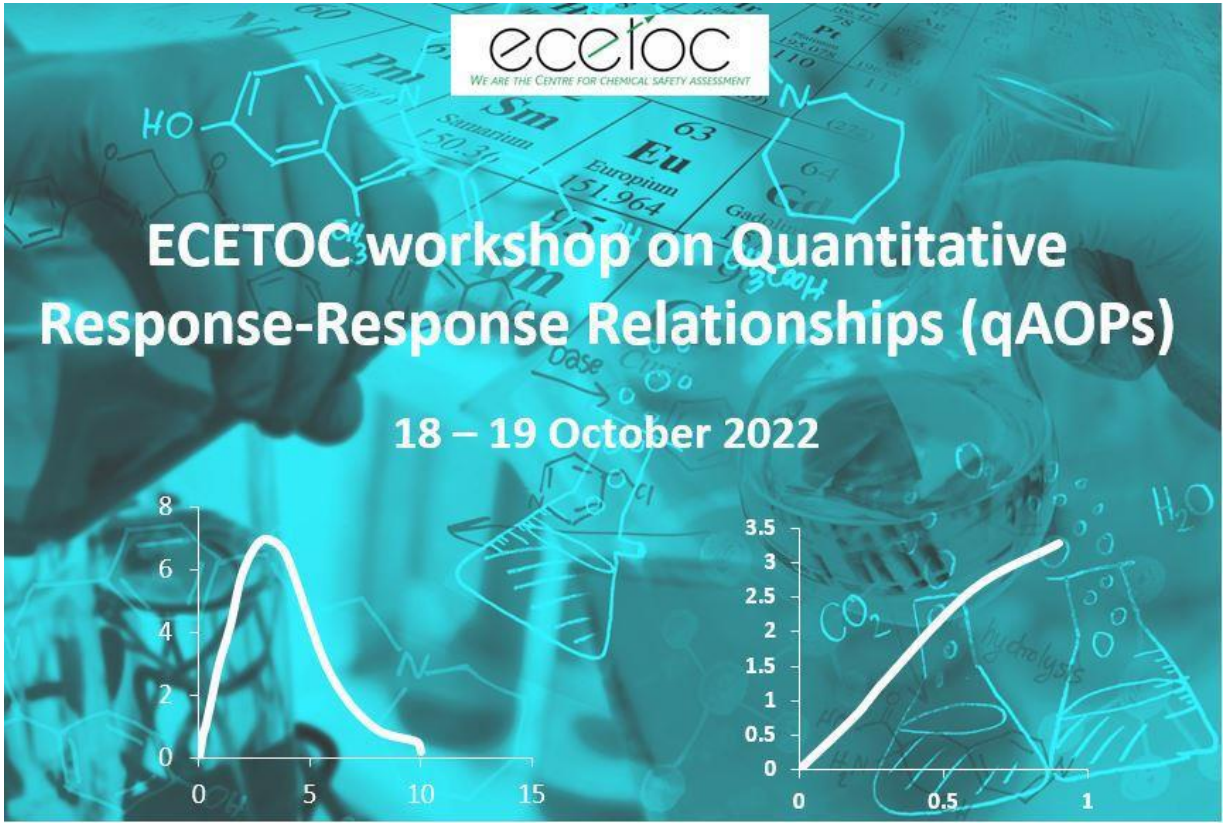
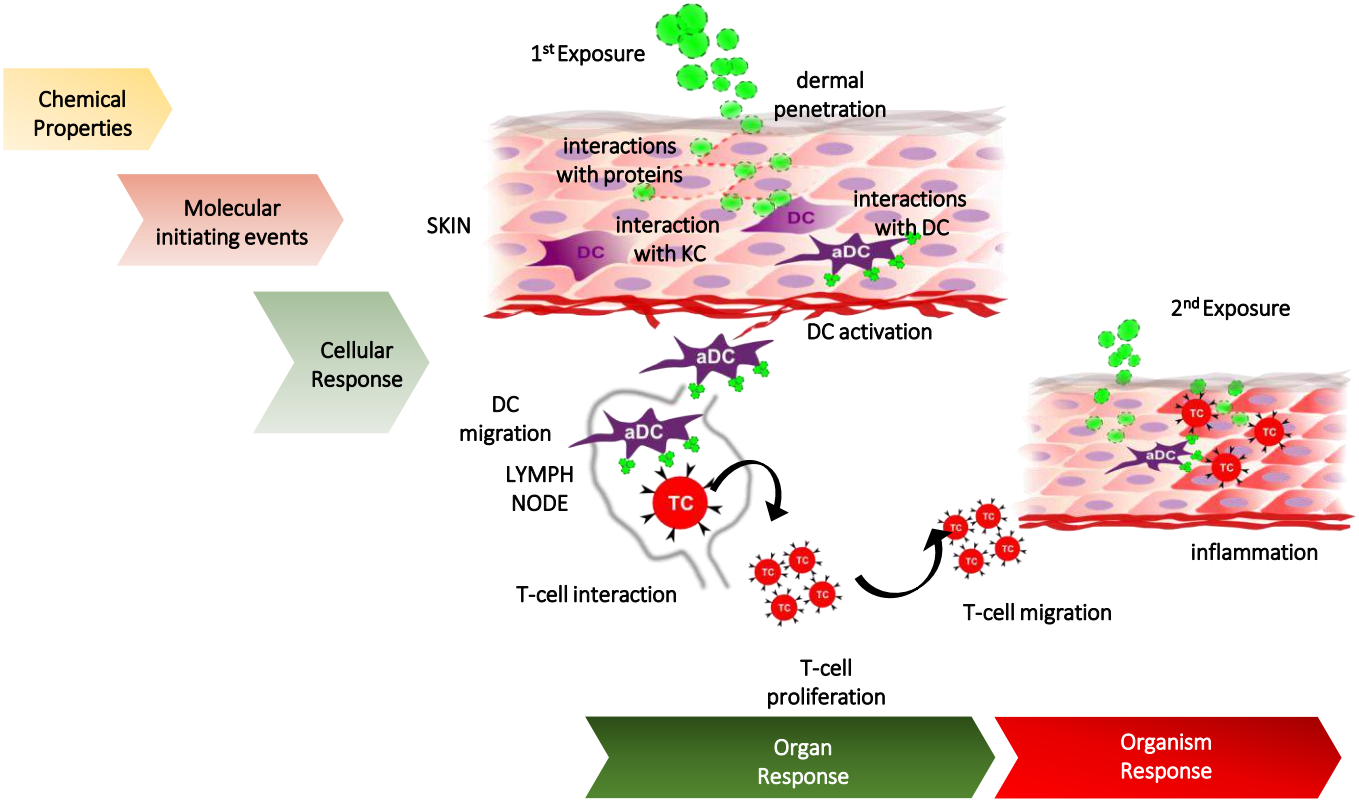
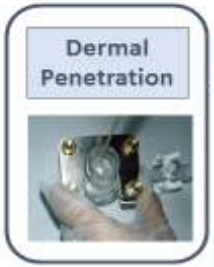
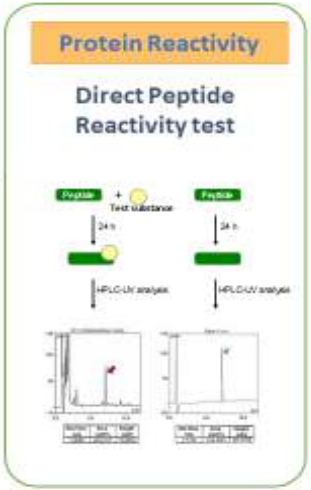

