Special Issue

Highlights in Pathophysiology and Treatment of Osteoarthritis

Message from the Guest Editors

Osteoarthritis is a highly common and disabling condition worldwide. Growing evidence shows that osteoarthritis is a complex condition in which the whole joint is involved; the degradation of articular cartilage, subchondral sclerosis, and the hyperplasia of the synovial tissue are hallmarks of the disease. The pathological changes in the joint structure are mediated by a plethora of factors, such as proteases, proinflammatory cytokines and chemokines, adipokines, prostaglandins, nitric oxide, and reactive oxygen species. Current data suggest that aberrant epigenetic modifications, as well as the gut microbiome, play key roles in the pathophysiology of this disease. Our aim in launching this Special Issue is to provide an overview of emerging studies designed to identify the complex pathological mechanisms that characterize the disease and that test different pharmacological and nonpharmacological approaches to the treatment of osteoarthritis.

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Message from the Editor-in-Chief

The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

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