

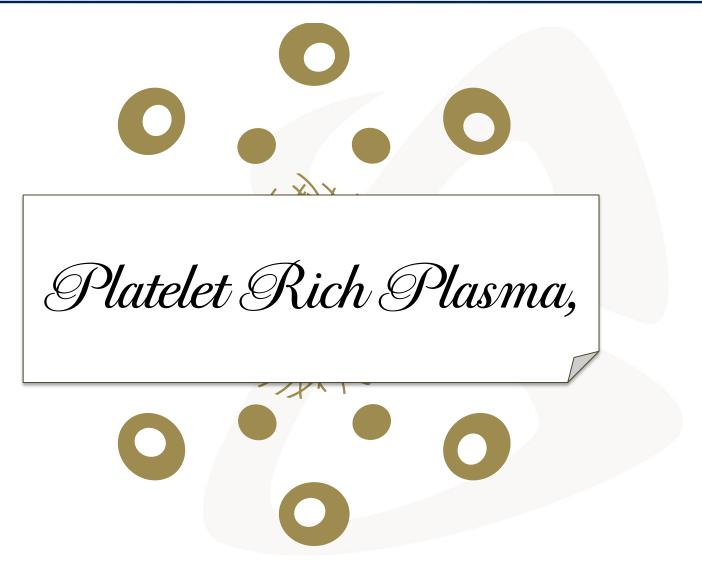


# US-FDA APPROVED REGEN LAB BCT PRP KIT



## US-FDA APPROVED **CONTROLED** PRP





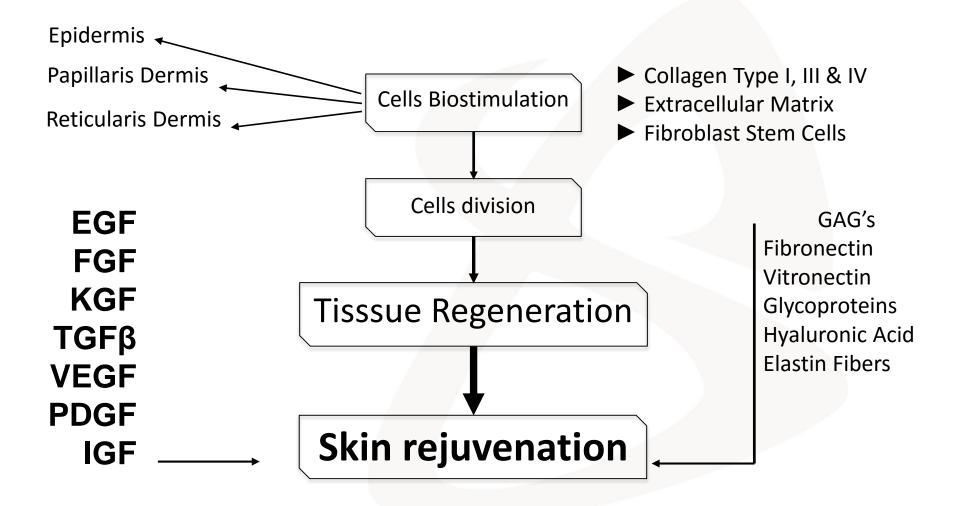


- Autologous Platelet Rich Plasma (A-PRP) is plasma with a concentration of platelets above the blood baseline.
- •A-PRP is developed from autologous blood, it is therefore inherently safe and free of transmissible diseases such as HIV and hepatitis.
  •Within A-PRP, the concentration of platelets delivers an increased number of growth factors in their biologically determined ratios. This distinguishes PRP from recombinant (not native) growth factors.
  •The plasma fibrinogen will serve to form the natural scaffold for tissue reconstruction.



Factor	Name	Principal Source	Effects	
PDGF aa PDGF bb PDGF ab	Platelet derived growth factors	Activated thrombocytes	Mitogenes of mesenchymal stem cells promote the synthesis of the extracellular matrix	
TGF-alpha TGF-beta	Transforming Growth Factors	Activated thrombocytes	Stimulation of DNA synthesis, proliferation of various types of cells. Favorises the synthesis of collagen	
IGF-I IGF-II	Insulin-like Growth Factors	Activated thrombocytes	Stimulates the proliferation and differentiation of osteoblasts	
EGF	Epidermal Growth Factor	Activated thrombocytes	Stimulates proliferation and differentiation of epidermis cells, co-stimulating angiogenesis	
VEGF	Vascular Endothelial Growth Factor	Leucosytes & Endothelial cells	Stimulate angiogenesis & chemo- attraction of osteoblasts	

# REGENERATIVE MEDICINE:REPAIRING & RESTRUCTURING:



**GEOSMATIC** 

**COSMECEUTICALS &** 

COSMOCARE PVT. LTD.



