

# ACP Max™ Platelet-Rich Plasma System

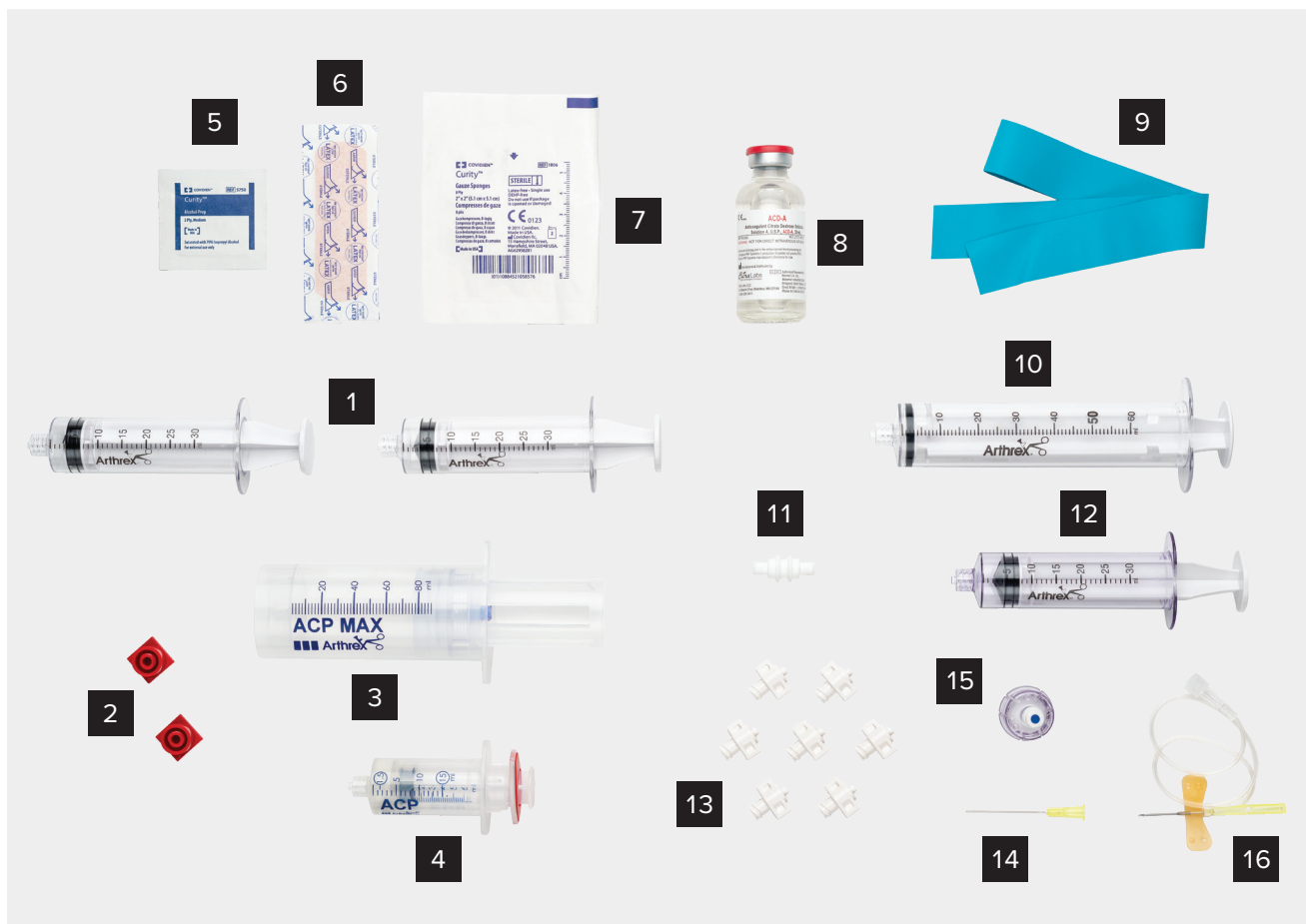
Surgical Technique



**Arthrex®** 

# ACP Max™ Platelet-Rich Plasma (PRP) System

## ACP Max Kit Components



### Inner Blister Tray (sterile)

| Pic. | Qty. | Description                      |
|------|------|----------------------------------|
| 1    | 2    | 30 mL Syringe for PPP Withdrawal |
| 2    | 2    | Luer Caps, red                   |
| 3    | 1    | ACP Max Syringe                  |
| 4    | 1    | Arthrex ACP® Double Syringe      |

