

ESAC statements on alternative methods

No.	Method	Date of ESAC statement	ECVAM validation study?	Impact on 3Rs and other aspects related to alternative test methods	ATLA Reference
1	3T3 NRU phototoxicity test	03/11/1997	Yes	Replacement OECD TG 432	ATLA 26 (1), 7-8
2	EpiSkin skin corrosivity test	03/04/1998	Yes	Replacement (EU) OECD TG 431	ATLA 26 (3), 275-280
3	Rat TER skin corrosivity test	03/04/1998	Yes	Replacement (EU) OECD TG 430	ATLA 26 (3), 275-280
4	Application of the 3T3 NRU phototoxicity test to UV filter chemicals	20/05/1998	Yes	Replacement OECD TG 432	ATLA 26 (4), 383-386
5	<i>In vitro</i> production of monoclonal antibodies	11/06/1998	No	Replacement	ATLA 26 (4), 383-386
6	Local lymph node assay for skin sensitization	21/03/2000	No	Reduction / Refinement OECD TG 429	ATLA 28 (3), 365-367
7	EpiDerm skin corrosivity test	21/03/2000	Yes	Replacement (EU) OECD TG 431; Annex V TG B.42	ATLA 28 (3), 365-367
8	CORROSITEX skin corrosivity test	06/12/2000	Yes	Reduction OECD Draft TG 435	ATLA 29 (2), 93-97
9	ELISA test for batch potency testing for tetanus vaccines for human use	06/12/2000	Yes	Reduction / Refinement accepted by European Pharmacopeia; general method 2.7.8 Assay of tetanus vaccine adsorbed)	ATLA 29 (2), 93-97
10	ToBI test for batch potency testing for tetanus vaccines for human use	06/12/2000	Yes	Reduction / Refinement accepted by European Pharmacopeia; general method 2.7.8 Assay of tetanus vaccine adsorbed)	ATLA 29 (2), 93-97
11	Micromass embryotoxicity assay	01/05/2002	Yes	Reduction	ATLA 30 (3), 265-273
12	Whole rat embryotoxicity assay	01/05/2002	Yes	Reduction	ATLA 30 (3), 265-273
13	Embryonic stem cell test for embryotoxicity	01/05/2002	Yes	Reduction OECD Draft GD 43	ATLA 30 (3), 265-273
14	ELISA test for batch potency testing of erysipelas vaccines	28/06/2002	No	Reduction / Refinement accepted by European Pharmacopeia, Monograph 0064, Swine Erysipelas Vaccine (inactivated)	ATLA 30 (5), 485-491
15	Relevance of the target animal safety test for batch safety testing of vaccines for veterinary use	28/06/2002	No	Deletion of <i>in vivo</i> test for routine batch release accepted by European Pharmacopeia after proven consistency in 10 consecutive batches; General monograph 0062: Vaccines for veterinary use	ATLA 30 (5), 485-491
16	Batch potency testing of erythropoietin solution	28/06/2002	No	Refinement Submitted to European Pharmacopeia but not accepted	ATLA 30 (5), 485-491
17	Upper Threshold Concentration (UTC) step-down approach for acute Aquatic Toxicity testing	21/03/2006	Yes	Reduction Submitted to OECD	ATLA 35 (2), 199-208
18	CFU-GM assay for predicting acute neutropenia in humans	21/03/2006	Yes	Reduction Submitted to EMEA	ATLA 35 (2), 199-208
19	Human Whole Blood IL-1 for <i>in vitro</i> pyrogenicity testing	21/03/2006	Yes	Replacement Submitted to EMEA and European Pharmacopoeia; drafting of a general monograph is in progress	ATLA 35 (2), 199-208
20	Human Whole Blood IL-6 for <i>in vitro</i> pyrogenicity testing	21/03/2006	Yes	Replacement Submitted to EMEA and European Pharmacopoeia; drafting of a general monograph is in progress	ATLA 35 (2), 199-208