- Tolerance
- Skin Revitalisation
- Product Durability
- Safety

## REGEN LAB PRP AUTOLOGOUS PLATELET-RICH PLASMA



- Autologous safe, biocompatible
- Increases tissue vascularity through angiogenesis
- Chemotactic for stem cell, macrophages, and fibroblasts
- Increases the rate of epithelial, collagen and granulation tissue production
- Antimicrobial effect
- Surgical hemostatic agent for wound hemostasis and lymphatic sealing.



#### For preparation of PRP

## WHY REGEN LAB PRP KIT

## **ONLY**?

GEOSMATIC TM COSMECEUTICALS & COSMOCARE PVT. LTD.

- It is the only kit which is approved by US-FDA for collection PRP
- SIMPLICITY in methodology
- LOW BLOOD VOLUME REQUIRED
- OPTIMUM PLATELET RECOVERY
- CONSISTENT ISOLATION OF A-PRP
- RED BLOOD CELL DEPLETION
- Regen Lab has more then 14 years clinical experience in aesthetics clinicians
- PRP has been proven for various clinical trials.

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• Regen Kit® is designed to prepare Autologous Platelet Rich Plasma by centrifugation of peripheral blood in a vacuum tube, using a thixotropic gel for cell separation and citrate as anticoagulant.

• The system is simple to use, works in a closed system and produces 4 to 5 ml of Platelet Rich Plasma from 8 ml of whole blood in less than 10 minutes.

• The gel in the Regen BCT tubes specifically enables the recovery of more than 95% of the platelets and isolates them from red blood cells.



The table below shows the results of a study on A-PRP obtained from 60 individuals (34 men and 26 women, age 18 to 76, mean age 35±14), processed according to the Regen Kit® protocol.

PRP volume	Platelet Recovery	Red blood Cell remnant	Platelet Concentration Factor
4 to 5 ml	> 95 %	< 2 %	1.7 to 2.5 x

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#### SIMPLICITY

Only few straightforward steps are required to prepare 4 to 5

ml of Platelet-Rich Plasma.

LOW BLOOD VOLUME REQUIRED

**RegenKit® is designed to prepare Autologous Platelet Rich** 

Plasma from only 8 ml of blood.

**OPTIMUM PLATELET RECOVERY** 

With Regen Kit® you recover almost 100% of the platelets from the whole blood. Platelets are concentrated in 1 to 5 ml of autologous plasma (depending on the required platelet concentration).



#### **CONSISTENT ISOLATION OF A-PRP**

Regen Kit® uses a physical barrier (thixotropic gel) to separate the red blood cells from the plasma and the cellular sediment. The preparation is safe and consistent.

#### **RED BLOOD CELL DEPLETION**

The level of Red Blood Cells is drastically reduced, with more than 98% of RBCs removed.



- Simple and fast process. PRP is ready with only few steps in less than 10 minutes.
- Only 8ml of whole blood are required to prepare 4 To 5 ml of PRP
- Double sterile blister. Regen PRP is the only PRP approved to be used in an operating room
- The Regen technology effectively isolates the platelet concentrate from the RBCs



- PRP has been proven for various clinical trials,
- Regen Lab has more then 12 years clinical experience in aesthetics clinicians.
- Regen offers proven detailed clinical protocols, clinical studies, a dedicated YouTube channel with educational videos, as well as in house clinical specialists and consultant doctors

- Pyrogen free.
- Sterility ensures the absence of viable living bacteria. However, the act of sterilizing a contaminated vial can actually result in the release and deposit of pyrogens, as sterilization destroys bacteria, leading to bacterial cell lysis and release endotoxins and exotoxins.

