



ANNUAL LECTURE – 16 NOV 2022

Safer chemicals and sustainable innovation will be achieved by regulatory use of modern safety science, not by more animal testing

JULIA FENTEM

HEAD OF UNILEVER'S SAFETY & ENVIRONMENTAL ASSURANCE CENTRE (SEAC)





SCIENCE IS A TEAM SPORT!

Thank You

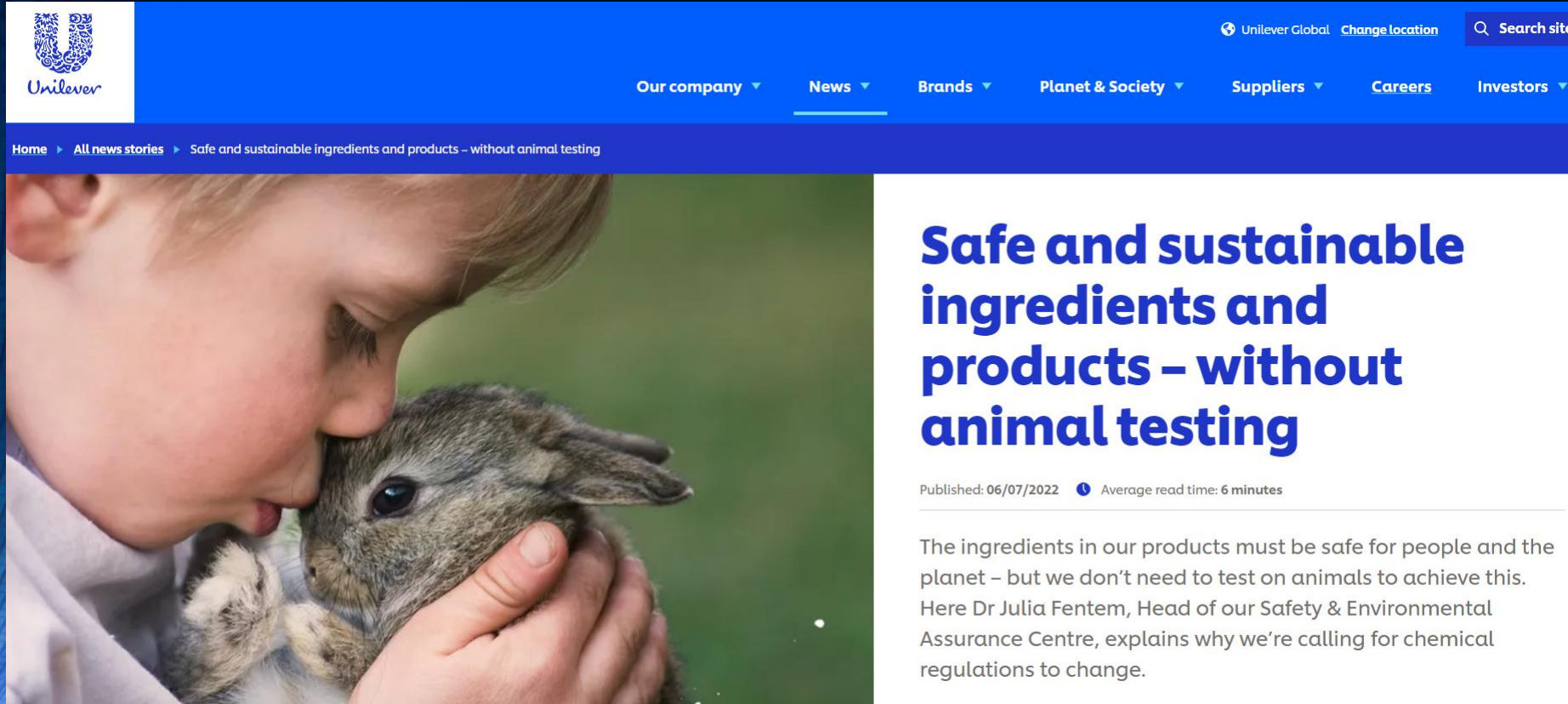
Gavin Maxwell, Carl Westmoreland, Gemma Shaw, Maria Baltazar, Paul Carmichael, Matt Dent, Steve Gutsell, Sarah Hatherell, Predrag Kukic, Hequn Li, Alistair Middleton, Iris Müller, Ramya Rajagopal, Georgia Reynolds, Andrew White & Unilever colleagues + collaborators



**We say use science.
Not animals.**



Our Ambition – Safe & Sustainable Chemicals without Animal Testing



The screenshot shows the Unilever website's news section. At the top left is the Unilever logo. The navigation bar includes 'Unilever Global', 'Change location', and a search bar. Below the navigation are menu items: 'Our company', 'News', 'Brands', 'Planet & Society', 'Suppliers', 'Careers', and 'Investors'. A breadcrumb trail reads: 'Home > All news stories > Safe and sustainable ingredients and products – without animal testing'. The main content area features a large image of a child kissing a rabbit. To the right of the image is the article title: 'Safe and sustainable ingredients and products – without animal testing'. Below the title, it says 'Published: 06/07/2022' and 'Average read time: 6 minutes'. The article text begins: 'The ingredients in our products must be safe for people and the planet – but we don't need to test on animals to achieve this. Here Dr Julia Fentem, Head of our Safety & Environmental Assurance Centre, explains why we're calling for chemical regulations to change.'



Advances in science and technology mean that we can generate much more relevant safety data to protect people and the environment using modern non-animal approaches.



**We say use science.
Not animals.**



Advocating for an animal-free science-based approach to improve chemical safety

1 SAFETY SCIENCE

Cosmetics
design-europe.com

THE LONG READ: IN CONVERSATION WITH UNILEVER SAFETY & ENVIRONMENTAL ASSURANCE CENTRE (SEAC) EXECUTIVES

The future of animal-free chemical testing? There's a 'big frustration' in the scientific community, say Unilever execs

By Kacey Cullinley

20-Oct-2021 - Last updated on 20-Oct-2021 at 09:54 GMT

**We say use science.
Not animals.**



2 CHEMICALS REGULATIONS



Law–Not Science–Impedes Shift to Non–Animal Safety Testing

June 18, 2021, 9:01 AM

Listen

Gary Marchant
Sandra Day O'Connor College of Law

Testing products on animals is slowly ending, but there are still some obstacles to completely ending the practice, explains Gary E. Marchant, a professor at the Sandra Day O'Connor College of Law at Arizona State University. He discusses three impediments, including legal barriers from federal regulatory agencies.

3 CHEMICALS POLICY

EU CHEMICALS POLICY 2030
BUILDING ON THE PAST, MOVING TO THE FUTURE
BRUSSELS, 27-28 JUNE 2019

High-Level Conference
EU Chemicals Policy 2030

Chemicals Strategy for Sustainability



The European Commission adopted its Chemicals Strategy for Sustainability on 14 October 2020. The strategy is part of the EU's zero pollution ambition – a key commitment of the European Green Deal – and aims to better protect citizens and the environment from harmful chemicals, and boost innovation by promoting the use of safer and more sustainable chemicals.

Common Framework: Framework Outline Agreement

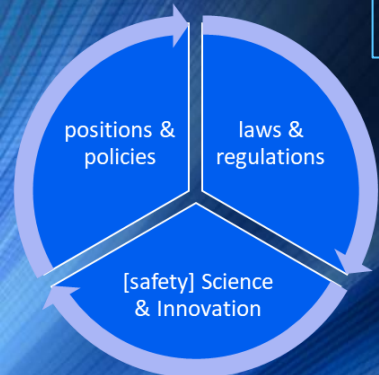
Section A: What we are talking about

1. Policy area

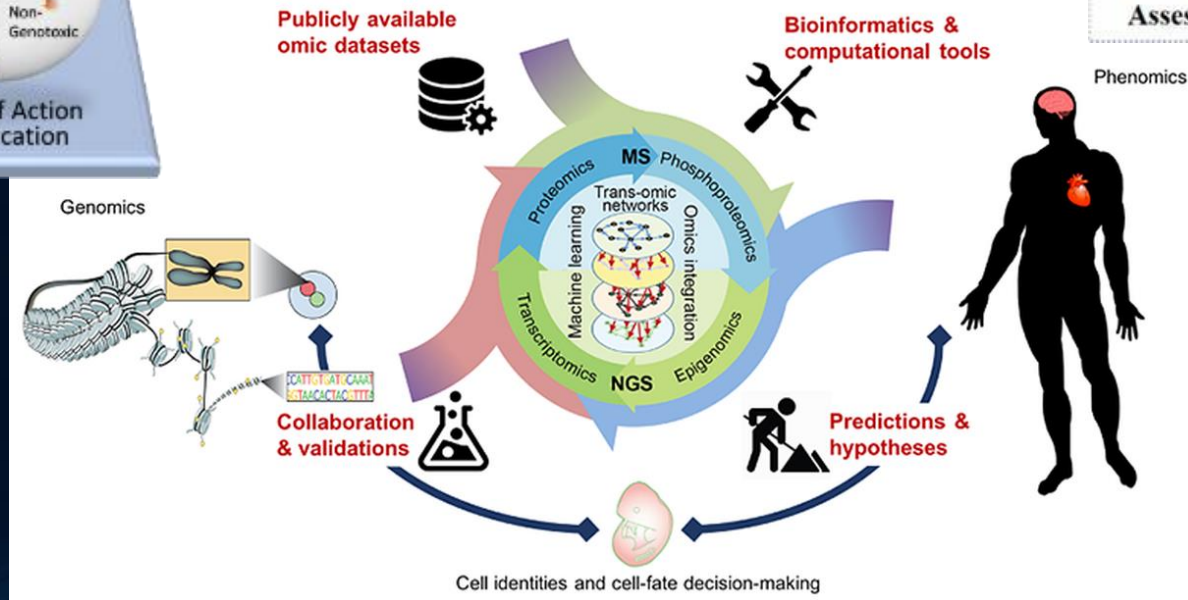
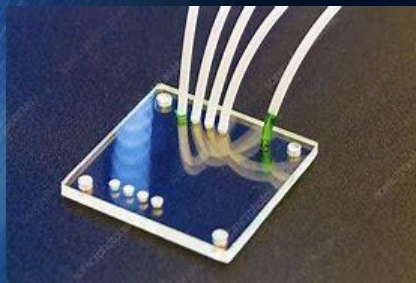
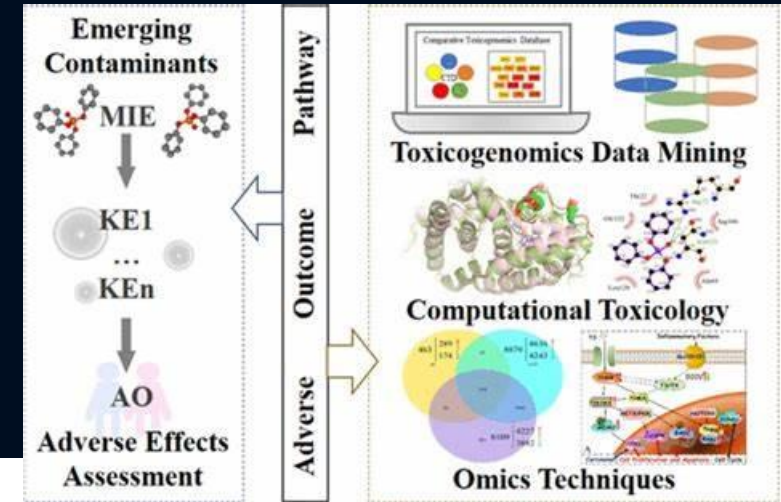
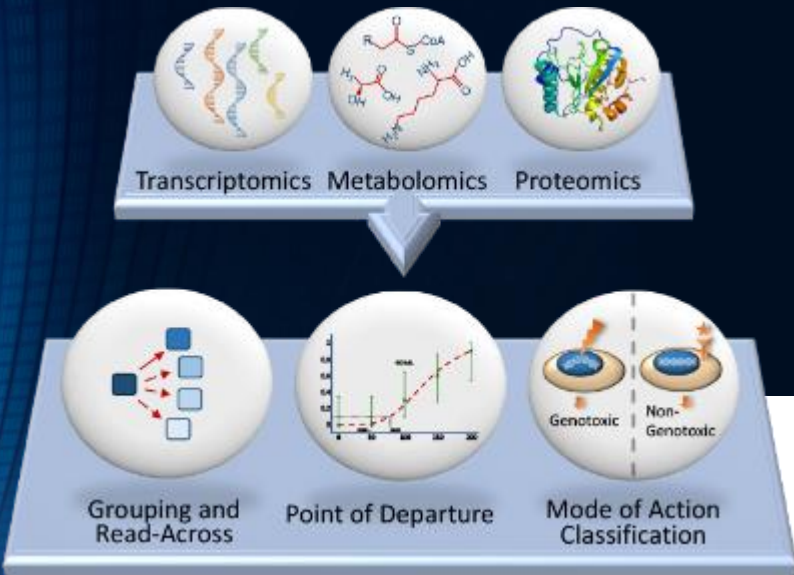
1.1. The policy area under consideration is chemicals regulation, including pesticides. For the purposes of this

DEFRA confirms fresh delay to publication of Chemicals Strategy

DEFRA has told ENDS that the publication of its serially-delayed Chemicals Strategy has been put back again, though roundtable talks will begin next month.



