Special Issue

Rheumatology Diseases: Advances in the Understanding of Pathogenesis, Biomarker Research and Treatment Target

Message from the Guest Editor

Autoimmune rheumatic diseases (AIRDs) are chronic, systemic diseases characterized by unknown etiology and pathogenesis. Recent studies have revealed the multifactorial basis of AIRD with the leading role of genetic and epigenetic factors as well as environmental factors in disease predisposition, onset and progression. Epigenetic factors, including DNA methylation, histone modifications and deregulated miRNA expression in circulation, in addition to local expression, play an important role in the pathogenesis of AIRD by regulating key biological pathways. The recent advances in our understanding of the pathogenesis of AIRD enable the development of effective therapeutic agents, including biological and target therapies minimizing the side-effects of nonselective immunosuppressive agents. Recent studies have shown the effects of new therapeutic strategies, including the use of CAR-T cell therapies, and Bispecific T-cell engagers, in rheumatology clinical practice, which could allow us to revolutionize the treatment approach in this type of autoimmune diseases.

Guest Editor

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