping, and wound filling.

The advantage of PRF

- 1) It is completely derived from autogenic blood without any artificial biological products, which avoids ethical disputes and the risk of blood cross-infection;
- 2) Rich in platelets and growth factors, with the function of promoting bone tissue regeneration;
- 3) Rich in a large number of immune cells, can reduce the inflammatory response in the process of tissue healing and have the anti-infection ability;
- 4) The network structure formed by PRF is beneficial to the migration, proliferation and differentiation of osteoblasts, giving full play to the role of growth factors and providing scaffolds for tissue healing;
- 5) The preparation process is simple and easy to operate.

Compare the project	PRP	PRF
characteristics	Ordinary centrifugal	Ordinary centrifugal
Active ingredients	Rich in platelet plasma, growth factors, no fibrin	Rich in platelet fibrin, growth factor
Number of separation modes	Constant speed many times	A constant speed
security	Add calcium chloride and other anticoagulant substances	No added
advantage	PRP can only be prepared into liquid, growth factor release faster, action time end, relatively stable	Gel status, limited clinical application, high concentration of growth factors, relatively stable



GET IN TOUCH

Ningbo Siny Medical Technology Co., Ltd

- No 559, Youngor Road, Haishu District, Ningbo, China
- T: 0086 (574) 83035919 F: 0086 (574) 83035909
- Mob/WeChat/WhatsApp: 0086-135 6662 9363
- Email: sales@sinymedical.com
- Website: www.sinymedical.com/www.sinict.com