

Summary

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Drug Profile

Treatment of knee osteoarthritis with Orthokine[®]-derived autologous conditioned serum

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Osteoarthritis (OA) is the most prevalent arthritis in the world with increasing numbers of people expected to acquire the disease as the population ages. Therapies commonly used to manage the disease have limited efficacy and some carry significant risks. Current data suggest that the anti-inflammatory cytokine IL-1 receptor antagonist (IL-1Ra) can alter the inflammatory response and cartilage erosion present in OA. Intra-articular gene expression of IL-1Ra has shown promising results in animal models to provide symptomatic improvement and minimize osteoarthritic changes. Orthogen AG (Dusseldorf, Germany) has developed a method to produce an autologous conditioned serum (ACS) rich in IL-1Ra marketed as Orthokine[®]. Study participants treated with ACS have improved pain and function; however, these results are preliminary and need confirmation. If ongoing trials prove that ACS can retard cartilage degeneration and reduce inflammation, the management of OA would be dramatically altered, perhaps providing a mechanism to prevent the disease or at least its progression.

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