



SEURAT-1 Symposium

**Painting the future animal-free safety assessment of
chemical substances: *Achievements of SEURAT-1***

4 December 2015, Brussels, Belgium



Cosmetics Europe
the personal care association

SEURAT-1 - Continuing the Successful Journey -

SEURAT-1 Symposium

Brussels, 4th December 2015

H. Wenck

Chair, Cosmetics Europe SCT Alternatives to Animal Testing

Agenda

- **SEURAT-1 results from an industry practitioner's perspective**
- **Cosmetics Europe AAT plans**

A.D. 2010 “Before SEURAT-1”

- All systemic toxicity evaluations had to rely fully on animal data
- Toxicity 21st Century Vision Publication
 - an inspiring conceptual paper, but without data ...
- Skepticism that systemic toxicity would ever be manageable without animal tests

The Industry Motivation for Starting SEURAT-1



- **Politically**

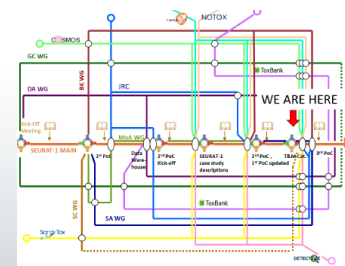
Demonstrating commitment to abolish animal toxicity testing, thus achieving “political good will”

- failed, bans went into force 2013 -

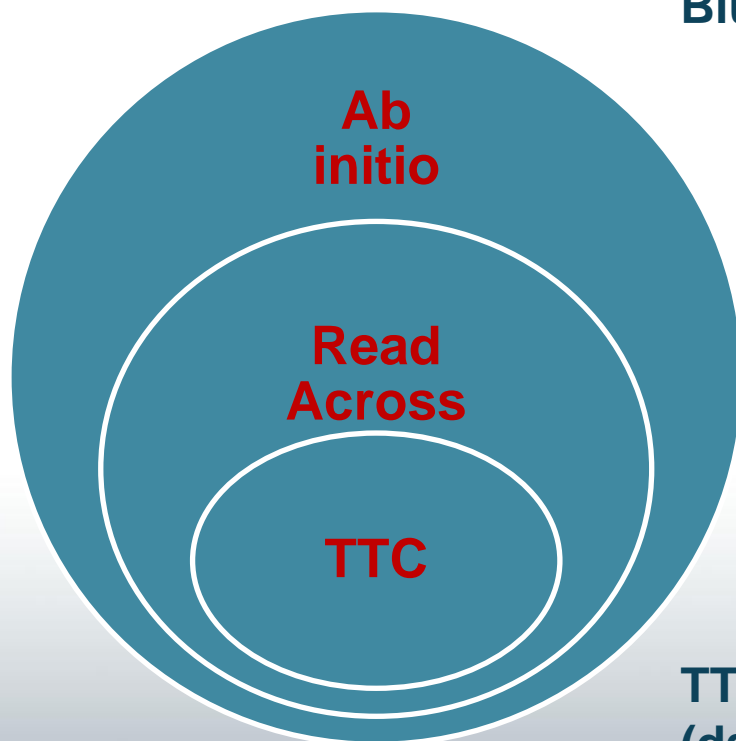
- **Scientifically**

Basic research to lay the grounds for animal free systemic toxicity safety assessment

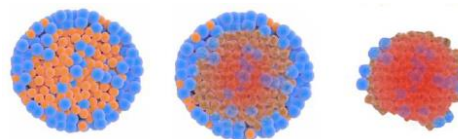
- **- overachieved, SEURAT-1 already delivered useful tools -**



Highlight Benefits of SEURAT-1



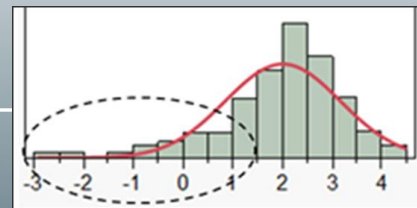
Blueprint tool box liver toxicity



Read Across execution
(strategy, workflow, templates, database))



TTC for cosmetic ingredients
(database, SCCS Notes of Guidance)



A.D. 2015 “After SEURAT-1”

- **Safety assessment for low exposure**
 - TTC for cosmetic chemicals
- **Safety assessment for related substances**
 - Viability of Read Across
- **Future Building Blocks**
 - Toxicity tools with particular focus on liver
 - Strategy for future research & safety assessment

Cosmetic Europe AAT Strategic Roadmap

2013

Skin Irritation
Eye Irritation
Genotoxicity
Acute Toxicity

2016

Sensitization
Systemic toxicity

2015

Eye Irritation
Genotoxicity

Skin sensitization
SEURAT-1 results

2020

Sensitization
Systemic Toxicity

Cosmetic Europe - Future AAT Program -



- **Consortium 2016-2020**
(Cosmetic industry & beyond)
- **Focus on applied research**
(Tools & approaches for safety assessment)
- **~ 19 Mill. investment**

Future Industry Strategy Systemic Toxicity

Exposure

- Consumer exposure scenarios
- Low exposure: internal TTC
- Tools for systemic bioavailability / ADME
- Pharmacokinetics modelling

