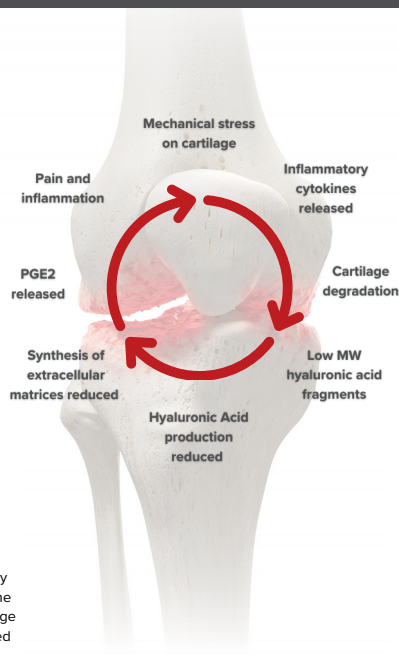
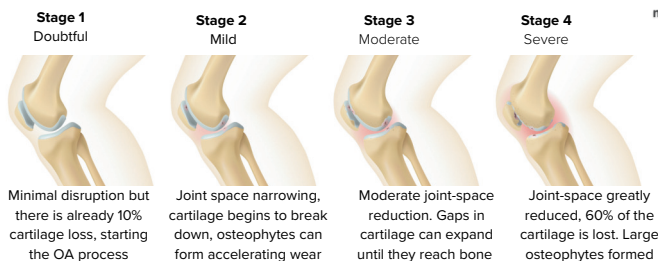


Osteoarthritis and Hyaluronic Acid

Although 'joint wear' and 'cartilage thinning' help to explain the mechanical process of osteoarthritis, there is also a painful negative biology within the joint. This is important to address alongside the mechanical problems.

These changes in the joints local biology, combined with mechanical stresses form a painful cycle. This combination of factors can increase the severity of the arthritis over time.

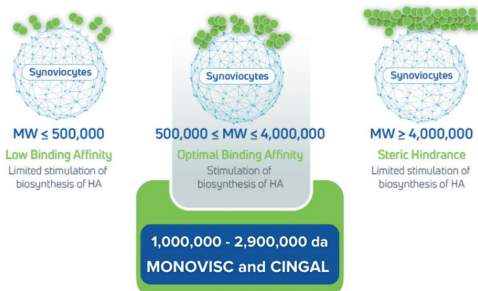
Mechanically, the OA stages start to look like this:



A healthy joint produces the perfect Hyaluronic Acid (HA)

The HA produced within your own healthy joint nourishes the synovial fluid. It is an important component for maintaining healthy cartilage and an overall healthy environment within the joint.

The breaking down of cartilage and increase in inflammation which occurs in OA, all contribute to the reduction of natural hyaluronic acid within the joint. This is because the process attacks the cells that create the endogenous HA. To correct this in-balance, we want to restore the joints capability to produce it's own HA again, this allows for a longer lasting therapeutic effect.



Only the right molecular weight can stimulate the cells in the joint to produce HA again

Reference 4 in booklet

A healthy joint is an active joint, but in order to stay active, continue physiotherapy, or develop a good active routine, the biology in the joint may need a helping hand. When painful inflammation is present, a potent anti-inflammatory may also be required to quickly prevent further damage to the joint

Monovisc and Cingal are two successful injection therapies that have been developed to give initial mechanical support with cushioning and lubrication, but also stimulate the cells in the joint to once again produce their own HA. This gives a longer lasting effect. Cingal is also combined with a fast acting anti-inflammatory steroid to halt pain and further joint destruction fast.