

metabolized by COX-2, via the arachidonic acid cascade, to prostaglandins such as prostaglandin E₂ (PGE₂). PGE₂ increases the synthesis of MMP-3 (stromelysin), has important pro-inflammatory properties and contributes to vasodilation and pain in patients with osteoarthritis. Leukotrienes, which have powerful chemotactic effects, are also produced by the arachidonic acid cascade and attract white blood cells into inflamed tissue.

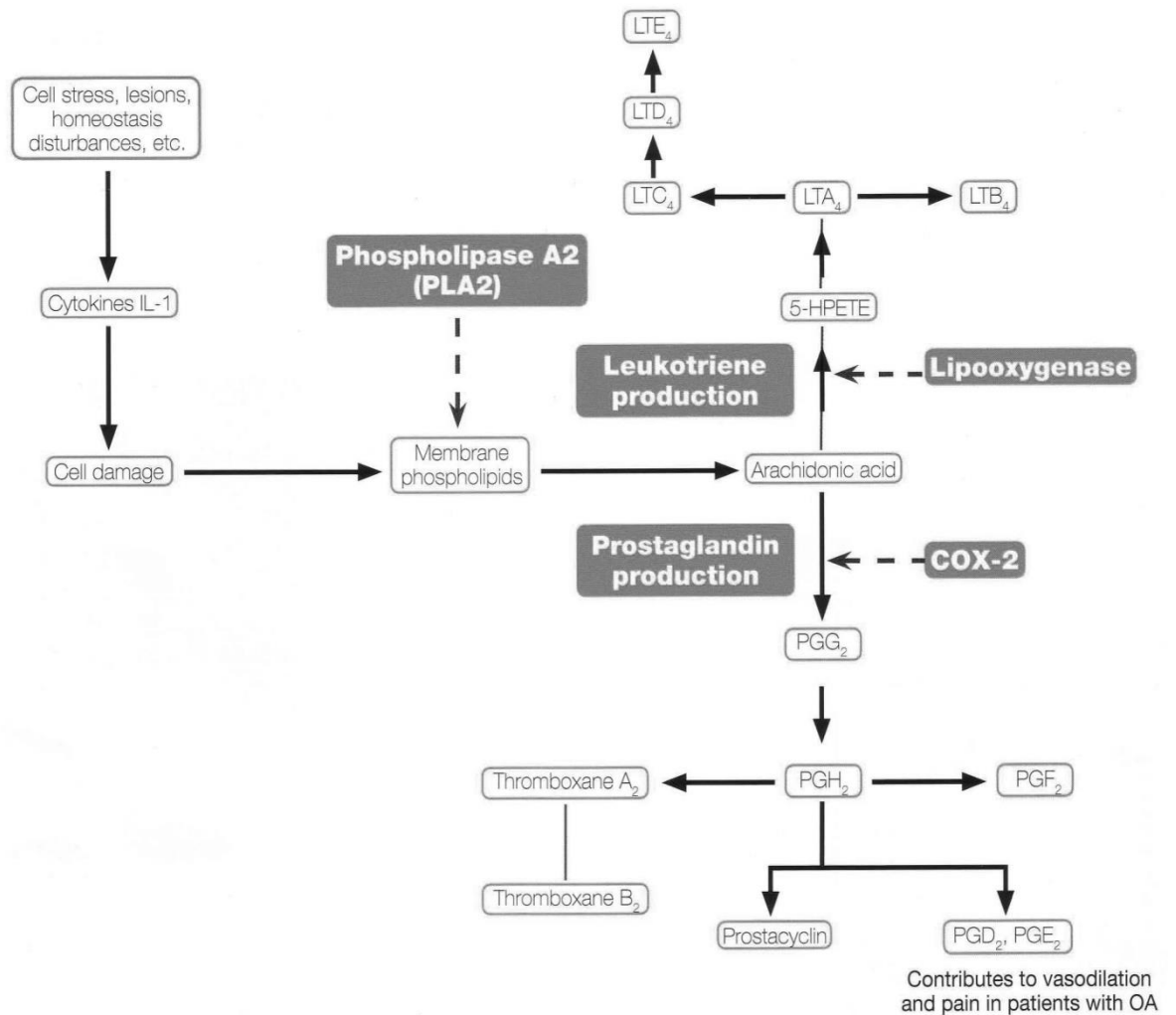


Figure 4: Inflammatory cascade in synovial joint (Novartis osteocerein brochure, n.d.)

3. Induction of chondrocyte apoptosis: chondrocytes and synoviocytes are responsible for maintaining the integrity of articular cartilage and the synovium, studies suggest that IL-1 may indirectly stimulate apoptosis of chondrocytes and