Autologous Orthobiologic Therapy focuses on the science of Regenerative Medicine. Regenerative medicine is the process of replacing or regenerating human cells and tissues to increase the restoration of normal function. This field holds the promise of regenerating damaged tissues in the body by stimulating the body’s own repair mechanisms. Regenerative cells, such as mesenchymal stem cells, have the ability to differentiate into a variety of cell types including Osteoblast, Myocyte, Tenocyte, Chondrocyte and Adipocytes. Autologous Orthobiologic Therapy utilizes mesenchymal stem cells found in bone marrow to accelerate the healing process of damaged tissue.
A revolutionary new system for Autologous Orthobiologic Therapy

**Bio-MAC.** Bone Marrow Aspiration Catheter

Harvesting bone marrow is now easier and faster than ever before with the new power driven Bio-MAC Bone Marrow Aspiration Catheter from Biologic Therapies.

Available in 25mm, 45mm, 80mm and 105mm lengths, the new Bio-MAC’s varying lengths allow for marrow draws throughout the anatomy. The proximal tibia, proximal humerus and calcaneus are now viable sites for bone marrow aspiration.

The Bio-MAC is the most technologically advanced bone marrow aspiration product available today. It provides the safest, fastest and most efficient means of bone marrow harvest for providers of point-of-care Autologous Orthobiologic Therapy. This therapy has been shown to be a highly effective treatment for bone, muscle, tendon, ligament and cartilage injuries, and bone marrow is an excellent source for progenitor and growth factor cells responsible for the healing process.

Another leading feature of the Bio-MAC is the gentle insertion process. Unlike most traditional bone marrow aspiration devices, which are manually manipulated with brute force or a mallet, the Bio-MAC can be inserted with any standard surgical drill. This delivery system eliminates the potential micro-fracturing, bruising and subsequent pain from ‘hammering’ other marrow aspiration catheters into bone.

The Bio-MAC’s outer sleeve contains eight large, smooth, bevel-edged fenestrations, which allow for gentle bone marrow aspiration. The Bio-MAC’s unique design also incorporates a proprietary plunger component that when inserted down the outer sleeve creates a void (frac) where bone marrow pools. Together, the fenestrations and plunger-created void provide a 120% greater draw area resulting in higher aspiration efficiency and an easier draw when compared to other devices.

**Important features of the Bio-MAC include:**
- Made from surgical grade 304 Stainless Steel material
- Driver hub constructed from polyetherimide, which is superior to other polycarbonate products on the market
- Nickel plated rare earth magnet holds hub securely to driver during drilling insertion
- All components incorporate press-fit construction to eliminate hub breakage and separation during use
- Diamond-shape trocar cutting tip for fast, gentle drilling into bone
- All stainless steel components are mirror polished for added lubricity and ease of insertion
- Trocar assembly and plunger withstand 300 pounds of pull for five minutes without stainless steel components separating from polyetherimide driver hubs. Other companies' devices separate at just 15 pounds of pull.
- Trocar assembly and plunger withstand 25 inch-pounds of torque without stainless steel components twisting in driver hubs. Other devices twist at just 5 inch-pounds.

Bio-SPIN Automated Blood Cell Separator

The Bio-SPIN automated blood cell separation centrifuge is designed for use in Biologic Therapies’ point-of-care Autologous Orthobiologic Therapy system. The Bio-SPIN utilizes state-of-the-art technology to separate the maximum number of healthy cells from bone marrow aspirate.

The Bio-SPIN is adjustable for varying levels of hematocrit separation, which gives it the capability to be customized to address various clinical applications. No other machine has this capability, which makes the Bio-SPIN the centrifuge of choice for point-of-care Autologous Orthobiologic Therapy. A comprehensive Disposables Convenience Kit is provided with this system.

Developing Tomorrow’s Healthcare Innovations Today

www.BiologicTherapies.com