GEOSMATIC

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TM

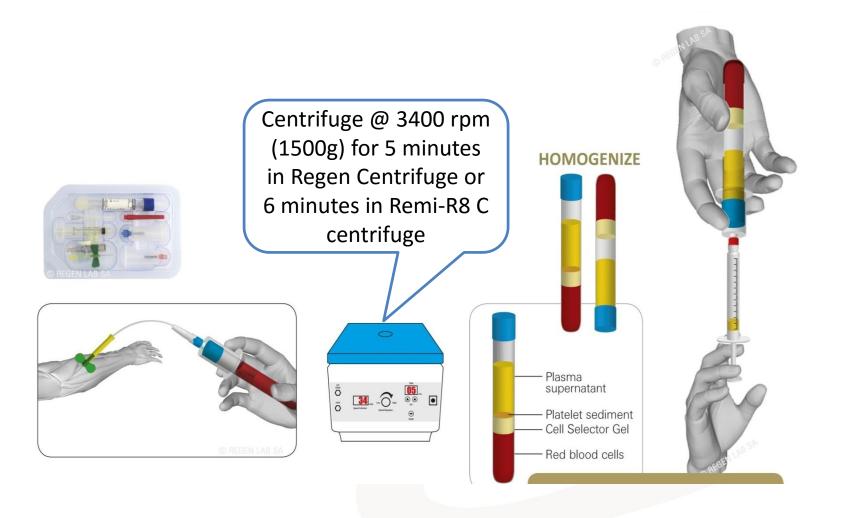
#### **International Approvals:**

- CE Mark
- US-FDA
- Health Canada
- K FDA
- Australia, Japan, Kuwait, Saudi Arabia, Iran, UAE, Singapore,

Malaysia, Indonesia, Hong Kong, South Africa etc

**GEOSMATIC** 

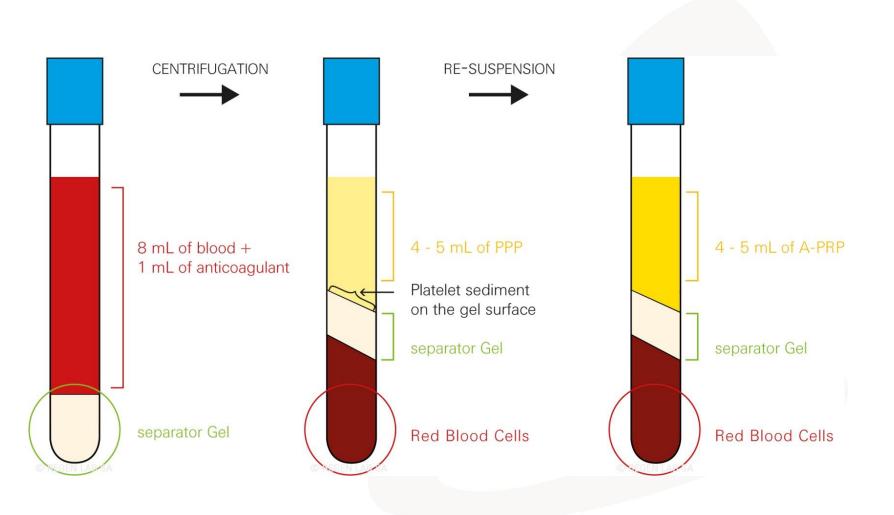
#### **A-PRP® PREPARATION PROTOCOL**



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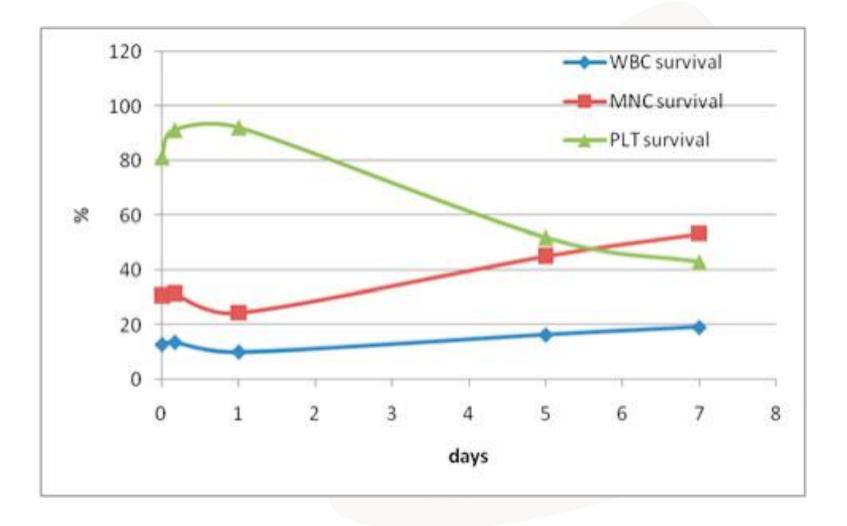
GEOSMATIC



