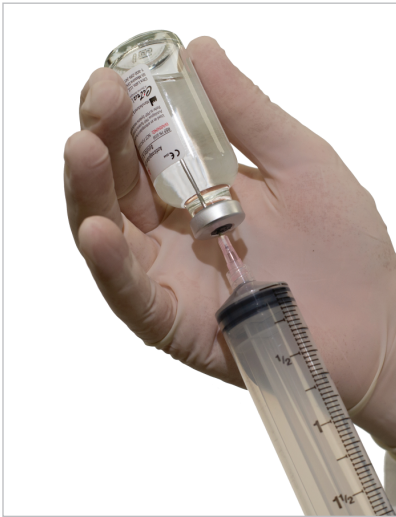


**CenTrate® BMA – Bone Marrow Aspirate Kit**



CenTrate BMA 30 mL 6 PK 10024650 | CenTrate BMA 30 mL SINGLE PK 10024649  
CenTrate BMA 60 mL 6 PK 10024645 | CenTrate BMA 60 mL SINGLE PK 10024644

**1 Bone Marrow Aspirate (BMA) Collection Preparation**



For the 60 mL device, use two sterile 30 mL syringes to collect the combined total of 60 mL BMA to reduce the chance of coagulation during collection.

For 30 mL device, use only one 30 mL syringe following the Syringe 2 instructions below only.

**Heparin (preferred anticoagulant for BMA)**

Syringe preparation

**Syringe 1:** Draw 3 mL of Heparin (1000 U/mL) into syringe, ensuring you coat entire inner surface.

**Syringe 2:** Draw 10 mL Heparin, ensuring you coat the entire inner surface. Attach this syringe to the BMA needle and prime with 7 mL Heparin, leaving 3 mL of Heparin in the syringe. Remove BMA needle and replace the trocar point.

**ACD-A anticoagulant**

Syringe preparation

**Syringe 1:** Draw 5 mL ACD-A into 30 mL syringe, ensuring you coat entire inner surface.

**Syringe 2:** Draw 10 mL ACD-A, ensuring you coat the entire inner surface. Attach to the BMA needle and prime with 5 mL ACD-A, leaving 5 mL of ACD-A in the syringe. Remove BMA needle and replace the trocar point.

**2 Load CenTrate Device**



Obtain bone marrow aspirate using standard aseptic technique for a final total volume.

**For 60 mL CenTrate device use:**

- 6 mL of Heparin with 54 mL of BMA *or*
- 10 mL of ACD-A with 50 mL of BMA

**For 30 mL CenTrate device use:**

- 3 mL of Heparin with 27 mL of BMA *or*
- 5 mL of ACD-A with 25 mL of BMA

Unscrew cap on center top port (1); remove and discard green packaging post. Slowly load BMA (at a rate of 1 mL/sec) into center port, ensuring you keep the blue vent on top clear. When complete, remove sterile plug from the tethered cap and attach the cap to the top port. The CenTrate device is now ready to be loaded into the centrifuge.

**3 Spin**



Place CenTrate Device into centrifuge with side ports oriented horizontally (60 mL device using green buckets, 30 mL device using purple buckets).

Be sure the centrifuge is balanced with appropriate counterbalance or second full CenTrate device placed directly across.

Close lid by rotating the lid latch clockwise. The “latched” indicator will illuminate. Set speed to 3,200 n/min and time to 15 minutes. Press Start button. Once spin is complete, press Open/Stop button. Twist latch counterclockwise to open lid.

**4 Remove Cell-Poor Plasma**



Remove device from the centrifuge and unscrew yellow cap (2). Withdraw the Cell-Poor Plasma with a 30 mL syringe and discard. When removing the plasma, tilt at an angle, keeping the fluid below the top blue vent. Replace yellow cap.

**5 Remove Concentrated Bone Marrow Aspirate (cBMA)**



Shake the CenTrate Device vigorously for 30 seconds to re-suspend cBMA. Unscrew red cap (3) and withdraw cBMA (approximately 3 mL for 30 mL device; 6 mL for 60 mL device) with a 10 mL syringe.

## How to Harvest Bone Marrow Aspirate



- 1. Harvest technique (60 mL):** Prime two (2) 30 mL syringes and the bone marrow aspirate needle with Heparin or ACD-A as per CenTrate Instructions for Use (IFU). This ensures that the inner syringe surfaces are coated and will prevent clotting.
- 2. Aseptically prepare the aspiration site and position the needle:** Hold the needle with proximal end in palm and the index finger against the shaft toward the tip.
- 3. Advance needle:** Using gentle but firm pressure, advance the needle, rotating it in an alternating clockwise/counterclockwise motion. Entrance into the marrow cavity is generally detected by decreased resistance. All of the side holes at the distal end of the needle must be introduced into the marrow cavity beyond the cortical bone.
- 4. Remove stylet/trocar:** Once needle is in place, remove the stylet.
- 5. Obtain bone marrow aspirate:** Use standard aseptic technique for a final total volume.