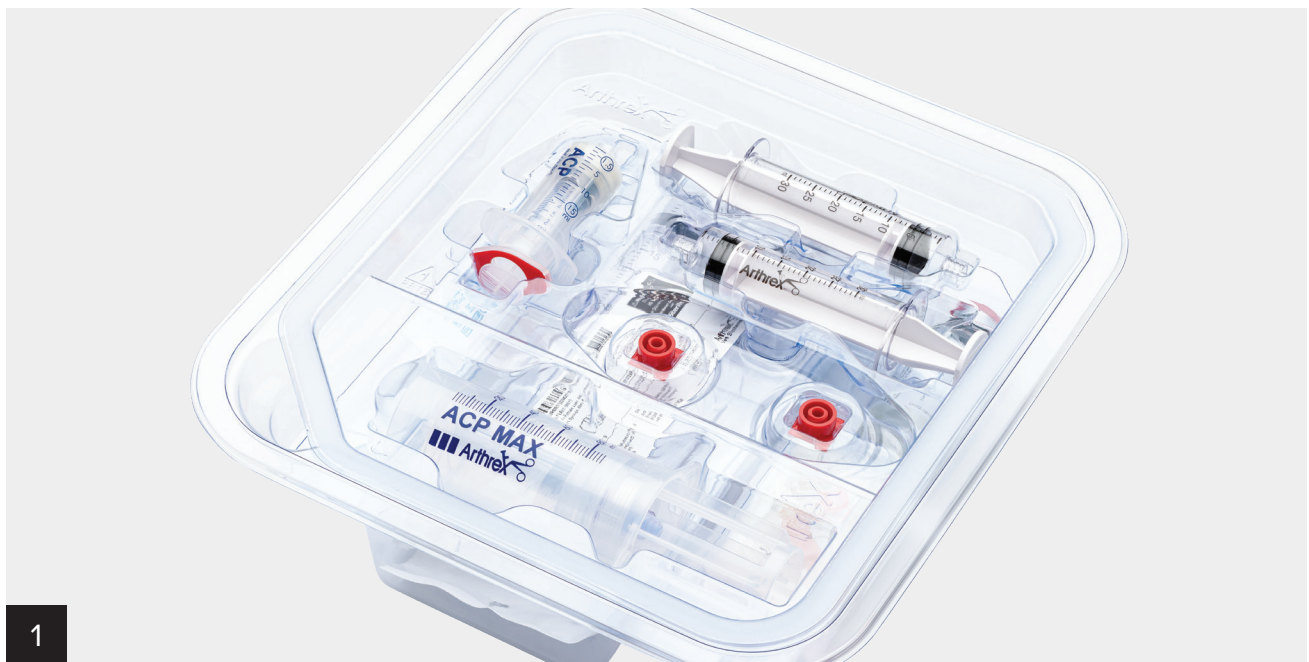
### Outer Blister Tray

| Pic. | Qty. | Description  |
|------|------|--|
| 5    | 1    | Alcohol Pad  |
| 6    | 1    | Bandage, latex-free                                |
| 7    | 1    | Gauze Sponge                                       |
| 8    | 1    | ACD-A  |
| 9    | 1    | Tourniquet   |
| 10   | 1    | 60 mL Blood Draw Syringe                           |
| 11   | 1    | Female-to-Female Luer                              |
| 12   | 1    | 30 mL Blood Draw Syringe                           |
| 13   | 7    | Male-to-Female Luer Caps, white                    |
| 14   | 1    | Hypodermic Needle for ACD-A Withdrawal, 20 ga      |
| 15   | 1    | Vial Adapter (another option for ACD-A withdrawal) |
| 16   | 1    | Angel Wing Infusion Set                            |

**Note:** Expiration date of the ACP Max kit is the earliest expiration date of any of the kit's components.

**ACP**<sup>MAX</sup>

## Preparation of Blood Draw Supplies



Open ACP Max™ kit and remove the tray set from the box. Set aside the inner blister sterile tray.



Using the 20 ga hypodermic needle or the vial adapter provided in the outer tray, withdraw the appropriate volume of anticoagulant citrate dextrose solution A (ACD-A) into the provided blood draw syringe. The ratio of ACD-A to whole blood is 1:7.



Using aseptic technique, cap the syringe with one of the Luer lock caps provided in the outer tray. Using standard blood draw protocol, draw the desired amount of blood into the syringes primed with ACD-A.

| Blood Volume | Total ACD-A Volume |
|--------------|--------------------|
| 30 mL        | 4 mL               |
| 60 mL        | 8 mL               |
| 90 mL        | 12 mL              |



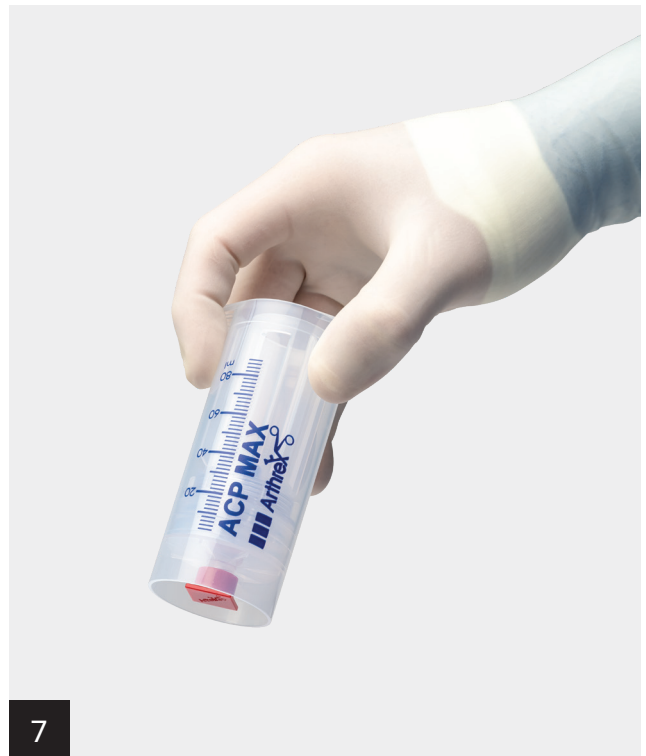
4 Remove the ACP Max™ syringe from the inner tray.



