Special Issue

Membrane Microdomains as Targets for New Therapies

Message from the Guest Editor

Complex amphiphilic lipids are functional components of membrane lipid domains, now known as lipid rafts. Lipid rafts are membrane portions developed by glycosphingolipids, sphingomyelin, ceramide, and dipalmitoylphosphatidylcholine. Lipid rafts contain a few proteins, receptors, and enzymes that are strategic for the correct physiology of cells. Within glycosphingolipids, gangliosides have been found to be associated with membrane lipid rafts, which are necessary for the activity of membrane receptors and membrane enzymes working as starting switches for the transduction of information through the plasma membrane or the beginning of functional processes. Several pathologies involve gangliosides that follow genetic derailments or enzyme kinetics, changing the incorrect quantity or incorrect positions of the results. Thus, incorrect or incomplete ganglioside–protein interaction is followed by a pathological condition or impairs a physiological function. Therefore, lipid rafts represent a starting opportunity for studies that aim to develop innovative and useful drugs for new treatments of neurodegenerative disease, tumors, and lysosomal storage diseases.

Guest Editor

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Biomedicines (ISSN 2227-9059) is an open access journal devoted to all aspects of research on human health and disease, the discovery and characterization of new therapeutic targets, therapeutic strategies, and research of naturally driven biomedicines, pharmaceuticals, and biopharmaceutical products. Topics include pathogenesis mechanisms of diseases, translational medical research, biomaterial in biomedical research, natural bioactive molecules, biologics, vaccines, gene therapies, cell-based therapies, targeted specific antibodies, recombinant therapeutic proteins, nanobiotechnology driven products, targeted therapy, bioimaging, biosensors, biomarkers, and biosimilars. The journal is open for publication of studies conducted at the basic science and preclinical research levels. We invite you to consider submitting your work to Biomedicines, be it original research, review articles, or developing Special Issues of current key topics.

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