



Therapeutic Potential and Delivery Approaches of Algal Polysaccharides

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Deadline for manuscript
submissions:

closed (30 June 2021)

Message from the Guest Editor

Marine algae, unlike terrestrial plants, produce sulfated polysaccharides which are the main compounds of their extracellular matrix. For a long time, these complex sugars have been used in particular in the food industry. But these polysaccharides and their derived oligosaccharides produced by blue biotechnology also have promising biological properties such as anti-cancer, antimicrobial, anticoagulant, antioxidant, immunomodulator, etc.

Thus, in a viral pandemic context, different teams evaluated (in vitro) fucoidans extracted from *Saccharina japonica* to inhibit Covid-19. Some other studies conducted on mouse model suggest that all compounds can be used in nasal sprays, inhalers or oral doses. This is an easier way to deliver a drug, compared to the more technical intravenous injection. But the mechanisms involved have to be precisely explained and validated.

The aim of this Special Issue is to present the most recent works on the biomedical applications (including biological activities, mechanisms of action, analysis, extraction) of algal polysaccharides and their delivery approaches.





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Message from the Editor-in-Chief

During the past few decades there has been an ever increasing number of novel compounds discovered in the marine environment. This is exemplified by the robust preclinical and clinical pipeline that currently exists for marine natural products. *Marine Drugs* is inviting contributions on new advances in marine biotechnology, pharmacology, chemical ecology, synthetic biology, and genomics approaches related to the discovery of therapeutically relevant marine natural products. Our goal is to share your contribution in a timely fashion and in a manner that will be valued by the scientific community.

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