

TT 34: Standardization of bioassays for vaccines

TT lead: Jasja Wolthoorn



Background and Aim

- In contrast to the unwanted immunogenicity field, regulatory papers and recommendations on how to perform and validate assays for wanted immunogenicity of vaccines are not published yet.
- Aims:
 - Organize break-out session on wanted and unwanted immunogenicity (this conference)
 - Publish White Paper on how to perform and validate assays for the immunogenicity of vaccines

Team Members

- Kevin Maskell, Merck Millipore
- Dorte Kornerup Ditlevsen, Lundbeck
- Jenny Hendriks, Crucell
- Stefan Kostense, Crucell
- Arjen Companjen, Crucell
- Melody Sauerborn, TNO Triskelion
- Jasja Wolthoorn, TNO Triskelion

Ongoing Activities and Current Results

- Organization EBF 2012 break-out session on wanted and unwanted immunogenicity on Thursday 15th from 14.00-15.30h: welcome to join !
- Current team discussion on White Paper:

Immunogenicity assays for vaccines compared to related assay types:

Ligand-binding assays
for PK study



- Quantitative (mass/international units)
- True assay control
- Assay: sensitive, accurate, precise, specific.

Immunogenicity assays for
unwanted immunogenicity



- Qualitative/ semi-quantitative (titer)
- No true assay control
- Clinical relevance: Focus on lowest possible detection limit for safety

Immunogenicity assays for
vaccines



- Semi-quantitative (titer)
- True assay control not always available
- Clinical relevance: Focus on correlate of protection

Future Plans

- Publish White Paper on this topic in 2013:

Key terms: antibody serology assays, validation, correlate of protection, neutralization antibody assays, therapeutic vaccines, regulation.