

Tissue Science and Molecular Biology, Stem Cells & Separation Techniques

June 06-07, 2019 | London, UK

Advances in separation science and bioinformatics for analysing glycosylation in manufacturing biologics

Pauline M Rudd

NIBRT Dublin, Ireland

Controlling glycosylation is a major issue for ensuring the safety and efficacy of Biologics. Traditional challenges for glycan analysis can be addressed by a range of technologies that are automated, high throughput, sensitive and quantitative. To give a more complete detailed analysis of intact glycoforms a combination of technologies such as LC/MS/CE are required. These enable the analysis of intact glycoproteins, glycopeptides, released glycans and glycolipid head groups. The bottleneck now lies in data interpretation so this talk focuses on the application of four

new software programmes: (i) GlycopeptideGraphMS (for the detailed identification of glycopeptides which is data base and platform independent) (ii) GlycoStore (an international resource including experimental glycan data bases and metadata) (iii) Glycoanalyser (software to aid interpretation of exoglycosidase array digestions) and (iv) MAGMap (a programme giving a confidence score to an assignment based on multiple attributes).

e: pauline.rudd@nibr.ie