Brought to you by the <u>original</u> and proven US source of irap therapy



From the patient. For the patient.



Higher Volume
→ Higher Yield

Additional Port

→ Better Handling

New Dimensions

→ Fits more
Centrifuges



irap (interleukin-1 receptor antagonist protein) therapy utilizes your patient's own blood and natural therapeutic mechanisms. The patented Orthokine vet irap 60 syringe produces autologous conditioned serum (ACS) which contains beneficial anti-inflammatory and regenerative cytokines.

The Orthokine vet irap 60 syringe contains glass beads that stimulate the white blood cells to produce the anti-inflammatory and regenerative cytokines. The whole blood is incubated overnight and then centrifuged and the serum collected. The serum is then re-injected into the patient.







Processing of Autologous Conditioned Serum (ACS) with Orthokine®vet irap 60



- 1. Aseptically withdraw blood using the Orthokine vet irap 60 syringe. Fill syringe, past the soft stop, until plunger locks into place and is flush with the plate and clips. At this point the score mark on the plunger is revealed.
 - Apply supplied green luer lock cap and seal securely
 - Ensure the blood and beads are mixed well by 'rocking' the syringe back and forth several times.
 - Incubate the Orthokine vet irap 60 syringe at 98.6°F (37°C) for a maximum of 24 hours.



- 2. After incubation, snap off plunger and centrifuge Orthokine vet irap 60 for 10 minutes at 3700rpm.
 - Ensure the luer lock cap is tightly closed
 - Load centrifuge symmetrically



- 3. After centrifugation, break off the diagonal clips on the guide plate of Orthokine vet irap 60 syringe
 - Disinfect syringe and port thoroughly
 - Work on disinfected surface



4. Take off guide plate by rotating it 90°. Place triangular port on the side of the syringe where serum is the deepest by rotating the base of the syringe plunger. Work carefully to not disturb the clot.



Connect cannula to a 35mL syringe. Penetrate the black stopper through accessory port and carefully aspirate ACS, being careful to not aspirate any RBCs.



- 6. Aliquot ACS through filter/adapter into 5mL syringes. Close 5mL syringes with a sterile cap. Label each syringe with patient information and date.
 - Store syringes at -18°C (0°F) or colder for up to 7 months
 - Thaw ACS at room temperature before injecting