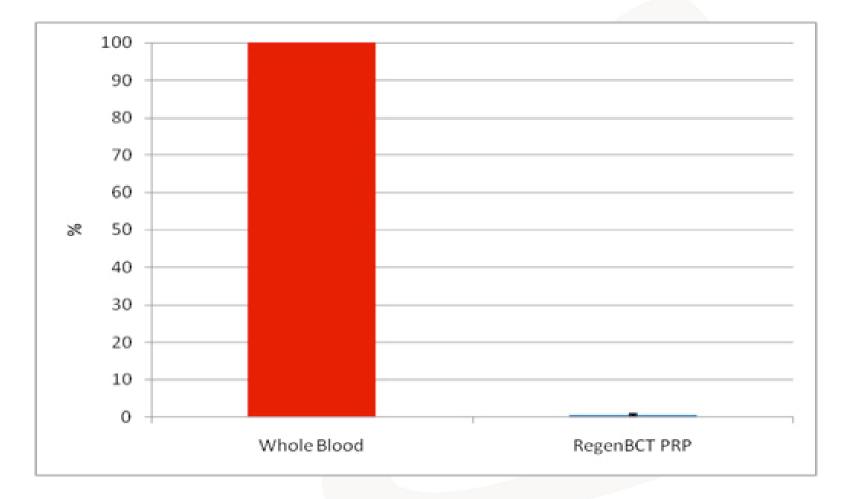
# Most efficient PRP system, loosing only 5% of platelets during processing....

#### **Cell survival:**





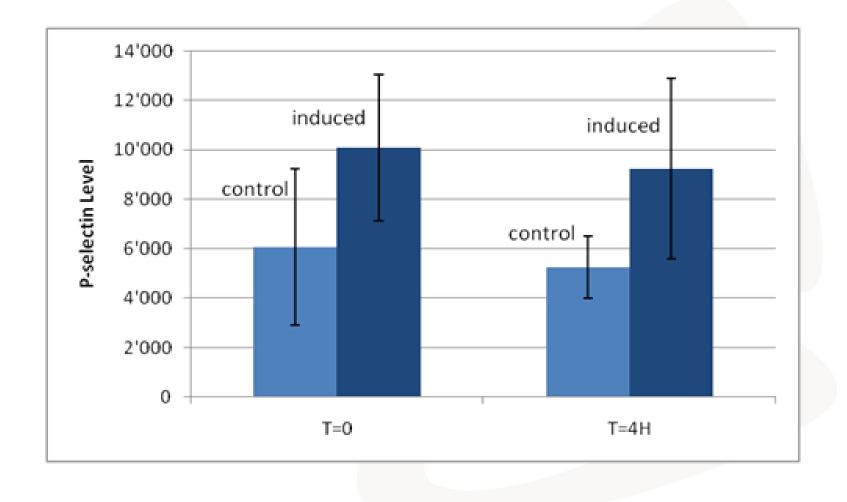
### Déplétion of 99.7% of the hématies:



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- PRP with near physiological concentration show better results for wound healing than too highly concentrated PRP:
- "Those methods with lower concentrations of platelets 1 to 3 times baseline – showed more robust healing rates than those with higher concentrations of 3 to 8 times baseline."
- Rappl LM et al. Effect of platelet-rich plasma gel in a physiologically relevant platelet concentration on wounds in persons with spinal cord injury. Int Wound J 2011; 8:18.7–195.



- Animal studies show negative effect of too high platelet concentration:
- "The use of highly concentrated platelet preparations appeared to have an inhibitory influence on osteoblasts activity. Possible reasons could be unwanted inhibitory and cytotoxic effects of growth factors at such high concentrations."
- Weibrich G. et al., Effect of platelet concentration in platelet-rich plasma on peri-implant bone regeneration. Bone 2004; 34:665-671.



 "PRP might exert positive effects on intestinal anastomotic healing in a dose-dependent manner up to a certain level, but adverse effects occur when it is highly concentrated."

Yamaguchi R. al., Effects of Platelet-Rich Plasma on Intestinal Anastomotic Healing in Rats: PRP Concentration is a Key Factor. J Surg Res. 2012 Apr;173(2):258-66.

In vitro studies reach the same conclusion:

"Optimal results were observed at a platelet concentration of 1.7 X", "Increased concentrations resulted in a reduction in proliferation and a suboptimal effect on osteoblasts function."