5 Express the air out of the syringe by depressing the syringe guide.



6 Seat the ACP Max syringe on the red cap of the tray and turn clockwise to cap.



7 Set the capped ACP Max syringe aside.





8

Remove cap from the syringe containing whole blood. Connect the syringe to the blue needleless valve inside the ACP Max™ syringe.

Alternatively, use the female-to-female connector provided in the outer tray to connect the syringe to the ACP Max syringe.



9

Slowly fill the ACP Max syringe with the whole blood.



10

Remove the whole blood syringe from the ACP Max syringe. Next, remove the syringe guide by turning counterclockwise. Set the syringe guide aside for later use.



11

Open centrifuge lid. Place the ACP Max syringe into the centrifuge bucket.

Fill the ACP Max counterweight to a volume equal to the ACP Max syringe from the distal end.



Ensure that the ACP counterweight is placed opposite of the ACP Max™ syringe. Set the centrifuge to the appropriate speed and time for processing volume. Begin centrifugation.

## Spin Regimes

- The ACP Max system creates an output with a high concentration of platelets by using two spin cycles.
- Spin time of the first spin is variable depending on spin volume.
- Speed (rpm) is constant for all volumes but changes between the first and second spins.

### First Spin

| Blood Volume | RPM      | Time  |
|--------------|----------|-------|
| 30 mL        | 3200 rpm | 3 min |
| 60 mL        | 3200 rpm | 6 min |
| 90 mL        | 3200 rpm | 9 min |

### Second Spin

| Blood Volume | RPM      | Time  |
|--------------|----------|-------|
| 15 mL        | 1500 rpm | 5 min |

**Note: Ensure centrifuge brake is off.**



13

When the centrifugation spin is complete, remove the ACP Max syringe from centrifuge and place on a flat surface.

**Note: Carefully handle the syringe to avoid mixing the centrifuged sample.**



14

Replace syringe guide on the ACP Max™ syringe by turning the syringe guide clockwise. Attach the 30 mL syringe(s) provided to the ACP Max syringe to withdraw the platelet-poor plasma (PPP).



15

Withdraw the PPP until the ACP Max plunger is two gradations above the red blood cell interface. Discard PPP.



16

Seat the Arthrex ACP® double syringe to the ACP Max syringe.



17

Fill the Arthrex ACP double syringe to 15 mL by firmly holding the ACP Max syringe and pulling back on the red tabs of the Arthrex ACP double syringe.



18

Remove ACP double syringe from the ACP Max™ syringe and cap with the remaining red cap.

Mix sample by gently inverting the Arthrex ACP® double syringe for 15 seconds.



19

Place the Arthrex ACP double syringe in the centrifuge.



20

Ensure the appropriate counterweight and bucket spacers are in place.





21

Close the lid of the centrifuge and set to 1500 RPM for 5 minutes. Begin centrifugation.



22

Carefully remove the Arthrex ACP® double syringe from the centrifuge to avoid mixing of the sample.



23

Transfer the PRP from the lower syringe into the upper syringe by carefully depressing the red wings of the Arthrex ACP double syringe.

**Note:** Ensure collection of only the PRP layer.



Collect final PRP output.

### Uses for ACP Max™ PRP

ACP Max PRP can be used to hydrate various bone grafts, such as demineralized cortical and cancellous grafts, for improved handling.



Demineralized cortical fibers



Demineralized cancellous sponge



Cancellous cube

## Ordering Information

### ACP Max™ Platelet-Rich Plasma

| Product Description          | Item Number |
|------------------------------|-------------|
| ACP Max PRP system w/ ACD-A  | ABS-10015   |
| ACP Max PRP system w/o ACD-A | ABS-10013   |
| ACP Max PRP system           | ABS-10013-B |
| ACP Max counterbalance       | ABS-10017   |

### Drucker Horizon Centrifuge

| Product Description                           | Item Number      |
|---|------------------|
| Drucker Horizon 24 Flex-AH                    | 00389-129-000K   |
| Bucket  | 03-1-0007-0123HK |
| Bucket spacer for Arthrex ACP® Double Syringe | 03-1-0001-0098K  |
| Counterbalance for Arthrex ACP Double Syringe | ABS-10027        |

### Hettich Rotofix Centrifuge

| Product Description                    | Item Number |
|--|-------------|
| Hettich Rotofix 32A 110V               | 1206-01     |
| Hettich swing out rotor for Rotofix 32 | 1324        |
| Hettich ACP Max bucket                 | 1490        |
| Bucket for Hettich Rotofix 32A         | 1491-2      |
| Screw cap for Hettich Bucket           | 1492-2      |

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