21	PBMC IL-6 for <i>in vitro</i> pyrogenicity testing	21/03/2006	Yes	Replacement Submitted to EMEA and European Pharmacopoeia; drafting of a general monograph is in progress	ATLA 35 (2), 199-208
22	MM6 IL-6 for <i>in vitro</i> pyrogenicity testing	21/03/2006	Yes	Replacement Submitted to EMEA and European Pharmacopoeia; drafting of a general monograph is in progress	ATLA 35 (2), 199-208
23	Human Cryopreserved Whole Blood IL-1 for <i>in vitro</i> pyrogenicity testing	21/03/2006	Yes	Replacement Submitted to EMEA and European Pharmacopoeia; drafting of a general monograph is in progress	ATLA 35 (2), 199-208
24	<i>In vitro</i> micronucleus test as an alternative to the <i>in vitro</i> chromosome	17/11/2006	Yes	Enhancement of <i>in vitro</i> test battery, OECD Draft Guideline 827	ATLA 35 (2), 199-208
25	Application of the SkinEthic human skin model for skin corrosivity testing	17/11/2006	No	Replacement (EU) OECD TG 431	ATLA 35 (2), 199-208
26	Relevance of dog toxicity studies	17/11/2006	No	Refinement	ATLA 35 (2), 199-208
27	Bovine Corneal Opacity and Permeability (BCOP) test method	27/04/2007	No	Reduction Will be submitted to OECD via EC	ATLA 35 (3), 303-312
28	Isolated Chicken Eye (ICE) test method	27/04/2007	No	Reduction Will be submitted to OECD via EC	ATLA 35 (3), 303-312
29	Reduced Local Lymph Node Assay (rLLNA)	27/04/2007	Yes	Reduction OECD submission	ATLA 35 (3), 303-312
30	EpiDerm (with MTT reduction) for skin irritation	27/04/2007	Yes	Replacement (EU and OECD – depending on country requirements) of EU TM B.4 and OECD TG 404 (acute dermal irritation/corrosion).	ATLA 35 (3), 303-312
31	EPISKIN (with MTT reduction) for skin irritation	27/04/2007	Yes	Replacement (EU and OECD – depending on country requirements) of EU TM B.4 and OECD TG 404 (acute dermal irritation/corrosion).	ATLA 35 (3), 303-312
32	Fixed dose procedure (FDP)	31/10/2007	No	OECD TG 420	ATLA 36 (1), 4-5
33	Acute Toxic Class Method (ATC)	31/10/2007	No	OECD TG 423	ATLA 36 (1), 4-5
34	Up and Down procedure (UDP)	31/10/2007	No	OECD TG 425	ATLA 36 (1), 4-5
35	Use of FCS and other animal-derived supplements	08/05/2008			ATLA 36 (5), 481-482
36	In-Vitro tests for Skin Irritation testing	05/11/2008	No	Two similar test methods. Replacement (EU) of EU TM B.4 and OECD TG 404 (acute dermal irritation/corrosion)	
37	Performance Standards (PSs) for the Local Lymph Node Assay (LLNA)	05/11/2008		Allows validation of similar or modified test methods with respect to the validated LLNA. Supports reduction, refinement in the area of skin sensitisation. EU TM B.42 and OECD TG 429	
38	Statement on the Performance under UN GHS of three In Vitro assays for Skin Irritation testing and the Adaptation of the Reference Chemicals and Defined Accuracy Values of the ECVAM Skin Irritation Performance Standards	09/04/2009	Yes (reference method) No (two similar test methods)	Use of three <i>in vitro</i> methods for skin irritation testing under the new EU classification scheme (CLP regulation; 1272/2008/EC) based on UN GHS. The three methods had been validated acc. to the previous EU classification system.	ECVAM publication on the performance of three ECVAM-validated methods under UN GHS (online)
39	ESAC Statement on the Scientific Validity of an In-Vitro Test Method for Skin Corrosivity Testing	12/06/2009	No	Replacement (EU) of EU TM B.4 and OECD TG 431	no

40	Cell based assays eye irritation	22/09/2009	Yes	Partial replacement EU TM B.5 OECD TG 405	None yet
41	LVET	22/09/2009	No	Use of existing LVET data for C&L purposes of a restricted use domain of chemicals and products. May impact on the number of tests required to make C&L decisions. Affected are EU TM B.5 and OECD TG 405	No ECVAM Publication
42	Updated skin irritation PS	22/09/2009	N.A	Allows validation of similar or modified test methods with respect to the validated reference method (Episkin for skin irritation). Supports full or partial replacement in the area of skin irritation	ECVAM Performance Standards for <i>in vitro</i> skin irritation testing based on reconstructed human epidermis (RhE)
43	Statement on two reference chemicals for in vitro skin corrosion testing	22/09/2009	N.A	Supports the ongoing (2009) revision of the OECD TG 431	N.A

Contact Person: Joachim Kreysa • Tel +39-0332-786735 • Fax +39-0332-786297 •Joachim.Kreysa@ec.europa.eu