Special Issue

Pathophysiology and Therapeutic Perspectives in DMD: The Well-Defined Role of the Immune System

Message from the Guest Editor

Duchenne muscular dystrophy (DMD) is characterized by dystrophin protein lack, loss of sarcolemma stability, fiber necrosis, and muscular weakness, as well as a multitude of secondary defects involving metabolic and inflammatory deregulated pathways. The rise of inflammation and the consequent activation of the immune system are evident in DMD: The invasion of muscles driven by cytotoxic T-lymphocytes, neutrophils and macrophages promote muscle apoptosis, atrophy, and finally muscle cytolysis. A deeper understanding of these mechanisms is fundamental to produce new feasible treatments. Immune-system dependent signaling cascades are reviewed together with perspectives on management to dampen the inflammatory environment of DMD pathology.

Guest Editor

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