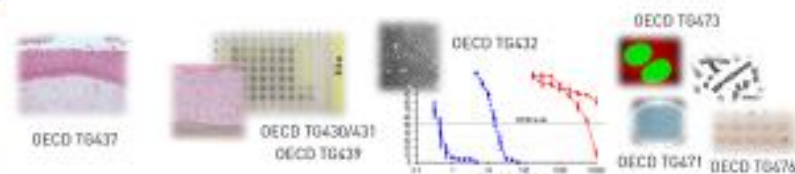
A 21st Century non-animal toolbox - exciting scientific developments accelerated availability of novel technologies & models



Assessing Consumer Safety of Cosmetics Ingredients without new animal testing (EU Cosmetic Products Regulation)

Is the consumer exposure safe? A tiered approach is routine:

- Use all available safety data on the ingredient
 - clinical, epidemiological, animal (if dates permit), *in vitro*, etc.
- Exposure-based waiving (e.g. TTC – toxicological threshold of concern)
- *In silico* predictions
- History of safe use
- Read across from comparable ingredients
- Use of existing OECD *in vitro* approaches
- Next Generation Risk Assessment (NGRA)



ATLA 32, 617-626, 2004

Comment

The Feasibility of Replacing Animal Testing for Assessing Consumer Safety: A Suggested Future Direction

Julia Fentem, Mark Chamberlain and Bart Sangster

Safety & Environmental Assurance Centre, Unilever Colworth Laboratory, Sharnbrook, Bedfordshire, UK



Contents lists available at ScienceDirect

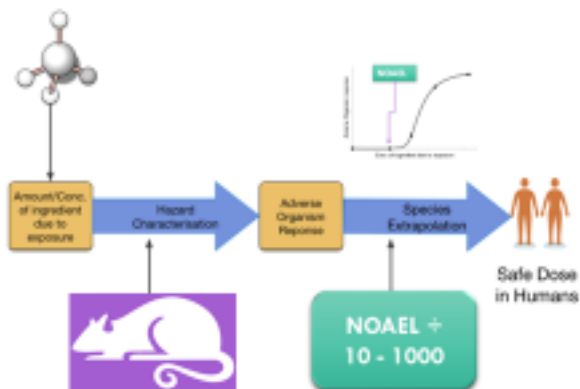
Computational Toxicology

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

Principles underpinning the use of new methodologies in the risk assessment of cosmetic ingredients

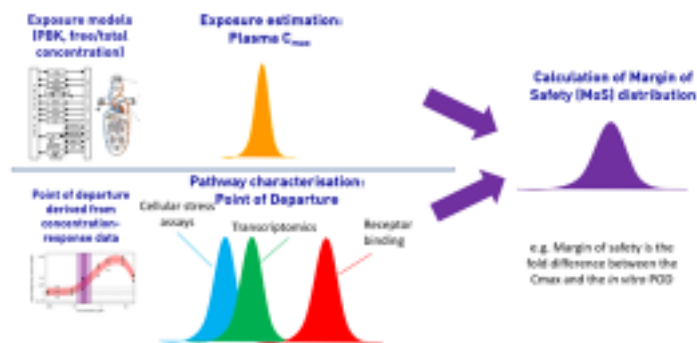
Matthew Dent^{a,*}, Renata Teixeira Amaral^b, Pedro Amores Da Silva^b, Jay Ansell^c, Fanny Boislevé^d, Masato Hatao^e, Akihiko Hirose^f, Yutaka Kasai^g, Petra Kern^h, Reinhard Kreilingⁱ, Stanley Milstein^j, Beta Montemayor^k, Julcemara Oliveira^l, Andrea Richarz^m, Rob Taalmanⁿ, Eric Vaillancourt^o, Rajeshwar Vermaⁱ, Nashira Vieira O'Reilly Cabral Posada^l, Craig Weiss^p, Hajime Kojima^f

'Traditional' Risk Assessment



'Next Generation' Risk Assessment

based on advances in human biology and in vitro/computational modelling



SCCS/1628/21



Scientific Committee on Consumer Safety
SCCS

THE SCCS NOTES OF GUIDANCE FOR THE TESTING OF
COSMETIC INGREDIENTS AND THEIR SAFETY
EVALUATION
11TH REVISION



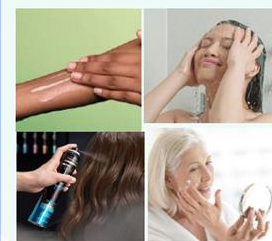
The SCCS adopted this guidance document at its plenary meeting on 30-31 March 2021

Next Generation Risk Assessment (NGRA)

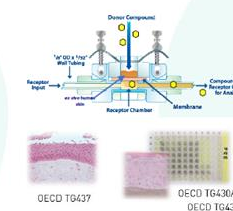
NGRA is defined as an exposure-led, hypothesis-driven risk assessment approach that integrates New Approach Methodologies (NAMs) to assure safety without the use of animal testing



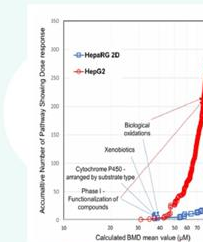
Next Generation Risk Assessment is highly interdisciplinary



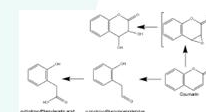
Risk assessment



Biology



Bioinformatics



Chemistry

$$y_t = \begin{bmatrix} w_{g,1}^{(1)} & \dots & w_{g,1}^{(m)} \\ \vdots & & \vdots \\ w_{g,n_y}^{(1)} & \dots & w_{g,n_y}^{(m)} \end{bmatrix} \begin{bmatrix} \phi_g^{(1)}(x_t, u_t) \\ \vdots \\ \phi_g^{(m)}(x_t, u_t) \end{bmatrix} + e_t$$

Mathematical and statistical modelling

[Unilever, Safety & Environmental Assurance Centre \(SEAC\) – YouTube US SoT March 2020 – NGRA concept & approach](#)



[Unilever - Safety & Environmental Assurance Centre at Unilever Global IP Limited – YouTube US SoT March 2022 – integrating NAMs in NGRA for consumer safety decisions](#)

Using NGRA for assessing cosmetics safety

Dent et al (2018), Computational Toxicology, 7, 20-26

4 Main overriding principles:

- » The overall goal is a human safety risk assessment
- » The assessment is exposure-led
- » The assessment is hypothesis-driven
- » The assessment is designed to prevent harm



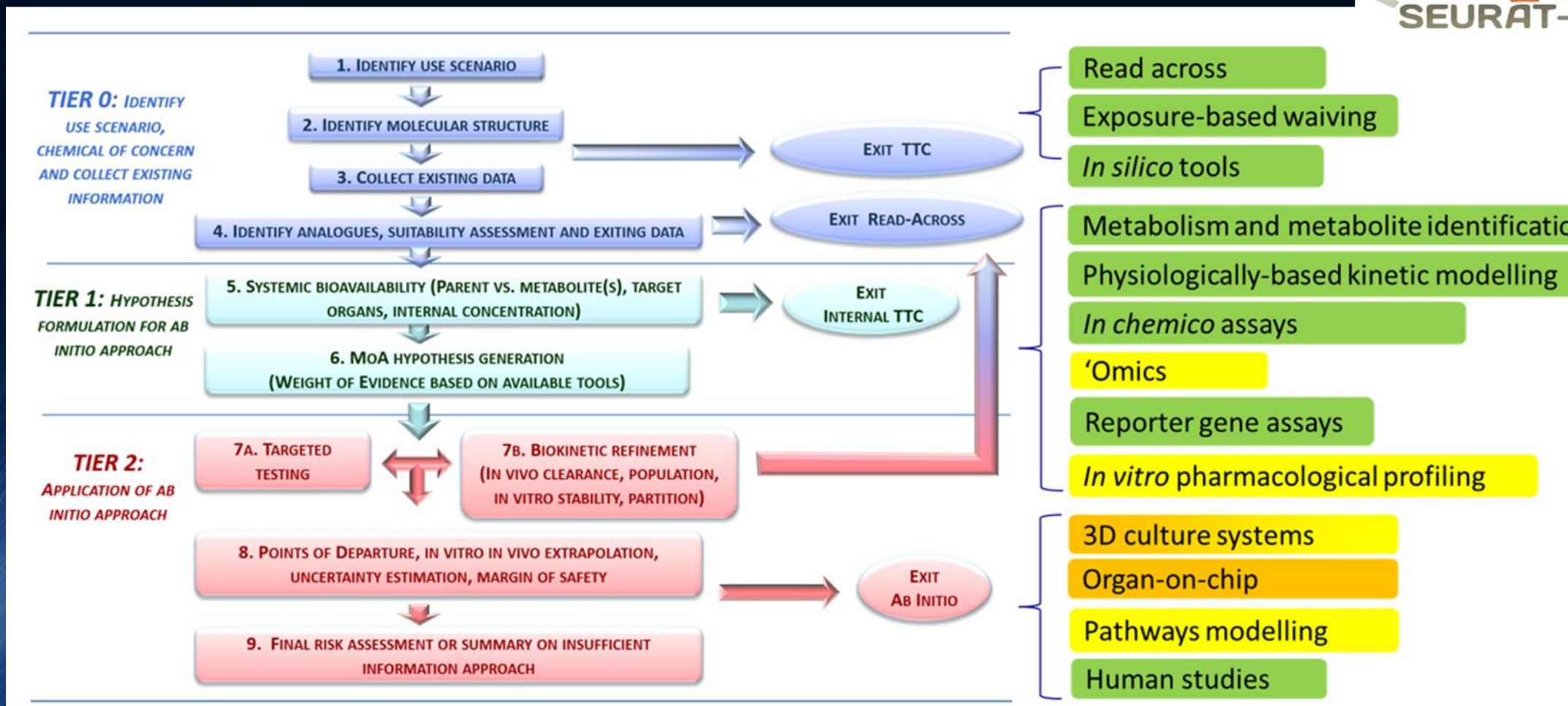
3 Principles describe how a NGRA should be conducted:

- » Following an appropriate appraisal of existing information
- » Using a tiered and iterative approach
- » Using robust and relevant methods and strategies

2 Principles for documenting NGRA:

- » Sources of uncertainty should be characterized and documented
- » The logic of the approach should be transparently documented

Tiered testing and human health assessment approach



Our NGRA toolbox for systemic effects – key tools



PBK Modelling

Face Creams

Clearance
 In silico 98.57 L/h
 In vitro 929 L/h

Conc. (µg/mL)

Toxicology in Vitro (2020), 63, 104746

In vitro pharmacological profiling

PERSPECTIVES

Reducing safety-related drug attrition: the use of in vitro pharmacological profiling

euoifins | Cerep

Transcriptomics

- Use of full human gene panel - 21k
- 24 hrs exposure
- 7 concentrations
- 3 cell lines HepG2/ HepaRG/ MCF7
- 3D HepaRG spheroid

Accumulative Number of Pathway Showing Dose response

Calculated BMD mean value (µM)

Biological oxidations
 Xenobiotics
 Cytosolic P450 - engaged by substrate type
 Phase I - Functionalization of compounds

BMDexpress 2

Cellular Stress Pathways

13 chemicals, 36 Biomarkers; 3 Timepoints; 8 Concentrations; ~ 10 Stress Pathways

cyprotex

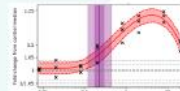
Toxicol Sci (2020), 176, 11-33

Integrating these approaches to make safety decisions

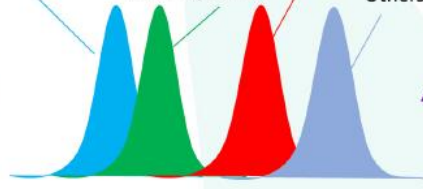
Hazard identification and characterisation of ingredients



Point of departure derived from concentration-response data



Cellular stress assays
Transcriptomics
Receptor binding
Others



Risk Assessment

Calculation of Bioactivity Exposure Ratio (BER)

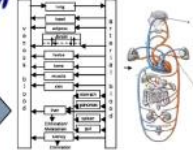
The BER/MoE is defined as the ratio of the PoD and the relevant exposure estimate

Consumer Exposure characterisation



Skin pen

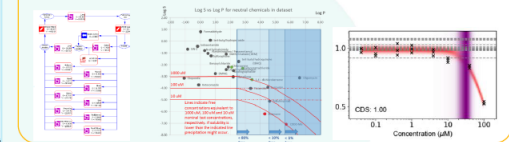
Exposure models (PBK, free/total concentration)



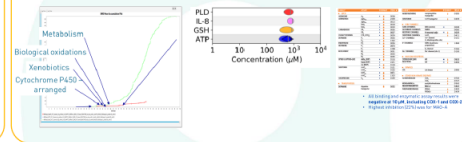
Exposure estimation: Plasma C_{max}



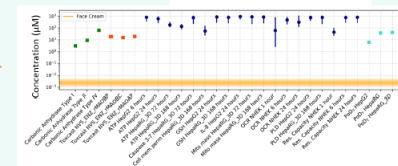
PBK models Free concentration Conc. Resp. models