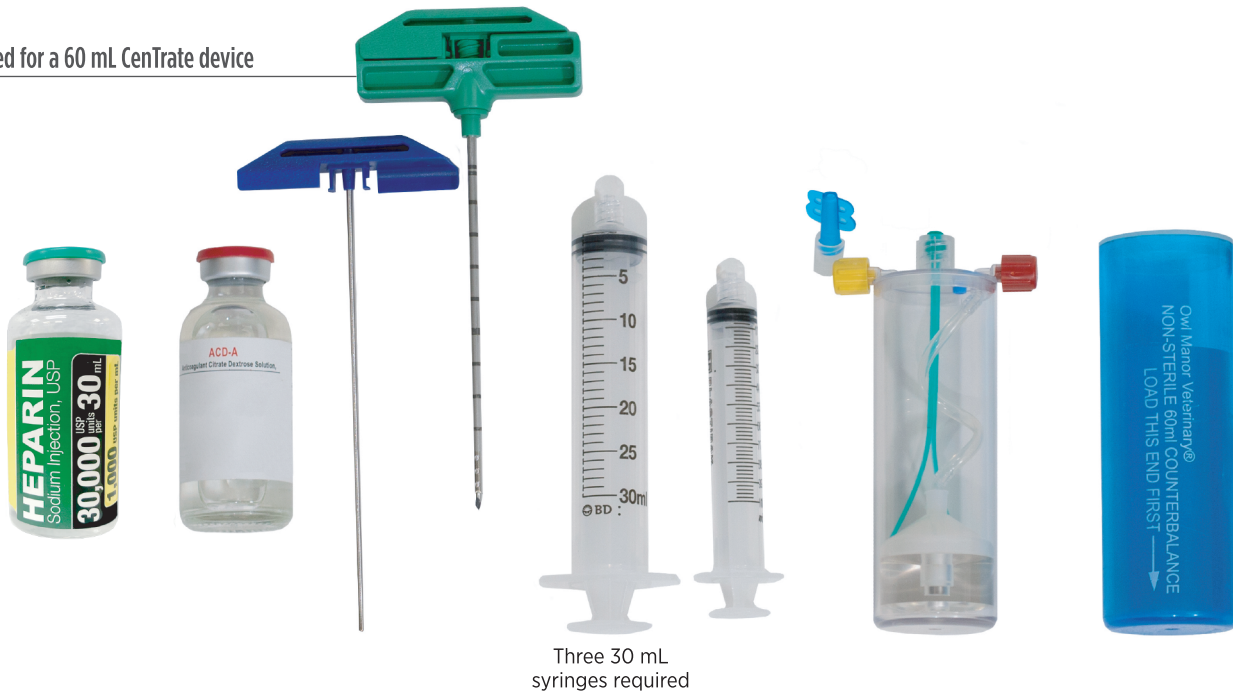
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### For 30 mL CenTrate device use:

- 3 mL of Heparin with 27 mL of BMA or
- 5 mL of ACD-A with 25 mL of BMA

## What you need for a 60 mL CenTrate device



Three 30 mL syringes required

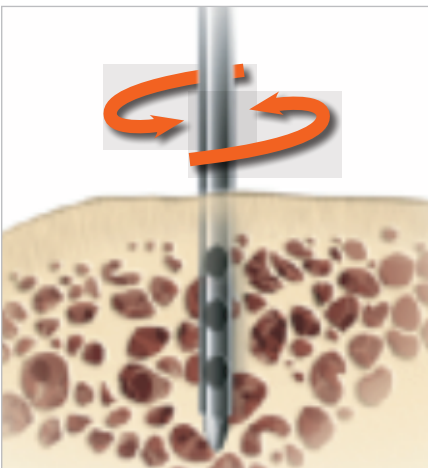
## Bone Marrow Aspirate Harvesting Tips

### Ensure your BMA needle has:

- An easy-to-hold handle to enable safer maneuverability
- Two stylets: One trocar point and one blunt point

### The 6 holes at the distal tip of the BMA needle allow for:

- Minimizing aspirating air into the syringe by ensuring all distal holes are located beyond the cortical wall and well within cancellous bone
- Advancing the needle in a twisting motion to ensure all holes are within the medullary cavity



Six holes at the distal tip with sharp trocar for penetration of the cortical bone into the bone marrow cavity



One stylet with blunt tip for easy movement of the needle within the bone marrow cavity

## Attention Administering Personnel

NOTE: FOR SINGLE USE AND VETERINARY USE ONLY

### DESCRIPTION

The CenTrate Device separates bone marrow by density through the use of the ACT- Cell separator and a centrifuge.

Discard the entire CenTrate Device, after one use, by an acceptable disposal method for materials potentially contaminated with bone marrow.

### MATERIALS

All CenTrate devices are made with only medical grade materials suitable for use in medical devices. All CenTrate components are latex-free.

### INDICATIONS FOR USE

The CenTrate 60 ml or CenTrate 30 ml Device is intended to be used for the safe and rapid preparation of a concentrated Bone Marrow Aspirate (cBMA) from bone marrow.

### WARNINGS AND PRECAUTIONS

1. Always wear personal protection equipment when handling animal samples and follow local occupational health regulations.
2. Use proper safety precautions to guard against needle stick injury. Discard used needles in "sharps" containers.
3. Follow manufacturer instructions when using centrifuge.
4. Do not use sterilized device if package is opened or damaged.
5. Single use device. Do not reuse.
6. User is to be thoroughly familiar with the equipment and the treatment procedure prior to using this device.
7. Use prepared cell concentrate solution within 4 hours after drawing marrow.
8. Only a Zoetis Universal centrifuge should be used with these devices.

### STERILITY

All components are sterilized by exposure to a minimum dose of 25 kGy gamma radiation. Single use only. Do not re-sterilize. Do not use after expiration date.

CAUTION: Federal law restricts these devices to sale by or on the order of a licensed veterinarian, and they must be used under the supervision of a licensed veterinarian

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AU 1800 814 883

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### Symbol Legend



Use by Date (expiration date)



Sterilized using irradiation



Batch Code



Caution



Do not reuse



Manufacturer



Consult electronic instructions for use



Date of Manufacture in United States



Number of devices