Systemic Lupus Erythematosus: Research Updates in Immunopathogenesis, Biomarkers and Therapeutics

Message from the Guest Editors

Systemic lupus erythematosus (SLE) is a chronic autoimmune disease with diverse clinical manifestations involving multiple organ systems. Clinically, SLE is still mainly managed by the use of conventional immunosuppressants and steroids with undesirable side-effects; the efficacies of new biologics are yet to be substantiated. Thus, understanding SLE pathogenic mechanisms is of imminent importance to advancing the management of this condition. SLE pathogenesis is highly intricate and etiologically contributed by a combination of multiple genetic and environmental elements. This Special Issue aims to provide recent research highlights that focus on understanding the immuno-pathogenesis mechanisms, biomarkers, and novel therapeutics development in SLE. Topics include, but are not limited to, the following:

- The genetics of lupus
- The epigenetic regulation of lupus
- Cellular and molecular dysregulation in SLE
- Cytokine perturbation and contribution to lupus progression
- Innate and adaptive immunity in SLE
- Immuno-regulatory cells in lupus
- Biomarker development for prognosis and monitoring lupus disease
- Novel therapeutics and new treatment strategies for lupus