HTTr CSP IPP



Bioactivity exposure ratio

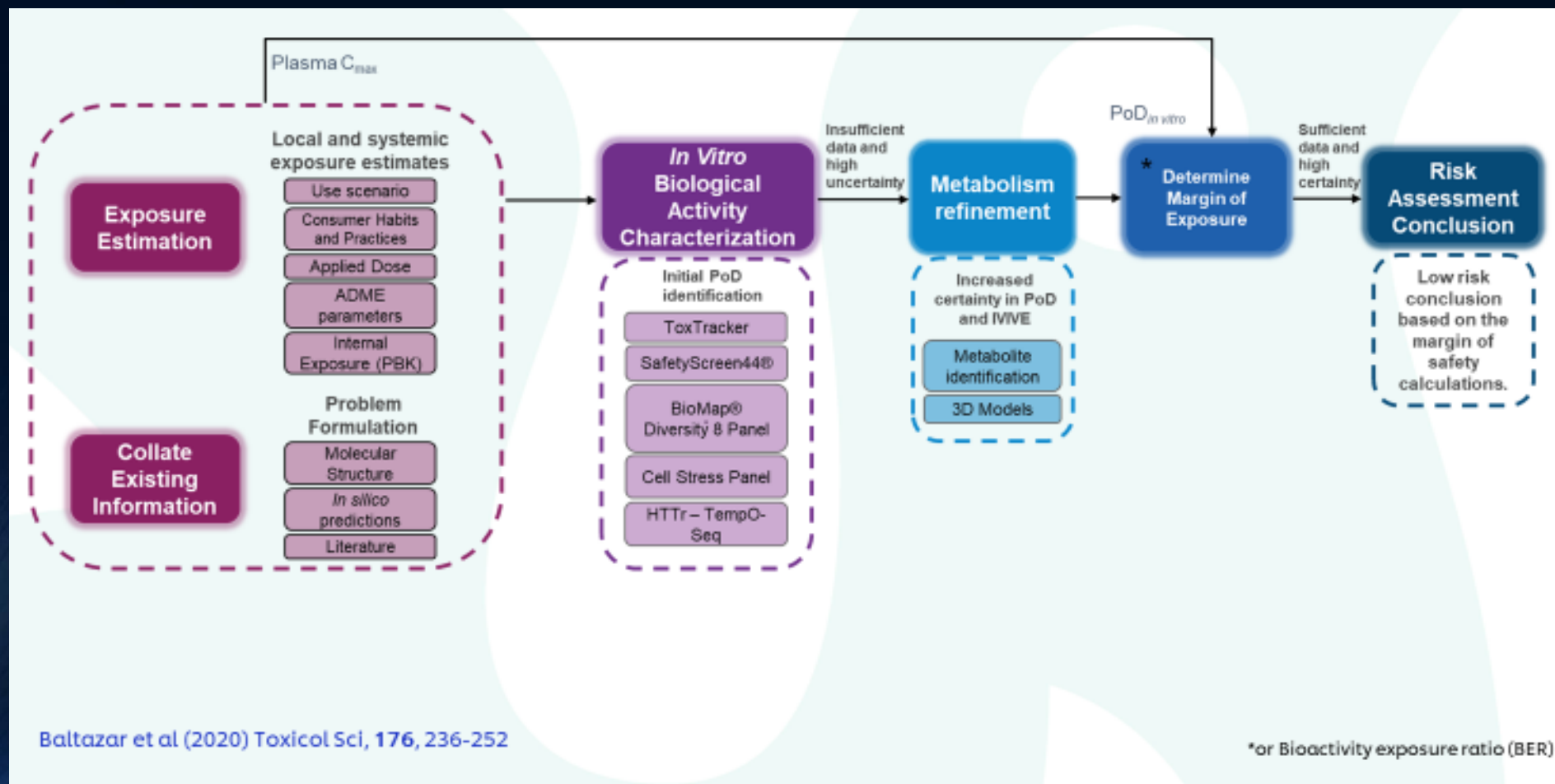


Inform safety decision

HTTr: High-throughput transcriptomics CSP: Cell Stress Panel IPP: In vitro pharmacological profiling



NGRA – case study workflow for systemic effects

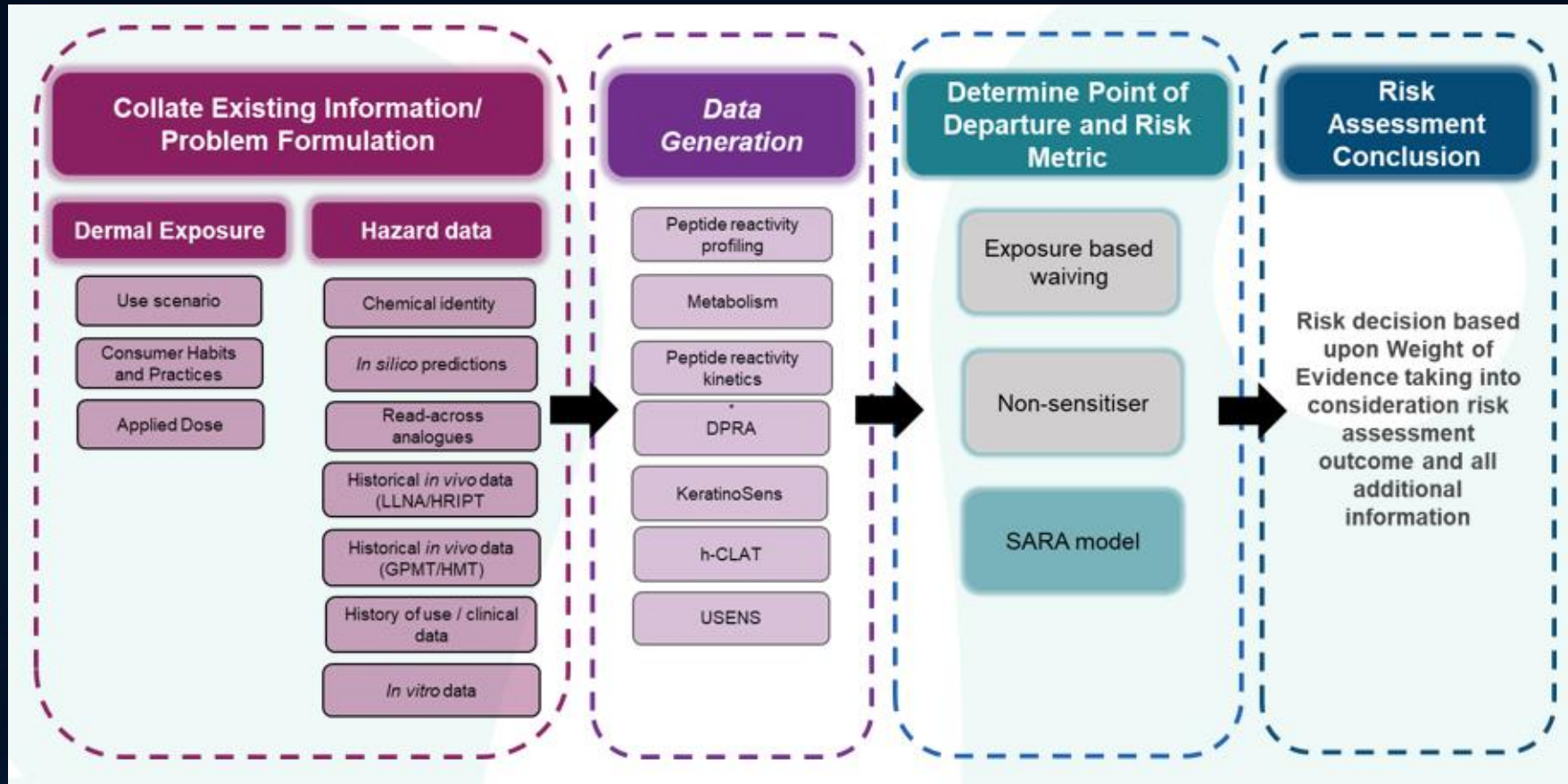


Baltazar et al (2020) Toxicol Sci, 176, 236-252

*or Bioactivity exposure ratio (BER)



NGRA – framework for skin allergy



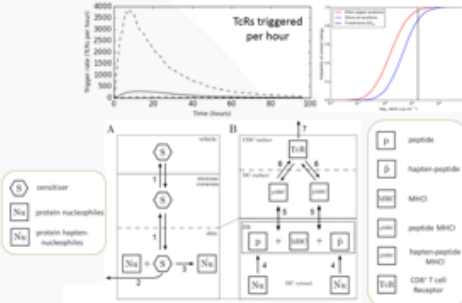
Reynolds *et al* (2021) *Reg Tox Pharmacol*, **127**, December 2021, 105075

Gilmour *et al* (2022) *Reg Tox Pharmacol* **131**, June 2022, 105159

Transforming our approach for skin allergy risk assessment (SARA)



Entelos model
Maxwell G. & MacKay C. 2008.

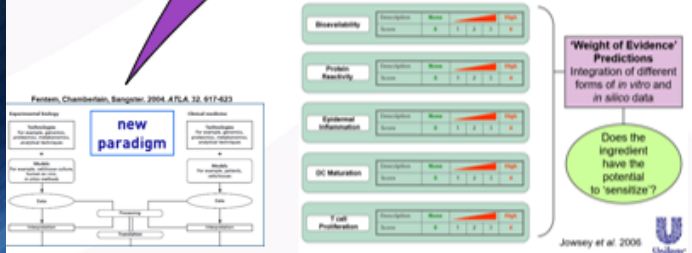


SARA TKTD qAOP model
Mackay et al. 2013

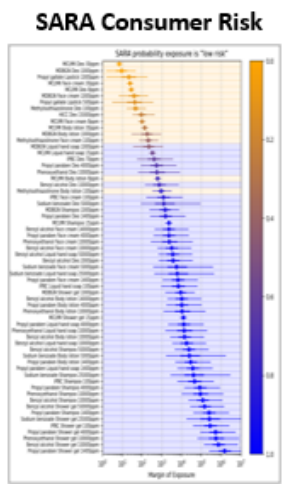
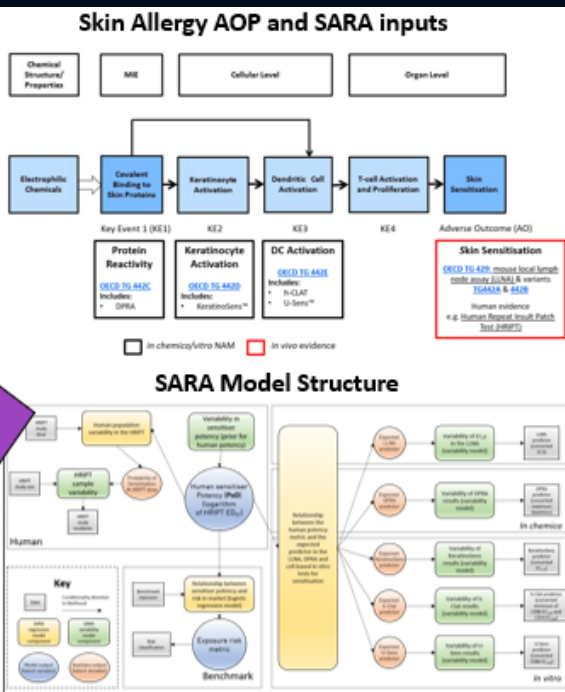
T cell Forum
Kimber et al. 2012



Integration of non-animal data
Jowsey et al. 2006

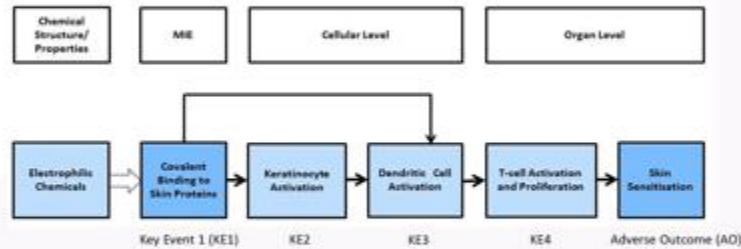


SARA Bayesian Model
Reynolds et al. 2019

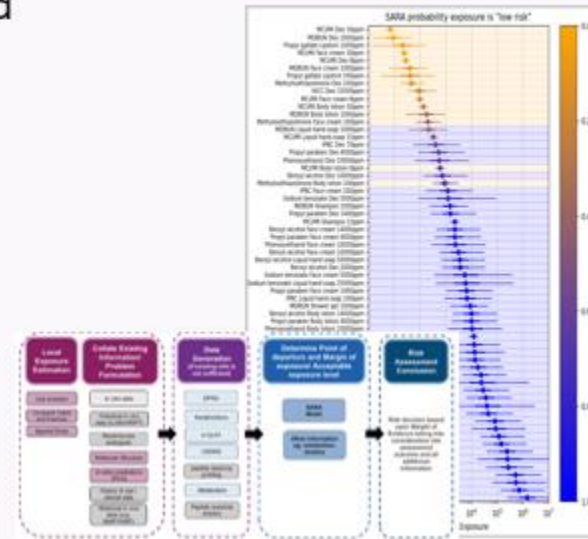
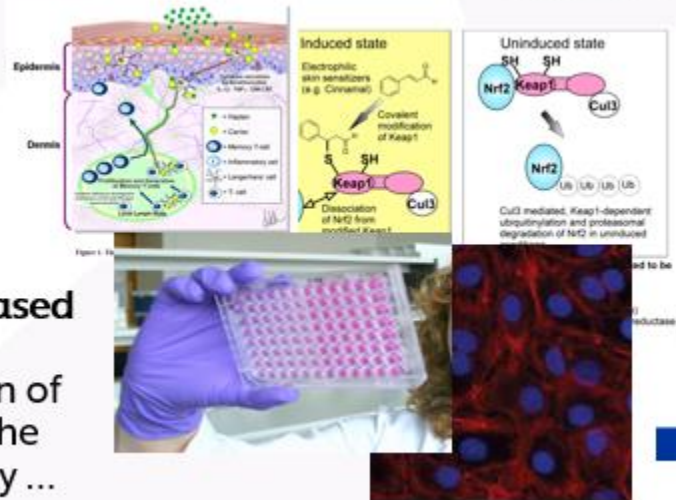


Non-animal strategy for skin allergy risk assessment (SARA)

Determining the **biological pathway** behind the adverse skin allergy reaction ...



Developing **cell-based** experiments to measure activation of different parts of the biological pathway ...



Unilever's **SARA Model** – developed as a computational approach to integrate information from the historical data and various cell-based experiments ...



SARA Model published and collaboration with US Gov. group (NICEATM) to adapt the model for **regulatory use**.

Developing a **risk assessment framework** ...



Highlights

- Application of new approach methodologies in a next generation risk assessment framework for skin allergy.
- Use of the skin allergy risk assessment (SARA) model, a defined approach for potency and risk assessment of skin sensitizers.
- Skin sensitisation risk assessment case studies using new approach methodologies.

