

## **Regeneration – Cellular & Tissue Repair**

### **Content for Website Page or Section**

#### **Regeneration: Cellular and Tissue Repair for Lasting Resolution**

Once environment, rhythm, circulation, and signaling are restored, regeneration uses autologous adipose-derived stem cells (ADSCs) and peptides to promote lasting immune tolerance and tissue repair.

#### **Key Interventions in the Regeneration Pillar**

- Autologous ADSC harvest (initial \$13,500 including 100M immediate IV + banking).
- Monthly IV ADSC vials (2 vials 10M each, \$1,650/month for 6 months).
- Thymosin Alpha-1 bi-weekly IV.
- Localized exosomes PRN for refractory joint pain.

#### **Scientific Rationale**

- ADSCs secrete anti-inflammatory cytokines (IL-10, TGF- $\beta$ ) and exosomes that inhibit NF- $\kappa$ B/IL-6 in macrophages/T cells/FLS, promoting M2 shift and Treg tolerance (50-80% remission in autoimmune trials).
- Thymosin Alpha-1 enhances T cell regulation, reducing IL-6 by 20-30%.
- Exosomes target local inflammation in bursae/synovium, reducing pain and promoting repair.

#### **Outcome**

Regeneration recalibrates immunity and repairs tissue damage, enabling sustained remission and minimal/no long-term steroids.

This framework is biology-first: remove noise, restore rhythm and circulation, recalibrate signaling, then regenerate. It targets PMR's root dysregulation for lasting resolution.