ecetoc
WE ARE THE CENTRE FOR CHEMICAL SAFETY ASSESSMENT
ECETOC workshop on Quantitative Response-Response Relationships (qAOPs)
18 – 19 October 2022
8
6
4
2
0
0
5
10
15
3.5
3
2.5
2
1.5
1
0.5
0
0
0.5
1

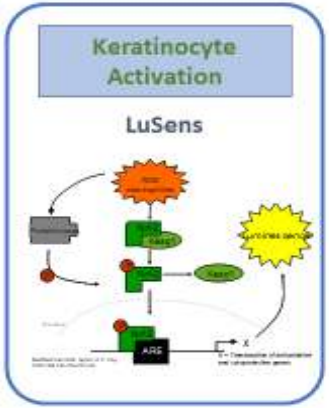
Skin allergies
the „Adverse Outcome Pathway“

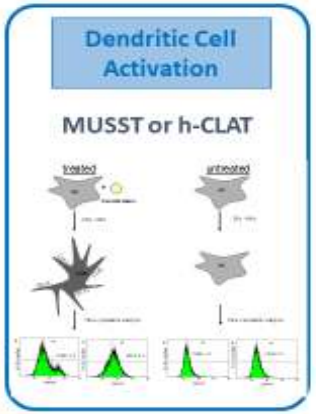


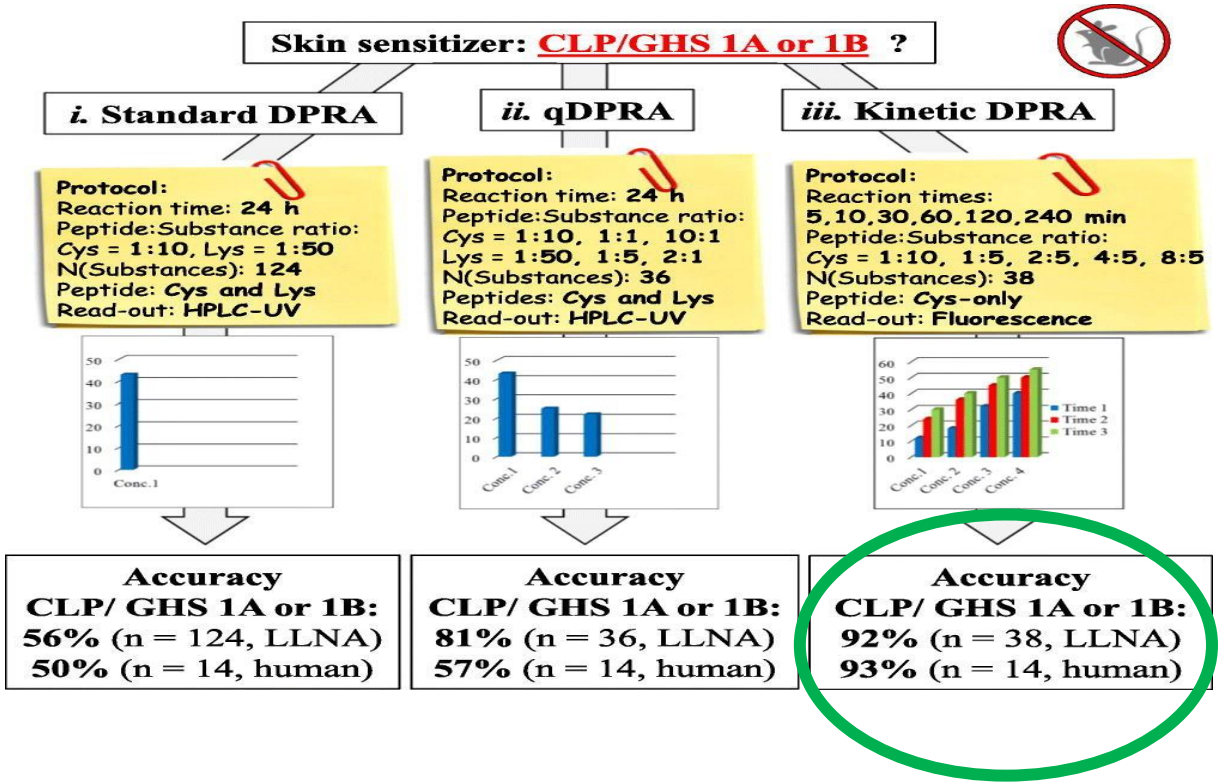
in vitro tests placed along the AOP….
Is it enough to get a 90 % accuracy ?