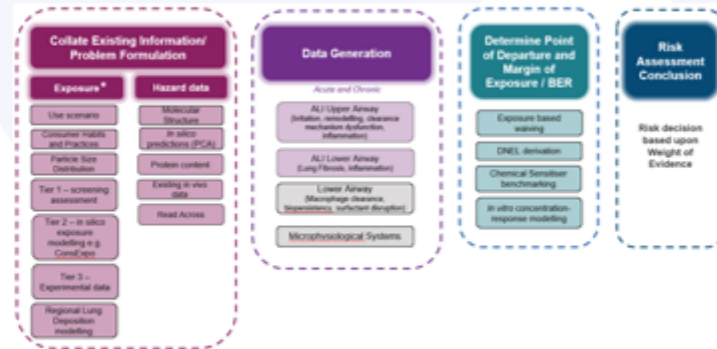
Unilever NGRA frameworks for using NAMs for consumer safety decisions

Developmental & Reproductive



Rajagopal et al (2022) *Frontiers in Toxicology*, doi: 10.3389/ftox.2022.838466

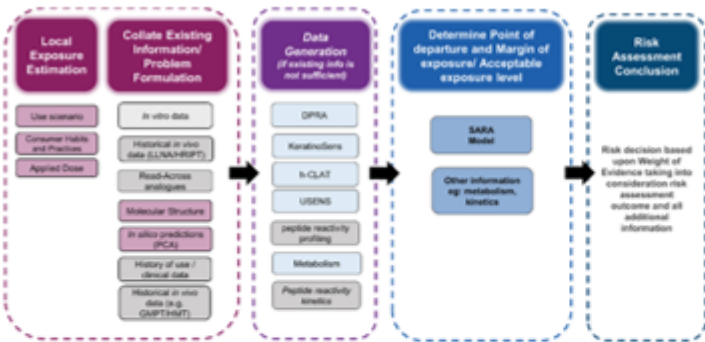
Inhalation



Ongoing Evaluations - Unilever working with government agencies

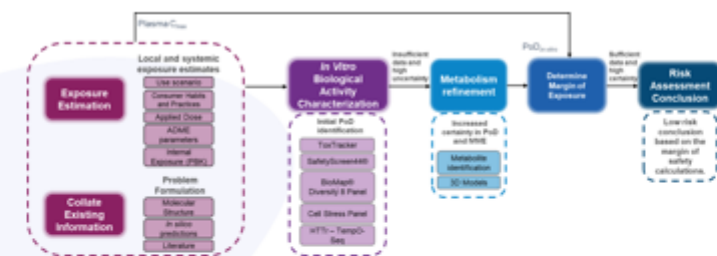


Skin Sensitisation



Reynolds et al (2021) *Reg Tox Pharmacol*, 127, 105075

Systemic



Baltazar et al (2020) *Toxicol Sci*, 176, 236-252

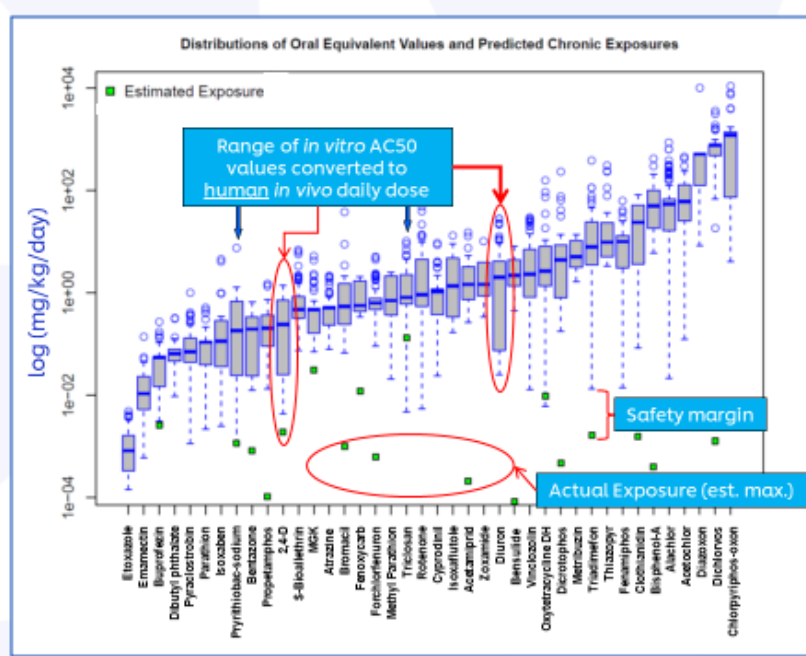
Reference: Reynolds et al, Probabilistic prediction of human skin sensitizer potency for use in next generation risk assessment. *Comput Toxicol* 9:36-49. <https://doi.org/10.1016/j.comtox.2018.10.001>

Aim of NGRA is protection of health, *not* prediction of animal data

Not a prescriptive set of tools, but driven by the safety assessment

Exposure tools to inform level of Systemic Exposure

Bioactivity tools to provide Points of Departure: *Bioactivity - Exposure Ratio*



Graph from Rusty Thomas EPA, with thanks. Rotroff et al (2010) Toxicological Sciences, 117, 348-358

The hypothesis underpinning this NGRA is that if no bioactivity is observed at consumer-relevant concentrations, there can be no adverse health effects.

At no point does NGRA attempt to predict the results of high dose toxicology studies in animals.

NGRA uses new exposure science and understanding of human biology.

Hatherell et al (2020) Toxicological Sciences, 176, 11-33

Moxon et al (2020) Toxicology in Vitro, 63 104746

Li et al (2022) Toxicol. Appl. Pharmacol., 442 115992



Interpreting NAMs data for assessing chemical safety: Bioactivity – Exposure Ratio (BER) approach

OXFORD SOT Society of Toxicology academic.oup.com/toxsci Tox Spotlight article TOXICOLOGICAL SCIENCES, 173(1), 2020, 202–225 doi: 10.1093/toxsci/kfz011 Advance Access Publication Date: September 18, 2019 Research Article

Utility of *In Vitro* Bioactivity as a Lower Bound Estimate of *In Vivo* Adverse Effect Levels and in Risk-Based Prioritization

Katie Paul Friedman ¹, ² Matthew Gagne, ³ Lit-Hsin Loo, ⁴ Panagiotis Karamertzanis, ⁵ Tatiana Netzeva, ⁶ Tomasz Sobanski, ⁷ Jill A. Franzosa, ⁸ Ann M. Richard, ⁹ Ryan R. Lougee, ¹⁰ Andrea Gissi, ¹¹ Jia-Ying Joey Lee, ¹² Michelle Angrish, ¹³ Jean Lou Dorne, ¹⁴ Steven Foster, ¹⁵ Kathleen Raffaele, ¹⁶ Tina Bahadori, ¹⁷ Maureen R. Gwinn, ¹⁸ Jason Lambert, ¹⁹ Maurice Whelan, ²⁰ Mike Rasenberg, ²¹ Tara Barton-Maclaren, ²² and Russell S. Thomas ²³

ASTAR HIPPTox EC10 (µM) ToxCast ACS0 (µM)

Apply high-throughput toxicokinetics (httk) to get mg/kg-bw/day

Exposure 95th

Bioactivity-exposure ratio

POD_{NAM} 95th 50th

POD_{trad} : POD_{NAM} ratio

POD_{traditional} 5th

APCRA ACCELERATING THE PACE OF CHEMICAL RISK ASSESSMENT

- Evaluation of *in vitro* NAMs, exposure modelling and dose-response models
- For 89% chemicals NAM PoD was **more conservative** than traditional PoD
- **Bioactivity - Exposure ratios (BERs) approach useful to accelerate screening and chemicals assessment using NAMs for hazard and exposure**

Evaluating our NAMs Toolbox for Systemic Safety Assessments



Toxicological Sciences SOT Society of Toxicology

Article Navigation

JOURNAL ARTICLE FEATURED

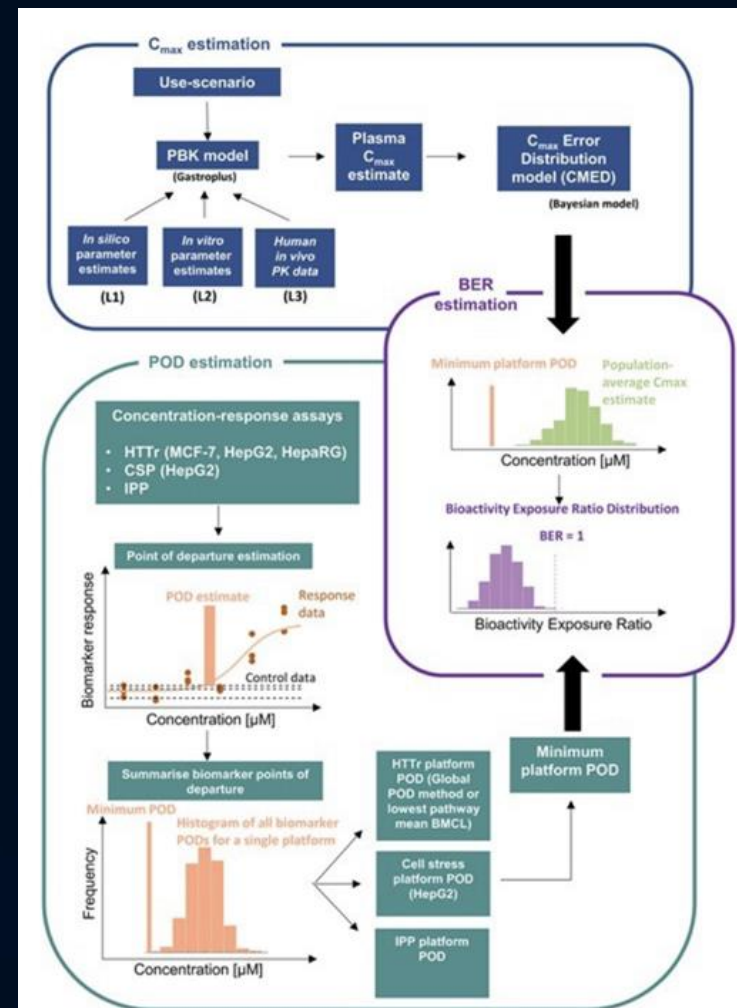
Are Non-animal Systemic Safety Assessments Protective? A Toolbox and Workflow

Alistair M Middleton ✉, Joe Reynolds, Sophie Cable, Maria Teresa Baltazar, Hequn Li, Samantha Bevan, Paul L Carmichael, Matthew Philip Dent, Sarah Hatherell, Jade Houghton, Predrag Kukic, Mark Liddell, Sophie Malcomber, Beate Nicol, Benjamin Park, Hiral Patel, Sharon Scott, Chris Sparham, Paul Walker, Andrew White

Toxicological Sciences, Volume 189, Issue 1, September 2022, Pages 124–147,

<https://doi.org/10.1093/toxsci/kfac068>

Published: 13 July 2022



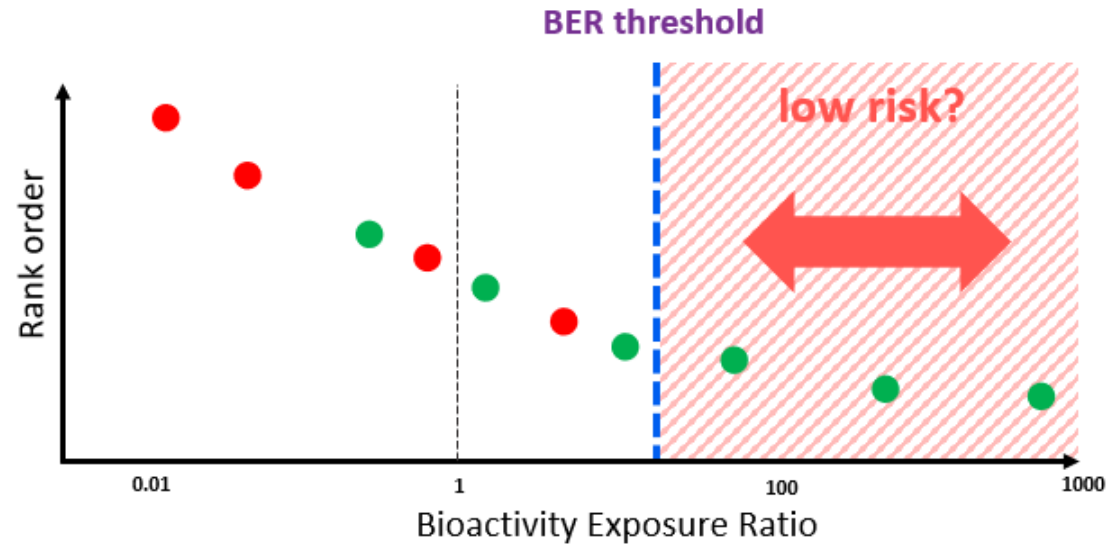
Are Non-animal Systemic Safety Assessments Protective? A Toolbox and Workflow - Abstract. A...

academic.oup.com • 2 min read

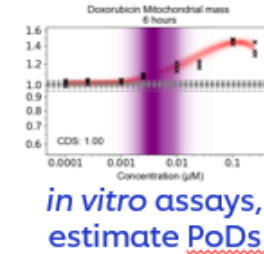
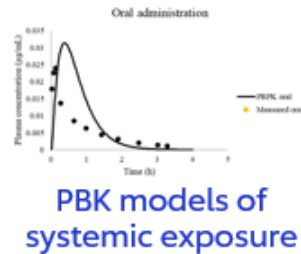
Benchmarking against historical safety decisions to evaluate how protective the toolbox & workflow are

Chemical exposures scenarios

- 'Low' risk (from consumer goods perspective) – e.g. foods, cosmetics
- 'High' risk (from consumer goods perspective) – e.g. drugs



Define typical use-case scenarios & benchmark chemical-exposures; mix of high and low risk



Calculate the Bioactivity-Exposure Ratio (BER)

Can we establish a BER threshold above which we consider a chemical exposure scenario to be low risk?



