Autologous output from the Plasmax® Plasma Concentration System eliminates concern regarding pooled blood sources. Pooled plasma sources found in donor-based fibrin sealants carry the risk of transmitting infectious diseases and viruses.

The Plasmax® Plasma Concentration System is comprised of two distinct parts, the GPS III® Separator and the Plasmax Concentrator. The GPS III® Separator produces leukocyte-rich platelet-rich plasma (L-PRP) from a small sample of the patient’s own blood. The Plasmax Concentrator produces autologous fibrinogen-rich platelet-poor plasma concentrate (PPPc)* utilizing polyacrylamide beads to remove excess water.

**Plasmax Concentrator**

**Features:**
- 3x increase in plasma proteins including fibrinogen
- Outputs up to 10 cc of rapidly polymerizing autologous plasma concentrate
- Outputs up to 6 cc of platelet-rich plasma (from GPS III Separator)
- Total centrifugation time is less than 20 minutes
- Point-of-care preparation
- No refrigeration required

**GPS III® Separator**

Autologous output from the Plasmax® Plasma Concentration System eliminates concern regarding pooled blood sources. Pooled plasma sources found in donor-based fibrin sealants carry the risk of transmitting infectious diseases and viruses.
The role of fibrin in bone graft handling

Soluble fibrinogen is a component of whole blood. As part of the coagulation cascade, thrombin begins to cleave fibrinogen to form cross-linked fibrin molecules. This cross-linking forms the structural basis for the platelet-poor plasma gel or clot. Then, the activation of protein Factor XIII begins to stabilize the cross-linking between fibrin molecules.2

Features:
• 3x increase in plasma proteins including fibrinogen1
• Outputs up to 10 cc of rapidly polymerizing autologous plasma concentrate
• Outputs up to 6 cc of platelet-rich plasma (from GPS III Separator)
• Total centrifugation time is less than 20 minutes
• Point-of-care preparation
• No refrigeration required

Images adapted from reference 2.

Natural Coagulation Cascade

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

The output* from the Plasmax® Plasma Concentration System can be mixed with autograft and/or allograft bone prior to application to an orthopedic site.

* The safety and effectiveness for bone healing and hemostasis has not been established.

References