Operative Technique
Important System Notes:

- All syringe-to-device connections are standard Luer-Lok® connections. Syringes must always be properly attached to the CAPTION system before ejecting syringe contents.
- The system is single-use only. Do not attempt to resterilize or reuse the device.
- The green and blue pre-filled syringes MUST NOT be transferred directly into the sterile field. Only the liquids inside the syringes and the fluid pathways are sterile.
- The empty 10ml syringe must be installed in the top right port of the device before blood processing, as indicated on each unit.
- When using the CAPTION Disposable Platelet Concentrator device, each step must be completed before proceeding to the next step.
- The user must ensure that the orange dial is in the “Filtration Complete” position before proceeding to Step 3.
Nota Bene

The technique description herein is made available to the healthcare professional to illustrate the author’s suggested treatment for the uncomplicated procedure. In the final analysis, the preferred treatment is that which addresses the needs of the specific patient.
Setup and Blood Draw Instructions: Complete this section before proceeding to Step 1

Disposable Concentrator Unit Setup

- Insert the empty 10ml syringe into the empty port, located on the top right portion of the device labeled “IMPORTANT.”
- Turn clockwise to LOCK syringe to port.

**Caution** Force or a traumatic venipuncture may activate platelets, hemolyze red cells and result in a lower yield of platelet concentrate.

Patient Blood Draw

- Attach the provided plastic cannula to the empty 60ml syringe.
- Wipe the stopper of the provided ACD-A vial (anticoagulant) with an alcohol prep pad.
- Draw 5ml of ACD-A into 60ml syringe.
- Remove the plastic cannula from the syringe and attach the butterfly needle.
- Locate a suitable large vein such as the antecubital or cephalic vein and draw 55ml of patient's blood into syringe. (Do NOT draw blood from a central line or arterial line or from a vein that contains an IV).
- Gently invert the syringe 10 times (do not shake) to ensure adequate mixing of blood and anticoagulant. Recap the syringe and set aside.
Blood Processing Instructions 7117-8202

Step 1a
• Ensure that the orange dial is in the “Start” position. Uncap and insert the **blue syringe** into Port 1. Turn clockwise to LOCK syringe into the port and depress the plunger. Remove and discard the empty syringe.

Step 1b
• Insert the **blood/ACD-A syringe** into Port 1 and turn clockwise to LOCK syringe into the port. Depress the plunger. Remove and discard the empty syringe.

**Note** Excessive force on the syringe plunger may result in hemolysis of the red blood cells or premature activation of the platelets, resulting in reduced platelet yield or activity.

**Caution** If there is a visual sign of leakage of blood from the bag or tubing inside the PRC Processing Unit, discontinue the procedure, discard the PRC unit as biohazardous waste and start over with a new unit.
Step 1c
• Move the orange mixing lever “down and up” 10 times (a complete stroke is one downstroke and one upstroke).
• Leave the handle in “up” position after 10 full strokes.

Step 2
• Turn the orange dial from “Start” to “Filter” and wait until blood is no longer visible in indicator window.
• When the indicator window is clear, turn the orange dial to “Filtration Complete.”

Note Filtration time is approximately nine minutes, but varies from patient to patient.
Step 3

• Ensure that the orange dial is in the “Filtration Complete” position.

• PUSH the orange tab (located in Port 3) into the device to expose the Luer-Lok® connector. An audible click will be heard when the orange tab has been adequately depressed, and the green labeled syringe will easily connect to the Port 3 Luer-Lok.

• When the syringe makes contact with the Port 3 Luer-Lok, turn the syringe clockwise to LOCK into the port.

• Depress the plunger.

• The empty 10ml syringe previously installed will fill immediately with PRC. Turn, release and remove the 10ml “PRC” syringe after it fills. Discard the entire unit as biohazardous waste.

Caution Care should be taken to not overtighten the syringe into Port 3. Breakage of the glass syringe may occur.

Caution Ensure that no pressure is applied to the 10ml syringe filled with PRC while it is installed in the top of the Processing Unit. Placing pressure on the plunger may expel some of the platelet concentrate.

The PRC mixture can be used alone, mixed with autograft or allograft bone, transferred into the CAPTION® Graft Delivery System (GDS) or applied using the CAPTION Dual Lumen or Spray Tip Applicators (available separately). The Graft Delivery System, Dual Lumen Applicator and Spray Tip Applicator are designed for use inside the sterile field and can be used to further prepare the PRC for application to an orthopaedic site, as directed by the physician.
Transfer PRC to Sterile Field

• Using sterile technique, transfer the provided red and clear cups to the sterile field. The cups are provided in sterile packaging.
• Transfer the PRC into the red cup.
• Using the provided empty 5ml syringe, transfer other desired fluids into the clear cup.
Using the GDS Kit

- Open the outer package and deliver the sterile inner package to the sterile field. Open the inner package, remove the contents and place onto the sterile field.

- Insert the 17cc Graft Chamber into the large port on the base of the device. Turn clockwise to LOCK into the port.

- Fill the chamber with the desired volume of graft material. The Graft Chamber will hold up to 17cc of graft material.
• Place plunger inside the column of the Graft Chamber. The tip of the plunger should be in contact with the graft material. If desired, the plunger can be used to slightly compress the graft material.

• Draw the desired fluid into the 1ml syringe and insert into the small port on the top of the device. Turn the syringe clockwise to LOCK into place.

• Draw the PRC into the 12ml syringe and insert into the large port on the top of the device. Turn the syringe clockwise to LOCK into place.
• Raise the orange handle and LOCK into the syringe plungers as you bring it to the vertical position.

• Depress the handle to simultaneously inject the contents of the syringes into the manifold fluid path. If necessary, wait at least 90 seconds for fluids to properly mix with graft material before proceeding to the next step.

• Remove the Graft Chamber from the manifold. Using a hemostat or fine forceps, remove the end plug from the end of the Graft Chamber.

• Eject the contents of the Graft Chamber using the plunger. Forceps may be used to pick up the graft material.

• Dispose of the Graft Delivery System Kit components.
Using the Spray Kit

- The CAPTION™ Spray Kit is designed to simultaneously spray two fluids in a 10:1 ratio.

- Open the outer package and deliver the sterile inner package to the sterile field. Open the inner package and remove the contents. Place the kit on the sterile field.

- Cups are available for transport of liquids to the sterile field, if necessary. Lids are provided.

- Draw the PRC or other desired fluid into empty 12ml syringe.

- Draw the desired fluid into the 1ml syringe.
• Assemble the syringes into the Spray Tip Applicator by twisting the syringe tips into the Luer-Lok® hubs.

• Assemble the syringe holder onto the syringe barrels as shown.

• Assemble the plunger link onto the end of the syringe plungers as shown.

• Depress the plunger link to simultaneously spray the syringe contents.
The CAPTION® Dual Lumen Kit is designed to simultaneously apply two fluids in a 10:1 ratio.

Open the outer package and deliver the sterile inner package to the sterile field. Open the inner package and remove the contents. Place the kit on the sterile field.

Cups are available for transport of liquids to the sterile field, if necessary. Lids are provided.

Draw the PRC or other desired fluid into the empty 12ml syringe.

Draw the desired fluid into the 1ml syringe.
• Assemble the syringes into the Dual Lumen Applicator by twisting the syringe tips into the Luer-Lok® hubs.

• Assemble the syringe holder onto the syringe barrels as shown.

• Assemble the plunger link onto the end of the syringe plungers as shown.

• Depress the plunger link to simultaneously eject the syringe contents.
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