Unilever

Scientific partnership & publication underpin our approach



Details of SEAC's presentations & publications on www.tt21c.org

Unilever : U.S. EPA and Unilever Announce Major New Research Collaboration to Advance Non-Animal Approaches for Chemical Risk Assessment

09/08/2015 | 09:01am EDT



Research collaboration will develop ground-breaking scientific approaches to better assess the safety of chemicals found in some consumer products without using animal data



Environmental Topics ▾ Laws & Regulations ▾ Report a Violation ▾ About EPA ▾

News Releases from Headquarters > Research and Development (ORD)

CONTACT US

EPA and Unilever Announce Major Research Collaboration to Advance Non-animal Approaches for Chemical Risk Assessment

August 19, 2021

Contact Information

EPA Press Office (press@epa.gov)

WASHINGTON – Today, the U.S. Environmental Protection Agency (EPA) and Unilever announced a collaborative agreement to explore better ways to assess chemical risks associated with consumer products. This agreement builds on prior cooperation between EPA and Unilever regarding New Approach Methods (NAMs), which are a promising alternative to conventional toxicity testing that are intended to reduce reliance on the use of animals.

EPA and Unilever have been jointly evaluating and using NAMs since 2015. This collaboration is helping EPA implement its New Approach Methods Work Plan and is the foundation for new efforts to demonstrate that these novel approaches can help decision makers better protect consumers, workers and the environment.

"EPA is a pioneer in developing and applying NAMs to identify and quantify risks to human health, while reducing the use of animals in chemical toxicity testing," said **H. Christopher Frey, Deputy Assistant Administrator for Science Policy in EPA's Office of Research and Development**. "We are excited to continue the collaboration with Unilever, which enhances the robustness of our mutual research to demonstrate the use of NAMs."

Adoption of NGRA / NAMs for assessing safety of cosmetic ingredients - promoting use of similar approaches for chemicals registration

Computational Toxicology 7 (2018) 20–26

Contents lists available at ScienceDirect

Computational Toxicology

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

Principles underpinning the use of new methodologies in the risk assessment of cosmetic ingredients

Matthew Dent^{a,*}, Renata Teixeira Amaral^b, Pedro Amores Da Silva^b, Jay Ansell^c, Fanny Boislevé^d, Masato Hatao^e, Akihiko Hirose^f, Yutaka Kasai^g, Petra Kern^h, Reinhard Kreilingⁱ, Stanley Milstein^j, Beta Montemayor^k, Julcemara Oliveira^l, Andrea Richarz^m, Rob Taalmanⁿ, Eric Vaillancourt^o, Rajeshwar Verma^p, Nashira Vieira O'Reilly Cabral Posada^q, Craig Weiss^r, Hajime Kojima^s

^a Unilever Safety and Environmental Assurance Centre, Colworth Science Park, Sharnbrook, Bedfordshire, UK
^b ANIPPEC - Association of the Cosmetic, Toiletry and Fragrance Industry (ASBTIFC), Av. Paulista, 1311, São Paulo, Brazil
^c US Personal Care Products Council (PCPC), 1620 I St. NW, Suite 1200, Washington, D.C. 20036, USA
^d Johnson & Johnson Santé Beauté France, Domaine de Madragues, CS 10615, F 27100 VAILLÉ, France
^e Japan Cosmetic Industry Association (JCIA), Metro-City Kamayacho 6F, 5-1-5, Tamae, Minato-ku, Tokyo, Japan
^f National Institute of Health Sciences, 1-18-1 Kamiyoga, Setagaya-ku, 158-8501 Tokyo, Japan
^g Kao Corporation, External Relations & Government Affairs 2 F.3, Banka, Saitama-ku, Tokyo 131-8501, Japan
^h Procter and Gamble Services Company NV, Temseaan 100, B 1853 Serebriek Bever, Belgium
ⁱ Clariant Products (COP) GmbH, Global Toxicology and Ecotoxicology, Am Drüppel Park 1, 40843 Solingen, Germany
^j US Food and Drug Administration (FDA), Office of Cosmetics and Colors (OCC), Center for Food Safety, College Park, MD 20740, USA
^k Cosmetics Alliance Canada, 420 Britannia Road East Suite 102, Mississauga, ON L4Z 3L5, Canada
^l Brazilian Health Regulatory Agency (ANVISA), Gerência de Produtos de Higiene, Perfumes, Cosméticos e Corantes, Brasília, DF, Brazil
^m European Commission, Joint Research Centre (JRC), Directorate for Health, Consumers and Reference Materials, I-27100 Ispra, Italy
ⁿ Cosmetics Europe, Avenue Hermesse Debrux 40, 1360 Auderghem, Belgium
^o Health Canada (HC), Consumer Product Safety Directorate, Healthy Environments and Consumer Safety, Ottawa, Ontario, Canada
^p Independent Cosmetic Manufacturers and Distributors (ICMAD), 21925 Field Parkway, Suite 2015, Irvine, CA, USA

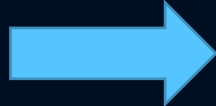
Archives of Toxicology (2022) 96:743–766
<https://doi.org/10.1007/s00204-021-03215-9>

REGULATORY TOXICOLOGY

A framework for chemical safety assessment incorporating new approach methodologies within REACH

Nicholas Ball¹ · Remi Bars² · Philip A. Botham³ · Andreea Cuciureanu⁴ · Mark T. D. Cronin⁵ · John E. Doe⁵ · Tatsiana Dudzina⁶ · Timothy W. Gant⁷ · Marcel Leist⁸ · Bennard van Ravenzwaay⁹

ecetoc



Regulatory Toxicology and Pharmacology

Available online 11 September 2022, 105261

In Press, Journal Pre-proof

ELSEVIER

epaa
The European Partnership for Alternative Approaches to Animal Testing

Use of New Approach Methodologies (NAMs) in regulatory decisions for chemical safety: Report from an EPAA Deep Dive Workshop

Carl Westmoreland^a, Hans J. Bender^b, John E. Doe^c, Miriam N. Jacobs^d, George E.N. Kass^e, Federica Madia^f, Catherine Mahony^g, Irene Manou^h, Gavin Maxwell^a, Pilar Prieto^f, Rob Roggebandⁱ, Tomasz Sobanski^j, Katrin Schütte^k, Andrew P. Worth^f, Zvonimir Zvonar^h, Mark T.D. Cronin^c

ICCR
International Cooperation on Cosmetics Regulation (2018)

SCCS/1628/21

Scientific Committee on Consumer Safety

SCCS

THE SCCS NOTES OF GUIDANCE FOR THE TESTING OF COSMETIC INGREDIENTS AND THEIR SAFETY EVALUATION

11TH REVISION

Scientific Committees

The SCCS adopted this guidance document at its plenary meeting on 30-31 March 2021

Scientific Committee on Consumer Safety (2021)

Use of new approach methodologies (NAMs) to meet regulatory requirements for the assessment of industrial chemicals and pesticides for effects on human health

frontiers | Frontiers in Toxicology

TYPE Review

PUBLISHED 01 September 2022

DOI 10.3389/tox.2022.964553

Andreas O. Stucki^{1*}, Tara S. Barton-Maclaren², Yadvinder Bhuller³, Joseph E. Henriquez⁴, Tala R. Henry⁵, Carole Hirn⁶, Jacqueline Miller-Holt⁶, Edith G. Nagy⁷, Monique M. Perron⁸, Deborah E. Ratzlaff², Todd J. Stedford⁷ and Amy J. Clippinger¹

Advances in our non-animal safety science capability enabled a change in Unilever's animal testing policy in July 2018

Unilever's approach: science-based safety, claims & advocacy - working with others to end animal testing of consumer products

1 Use Science, Not Animals

We use science, not animals – our industry leading capability in animal-free safety science means we do not need to use animal testing to ensure safety.

2 Independent Brand Certification

Building consumer confidence through NGO accreditation and consumer-facing no animal testing claims.
Starting with Dove in 2018, we have 31 NGO-certified cruelty free brands.

3 Partnerships

Our partnerships – with global animal protection NGOs, leading research teams, other companies and government scientists – support wider acceptance and use of alternatives to animal testing.

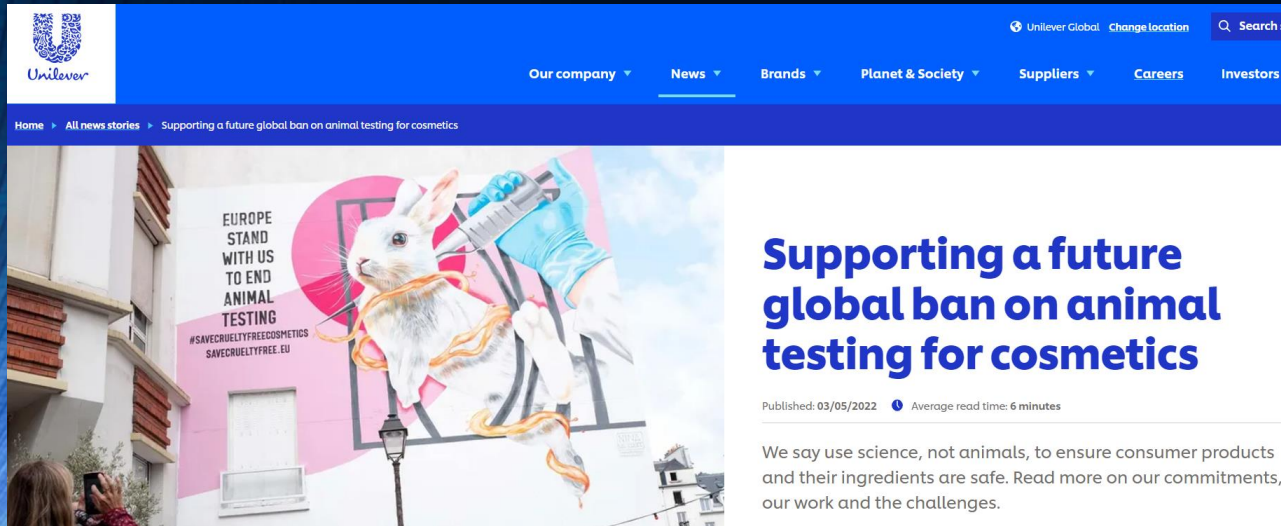
4 Advocate for Regulatory Change

We work to end the animal testing of consumer products worldwide.
We are recognised by PETA as a company working for regulatory change.

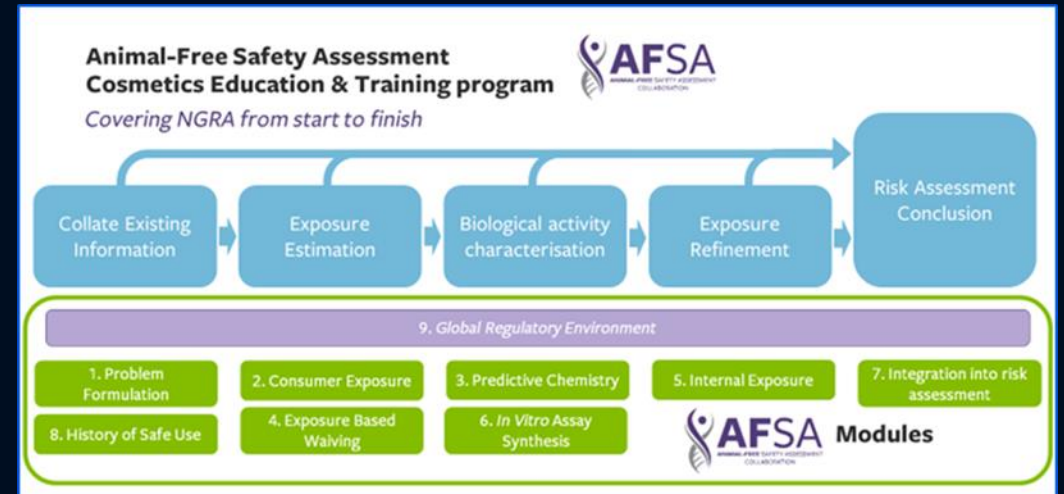
Working towards a global ban on animal testing for cosmetics

Unilever supports calls for a worldwide animal testing ban on cosmetics

Published: 09/10/2018 ⌚ Average read time: 3 minutes



The screenshot shows the Unilever website's news section. The article title is "Supporting a future global ban on animal testing for cosmetics", published on 03/05/2022. The article features a photograph of a white rabbit being held by a person in a blue lab coat, with a syringe and a scale nearby. The text of the article reads: "We say use science, not animals, to ensure consumer products and their ingredients are safe. Read more on our commitments, our work and the challenges." The article also includes a call to action: "EUROPE STAND WITH US TO END ANIMAL TESTING #SAVECRUELTYFREECOSMETICS SAVECRUELTYFREE.EU".



In **October 2018** Unilever was the first major international company to announce its support for a global ban on the animal testing of cosmetics. But the new proposals from ECHA appear to contradict it. In August 2020, ECHA said that certain substances must be tested on animals even if they are solely for use in cosmetics.

No animal testing, Unilever brands and the EU's chemicals regulati...

www.unilever.com/news/news-search/2020/no-animal-testing-unilever-brands-a-...

EU & UK animal testing bans for cosmetics are being destroyed

New EU rule says cosmetics **MUST** be tested on animals despite the chemicals being used in hundreds of 'cruelty free' products supported by ambassadors such as Leona Lewis

- Eurocrats said chemicals in 'cruelty-free' cosmetics must be tested on animals
- Protesters say it destroys the EU-wide ban on animal experiments for cosmetics
- The two chemicals are used by High Street brands Dove, Body Shop and L'Oreal

By JON UNGOED-THOMAS FOR THE MAIL ON SUNDAY

PUBLISHED: 00:50, 30 August 2020 | UPDATED: 01:40, 30 August 2020



The ban became EU-wide in 2013 but the European Chemicals Agency, a branch of the EU, now claims that separate regulations on the use of chemicals means substances still must be tested, even if exclusively for cosmetic use, to assess any risks to workers on the production line.

The two chemicals involved in this case are the ultra-violet filters homosalate and 2-ethylhexyl salicylate, also known as octisalate. Both have already been approved by EU safety watchdogs for use in cosmetics and are widely used in hundreds of popular cosmetic products.

Consumer giant Unilever last night condemned the European Chemicals Agency's decision and warned it may now be forced to reformulate some of its cosmetic products.

