

Special Issue on
Natural Products as a Source for New Leads in Gout Treatment

CALL FOR PAPERS

Gout is a common inflammatory arthritis characterized by elevated plasmatic levels of uric acid. Several risk factors were identified, including diets rich in seafood and meat, alcohol consumption, and obesity. In this disease, when uric acid levels in the body increase due to increased formation and/or decreased excretion, the solubility limits of sodium urate are exceeded and precipitation occurs, particularly within joints, synovial fluid, and periarticular tissues. The deposits of urate crystals can initiate attacks of acute painful gouty arthritis which can evolve to chronic gout when permanent erosive joint deformity emerges. The estimated prevalence of this condition is increasing in many developed countries, particularly in men and postmenopausal women. Therefore, preventive and therapeutic strategies have been considered to avoid and treat this disease. In this context, the control of gout has been mainly performed by reducing the inflammation (e.g., with colchicine and nonsteroidal anti-inflammatory drugs), as well as by reducing the uric acid formation (e.g., using alopurinol and febuxostat) and by favouring its excretion (e.g., with probenecid and sulfapyrazone). However, these approaches only have relative success and can originate several side effects, particularly in chronic use. For these reasons, over the years researchers have been searching for alternative therapeutic strategies, particularly involving the use of natural products.

This special issue aims to collect original research as well as review articles and meta-analysis addressing the use of natural products, as either extracts or isolated compounds, in gout control. Therefore, we kindly invite researchers to contribute manuscripts with in vitro, in vivo, and clinical studies focusing not only on the effects of natural products on the control of uric acid levels, but also on potential treatments to reduce the gouty inflammatory arthritis.

Potential topics include but are not limited to the following:

- ▶ Sources of natural products used in the treatment of gout
- ▶ Isolation and characterization of natural products useful in gout control
- ▶ Natural products which increase uric acid excretion and/or reduce uric acid absorption
- ▶ Natural products with antioxidant and anti-inflammatory effects in gout
- ▶ Natural products which reduce uric acid biosynthesis or enhance its degradation
- ▶ Comparison of natural and synthetic drugs in gout treatment
- ▶ Safety of gout control with natural products
- ▶ Chemical modifications of natural products useful in gout control to improve their efficacy and/or safety

Authors can submit their manuscripts through the Manuscript Tracking System at <https://mts.hindawi.com/submit/journals/ecam/naplg/>.

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

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