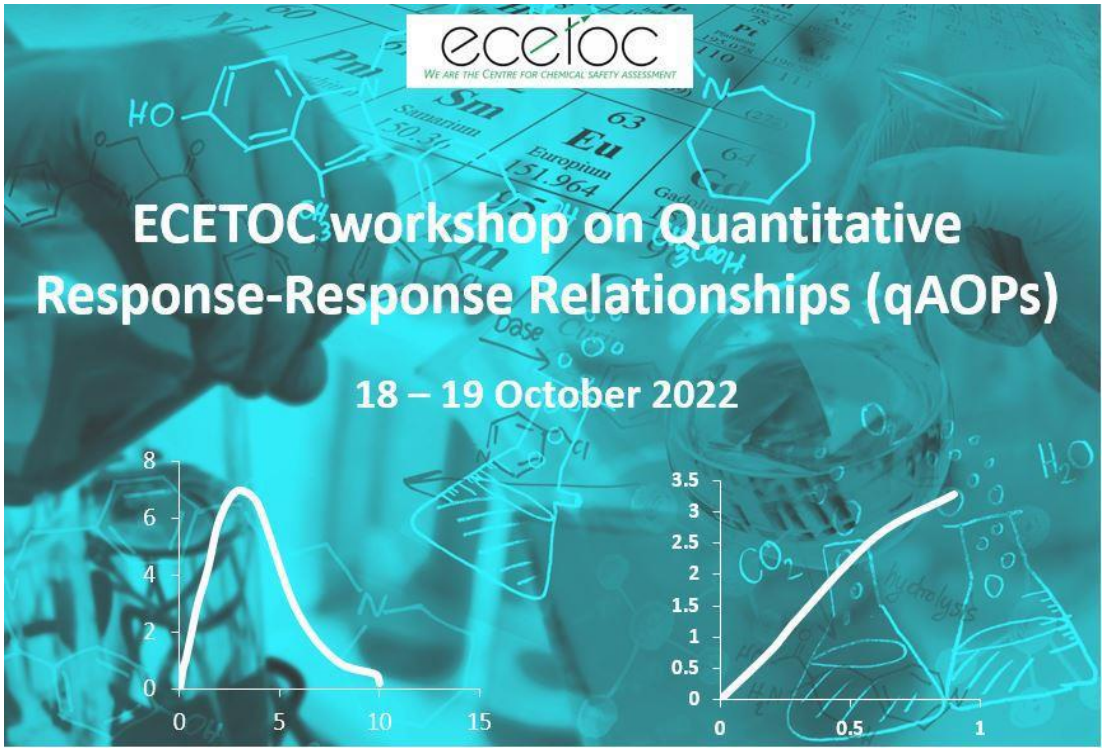






Prediction of skin sensitization potency sub-categories using peptide reactivity data
Britta Wareing et al Tox in vitro, 45, 2017

A sequence of connected ECETOC Workshops: intention, serendipity or “the time is ripe” ?




20 - 21 January 2022
ECETOC Workshop on omics threshold on non-adversity

Applying Genomics in Regulatory Toxicology – a report of the ECETOC workshop on Omics threshold on non-adversity

Timothy W Gant, Scott Auerbachs, Martin Von Bergen, Mounir Bouhifd, Phil Botham, Florian Caiment, Richard A. Currie, Joshua Harrill, Kamin Johnson, George Kass, Dongying Li, David Rouquie, Ben van Ravenzwaay, Frank Sistare, Tewes Tralau, Mark Viant, Jan Wilhem van de Laan, Carole Yauk

Target journal: Archives

Abstract

In a joint effort involving scientists from academia, industry and regulatory agencies ECETOC's activities in omics have led to the conceptual proposals for:

1.A framework that assures data quality for reporting and inclusion of omics data in regulatory assessments and

2.an approach to robustly quantify these data, prior to interpretation for regulatory use.

Workshop presentations demonstrated that 'omics data developed within robust frameworks for both scientific data generation and analysis can be used to derive a POD. The issue of noise in the data was discussed as an important consideration for identifying robust omics changes and derive a POD. As such variability or "noise" can comprise technical or biological variation within a dataset but should clearly be distinguished from homeostatic responses. Adverse Outcome pathways (AOPs) were considered to be a useful framework on which to assemble omics methods, and a number of case examples were presented in illustration of this point…..