Its safety chief Julia Fentem said: 'We don't agree that animal testing is necessary to protect workers and the environment, and strongly encourage the use of non-animal data.'

UK could allow animal tests for cosmetic ingredients for first time since 1998

Exclusive: campaigners say aligning with EU ruling on chemical testing will 'blow a hole' in UK leadership on cruelty-free cosmetics



We join with united cosmetics industry to demand UK upholds its cosmetics animal testing ban

Letter to Home Secretary urges a rethink



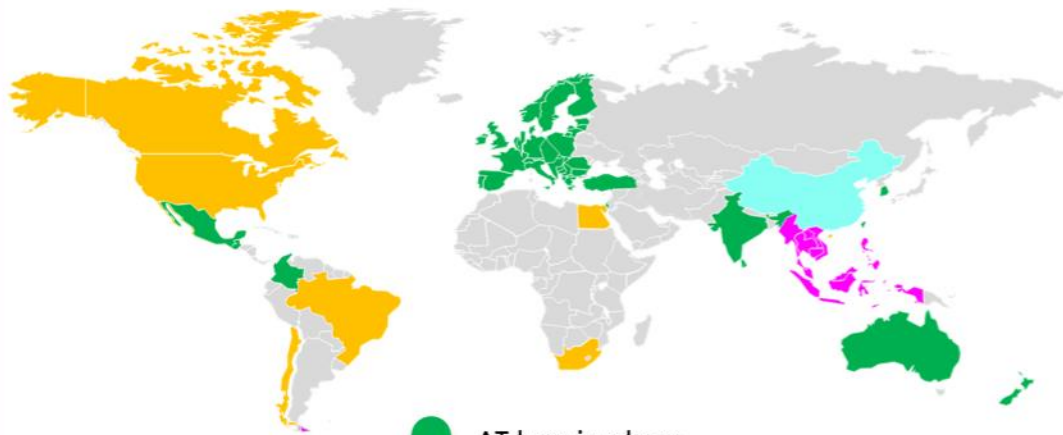
📷 The UK banned animal testing of cosmetic ingredients in 1998. Photograph: Steven Senne/AP

Ministers have opened the door to expanding the use of animal testing for ingredients used in cosmetic products for the first time in 23 years, an animal welfare charity has said.

Some regulations ban animal tests, others require them

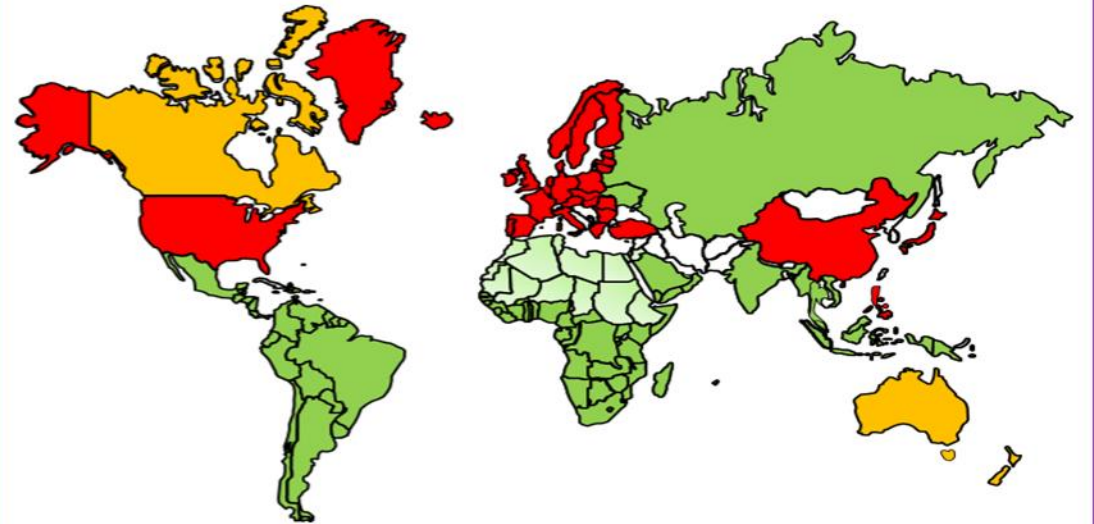
COSMETICS

Animal testing bans since 1998



- AT ban in place
- Exemption for common cosmetics
- AT draft ban in discussion
- Unilever driving discussion to create a ban
- No ban under discussion

CHEMICALS



US, EU, China, Japan, Philippines & UK typically require AT

Canada & Australia registrations may require AT

No current requirements for AT

Advocating for regulatory use of innovative animal-free safety science

Unilever: EU needs 'paradigm shift' in chemical safety assessment methods

By Kacey Culliney

23-Sep-2021 - Last updated on 23-Sep-2021 at 14:59 GMT



The Drum Digital Summit

NEWS

Leading legislation: how major brands are taking on the EU over animal testing

By Ellen Ormesher

October 18, 2021

Non-animal methods (NAMs) have to be fast prioritised in EU chemicals testing under REACH and much can be learned from the US Environmental Protection Agency [Getty Images]

RELATED TAGS: Animal testing, Animal testing alternatives, non-animal testing methods, REACH, Chemicals, Regulation, next-generation safety assessments, Unilever, safety assessment

A complete shift in the safety assessment of chemicals will be necessary if the EU is to uphold its 'animal testing as a last resort' policy under the European Chemicals Agency's REACH regulation – a critical aspect to maintaining the wider cosmetics animal testing ban, say Unilever execs.

Dove

Join us in ending animal cruelty

Globally, Dove does not test on animals

That's why we're asking the EU to transform its chemicals regulations

European Union

EUROPEAN CITIZENS' INITIATIVE - Central online collection system

SAVE CRUELTY FREE COSMETICS - COMMIT TO A EUROPE WITHOUT ANIMAL TESTING

Signatures collected online

1,413,383 / 1,000,000

End of the collection period: 31/08/2022



unilever The ingredients in our products must be safe for people and the planet.

But we don't need to test on animals to achieve this when science has the solution.

That's why we're calling for EU chemicals regulations to change.

Tap the link in our bio to help urge policymakers to take action.

And follow the link in our bio to learn how we #UseScienceNotAnimals to create safe, sustainable products.

10 w

Taking on the “close the gap” challenge: regulatory use

Time to re-think our approach ...

Comment

Upholding the EU's Commitment to 'Animal Testing as a Last Resort' Under REACH Requires a Paradigm Shift in How We Assess Chemical Safety to Close the Gap Between Regulatory Testing and Modern Safety Science

Julia Fentem, Ian Malcomber, Gavin Maxwell and Carl Westmoreland

Alternatives to Laboratory Animals
2021, Vol. 49(4) 122-132

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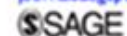


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DOI: 10.1177/02611929211040824

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Unilever

ALTEX, accepted manuscript

published July 4, 2022

doi:10.14573/altex.2204281

Food for Thought ...

Ready for Regulatory Use: NAMs and NGRA for Chemical Safety Assurance

Paul L. Carmichael^{1,2}, Maria T. Baltazar¹, Sophie Cable¹, Stella Cochrane¹, Matthew Dent¹, Hequn Li¹, Alistair Middleton¹, Iris Muller¹, Georgia Reynolds¹, Carl Westmoreland¹ and Andrew White¹

¹Safety & Environmental Assurance Centre (SEAC), Unilever, Sharnbrook, Bedfordshire, UK; ²Toxicology, Wageningen University & Research, Wageningen, The Netherlands

1. Conducting an animal test because it's a (perceived) regulatory requirement isn't adequate scientific justification
2. Current laws and regulations, not science, are impeding the paradigm shift to using modern animal-free safety science
3. Change regulatory approach to chemical safety to strengthen the protection of people (workers & consumers) and our environment, without that being anchored in predicting the apical toxicity effects seen in high-dose animal studies

Aligning materials suppliers with Unilever policy & partnering on advocating for changes in chemicals regulations

Our position on Non-Animal Testing



Dear Partner,

I'm writing to you today to reaffirm Unilever's position on animal testing on ingredients used in our Beauty & Personal Care and Home Care products.

We know the majority of our consumers, customers and investors do not want Unilever to be associated with animal testing. [Our position](#) is clearly articulated as being opposed to the use of animals in any form of safety testing. Instead, we develop and use a wide range of non-animal approaches to assess the safety of our products.

As you may be aware, the European Chemicals Agency (ECHA) is now requesting new animal testing on a significant number of ingredients that have been made and used safely for many years. This is despite an EU ban on animal testing of cosmetics being in place since March 2013. As part of our strategic ambition to be trusted without animal testing, in October 2020 we announced a global ban on animal testing of cosmetics. We are working with animal protection NGOs to achieve a global ban.



Partnering with Unilever on 'No Animal Testing'



Given our position and external commitments, it is important that all of Unilever's supply partners comply with the following asks:

1. You engage with us prior to commencing any animal testing on new or existing materials – we can then work together to identify opportunities to use NAT strategies for safety & regulatory compliance purposes, and ensure that we all uphold the 'animal testing as a last resort' principle which is part of EU regulations
2. You disclose details of any animal testing conducted on existing materials supplied to Unilever
3. You disclose any animal testing conducted on new materials intended for supply to Unilever



SUPPLIER WEBINARS - 2022

6 September

Partnering for a future with no animal testing

26 September

Animal testing as a last resort under REACH

18 October

NAT in REACH and consortia approaches

3 November

Next Generation approaches and REACH

6 December

Innovating for Biodegradability

Principles of EU regulatory approach – protection from harm & use of non-animal tests

ECHA
EUROPEAN CHEMICALS AGENCY

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LEGISLATION CONSULTATIONS INFORMATION ON CHEMICALS

ECHA > Legislation > REACH > Alternatives to animal testing under REACH

REACH

- Understanding REACH
- Substance Identification
- Registration
- Evaluation
- Authorisation
- Restriction
- Communication in the supply chain
- Candidate List substances in articles
- Legislation
- Alternatives to animal testing under REACH
- Enforcement

Alternatives to animal testing under REACH

Chemicals can cause cancer; affect the immune, respiratory, endocrine, reproductive or cardiovascular systems; weaken human resilience and the capacity to respond to vaccines; and increase vulnerability to diseases.

The European Parliament and Council adopted chemicals legislation to protect people and the environment from such harm and to promote alternative test methods.

In practice, this means companies must test their chemicals for safety – by using alternative methods or – as a last resort – testing on animals. Animal tests are only permitted if there is no alternative way to gather the safety information.

The law requires companies to use alternative methods whenever possible – so companies should only ever test on animals as a last resort.

EU REACH legislation has been in place for 15 years. It was introduced to protect people & the environment from harm and to promote alternative test methods.

Science & technology have advanced hugely since June 2007. Chemicals regulations need to catch up → framework for using most relevant scientific data for safety decisions.

Regulations are based on animal testing for characterising chemical hazards

REACH, Article 25: *'In order to avoid animal testing, testing on vertebrate animals for the purposes of this regulation shall be undertaken only as a last resort'*

Upholding “animal testing as a last resort” is challenging

European Court of Justice C-471/18 P - 21 January 2021

Federal Republic of Germany v Esso Raffinage and Others (advocates-for-animals.com)

Facts

Esso Raffinage (Esso) registered its chemical with the European Chemicals Agency (ECHA), an EU agency, as it was required to do before it could sell it in the EU. This was under Regulation (EC) No 1907/2006, known as REACH.

Decision

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Commentary

This is an important decision because it underlines the importance of the REACH principle that animal tests should only be carried out as a last resort. Companies and ECHA itself had to apply that principle at all stages, even after ECHA had decided that an animal test was needed.

The last resort principle is no panacea for animals because in many cases companies are unable to show that there is an alternative approach. Millions of animal tests have taken place under REACH. Animal protection organisations complain that the principle is honoured more in its breach than the observance.

But the CJEU's decision puts the principle firmly at the centre of decision-making. The Advocate-General, who advises the Court, said that it would be a 'devastating result' if animal tests were carried out in these circumstances when there was an available adaptation. In fact, ECHA did eventually accept Esso's weight of evidence approach, underlining just how important the company's persistence was.

European Court of Justice - 11 September 2015

Decision in case 1606/2013/AN on how the European Chemicals Agency applies rules concerning animal testing

Decision

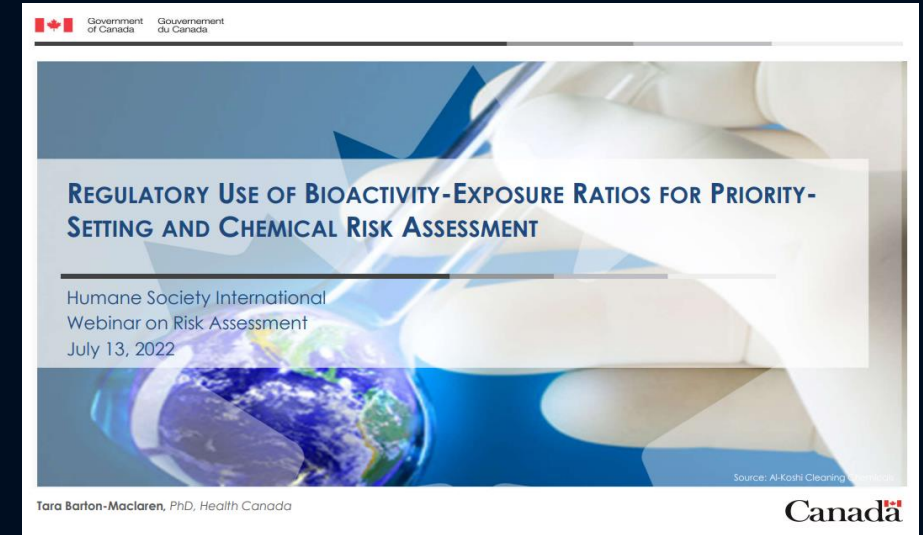
Case 1606/2013/AN - Opened on 20/11/2013 - Decision on 11/09/2015 - Institution concerned European Chemicals Agency (Friendly solution) |

The Ombudsman's inquiry concluded that ECHA's interpretation of its role was too strict and did not take into account the fact that the avoidance of animal testing was, together with the protection of human health and the environment, one of the guiding principles of the Regulation. The Ombudsman thus proposed to ECHA (i) that it require all registrants to show that they have tried to avoid animal testing and (ii) that it provide registrants with all the information at its disposal which could allow them to avoid animal testing.


