Disease Markers

Hindawi

Special Issue on

Glycoproteins and Glycans Associated with Diseases

CALL FOR PAPERS

Protein glycosylation is one of the most common protein posttranslational modifications, and the quantitative analysis of glycoproteins has the potential to provide valuable information regarding biological functions and their association with diseases. Glycoprotein changes occur not only in protein abundance but also in the occupancy and different glycoforms of each glycosylation site during biological or pathological processes. Furthermore, disease-associated alterations in glycoproteins or their glycosylation can be exploited for disease diagnosis or treatment. Hence, the comprehensive characterization of glycoproteins is critical and should include quantitative analysis of glycans, glycosylation sites (glycosites), and glycan occupany at each glycosite. Although the elucidation of the glycome and glycoproteome is vastly incomplete, over the past decade, considerable progress has been made with respect to the development and application of analytical methods for the isolation, identification, and quantitation of glycans and glycoproteins. The pace of the development of glycoproteins and glycans associated with diseases can be greatly enhanced by the application of these methods.

We invite investigators to submit original research articles as well as reviews to this special issue of this journal on glycoproteins and glycans associated with diseases. The most recent impact factor for this journal is 2.137 according to the 2015 Journal Citation Reports released by Thomson Reuters in 2016.

Potential topics include but are not limited to the following:

- Recent advances in analytical methods for the isolation, identification, and quantification of glycosylation
- Methods for the large-scale measurement of protein glycosylation stoichiometry
- Glycoanalytical techniques that are optimized for biological matrices such as serum, urine, breast milk, tissue, and bronchoalveolar lavage
- Disease-associated alterations in protein glycosylation
- Development and validation of glycomic assays for use in clinical diagnostics
- Candidate glycosylation-related biomarkers for cancer, heart disease, age-related diseases, and healthy aging
- Biological roles of viral glycoproteins and their applications in diagnostics for infectious diseases
- Bioinformatic methods for the analysis of intact glycopeptides in complex biological samples

Authors can submit their manuscripts through the Manuscript Tracking System at http://mts.hindawi.com/submit/journals/dm/ggad/.

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