

15th JBF Symposium



Challenges in Setting Cut Points for Anti-Drug Antibody (ADA) Assays

Day 2: Tuesday, 6th Feb 2024

9:00-11:00

@Miyako Messe, Kyoto, Japan

Environment around ADA cut points



Immunogenicity Testing of Therapeutic Protein Products — Developing and Validating Assays for Anti-Drug Antibody Detection

Guidance for Industry

U.S. Department of Health and Human Services
Food and Drug Administration
Center for Drug Evaluation and Research (CDER)
Center for Biologics Evaluation and Research (CBER)

January 2019
Pharmaceutical Quality/CMC

FPR: 5% SCP, 1% CCP/NADA, 0.1% TCP



Contents lists available at ScienceDirect

Journal of Pharmaceutical and Biomedical Analysis

journal homepage: www.elsevier.com/locate/jpba



Review

Recommendations for the validation of immunoassays used for detection of host antibodies against biotechnology products

Gopi Shankar^a, Viswanath Devanarayan^b, Lakshmi Amaravadi^c, Yu Chen Barrett^d, Ronald Bowsher^e,

Journal of Biopharmaceutical Statistics, 25: 269–279, 2015

ISSN: 1054-3406 print/1520-5711 online

DOI: 10.1080/10543406.2014.979196



Taylor & Francis
Taylor & Francis Group

STATISTICAL EVALUATION OF SEVERAL METHODS FOR CUT-POINT DETERMINATION OF IMMUNOGENICITY SCREENING ASSAY

Meiyu Shen, Xiaoyu Dong, and Yi Tsong

Office of Biostatistics/Office of Translational Sciences, Center for Drug Evaluation

The AAPS Journal, Vol. 19, No. 5, September 2017 (© 2017)

DOI: 10.1208/s12248-017-0107-3



CrossMark

Research Article

Recommendations for Systematic Statistical Computation of Immunogenicity Cut Points

Viswanath Devanarayan,¹ Wendell C. Smith,² Rocco L. Brunelle,² Mary E. Seger,^{2,3}
Kim Krug,^{2,3} and Ronald R. Bowsher^{2,3,4}

Ambiguity vs Scientific freedom



Number of baseline samples?

External collaborators A, B, C have slightly different approaches.

When/how to determine in-study / population cut points?

How to determine the outliers?

What is the patient population?

Can we keep the in-study / population cut points in the following studies?

The cut points too low?

Is it outlier or pre-existing ADA?

My project team concerns about the ADA incident rates too much.



Cut points are determined by measuring 'noise' which is heavily impacted by the selection of the baseline samples.

Statistics is not so easy for bioanalysts.

Is the approach acceptable by the HAs?

Title of presentations & Speakers



- **Practical advice on immunogenicity cut point evaluations and demo of an Excel-based tool**
/ Viswanath Devanarayan Ph.D. (Eisai US)
- **Establishing Appropriate Immunogenicity Assay Cut Points in Oncology Disease Indications**
/ Michael Partridge Ph.D.
(Regeneron Pharmaceuticals Inc.)