Brussels 9 and 10 November 2021

Archives of Toxicology
https://doi.org/10.1007/s00204-022-03356-5
MEETING REPORTS

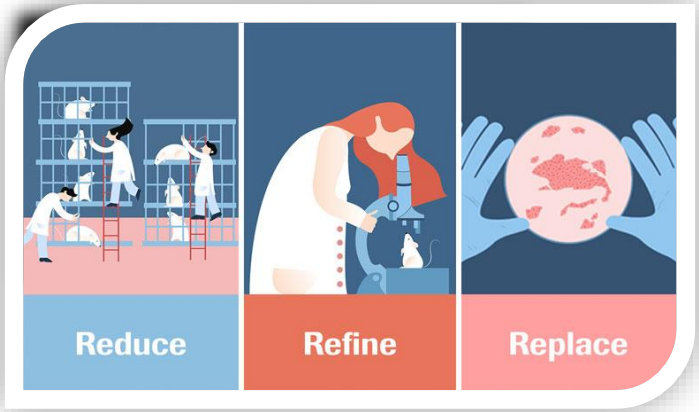
Towards best use and regulatory acceptance of generic physiologically based kinetic (PBK) models for in vitro-to-in vivo extrapolation (IVIVE) in chemical risk assessment

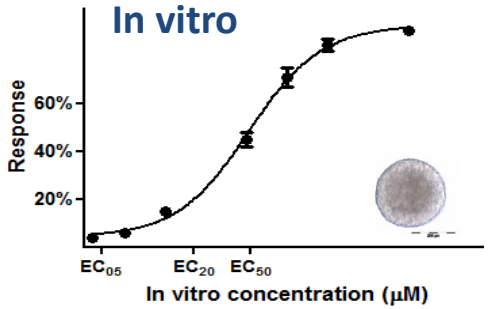
Abdulkarim Najjar1 · Ans Punt2 · John Wambaugh3 · Alicia Paini4 · Corie Ellison5 · Styliani Fragki6 · Enrica Bianchi7 · Fagen Zhang8 · Joost Westerhout9 · Dennis Mueller10 · Hequn Li11 · Quan Shi12 · Timothy W. Gant13 · Phil Botham14 · Rémi Bars15 · Aldert Piersma6 · Ben van Ravenzwaay16 · Nynke I. Kramer17

Abstract

With an increasing need to incorporate new approach methodologies (NAMs) in chemical risk assessment and the concomitant need to phase out animal testing, the interpretation of in vitro assay readouts for quantitative hazard characterisation becomes more important.……

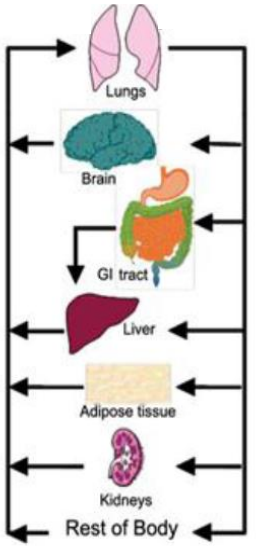
As PBKbased testing approaches evolve, it will become essential to standardise PBK modelling approaches towards a consensus approach that can be used in quantitative in vitro-to-in vivo extrapolation (QIVIVE) studies for regulatory chemical risk assessment based on in vitro assays. Based on results of an ECETOC expert workshop, steps are recommended that can improve regulatory adoption: (1)……



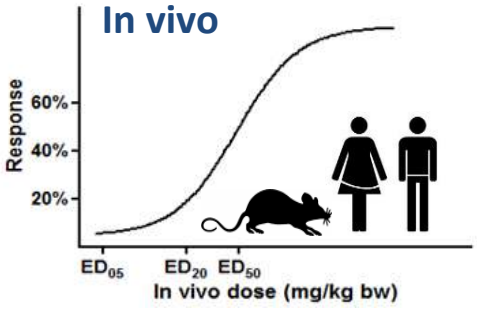


Hazard Identification

Physiologically based kinetic model

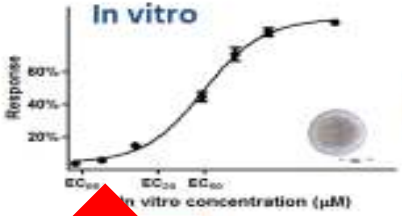


Quantitative In vitro-in vivo **extrapolation (QIVIVE)**



The 3 ingredients for the transition from in vivo to in vitro

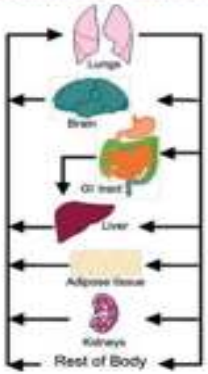
qAOP (WS # 3)



Hazard Identification

POD (WS # 2)

Physiologically based kinetic model



Quantitative In vitro-in vivo extrapolation (QIVIVE)

PBPK models (WS # 1)