**Osteoarthritis (OA)**

**Treatment Plan – Improving Mechanical & Biological Function of joint**

1. Reduction in wear by stabilising and improving the alignment of the joint with **customised orthotics** (if appropriate) & a customised strengthening program.
2. **Improving Biological Status of Joint – Regenerative Injections**
* **Autologous Conditioned Serum (ACS) also known as Orthokine. –** This is a new treatment that has level 1 scientific evidence. This uses the patient’s own blood and after incubation produces high concentrations of an anti-inflammatory protein that reduces pain and dysfunction associated with arthritis. 70% of patients who have moderate OA will have >50% reduction in symptoms.
* **Autologous Platelet-Rich Plasma** – involves taking a quantity of your own blood, then centrifuging the blood down so that plasma which is rich in platelets is extracted and then injected into the joint. Platelets contain growth factors that may help to decrease pain & inflammation and improve function.
* **Prolotherapy & Neural Prolotherapy** is effective in early to moderate OA –

knee, ankle & foot joints. The solution injected is usually 20-25% glucose combined with local anaesthetic.

1. The body requires certain **minerals and vitamins** to optimise injury healing. Deficiencies of the vitamins/minerals below may decrease your body’s ability to heal. The list of vitamins/minerals below may be beneficial to be taken with injection treatment (i.e couple of months). There are certain medical conditions that may not require taking these supplements**.** Discuss this with the podiatrist and/or GP.
* **Oral zinc** 20-25mg – (short –term)
* **Manganese** 5-10mg – (short-term)
* **Vitamin C** 1000mg-2000mg/day – (short-term)
* **Oral glucosamine sulphate (not hydrochloride)** 1500mg-2000mg/day

 **+/- chondroitin sulphate ( “ “ )**

* **Fish oil/krill oil**
* **Vitamin D –** 10 -20 minutes/day in Qld or (vit D3 1000-2000iu/day)
* **Protein**