Physicochemical and functional characterization of a bio-similar Bevacizumab

Ravish Patel
EPR Centre for Cancer Research & Bioinformatics Pvt. Ltd., India

Bevacizumab is a recombinant human IgG1 monoclonal antibody (mAb) glycoprotein consisting of 667 amino acids that are specific for tumor angiogenesis and thereby inhibition of tumor growth and metastasising. The biological activity and clinical profile of mAb therapeutics, including Bevacizumab, is influenced by their protein structure and glycosylation patterns, which can be affected by the expression system, cell culture conditions and purification process methodology. While clinical outcome cannot be attributed to many of the individual structural features that constitute a mAb, it is evident that detailed structural attribute analysis is necessary if structural contributions to function are to be comprehensively defined. Bevacizumab product quality data generated are presented here. These data reveal a consistent and tightly controlled profile for the product.

ravish@vitane.in