

Special Issue on Inflammation in Metabolic Diseases: Mechanisms to Therapies

CALL FOR PAPERS

Emerging evidence indicates that inflammation plays a primary role in metabolic diseases, such as cerebrovascular disease, neurodegenerative disease, and neuroinflammation-related disorders and cancers. Inflammatory responses are sophisticated immune responses with diverse clinical magnifications. Peripheral infection or systemic inflammation is also a driver of neurodegenerative diseases, including Alzheimer's disease, Parkinson's disease, amyotrophic lateral sclerosis, and multiple sclerosis. Inflammatory and immune systems may inhibit the development of cancer; however, inflammation may also be a key event in cancer progression. Numerous cytokines, chemokines, adhesion molecules, and immune cells are identified as potential mediators of inflammation. For example, IL-6, IL-18 TNF- α , TGF- β , and chemokines had been identified as critical mediators of metabolic diseases. The major biological targets of therapies mainly surround classic inflammatory cytokines including tumor necrosis factor- (TNF-) α , interleukin-(IL-) 6, and IL-1 or atypical cytokines such as IL-4, TGF- β , or IL-10. For instant, three currently licensed biological anti-TNF- α drugs, etanercept, infliximab and adalimumab, have all been clearly shown to suppress inflammation in diseases. Though various therapeutic agents are developed in regard to these biological markers, the adverse effects such as infection or uncontrollable immune-responses accompanied with therapy impose considerable concerns to decide when and how to use these agents properly. Research in order to define more candidate targets is ongoing. Based on this background, we assembled this special issue for a better understanding of inflammatory processes or therapies on the aspect of biologics used in inflammatory diseases. We invite investigators to contribute original research articles or review articles that seek to elucidate molecular pathogenesis underlying inflammation and the evaluation of the treatment outcomes in various metabolic diseases. We are particularly interested in articles that provide new insight toward inflammation in animal or cellular models, novel molecules as clinical biomarkers, therapeutic targets, or potential therapeutic agent for metabolic diseases regarding anti-inflammation.

Potential topics include but are not limited to the following:

- ▶ Identification of molecule targets in the development of inflammation
- ▶ Role of inflammation in experimental and clinical cases, such as cerebrovascular disease, neurodegenerative disease, inflammation-related disorders, and cancers
- ▶ Elucidating latest technologies and/or strategies in regarding to anti-inflammation
- ▶ Elucidation of inflammatory mechanism of therapeutic treatment by using animal or cellular models
- ▶ Development and elucidation of novel anti-inflammatory agents

Authors can submit their manuscripts through the Manuscript Tracking System at <http://mts.hindawi.com/submit/journals/mi/ides/>.

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First Round of Reviews

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