

Subject: Evidence concerning the accuracy and relevance of non-animal methods for chemical safety testing

Dear Commissioner Sinkevičius and honourable Members of the European Parliament,

We are three scientific consortia led respectively by the University of Birmingham (PrecisionTox), Vrije Universiteit Brussels (ONTOX) and Leiden University (RISK-HUNT3R) that assemble 70 scientific organisations and 300 leading scientists from across Europe specialising in understanding why exposure to chemicals may be harmful to human health and the environment. Our three consortia are working together as the ASPIS Cluster to rapidly accelerate and improve chemical risk assessment in the EU by advancing the science, by awareness training, and by supporting the work of policy and regulatory agencies.

We use transformative approaches that, in precision medicine, have revolutionised our understanding of the root causes and impacts of diseases. In toxicology, they are referred to as New Approach Methodologies (NAMs). Although the adoption of NAMs to better regulate exposure to toxic chemical toxicity may take time, we respectfully disagree with a statement made by Director ENV Ciobanu-Dordea at the European Parliament's 'Committee on Environment, Public Health and Food Safety,' on 22 March 2023:

"The granularity... of the results which is given of non-animal methods is different, far less precise than the animal tests..."¹

While this opinion may be reflecting a genuine lack of readiness by regulatory communities to utilise chemical safety data exclusively produced by NAMs, we are concerned that European Commission and Parliament may be misguided into believing that the current scientific knowledge and application of NAMs are insufficiently mature to be useful in assessing chemical safety. Moreover, confidence in the primacy of animal tests for chemical safety assessments may also be misplaced. For these reasons, we believe that excluding NAMs from the process of assessing chemical hazards would be unwise – especially because alternative test methods have already been validated for some regulatory endpoints and are continuing to develop towards assessing complex adverse outcomes with greater precision than traditional animal tests. Industry, academia, and regulatory agencies are working hard to meet the legislative requirements to replace, reduce, and refine animal testing² and for testing on vertebrate animals to be used only as a last resort.³

¹ European Parliament, Committee on Environment, Public Health and Food Safety, 22 March 2023, at minute 18:25:22. [Committee on Environment, Public Health and Food Safety | European Parliament Multimedia Centre \(europa.eu\)](#)

² *Inter alia*, Regulation 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH). O J L 396 30.12.2006, Article 13.

³ *Inter alia*, Regulation 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH). O J L 396 30.12.2006, Article 25.



As leading members of the European scientific community, we want to help official European Commission representatives at having confidence in a future regulatory paradigm that is built on technological innovations and based on knowing why toxicity happens instead of simply observing the pathological effects of every tested chemical. We see no reason to cast doubt on the trust in chemical safety assessments using alternative test methods, especially when the validation criteria of the OECD are met:

*'The method generates data for risk assessment purposes that are at least as useful as, and preferably better than, those obtained using existing methods. This will give a comparable or better level of protection for human health or the environment.'*⁴

Within academic discourse, there is even a movement to use more appropriate benchmarks than existing methods to assess the precision of NAMs, reflecting the constraints of outdated animal testing to guide better protection measures.

We are therefore concerned by official statements that may unintentionally impede further efforts at modernising chemical safety data by impacting the confidence in alternative methods, and by extension the human and environmental safety assessments they inform.

ASPIS would therefore welcome further information and clarification from DG ENV regarding the statement of Mr Ciobanu-Dordea, as well as the extent to which the statement applies to NAMs.

We hope that this letter opens the door to further discourse that will allow EU scientific and academic expertise and investments to more precisely limit exposure to hazardous chemicals.

Sincerely,

ASPIS CLUSTER:

For [PrecisionTox](#), Prof. John Colbourne (University of Birmingham) Grant agreement ID: 965406

For [ONTOX](#), Prof. Mathieu Vinken (Vrije Universiteit Brussels) Grant agreement ID: 963845

For [RISK-HUNT3R](#), Prof. Bob Van de Water (Leiden University) Grant agreement ID: 964537

About ASPIS:

Since 2021, the EU is investing €60m over 5 years in the three international projects of the ASPIS Cluster (PrecisionTox, ONTOX and RISK-HUNT3R) under H2020. These projects are entirely dedicated to accelerating chemical safety assessment without the use of animals; to significantly contribute to the zero-pollution ambition announced by the European Commission in the Green Deal; and to support the Chemical Strategy for Sustainability (CSS) to deliver "a toxic-free environment". These projects build on nearly €1b of previous EU and industry investment in alternative test methods and the achievements in their development and implementation over the past 20 years.

⁴ OECD Series on Testing and Assessment, Number 34 'Guidance Document on the validation and international acceptance of new or updated test methods for hazard assessment' point 20.2. [OECD Guidance Document 34: Validation and International Acceptance of New or Updated Internationally Acceptable Test Methods for Hazard Assessment \(nih.gov\)](#)

