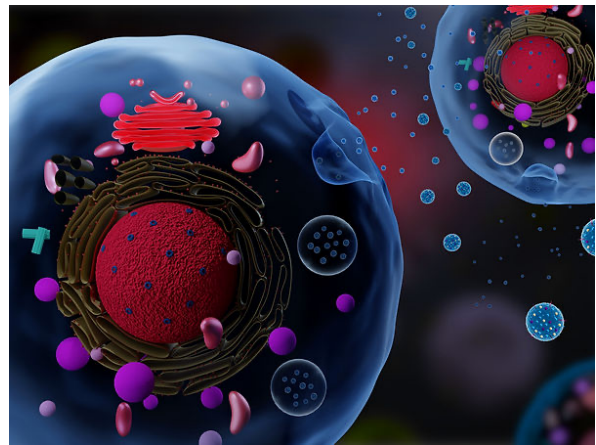




PPX™ Exosomes

Exosomes, also known as “Extracellular Vesicles (EVs),” are small vesicles naturally released by cells in the body. They carry various biological materials including proteins, lipids, and genetic information like microRNA (miRNA). The primary function of these EVs is to transport their cargo from one cell to another, helping regulate physiological processes such as immune response, inflammation, tissue repair, and cellular regeneration.

Autologous EVs are collected from an individual’s own cells and then reintroduced into the same person to promote healing and regeneration of injured tissues. Research is uncovering how these cellular messengers seem to have greater anti-inflammatory effects than other cell-based therapies including mesenchymal stem cells and traditional Platelet Rich Plasma (PRP).



PPX™, Next Generation PRP

Historically, Platelet Rich Plasma (PRP) has been a therapeutic tool in the field of regenerative medicine for many decades, concentrating the platelets and growth factors for cellular and tissue repair. However, because of the lack of standardization and consistency, results can be quite variable with a corresponding unpredictable result.

PPX™ - “Patient Pure X™” (ZeoScientifix.com) goes beyond PRP as an autologous blood-derived biologic that concentrates only the regenerative fraction of the patients’ blood, specifically the exosomes and other bioactive proteins. The proprietary high-speed-centrifugation process isolates an average of 400 billion nanoparticles (EVs) per dose along with more than 300 bioactive proteins and miRNA markers which are considered the mechanism of action that reduces inflammation and induces regeneration at the cellular level. Once placed in the injured site of concern, these powerful signature exosomes immediately begin the cascade of cellular reprogramming and tissue repair.

PPX™ is “acellular” meaning it contains no cells and since it is sourced from your own body, it has an excellent safety profile. The processing is conducted in an FDA registered CGMP-compliant laboratory to ensure sterility and minimize any risks.

Obtaining your own exosomes is done as follows. Your blood is collected in our clinical office and then sent to a specialized laboratory. The plasma is separated and processed into a highly concentrated solution that contains billions of autologous exosomes, EVs.

After approximately 1 week the product is sent back to our office as two 1cc vials of your own powerful exosomes for administration into your deteriorating joint. In short, this is a simple and easy process to obtain a completely natural and therapeutic solution providing a completely acellular treatment, unlike PRP. It focuses on damaged areas requiring healing, helps reduce inflammation, and supports cellular health and tissue recovery.



Exosomes vs. PRP: How do they compare?



Exosomes

- Anti-inflammatory properties
- Consistent outcomes
- Pain-free
- Easy to use and minimally invasive
- 20 to 30-minute total visit time
- Results within 1-2 treatments
- Results last for up to 2-3 years
- 450+ growth factors plus anti-inflammatory, microRNA and MRNAs for healing



PRP

- No anti-inflammatory properties
- Results vary and are unpredictable
- Acidic in nature
- Requires extra equipment / prep time
- 40 to 60-minute total visit time
- 3 to 6 +treatments required
- Results last for just 6-10 months
- Just 7 – 35 growth factors

If you would like to try this cutting-edge treatment for your deteriorating joints give us a call at the Zehr Center for Orthopaedics at 239-596-0100.