⇒ **Dose at systemic target site**

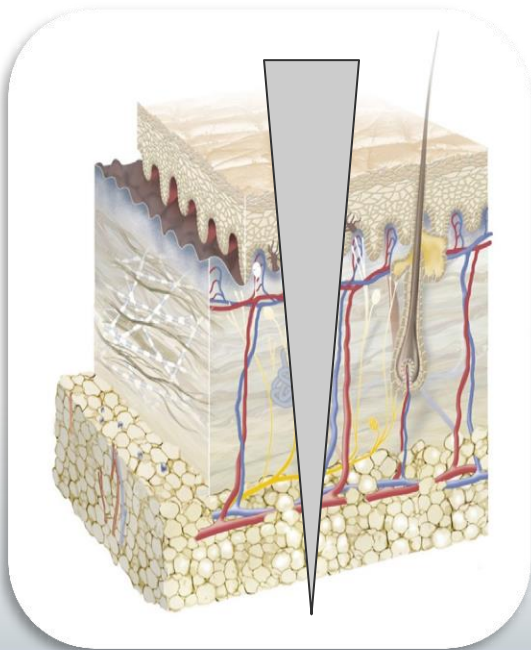
Hazard Identification

- Cheminformatics (→ hypothesis)
- Mechanism tool box / AOPs

⇒ **Dose response data**

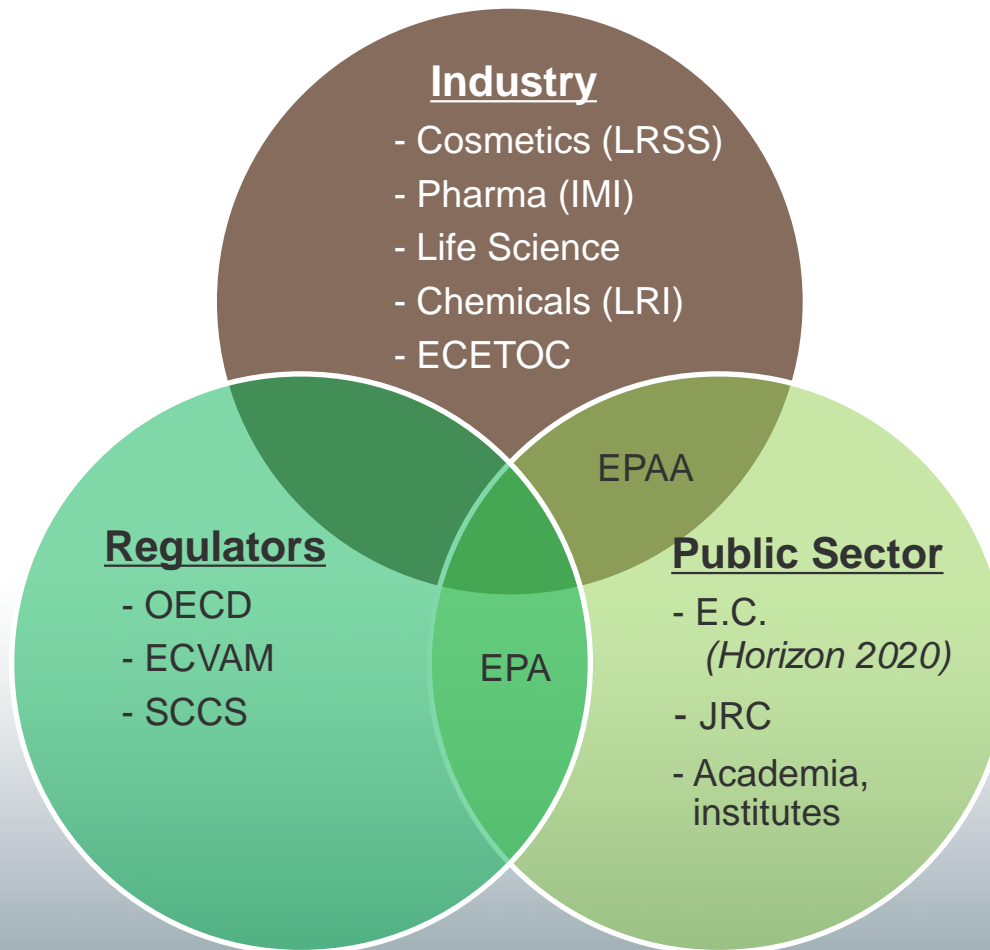
Safety Assessment

- Build capabilities in intern. TTC, read across, ab initio
- Combined evaluation of exposure & dose response via case studies



Systemic Toxicity Challenges

- Crucial Role of Collaboration -



Concluding Remarks

- **The 2013 bans substantially impede the ability of our industry to innovate**
 - Regularly lose existing ingredients, e.g. preservatives
 - Reduced innovation ability, cf. declining patent numbers
- **SEURAT-1 helps, but couldn't solve systemic toxicity**
- **Full non-animal safety assessment will take years**
- **The Cosmetic Industry is committed to the AAT case**

Thank you for SEURAT-1 !

Thank you for your attention !

**Let's continue to cooperate
in the great spirit of SEURAT-1 !**