GPS III
Platelet Concentration System
GPS III
The most widely used platelet concentration system in the world

GPS III Platelet Concentration System
Whole blood contains several components that can be concentrated during centrifugation to form a buffy coat layer or leukocyte-rich platelet-rich plasma (L-PRP). By utilizing the GPS III Platelet Concentration System, the patient’s own platelets can be separated into a highly concentrated formula.

PRP Output* Concentrations
- 90% recovery of available platelets
- 9.3x platelet increase over baseline
- 5x white blood cell increase over baseline
- 6 ml of autologous PRP output
- 15 minutes centrifuge process

The proprietary, finely tuned buoy mechanism captures up to 90% of the available platelets.

The blood components are separated into compartments for easy retrieval through the designated ports.

Note: It’s important to properly citrate the blood draw: 8 ml of ACD-A for 52 ml blood draw, 4 ml of ACD-A for 26 ml blood draw.
Whole blood contains components which play a key role in bone formation. Growth factors and signaling proteins from platelets stimulate the proliferation of osteoprogenitor cells as part of the bone remodeling process.

Images adapted from reference 5.
Examples of Autograft/Allograft Bone Grafting Applications

The PRP output* from the GPS III Platelet Concentration System can be mixed with autograft and/or allograft bone prior to application to an orthopedic site.

- Bone recession
- Restorative surgery
- Implant surgery
- Proximal humerus fractures
- Shoulder reconstruction
- Distal ulna/radial fractures
- Osteotomies
- Bone cysts
- Thoracic closure
- Distal femur fractures
- Hip reconstruction
- Avascular necrosis
- Spine fusion
- Supplement cages
- Proximal femur fractures
- Knee reconstruction
- Open wedge Osteotomies
- Distal tibia/fibula fractures
- Foot and ankle fusions
- Evans/Cotton Osteotomy
- Bone cysts
- Charcot
- Supplement allograft wedges
- Proximal tibia fractures
- Knee reconstruction
- Open wedge Osteotomies
- ACL bone block reconstruction

*The platelet-rich plasma (PRP) prepared by this device has not been evaluated for any clinical indications. The safety and effectiveness of this device for in vivo indications for use, such as bone healing and hemostasis, have not been established.

References
2. Data on file at Biomet Biologics, LLC.