Decisions on Chemical Safety – Next Generation Risk Assessment (NGRA) integrating data from New Approach Methodologies (NAMs)

Data are needed for decisions on:

1. safety of **consumers** exposed to chemicals in **products**
2. safety of **workers** exposed to chemicals during product **manufacture**
3. safety of **people & non-human species** if exposed to chemicals in the **environment**



REACH is being revised under the EU Chemicals Strategy



The screenshot shows the European Commission website. At the top left is the European Commission logo. Below it is a blue navigation bar with the word "Environment". Underneath is a breadcrumb trail: "HomeChemicalsReach". A left-hand navigation menu is visible, with "REACH" selected. The main content area is titled "REACH revision under the Chemicals Strategy" and includes an "Overview" section with text about the Commission's work on revising the REACH Regulation, led by DG Environment and DG GROW. It also includes a "Timeline" section with a vertical line and a marker for "End of 2022" corresponding to the "Commission to present proposal for the REACH revision".

European Commission

Environment

HomeChemicalsReach

Chemicals Home

Chemicals strategy for sustainability

News

Events

Publications and Studies

REACH

- Introduction
- REACH revision**
- Legislation
- Review REACH annexes
- Implementation
- REACH Review 2017
- Competent Authorities
- Enforcement
- Member States Reports on the operation of REACH
- Consumer right to know
- REACH and animal testing
- Chemicals management Initiatives
- Links
- Glossary
- History and Background

REACH revision under the Chemicals Strategy

Overview

The Commission has begun work on a revision of the REACH Regulation as announced in the Chemicals Strategy for Sustainability. The revision is led jointly by DG Environment and DG GROW.

The revision will be done in the most targeted way possible, limited to achieving the objectives of the Strategy, based on public consultations and subject to a comprehensive impact assessment. This will include an analysis of how small and medium sized enterprises (SMEs) as well as innovation are affected.

The revision follows the Commission's [Better Regulation provisions](#). It will include a thorough assessment of possible impacts of potential changes to REACH on

- the protection of human health and the environment
- the use of animal testing
- the functioning of the internal market
- and the competitiveness and innovation of European industry and businesses

Timeline

Previous and upcoming actions on the REACH revision

- End of 2022
Commission to present proposal for the REACH revision

Unilever's perspective on the REACH revision

In line with the vision presented in the Chemical Strategy for Sustainability (CSS), we believe we need a paradigm shift to strengthen chemical safety using best available science and technology that rebuilds trust in chemical safety. To this end, the revision of REACH (Regulation (EC) No 1907/2006) will be a key opportunity, and we would like the following elements to be fully considered as part of the impact assessment.

Accelerating use of New Approach Methods (NAMs) and ensuring animal tests are a last resort

Scientific and technological advances mean we can generate much more relevant data on the safety of chemicals using New Approach Methodologies (NAMs) than animal tests. **We see the REACH review as a unique opportunity to break free of the belief that animal models are the best experimental tools available to protect European citizens and the environment and start the paradigm shift towards widespread use of NAMs for chemical regulatory testing.**

UK REACH is work in progress – good discussions on NAMs

The REACH etc. (Amendment) Regulations 2021

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (“the EU REACH Regulation”) forms part of retained EU law by virtue of the European Union (Withdrawal) Act 2018. The retained version of the EU REACH Regulation is referred to as the UK REACH Regulation.

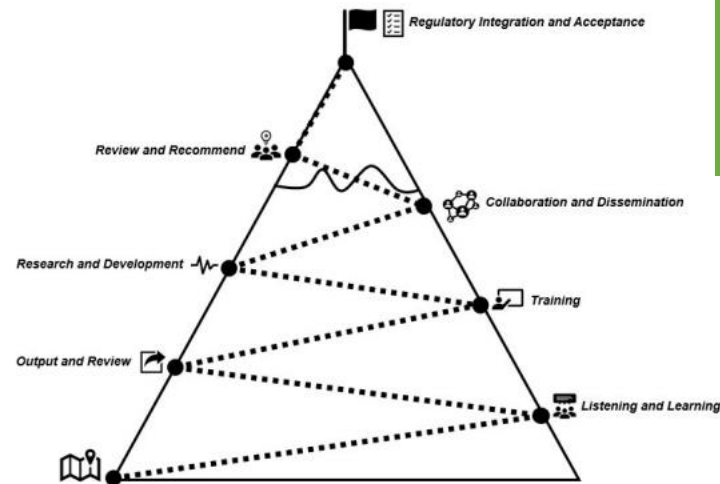
From: [Department for Environment, Food & Rural Affairs](#)

Published 29 June 2021

Last updated 27 July 2021 — [See all updates](#)

Paving the way for a UK Roadmap:

Development, Validation and Regulatory Acceptance of New Approach Methodologies (NAMs) in Chemical Risk Assessment



Overall objectives of the roadmap are to:

- identify latest available NAMs for optimal risk assessment
- learn from other regulatory agencies and beyond
- validate through case studies
- build confidence in NAMs in the regulatory setting
- develop skills and training
- implement and integrate NAMs in the regulatory setting

Non-animal safety science can support sustainable chemical innovation → **evolve chemical safety assessment frameworks to embrace use of NAMs / embed NGRA concepts**

2021

ECHA is responding to calls for more regulatory use of non-animal safety science

EURACTIV The Capitals The Brief Ukraine Intelligence

Agrifood Economy & Jobs Energy & Environment Global Europe Health Politics Technology Trade

Czech EU presidency seeks way out of deadlock on European digital identity powered by EURACTIV Czechia

Home / Opinions / Health / Accelerating uptake of non-animal safety science into European chemical legislation

Accelerating uptake of non-animal safety science into European chemical legislation

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c&en CHEMICAL & ENGINEERING NEWS TOPICS MAGAZINE COLLECTIONS VIDEOS JOBS

By Sirpa Pietikäinen | EPAA | Oct 3, 2022

TOXICOLOGY

Can Europe replace animal testing of chemicals?

As revisions to the EU's regulatory system look certain to increase toxicity tests on animals, the region ponders whether it will ever be able to conduct chemical safety assessments with alternative methods

by **Vanessa Zainzinger**, special to C&EN
August 15, 2022 | A version of this story appeared in **Volume 100, Issue 28**

A 10-POINT PLAN FOR TARGETED AND EFFECTIVE REVISION OF REACH



REACH is the cornerstone of the EU chemicals legislation. Revising REACH means changing the very foundation of the world-leading chemicals management system that we have in Europe. This 10-point action plan outlines how this can be done in a targeted and efficient way so that it effectively tackles areas where improvement is needed in line with the objectives set in the Chemicals Strategy for Sustainability.

Action 1

Introduce a new safety assessment scheme where reliable and human-relevant non-animal safety assessment methods have a prominent place (New Assessment Methods).


Why? Accuracy and reliability of non-animal methods have improved considerably over the past decade.

Result:

- Legislation reflects the latest advancements in the field of toxicology.
- Unnecessary animal testing is avoided.

Regulatory Toxicology and Pharmacology 136 (2022) 105278

Contents lists available at [ScienceDirect](#)



Regulatory Toxicology and Pharmacology

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

REACHing for solutions: Essential revisions to the EU chemicals regulation to modernise safety assessment

Marina Pereira, Donna S. Macmillan*, Catherine Willett, Troy Seidle

Humane Society International/Europe, Research & Toxicology, Av. des Arts 50, 1000, Brussels, Belgium

UK is a scientific powerhouse in innovative animal-free safety approaches



- embed animal-free safety science & innovation in *UK Chemicals Strategy* (DEFRA)
 - ensure active participation of UK thought leaders across academia, companies & NGOs
 - invest in knowledge transfer, capability & capacity building
 - clear focal point in government (current complex split of responsibilities)
- shape a progressive new framework for UK chemicals regulations that ensures “AT as a last resort” is upheld by all stakeholders whilst improving safety

Building confidence with the regulatory community is key

Archives of Toxicology (2022) 96:2865–2879
<https://doi.org/10.1007/s00204-022-03365-4>

REVIEW ARTICLE

A framework for establishing scientific confidence in new approach methodologies

Anna J. van der Zalm¹ · João Barroso² · Patience Browne³ · Warren Casey⁴ · John Gordon⁵ · Tala R. Henry⁶ · Nicole C. Kleinstreuer⁷ · Anna B. Lowit⁶ · Monique Perron⁸ · Amy J. Clippinger¹

Received: 17 May 2022 / Accepted: 11 August 2022 / Published online: 20 August 2022
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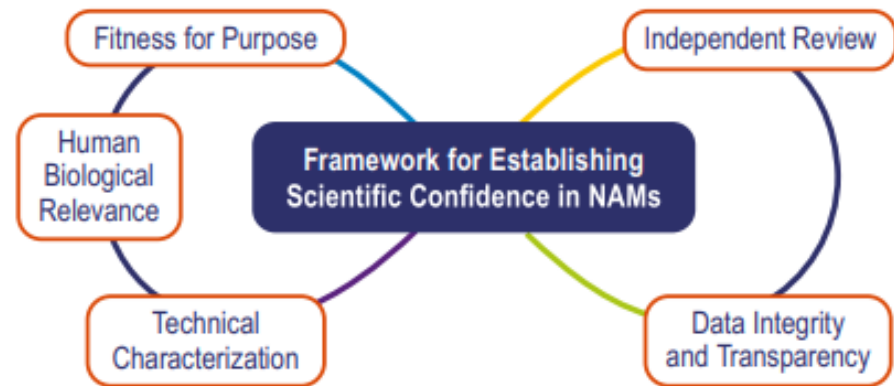
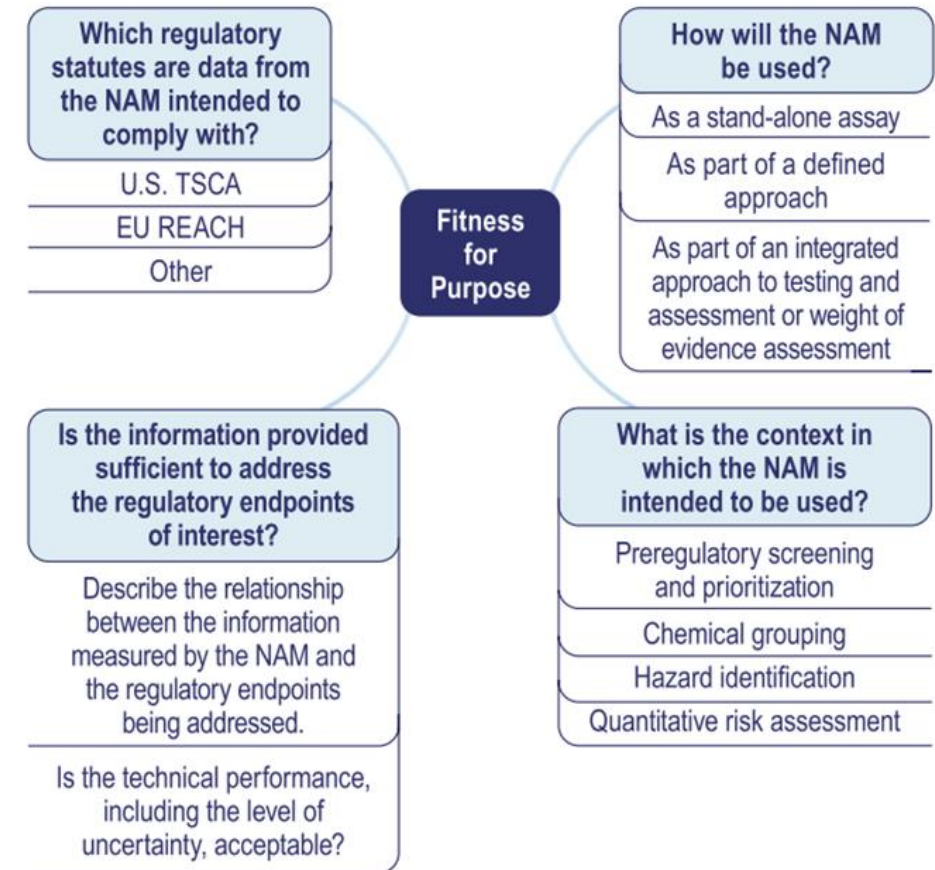


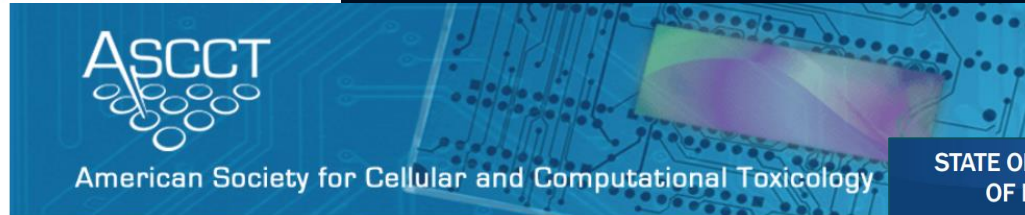
Fig. 1 Schematic illustrating the interconnectedness of the five essential elements for establishing scientific confidence in NAMs for assessing human health effects

Fig. 2 Schematic showing some of the questions relevant to determining the fitness for purpose of a NAM



Challenging the positioning of animal data as gold standard

Variability and Relevance of Current Laboratory Mammalian Toxicity Tests and Expectations for New Approach Methods (NAMs) for use in Human Health Risk Assessment



Archived Webinar

Using NAMs in Risk Assessment

Presenters:

