Lecture Series: Utility of 2D NMR methods to probe physicochemical attributes of therapeutic monoclonal antibodies

Event Type: IBBR Seminar Series  
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Event Info

Date: Monday, March 25, 2019 - 11:00am to 12:00pm  
Location: Auditorium

Details

Speaker/Presenter: Subhabrata Majumder  
Speaker Affiliation: Pfizer

Event Description:

Therapeutic IgG monoclonal antibodies (mAbs) are often prone to various physicochemical liabilities which can affect their storage stability and overall drug product development. Some of these development limiting liabilities of mAbs include aggregation propensities, increased solution viscosities and non-enzymatic modifications like asparagine deamidation at high concentrations (>100mg/ml). While aggregation can potentially compromise safety of drug products, sequence modifications may compromise antigen binding and in turn affect the efficacy. In this talk, the utility of 2D NMR methods to probe higher order structure (HOS) fingerprints of mAbs that are diagnostic of these unique liabilities will be discussed. Such HOS fingerprinting could be used as a complimentary high resolution characterization tool (in conjunction with biophysical and analytical tools) for development of therapeutic mAbs or mAb like proteins.

Setup

IT Setup: Projector  
Laptop  
Streaming on YouTube  
Podium
Lavalier Microphone