

CAREprp Instructions (updates in bold):

1. Draw **2.5ml** of anticoagulant into the included 30ml syringe/18G blunt fill needle. Use the included butterfly to gently draw 23ml of blood into the syringe (for a total volume of 25.5ml). The tip at the end of the butterfly tube pulls off so that it'll connect to the syringe/Luer Lock.
2. The edge of the piston in the bottom chamber should be at the 15ml mark.
3. Gently close the top collar (by turning clockwise) without overtightening.
4. Open the outer port cap. Gently transfer 23ml of blood + 2.5ml of anticoagulant by attaching the syringe/Luer Lock (no needle) onto the outer port. Reseal the outer port.
5. Open the top chamber by turning the top collar exactly $1 \frac{1}{3}$ turns counterclockwise. It might be easier to visualize $1 \frac{1}{4}$ plus a little. Jiggle the top collar to make sure it doesn't come off. Jiggling also ensures that there is space for the blood to transfer into the bottom chamber.
6. Place the CAREprp tube and the counterweight tube (with **25.5ml of water**) into the centrifuge and spin for **7 minutes at RCF500 (500g)** - RCF is consistent across different centrifuges - RPM is not. Note: As above - open the top collar of the counterweight tube $1 \frac{1}{3}$ turns and position the edge of the piston in the bottom chamber to 15ml. Also, close the top collar of the counterweight tube after the first spin to minimize evaporation (for next spins).
7. Carefully remove the tube. Raise the red blood cells and buffy coat to the desired position by slowly rotating the bottom collar.
Allow to sit for a minute to optimize platelet recovery and to allow any undesired red blood cells to settle back down into the red blood cell layer.
The red blood cell layer may rise while settling so initially position the top of the red blood cell layer lower than where desired.
8. Once the contents have settled, reposition the buffy coat if necessary and turn the top collar clockwise to seal off the connection between the top and bottom chambers.
9. Collect PRP from the outer port with a syringe/Luer Lock (no needle). Collects from the bottom up; retrieving the most concentrated first.
Your final needle should be no smaller than 30 gauge.
 - The total yield will be 12-15ml. Gently swirl if you'd like to use everything homogeneously or don't swirl if you'd like to aspirate the most concentrated first.
 - Tilt the hourglass towards the outer port (to maximize concentration) and aspirate the desired volume. 1ml will yield a 16x, 3ml - 10x and 5ml - 7x; for example.
 - If the yield is reddish in color (not golden) open the top collar a tiny bit more and spin again. A reddish/clear result may not resolve.
You may consider lowering the bottom piston if the patient is on testosterone therapy and/or if the buffy coat is in the upper chamber after the first spin.
 - **To change the centrifuge settings press and hold the CYCLE button until you hear 2 beeps. Press and hold the RCF button and change to 500 with the down arrow while keeping the RCF button pressed. Change the time to 7 minutes with the up arrow. Press the CYCLE button to store.**