

Corrigendum to Incorporating New Approach Methodologies into Regulatory Nonclinical Pharmaceutical Safety Assessment

Jan Turner¹, Pandora Pound¹, Carla Owen², Isobel Hutchinson², Marina Hop³, David Y. S. Chau⁴, Lady V. Barrios Silva⁴, Mike Coleman⁵, Audrey Dubourg⁶, Lorna W. Harries⁷, Victoria Hutter⁸, J. Gerry Kennel¹, Volker M. Lauschke⁹, Winfried Neuhaus¹⁰, Clive Roper¹¹, Paul B. Watkins¹², Jonathan Welch¹³, Laura Rego Alvarez¹⁴ and Katy Taylor¹⁴

¹Safer Medicines Trust, Kingsbridge, UK; ²Animal Free Research UK, London, UK; ³Viveo Consulting Ltd., London, UK; ⁴Division of Biomaterials and Tissue Engineering, UCL Eastman Dental Institute, London, UK; ⁵College of Health and Life Sciences, Aston University, Birmingham, UK; ⁶CN Bio Innovations Limited, Cambridge, UK; ⁷University of Exeter Medical School, Exeter, UK; ⁸ImmuONE Limited, Hatfield, UK; Centre for Topical Drug Delivery and Toxicology, University of Hertfordshire, Hatfield, UK; ⁹Department of Physiology and Pharmacology, Karolinska Institutet, Stockholm, Sweden; Dr Margarete Fischer-Bosch Institute of Clinical Pharmacology, Stuttgart, Germany; University of Tübingen, Tübingen, Germany; ¹⁰Austrian Institute of Technology GmbH, Competence Unit Molecular Diagnostics, Vienna, Austria; Department of Medicine, Danube Private University, Krems, Austria; ¹¹Roper Toxicology Consulting Limited, Edinburgh, UK; ¹²Division of Pharmacotherapy and Experimental Therapeutics, UNC Eshelman School Of Pharmacy, Chapel Hill, NC, USA; ¹³Newcells Biotech, Newcastle upon Tyne, UK; ¹⁴Cruelty Free International, London, UK

In this Workshop Report, which appeared in *ALTEX* 40, 519-532 (doi:10.14573/altex.2212081), there were errors in Figures 2 and 3. The corrected Figures are below.

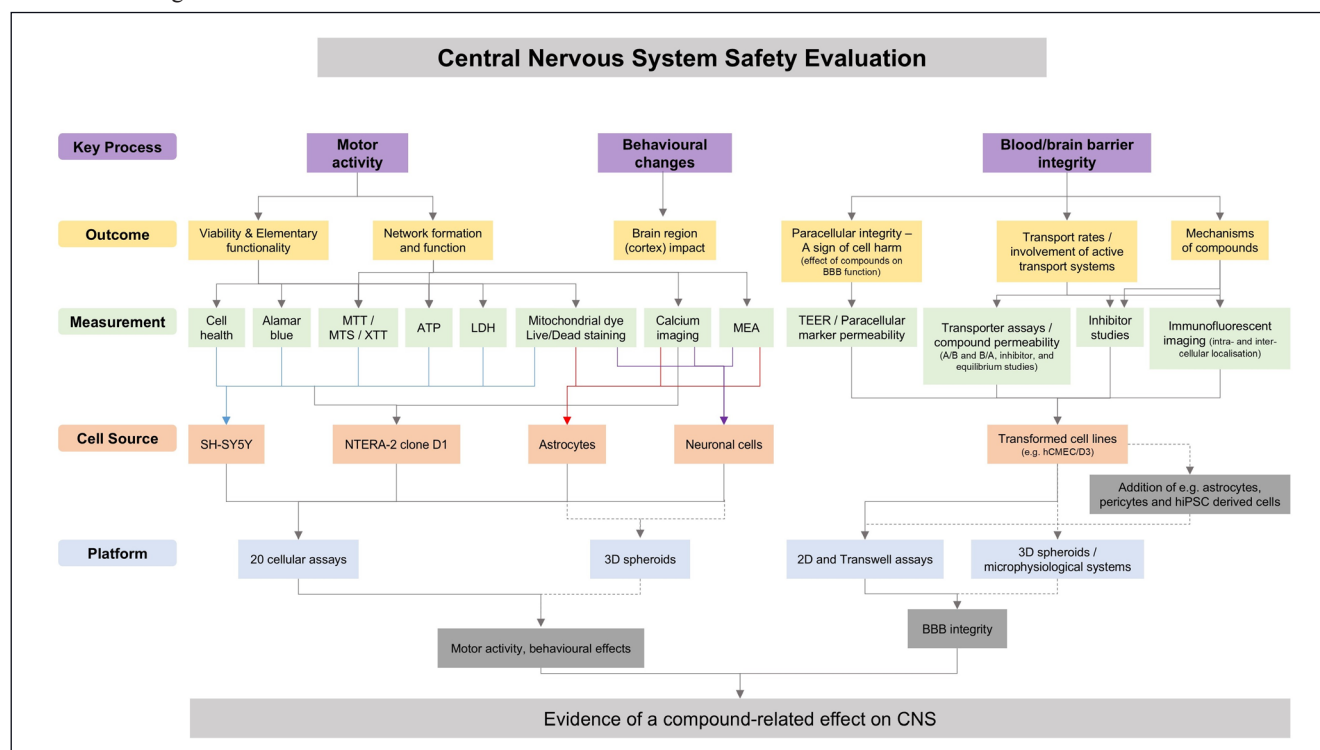


Fig. 2: Central nervous system map

Participants highlighted key functional processes (purple boxes) identified by regulators and the assay outcomes (yellow boxes) that could address those processes. Assay outputs, using the NAM platforms (blue boxes), cell types (orange boxes), and measurements (green boxes), are integrated to provide evidence of the compound-related effect on each system. Boxes with dotted lines indicate current/new developments in progress or required.

