

Special Issue on Natural Products for the Treatment of Inflammation

CALL FOR PAPERS

In recent years, the use of natural products in the treatment of inflammatory conditions has garnered increasing attention, reflecting the growing interest in alternative and complementary approaches to healthcare. Known for their diverse bioactive compounds, natural products have served as a tremendous source of lead compounds for anti-inflammatory drug development. However, more research is needed to develop anti-inflammatory agents that are not only more potent, but also safer and more cost-effective.

The inflammatory process is intricate and plays a pivotal role in the defense mechanisms and tissue repair processes of the body. However, if the inciting stimuli persist or the regulatory mechanisms fail, inflammation may become chronic, leading to prolonged tissue damage and dysfunction. Chronic inflammation is implicated in the pathogenesis of numerous diseases, including autoimmune disorders, neurodegenerative conditions, and certain cancers. While current anti-inflammatory drugs often provide relief in acute conditions, their efficacy in chronic inflammatory diseases, such as rheumatoid arthritis, inflammatory bowel disease, cancer-related inflammation, and many others, may be limited. Therefore, there is a compelling need to explore and harness the potential of promising molecules derived from natural sources.

This Special Issue hopes to consolidate research focused on the anti-inflammatory properties of natural products. It delves into the exploration of specific chronic inflammatory conditions, such as inflammatory bowel disease and cancer, and elucidates the mechanistic aspects of how key natural products exert these anti-inflammatory effects. Researchers are cordially invited to contribute novel primary research articles encompassing both preclinical and clinical studies. Additionally, we welcome review articles that scrutinize present advancements and contemplate future prospects within this research area.

Potential topics include but are not limited to the following:

- ▶ The role of natural products in neuroinflammation
- ▶ Systems biology-driven discovery of natural products with anti-inflammatory properties
- ▶ Understanding the effects of natural products on specialized pro-resolving lipid mediators
- ▶ Understanding the specific molecular mechanisms by which natural products modulate key inflammatory pathways
- ▶ Determination of interactions of natural compounds with specific receptors involved in the inflammatory response
- ▶ Investigation of potential interactions between natural anti-inflammatory products and compounds and conventional medications
- ▶ Understanding the biotransformation processes and metabolism of natural compounds, including the identification of metabolites and their potential contribution to anti-inflammatory effects
- ▶ Investigating natural products that influence the gut microbiome and its impact on inflammation, considering the crucial role of gut health in immune responses
- ▶ Determining the effect of natural products on cancer-related inflammation
- ▶ Utilization of advanced extraction techniques to optimize the isolation of bioactive compounds from natural sources, enhancing their anti-inflammatory properties and bioavailability
- ▶ Investigating the potential anti-inflammatory effects of plant-derived exosomes

Authors can submit their manuscripts through the Manuscript Tracking System at <https://review.wiley.com/submit?specialIssue=358208>.

Papers are published upon acceptance, regardless of the Special Issue publication date.

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