Magellan® is an autologous concentration system that delivers concentrated platelets and cells at the point of care.
Every patient has a unique biology with inherent variability, so you need a solution that is customized for each patient. Go beyond the standard of care and deliver a personalized biologic with the Magellan Autologous Concentration System.

**CUSTOMIZED AUTOLOGOUS THERAPY**

The fully-automated Magellan system uses proprietary BioAdaptive technology and customizable concentration factors to yield a tailored autologous solution for each patient.

- **Concentrates up to 14x Baseline**
  - Provides high concentrations of platelets, growth factors and progenitor cells

- **Customizable Concentration**
  - Users determine potential concentration factor by selecting input and desired output volumes

- **BioAdaptive Processing™**
  - Smart technology adjusts processing based on patient biology to optimize results

- **Automation Ensures Quality**
  - Fully-automated, closed system concentrates more consistently than manual systems

- **Flexible & Cost-Effective**
  - Processes up to three cycles per patient using a single kit, with flexibility to process bone marrow and whole blood

- **FDA Cleared for Orthopedic Applications**
  - Processed marrow and blood can be mixed with allograft or autograft
Platelets release various growth factors that influence cellular processes, including proliferation and differentiation, angiogenesis, and tissue repair\textsuperscript{2,3}.

**PROVEN TO CONCENTRATE VIABLE PROGENITOR CELLS**

Data featuring Magellan MAR0Max\textsuperscript{TM} demonstrates increased concentrations of MSC & HSC and IL-1Ra when compared to BMA and whole blood\textsuperscript{4,5}.

- MSCs can differentiate into osteoblasts and chondrocytes\textsuperscript{6}
- HSCs support blood vessel formation\textsuperscript{7}
- IL-1Ra is reported to neutralize pain triggers\textsuperscript{5,8}

**97\% cell viability\textsuperscript{4}**

Processing yields viable cells

**5–6\times** **MSC & HSC concentration\textsuperscript{9}**

Confirmed by characterization of CD markers 73+, 105+, 34+ or 133+ via flow cytometry

**94\% reduction in Red Blood Cells (RBC)\textsuperscript{9,10}**

BioAdaptive processing yields superior performance
CONCENTRATE AT THE PUSH OF A BUTTON

Magellan employs cutting-edge technology to produce a customized biologic quickly and easily.

SUPERIOR TECHNOLOGY. SUPERIOR PERFORMANCE.

**Fully Automated**
Simple one-button start for ease of use

**Closed System**
Minimal breaks in sterile barrier promote safety

**BioAdaptive Processing**
Works with optical sensors to tailor processing parameters based on each patient’s hematocrit

**Optical Sensors**
Identify the cellular fraction to eliminate error and optimize results

**Selectable Output**
Allows users to define desired therapeutic volumes (3-10 mL per cycle)

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CUSTOMIZE POTENTIAL CONCENTRATION FACTORS

HIGH INPUT VOLUMES + LOW OUTPUT VOLUMES = HIGHEST CONCENTRATION

Users can process 30-60 mL per cycle (up to 180 mL per patient) and select final output volume between 3-10 mL per cycle (up to 30 mL per patient) to customize final concentration.
**References**

1. AMSI Source: TS-0078-182.  
10. AMSI Source: TS-0078-103.

**Indications**

The Magellan Autologous Platelet Separator System is designed to be used in the clinical laboratory or intraoperatively at the point of care for the safe and rapid preparation of platelet-poor plasma and platelet concentrate (platelet-rich plasma) from a small sample of a mixture of blood and bone marrow. The plasma and concentrated platelets produced can be used for diagnostic tests. Additionally, the platelet-rich plasma can be mixed with autograft and/or allograft bone prior to application to an orthopedic site (BK040068). The Magellan Ratio Dispenser Kit is intended for the application of fluids, as deemed necessary by the surgeon’s determination of the clinical use requirements, to facilitate the preparation of soft tissue prior to repair (K041830).

**Disclaimer**

The platelet-rich plasma prepared by this device has not been evaluated for any clinical indications. Platelet-rich plasma prepared from a mixture of whole blood and bone marrow may contain higher levels of plasma-free hemoglobin than platelet-rich plasma prepared from whole blood.