

Degenerative joint disease (DJD), commonly referred to as osteoarthritis/arthritis, is an inflammatory condition of the joint. This inflammatory process causes pain and lameness through distension of the joint capsule and break down of the articular (joint) cartilage. DJD is perpetuated by many small proteins known as inflammatory mediators. The predominant inflammatory mediator is interleukin-1 (IL-1).

Interleukin Receptor Antagonist Protein (IRAP) is a relatively new joint therapy that treats joint inflammation and DJD. The protein produced using IRAP prevents IL-1 from binding to cells in the joint and exerting its devastating effects. By blocking IL-1, joint capsule distension and cartilage degradation is reduced.

IRAP is an autologous therapy, meaning the product originates from the horse's own body. The process begins by sterilely collecting blood from the horse. After collection, the blood is incubated with medical-grade glass beads for 24 hours. The glass beads stimulate the white blood cells to produce IRAP. The blood is centrifuged and the serum is filtered into individual doses. The IRAP can then be injected into the affected joint or stored for later use.

IRAP is able to decrease joint inflammation and cartilage degradation without the use of steroids. Indications for IRAP usage are DJD/arthritis, synovitis, bursitis and tenosynovitis.