Graziani F. et al., The in vitro effect of different PRP concentrations on osteoblasts and fibroblasts. Clin. Oral. Impl. Res. 17, 2006; 212–219.



- Marked thrombocytopenia
- Blood diseases
- Hypofibrinogenemia
- Hemodynamic instability
- Anticoagulant or antiaggregant treatment
- Oncological diseases (specially, skeletal system and blood)
- Sepsis
- Acute and chronic infectious diseases
- Autoimmune diseases, for example, lupus erythematosus, etc.

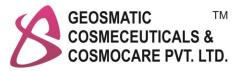


- Chronic liver diseases in the exacerbation phase
- Chronic intoxication against the background of long-term use of alcohol, addictive drugs, an administration of potent medications
- Use of no steroidal anti-inflammatory drugs in little less than 2 days before drawing the blood, an injection of cortico-steroids in little less than 2 weeks before the procedure
- Pregnancy
- Inflammatory skin diseases, chronic dermatosis in the exacerbation phase, for example, psoriasis, atopic eczema, etc.



5000 search results on Pubmed Lab & animal **experiments 1957-1998 Dental publications 1998 Marx,** Wound healing 2001 Powell **Cardiac publications 2005 Englert Orthopedic publication 2006 Anitua Aesthetic publications 2007 Gondinet** 

#### LITTERATURE



- Carter, M. J., C. P. Fylling, et al. (2011). "Use of platelet rich plasma gel on wound healing: a systematic review and meta-analysis." Eplasty 11: e38.
- Cervelli, V., P. Gentile, et al. (2009). "Application of platelet-rich plasma in plastic surgery: clinical and in vitro evaluation." Tissue Eng Part C Methods 15(4): 625-634.
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- Cho, J. M., Y. H. Lee, et al. (2010). "Effect of platelet-rich plasma on ultraviolet b-induced skin wrinkles in nude mice." J Plast Reconstr Aesthet Surg.
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- Mazzucco, L., V. Balbo, et al. (2008). "Platelet-rich plasma and platelet gel preparation using Plateltex." Vox Sang 94(3): 202-208.
- Redaelli (2010). "Face and Neck Revitalization With Platelet-rich Plasma." Journal of Drugs in Dermatology 9(5): 466-472.



## Before and after pictures SKIN REJUVENATION







# Before and after pictures GEOSMATIC COSMECEUTICALS & COSMECEUTICALS & COSMOCARE PVT. LTD.





### **Before and after pictures**







# Before and after pictures GEOSMATIC COSMECEUTICALS & COSMECEUTICALS & COSMOCARE PVT. LTD.





















Photos courtesy of Nicole Bell



Before treatment

© Face Loday medi clinic

After treatment results Regenerative Medicine Lower Face and Neck Improved Texture, Tone & Tighten

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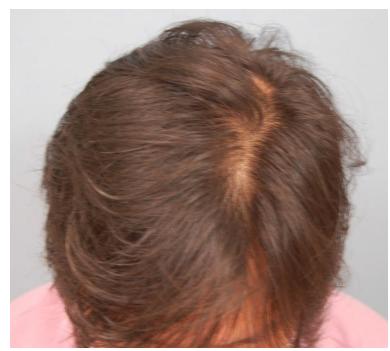


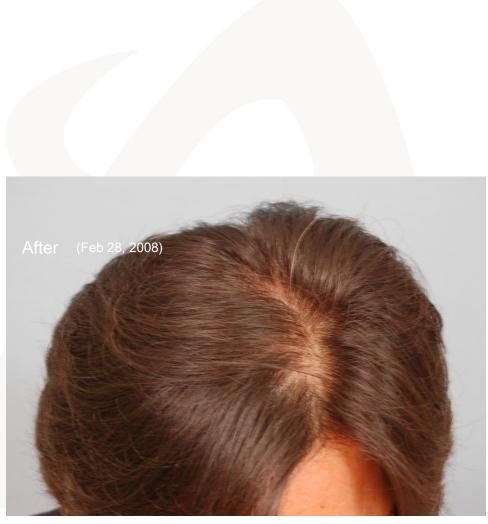


Protocol Standard BCT x 2 Nutritional Supplementation



























## The Australian Experience with Regen PRP





A 50 year old woman's birthday present to herself

- It exceeded her expectations!