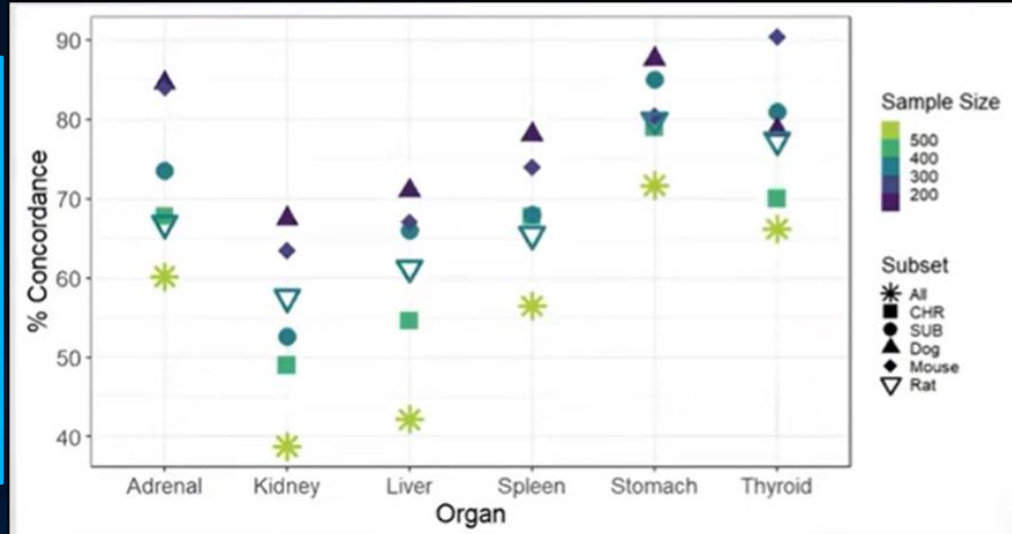
Katie Paul Friedman, PhD, Center for Computational Toxicology and Exposure, Office of Research and Development, US EPA
 George E. N. Kass, PhD, European Food Safety Authority (EFSA)

STATE OF THE SCIENCE ON DEVELOPMENT AND USE OF NAMS FOR CHEMICAL SAFETY TESTING

Location: U.S. Environmental Protection Agency
 William Jefferson Clinton East Building
 William D. Ruckelshaus Conference Center

Date: October 12-13, 2022

If attempting to use a NAM-based predictive model for prediction of a reference systemic effect level value of 10 mg/kg/day, it is likely that given the variability in reference data of this kind, that a model prediction of somewhere between 1 and 100 mg/kg/day would be the greatest amount of accuracy achievable.



Paul Friedman et al. (unpublished). Reproducibility of organ-level effects in repeat dose animal studies.

Primary Research Question	Statistical approaches
How concordant are organ-level effects for multiple repeat dose study observations?	Calculate concordance of findings between replicate studies when grouped by chemical and organ; chemical, organ, and species; and chemical, organ, and study type

- Qualitative reproducibility of organ-level effect observations in repeat dose studies of adult animals was 33-88%, depending on grouping

Implementing EU Chemicals Strategy for Sustainability [& a new UK Chemicals Strategy ?]

- + High-level Roundtable on the chemicals strategy
- + Promoting safe and sustainable by design chemicals
- + Chemicals and the circular economy: towards non-toxic material cycles
- + Strengthening the EU's open strategic autonomy
- + Tackling the most harmful substances
- + Essential uses
- + Endocrine disruptors
- + PFAS
- + Chemical mixtures
- + One substance, one assessment
- + Zero-tolerance approach to non-compliance
- + Research, innovation and funding
- + Indicators

Chemicals Strategy for Sustainability



chemicals.

The European Commission adopted its Chemicals Strategy for Sustainability on 14 October 2020. The strategy is part of the EU's zero pollution ambition – a key commitment of the European Green Deal – and aims to better protect citizens and the environment from harmful chemicals, and boost innovation by promoting the use of safer and more sustainable



Safe and Sustainable by Design chemicals and materials

Framework for the
criteria and evaluation
procedure for chemicals
and materials

Caldeira, C. Farcal, R., Gar
Mancini, L., Tosches, D., Al
Rauscher, H., Riego Sintes

2022



Legal revisions

- [Revision of the Regulation on the Registration, Evaluation, Authorisation and Restriction of Chemicals \(REACH\)](#)
- [Revision of EU legislation on hazard classification, labelling and packaging of chemicals \(CLP\)](#)

SESSION 1: CURRENT UK POLICY

Introduction and welcome

UK chemicals strategy

Representative from Defra

Update on UK REACH

Representative from HSE

Industry views on policy

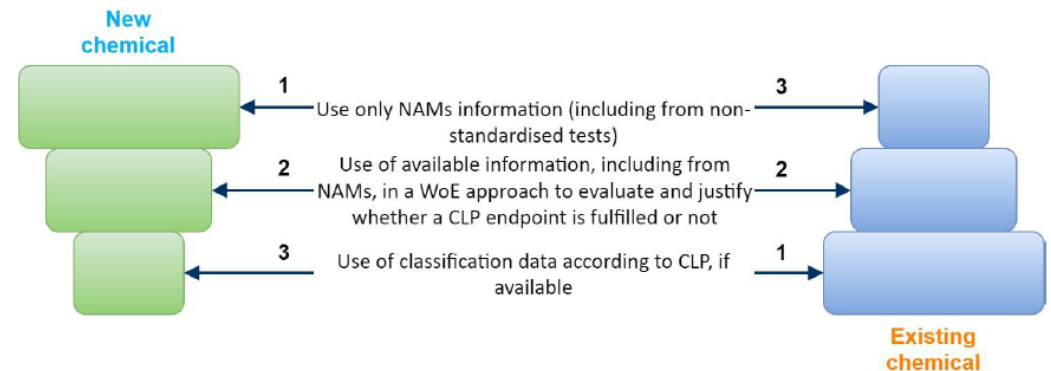
Updates from CIA and CBA:

- Latest developments impacting the chemicals supply chain
- How chemicals policy could facilitate innovation and growth in the UK

UK Chemicals Regulations & Policy 2022

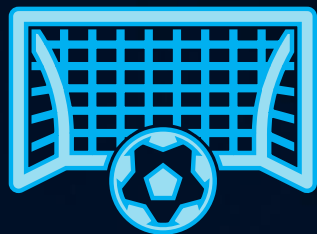
6 December 2022 | London, UK

Figure 24. Tiered approach regarding the information requirements and use of NAMs data for new or existing chemicals



In general, NAMs provide an opportunity for rapid and reliable toxicological profiling of chemicals and materials, including in the design phase. Further consideration should be given to the use of NAM-derived data within the SSbD framework, including the many cases where NAMs provide mechanistic information which is not directly comparable to endpoints from traditional *in vivo* studies.

Chemicals policies needed to stimulate progress in implementing modern safety science for chemicals regulatory purposes



Scientifically justify
'animal testing
as a last resort'
+
Paradigm shift in
how we assess
chemical safety

Best science & most
relevant data
for human health &
environmental
assessments
=
Safer Chemicals



Get creative using relevant
NAMs to generate data



Modernise legal &
regulatory requirements




Develop NAM-based
regulatory frameworks

Can we embed use of NGRA / NAMs within Safe & Sustainable by Design Chemicals?

Accelerating the transition to animal-free sustainable innovation

European Parliament
2019-2024



TEXTS ADOPTED

P9_TA(2021)0387
Plans and actions to accelerate a transition to innovation without the use of animals in research, regulatory testing and education
European Parliament resolution of 16 September 2021 on plans and actions to accelerate the transition to innovation without the use of animals in research, regulatory testing and education (2021/2784(RSP))

Strengthening “AT as a last resort” ...
Define & execute a Roadmap to phase out AT for EU chemicals regulatory compliance purposes

1. immediately pause all animal tests on existing **cosmetics ingredients** → use NGRA/NAMs
2. establish open dialogue on, and transparent scientific evaluation of, **NAM strategies** for specific chemicals / chemical groups
3. accelerate **knowledge transfer & training** in advanced safety science and NAM-based chemical assessments
4. stimulate EU **capacity building** to increase service provision of NAMs toolbox
5. develop a **modern, science-based, chemicals regulatory framework**, which facilitates use of NGRA/NAMs in weight-of-evidence approaches



Strategic Research and Innovation Plan for safe and sustainable Chemicals and Materials



SAVE THE DATE
EPAA ANNUAL CONFERENCE 2022

“Accelerating the Transition to Animal-Free, Sustainable Innovation”

Brussels, 15 November 2022

#EPA3Rs
@EPA3Rs
Grow-epaa@ec.europa.eu

ECI calls on the European Commission to manage chemicals without new animal testing requirements



Objectives

With the EU ban on cosmetics tests on animals came the promise of a Europe in which animals no longer suffer and die for the sake of cosmetics. That promise has been broken. Authorities still demand animal tests on ingredients used in cosmetics, which goes against the expectations and wishes of the public and the intention of legislators.

Yet, never have we had such powerful non-animal tools for assuring safety or such a golden opportunity to revolutionise human and environmental protection. The European Commission must uphold and strengthen the ban and transition to animal-free safety assessment.

We call on the European Commission to do the following:

1. Protect and strengthen the cosmetics animal testing ban.

Initiate legislative change to achieve consumer, worker, and environmental protection for all cosmetics ingredients without testing on animals for any purpose at any time.

2. Transform EU chemicals regulation.

Ensure human health and the environment are protected by managing chemicals without the addition of new animal testing requirements.

3. Modernise science in the EU.

Commit to a legislative proposal plotting a roadmap to phase-out all animal testing in the EU before the end of the current legislative term.

European Union EN

EUROPEAN CITIZENS' INITIATIVE -
Central online collection system

**SAVE CRUELTY FREE
COSMETICS - COMMIT
TO A EUROPE
WITHOUT ANIMAL
TESTING**

⊗

The collection of statements of support for this initiative has been disabled
We are currently not collecting statements of support for this initiative

👤 Signatures collected online

1,413,383 / 1,000,000

⌚ End of the collection period: 31/08/2022

Engaging politicians, policy-makers & regulators in phasing out animal testing and using modern non-animal safety science



24 Oct 2022

The Revision of EU Chemicals Legislation as a step towards human-relevant, new approach methods

[Read more >](#)



13 Oct 2022

How can the European Union move away from animal testing?

[Read more >](#)



[Target Zero - 27 October 2022 \(toxicfreeeuropewithoutanimaltesting.com\)](https://toxicfreeeuropewithoutanimaltesting.com)



[The Revision of EU Chemicals Legislation as a step towards human-relevant, new approach methods | Intergroup \(animalwelfareintergroup.eu\)](#)

[European Partnership for Alternative Approaches to Animal Testing \(europa.eu\)](https://europa.eu)

We must persist in speaking up to drive change

- NAMs scientific community continues to grow, with increasing involvement of early career scientists producing some excellent scientific outputs – new methods, testing strategies, case studies, publications ...
 - NAMs-based chemical assessments enable decisions on safety - relevant scientific data combined in weight-of-evidence approaches ...
- Must convince policy & regulatory decision-makers who are unfamiliar with advanced animal-free safety science and have responsibilities for chemical safety where reliance on animal testing is the norm
- If we want our modern science to have impact in enabling safer chemicals, we scientists must play our part in closing this gap, in building confidence in the use of NAMs and in helping drive policy & regulatory change – **& team-up with communications & policy experts!**



The screenshot shows the EURACTIV website header with a yellow navigation bar. Below the navigation bar, there is a sub-header for a news article. The article title is "Accelerating uptake of non-animal safety science into European chemical legislation". The sub-header text reads "Czech EU presidency seeks way out of deadlock on European digital identity powered by EURACTIV Czechia". The breadcrumb trail is "Home / Opinions / Health / Accelerating uptake of non-animal safety science into European chemical legislation".

EURACTIV The Capitals The Brief Ukraine Intelligen

Agrifood Economy & Jobs Energy & Environment Global Europe Health Politics Technology Trai

Czech EU presidency seeks way out of deadlock on European digital identity powered by EURACTIV Czechia

Home / Opinions / Health / Accelerating uptake of non-animal safety science into European chemical legislation

Accelerating uptake of non-animal safety science into European chemical legislation



The screenshot shows a snippet of an article from EURACTIV. The text includes the byline "By Kacey Culliney" and the date "20-Oct-2021 - Last updated on 20-Oct-2021 at 13:18 GMT". There are social media icons for Facebook, Twitter, LinkedIn, and Email.

THE LONG READ: IN CONVERSATION WITH UNILEVER SAFETY & ENVIRONMENTAL ASSURANCE CENTRE (SEAC) EXECUTIVES

The future of animal-free chemical testing? There's a 'big frustration' in the scientific community, say Unilever execs

By Kacey Culliney

20-Oct-2021 - Last updated on 20-Oct-2021 at 13:18 GMT

f t in e

Our Ambition – Safe & Sustainable Chemicals without Animal Testing



The screenshot shows the Unilever website's news section. The header includes the Unilever logo, navigation links for 'Our company', 'News', 'Brands', 'Planet & Society', 'Suppliers', 'Careers', and 'Investors', and a search bar. The main content area features a large image of a child kissing a rabbit. To the right of the image is the article title 'Safe and sustainable ingredients and products - without animal testing', published on 06/07/2022. Below the title is a short paragraph: 'The ingredients in our products must be safe for people and the planet – but we don't need to test on animals to achieve this. Here Dr Julia Fentem, Head of our Safety & Environmental Assurance Centre, explains why we're calling for chemical regulations to change.'



Advances in science and technology mean that we can generate much more relevant safety data to protect people and the environment using modern non-animal approaches.



**We say use science.
Not animals.**



To turn our ambition into reality we now need a common Roadmap for Transformation, Transition & Translation ...



ANNUAL LECTURE – 16 NOV 2022

THANK YOU

YOUR THOUGHTS & QUESTIONS?