

Immunological aspects of formation of anti-drug antibodies against aggregated protein drugs

Melody Sauerborn

TNO Triskelion BV, The Netherlands

Immunogenicity of protein drugs is a major issue and in recent years it became clear that aggregation plays an important role in initiating an adverse immune response. Since then new analytical tools have been implemented in drug development processes to detect and characterize drug aggregates. Besides analytical tools, industry uses biological tools such as *in silico*, *in vitro* and *in vivo* to predict immunogenicity of protein drugs. This presentation gives an overview about why aggregates are immunogenic, how they trigger the immune response, how we can measure aggregates and their impact on the immune system and new methods on how to prevent aggregation.

Biography

Sauerborn spent most of her undergrad years in well-known institutes such as the Centers for Disease Control and Prevention in Atlanta to widen her knowledge in immunology. After acquiring her Masters in Science she joined the lab of Prof. Schellekens and Prof. Jiskoot, two experts in immunogenicity of protein drugs, to shed more light on the immunological aspects of antibody formation against aggregated protein therapeutics. After obtaining her PhD she started a spin-off, ADA InVivo BV, a biotech CRO in the field of drug safety. Currently she is a project leader at the bioanalysis and immunogenicity department at TNO Triskelion BV, a Dutch CRO.

m.sauerborn@ada-invivo.com