APPENDIX D

List of DNT IATA And Publications That Used Data from DNT IVB Assays

Table D.1 – List of DNT IATA case studies that have used data from the DNT IVB and their current status.

Title and lead	Chemicals or Chemical Class	Current Status	Reference
EFSA: Case study for the integration of in vitro data in the developmental neurotoxicity hazard identification and characterisation using deltamethrin as a prototype chemical	Deltamethrin	• Published in the OECD Series on Testing and Assessment in September 2022 • Reviewed by the OECD IATA Case studies project team, and endorsed at the 6th meeting of the Working Party on Hazard Assessment in June 2022 • Initial draft published in EFSA Journal	- No. 362 Case study for the integration of in vitro data in the developmental neurotoxicity hazard identification and characterisation using deltamethrin as a prototype chemical (Annex 1; Annex 2, Annex 3: Excel File; Annex 4: Excel File) -EFSA PPR Panel (EFSA Panel on Plant Protection Products and their Residues), Hernández-Jerez A, Adriaanse P, Aldrich A, Berny P, Coja T, Duquesne S, Focks A, Marinovich M, Millet M, Pelkonen O, Pieper S, Tiktak A, Topping C, Widenfalk A, Wilks M, Wolterink G, Crofton K, Hougaard S, Paparella M, Tzoulaki I, 2021. Scientific Opinion on Development of Integrated Approaches to Testing and Assessment (IATA) case studies on developmental neurotoxicity (DNT) risk assessment. EFSA Journal 2021;19(5):6599, 67 pp. doi:10.2903/j.efsa.2021.6599
EFSA: Case study for the integration of in vitro data in the developmental neurotoxicity hazard identification and characterisation using flufenacet	Flufenacet	• Published in the OECD Series on Testing and Assessment in September 2022 • Reviewed by the OECD IATA Case studies project team, and	-No. 363 Case study for the integration of in vitro data in the developmental neurotoxicity hazard identification and characterisation using flufenacet (Annex 1; Annex 2, Annex 3: Excel File) -EFSA PPR Panel (EFSA Panel on Plant Protection Products and their Residues), Hernández-Jerez A, Adriaanse P, Aldrich A, Berny P, Coja

		endorsed at the 6th meeting of the Working Party on Hazard Assessment in June 2022 • Initial draft published in EFSA Journal	T, Duquesne S, Focks A, Marinovich M, Millet M, Pelkonen O, Pieper S, Tiktak A, Topping C, Widenfalk A, Wilks M, Wolterink G, Crofton K, Hougaard S, Paparella M, Tzoulaki I, 2021. Scientific Opinion on Development of Integrated Approaches to Testing and Assessment (IATA) case studies on developmental neurotoxicity (DNT) risk assessment. EFSA Journal 2021;19(5):6599, 67 pp. doi:10.2903/j.efsa.2021.6599
US: Organophosporus flame retardants, a case study on the use of IATA for DNT to prioritize a class of compounds	Brominated flame retardants	• Published in the OECD Series on Testing and Assessment in September 2022 • Reviewed by the OECD IATA Case studies project team, and endorsed at the 6th meeting of the Working Party on Hazard Assessment in June 2022	- No. 364 Case study on the use of Integrated Approaches for Testing and Assessment for DNT to prioritize a class of Organophosphorus flame retardants
EuToxRisk: Case Study on the use of Integrated Approaches for Testing and Assessment for developmental neurotoxicity hazard characterisation of acetamiprid	Neonicotinoids	• Published in the OECD Series on Testing and Assessment in September 2022 • Reviewed by the OECD IATA	- No. 365 Case Study on the use of Integrated Approaches for Testing and Assessment for developmental neurotoxicity hazard characterisation of acetamiprid (Annex 1)

		Case studies project team, and endorsed at the 6th meeting of the Working Party on Hazard Assessment in June 2022	
EuToxRisk: Case Study on the use of Integrated Approaches for Testing and Assessment for developmental neurotoxicity hazard characterisation of imidacloprid and the metabolite desnitro-imidacloprid	Neonicotinoids	• Published in the OECD Series on Testing and Assessment in September 2022 • Reviewed by the OECD IATA Case studies project team, and endorsed at the 6th meeting of the Working Party on Hazard Assessment in June 2022	- No. 366 Case Study on the use of Integrated Approaches for Testing and Assessment for developmental neurotoxicity hazard characterisation of imidacloprid and the metabolite desnitro-imidacloprid (Annex 1)
US: Case study in use of DNT IVB data in WoE for glufosinate herbicides	Organophosphorus	• Published	Dobreniecki S, Mendez E, Lowit A, Freudenrich TM, Wallace K, Carpenter A, Wetmore BA, Kreutz A, Korol-Bexell E, Friedman KP, Shafer TJ. Integration of toxicodynamic and toxicokinetic new approach methods into a weight-of-evidence analysis for pesticide developmental neurotoxicity assessment: A case-study with DL- and L-glufosinate. Regul Toxicol Pharmacol. 2022 Apr 9;131:105167.

			doi: 10.1016/j.yrtph.2022.105167. Epub ahead of print. PMID: 35413399.