2D, 2-dimensional; 3D, 3-dimensional; A/B and B/A, “A-to-B” direction and “B-to-A” direction; ATP, adenosine triphosphate; BBB, blood-brain barrier; CNS, central nervous system; hCMEC, human cardiac microvascular endothelial cells; hiPSC, human induced pluripotent stem cells; LDH, lactate dehydrogenase; MEA, microelectrode/multielectrode array; MTS, 3-(4,5-dimethylthiazol-2-yl)-5-(3-carboxymethoxyphenyl)-2-(4-sulfophenyl)-2H-tetrazolium; MTT, 3-(4,5-dimethylthiazol-2-yl)-2,5-diphenyltetrazolium bromide; TEER, trans-epithelial/transendothelial electrical resistance; XTT, (2,3-bis(2-methoxy-4-nitro-5-sulfophenyl)-2H-tetrazolium-5-carboxanilide

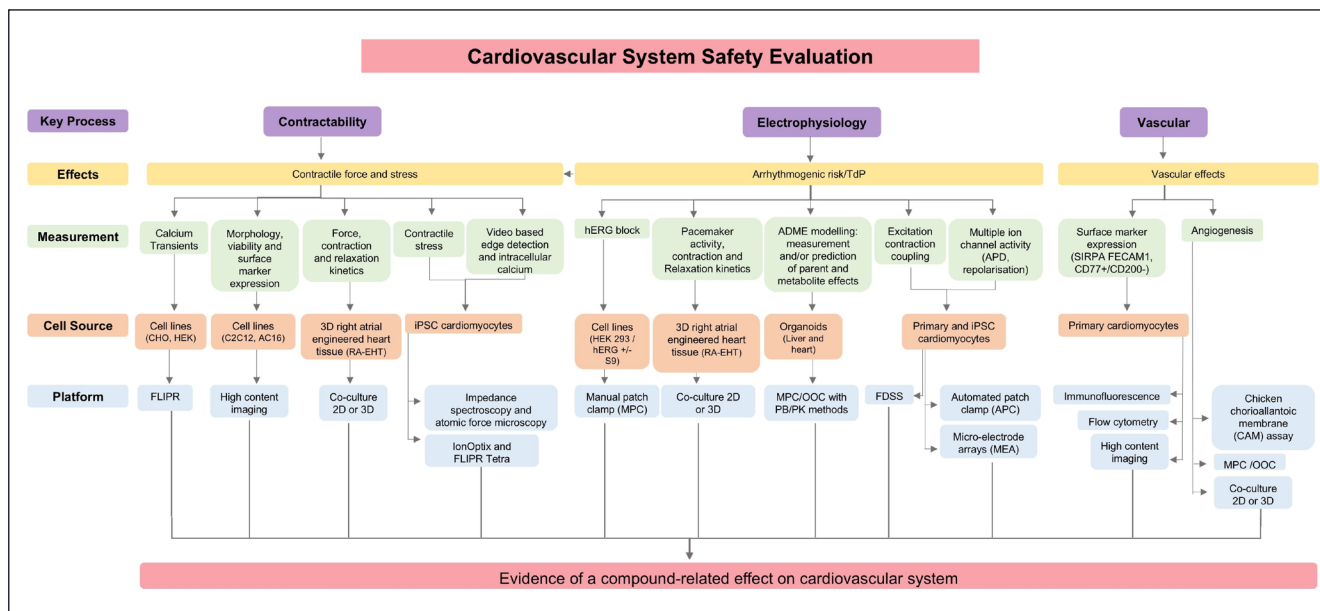


Fig. 3: Cardiovascular map

Participants highlighted key functional processes (purple boxes) identified by regulators and the assays that could address those processes. Assay outputs, using the NAM platforms (blue boxes), cell types (orange boxes), and measurements (green boxes), are integrated to provide evidence of the compound-related effect on each system.

2D, 2-dimensional; 3D, 3-dimensional; ADME, absorption, distribution, metabolism and excretion; APD, action potential duration; CHO, Chinese hamster ovary; FDSS, functional drug screening system; FLIPR, fluorescent imaging plate reader; HEK, human embryonic kidney; hERG, human ether-à-go-go-related gene; iPSC, induced pluripotent stem cells; OOC, organ-on-a-chip; PECAM1, platelet and endothelial cell adhesion molecule 1; PBPK, physiologically based pharmacokinetic; SIRPA, signal regulatory protein alpha; TdP, torsades de pointes