Contraindications to Stem Cells/Exosomes

- Cancer
- Myeloproliferative Disease
  - Bone Marrow Dysplasia
  - Sickle Cell
- Primary Pulmonary Hypertension
- Acute Bacterial Infection
- Recent Dental Work
- Macular Degeneration with neovascularization
- Any abnormal neovascularization
- Immuno-compromised
Preoperative Labs

- CBC
- CMP
- UA
- CA-125 for females
- PSA for males over 40
- CEA for males and females over 40
- PT/INR
- EKG
Aesthetic Protocols

- **Hair**
  PRP + Exosomes

- **Ulcers/Wounds/Scars/Venous Insufficiency Ulcers**
  Debride, Exosomes along periphery of wound and into wound base +/- Tisseel covering

- **Erectile Dysfunction**
  Exosomes +/- PRP

- **Urinary Incontinence**
  PRP + Exosomes

- **Arterial Insufficiency**
  Exosomes
MSK Protocols

- Joints
  PRP + Exosomes
  PRP + Exosomes

- Muscles
  Direction Injection Exosomes

- Tendons/Ligaments
  PRP + Exosomes (+ Tenotomy for tendons)

- Bones
  BMAC + Exosomes +/- DBM vs. other scaffold

- Nerves
  Exosomes +/- PRP

- Discs
  Exosomes + PRP
  Exosomes + PRP
MSK Protocols

- **Joints**
  - PRP + Exosomes
  - PRP + Exosomes
  - Day 0
  - Day 14

- **Muscles**
  - Direction Injection Exosomes

- **Tendons/Ligaments**
  - PRP + Exosomes (+ Tenotomy for tendons)

- **Bones**
  - BMAC + Exosomes +/- DBM vs. other scaffold

- **Nerves**
  - Exosomes +/- PRP

- **Discs**
  - Exosones + PRP
  - Exosones + PRP
  - Day 0
  - Day 14