Protocol 2 BCT tubes every 2 weeks, with RF skin tightening treatment in between Activation in vivo

## **Neck Rejuvenation in 6 weeks**



Results from superficial micro blebs (1 bevel deep) through necklace lines Result after 6 weeks





The thinning skin of the ageing eyelids are difficult to treat with traditional modalities such as dermal fillers or fractional laser Stand-alone PRP represents an effective and safe method of rejuvenation of the eyes in patients from their late 20s and upwards Protocol – Session x 1; Activation in vivo; Micro bleb



## **Peri-orbital Rejuvenation**







Stand-alone PRP has resulted in improved skin texture, elasticity, microvascularisation and skin thickening after just a single treatment for this patient

Protocol BCT x 1 Sessions x 1 Activation with calcium Micro bleb

## **Peri-orbital Rejuvenation**







#### **Fresher in 6 weeks**

Alternating weekly treatments of Regen and RF skin tightening

Protocol No Botulinum Toxin used in this period BCT x 1 around eyes Tangential micro blebs with 30G short needle Activation with Calcium







Cfacetoday



Combination treatment PRP with Portrait Skin Resurfacing. This patient demonstrates overall improvement in skin texture, fine lines and pigmentation, with accelerated healing

Protocol 2 x BCT tubes whole face Activation with calcium Portrait Resurfacing





## **Acne Scar Improvement**



Regen injected superficially and undermining scars in combination with microneedling Protocol: BCT x 2, 3 sessions, Activation in vivo







Neck rejuvenation has long been the province of the surgeon.

PRP in combination with RF and HA dermal fillers can improve the skin of the neck, often with greater effectiveness than seen on facial skin

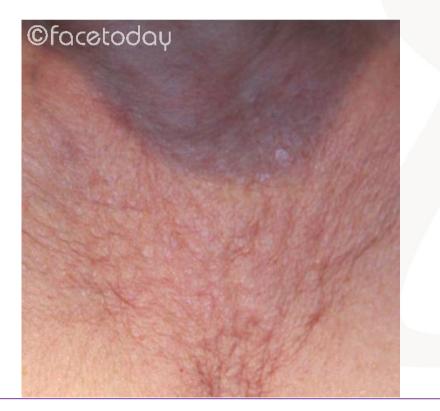
Protocol BCT x 4 per treatment Activation calcium RF skin tightening, HA fine lines Period of treatment: June 2009 – June 2013



## **Body (decolletage) Rejuvenation**



The décolletage is a neglected area in Cosmetic Medicine. Depending on environmental (ultraviolet) exposure, signs of ageing will begin appearing in the 20s. The focus is on prevention but the décolletage responds very quickly to PRP and less treatments are generally required BCT x 2, 1 session, long needle

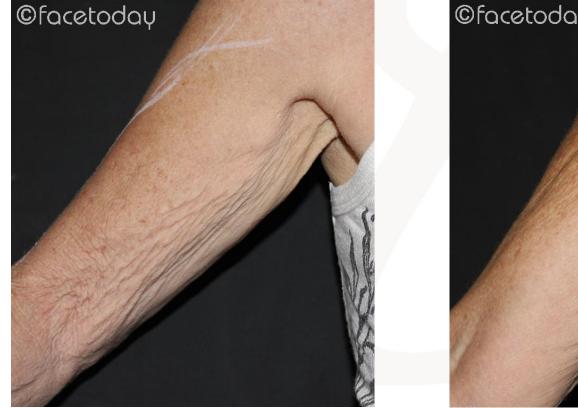


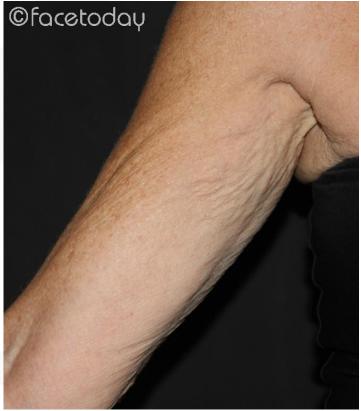


## **Body (limb) Rejuvenation**



The ageing skin of the limbs has again been a neglected area. PRP in combination with RF skin tightening can significantly improve the appearance of the ageing arm ("Tuck-shop lady arms")







# You Tube video link for preparation of PRP:-

https://www.youtube.com/watch?v=S3sJkP3q1h4&list=PLusMjg kfTtg3zXvaCvQLesZP\_s2ECro04&index=2



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# Thank you.