

Literaturliste ZEBET 1989 bis 2009, sortiert nach Themen

List of ZEBET literature 1989-2009 by topic

1. Aufgabenbereiche der Zentralstelle zur Erfassung und Bewertung von Ersatz- und Ergänzungsmethoden zum Tierversuch (ZEBET)

Areas of work of the Centre for Documentation and Evaluation of Alternatives to Animal Experiments (ZEBET)

1. Spielmann H, Grune B, Liebsch M, Vogel R (2008) Mission and Accomplishments of ZEBET, the National Centre for Alternatives in Germany. AATEX 14: 41-46
3. Sauer UG, Spielmann H, Rusche B (2005) Fourth EU report on the statistics on the number of animals used for scientific purposes in 2002 — Trends, problems, conclusions. ALTEX 22: 59-67
4. Spielmann H (2005) Progress in Establishing in Vitro Alternatives to Animal Experiments — Ethical and Scientific Challenges. AATEX 11: 89-100
5. Sauer UG, Spielmann H, Rusche B (2004) Third EU report on the statistics on animals used for experimental and other scientific purposes: Trends, problems, conclusions. ATLA 32: 309-317
6. Luy J, Grune B (2003) Workshop-report: Classes of 'protection of animals' concept in schools. ALTEX 20: 40-42
7. Sauer UG, Spielmann H, Rusche B (2003) Dritter EU-Bericht über die Anzahl verwendeter Versuchstiere — Tendenzen, Probleme, Schlussfolgerungen. Third statistical report on the numbers of laboratory animals used in the European Union — Tendencies, problems, decisions. ALTEX 20 120-123
8. Spielmann H (2003) The future of animal experiments in nutrition research. Forum Nutr 56: 297-299
9. Spielmann H (2002) A chair on alternatives? ALTEX 19: 69-73
10. Spielmann H, Grune B, Ott T, Schnädelbach D, Olejniczak K, Schwaning M, Cußler K, Mettenleiter T, Ahl R (1998) Möglichkeiten des Einsatzes von Ersatz- und Ergänzungsmethoden zum Tierversuch bei der Entwicklung und Zulassung von Arzneimitteln. Bundesgesundheitsblatt 41: 422-429
11. Spielmann H (1997) Fromme Wünsche helfen nicht. Berliner Ärzte 5: 3
12. Spielmann H (1997) Animal alternatives in Germany. Science 276: 19
13. Spielmann H (1997) EU-Recht erfordert Novellierung des Tierschutzgesetzes. Biospektrum 3: 20
14. Grune-Wolff B, Hantdke B, Spielmann H (1996) Transgene Tiere und gentechnisch veränderte Zellen als Alternativmethoden zum Tierversuch. Bundesgesundheitsblatt Sonderheft Dez: 41-43
15. Grune-Wolff B, Spielmann H (1995) Tierversuche in der veterinärmedizinischen mikrobiologischen Diagnostik in Deutschland. ALTEX 12: 201-202
16. Rusche B, Spielmann H (1994) Letter to the editor. ATLA 22: 512
17. Spielmann H (1994) Aufstellungssystematik des Archivs für Tier- Natur- und Umweltschutz. ALTEX 11: 164-165
18. Spielmann H (1994) Verleihung der Medaille der Medizinischen Fakultät der tschechischen Karls-Universität an Michael Balls. ALTEX 11: 160
19. Spielmann H (1993) Government initiatives to change the German animal protection act. ATLA 21: 384-385
20. Spielmann H (1993) Kritische Anmerkungen zum Memorandum der deutschen Wissenschaftsorganisationen zur Novellierung des Tierschutzgesetzes vom 7. Oktober 1992. ALTEX 10: 70-71
21. Spielmann H (1989) Die Zentrale Erfassungs- und Bewertungsstelle für Ersatz- und Ergänzungsmethoden zum Tierversuch. Bundesgesundheitsblatt 32: 363

2. Konzepte zur Entwicklung und Anerkennung von Alternativmethoden

Concepts for the development and recognition of alternative methods

1. Maurici D, Barlow S, Benford D, Dybing E, Halder M, Louhimies S, Holloway M, Lacerda A, Mantovani A, Meyer O, Pratt I, Morton D, Seinen W, Spielmann H, LeNeindre P (2008) Overview of the test requirements in the area of food and feed safety. AATEX 14: 779-783
2. Robinson S, Basketter D, Bussi R, Coenen J, Connolly P, Elvig-Jorgensen SG, Hermans H, Hoffmeister A, Lacerda A, Linge JP, Spielmann H, Torok M, van der Valk J, Watson T (2008) Dissemination strategies: How do they influence the uptake of the new Three Rs methods across laboratories and other boundaries? A report of a workshop held by the European Partnership for Alternative Approaches to Animal Testing (EPAA) Working Group 3. ATLA 36: 453-458
3. Balls M, Amcoff P, Bremer S, Casati S, Coecke S, Clothier R, Combes R, Corvi R, Curren R, Eskes C, Fentem J, Grihaldo L, Halder M, Hartung T, Hoffmann S, Schectman L, Scott L, Spielmann H, Stokes W, Tice R, Wagner D, Zang V (2006) The principles of weight of evidence validation of test methods and testing strategies — The report and recommendations of ECVAM workshop 58. ATLA 34: 603-620

4. Box RJ (2006) Replacement of dogs as research animals for the approval testing of plant protection products. *ALTEX* 23: 24-27
5. Hess P, Grune B, Anderson DB, Aune T, Botana LM, Caricato P, van Egmond HP, Halder M, Hall S, Lawrence JF, Moffat C, Poletti R, Richmond J, Rossini GP, Seamer C, Vilageliu JS (2006) Three Rs Approaches in Marine Biotoxin Testing — ECVAM Workshop Report 55. *ATLA* 34: 193-224
6. Spielmann H, Box R (2006) The dog as second test species for the toxicological evaluation of pesticides — International status. *Naunyn Schmiedebergs Arch Pharmacol* 372: 133
7. Box RJ, Spielmann H (2005) Use of the dog as non-rodent test species in the safety testing schedule associated with the registration of crop and plant protection products (pesticides): Present status. *Arch Toxicol* 79: 615-626
8. Spielmann H, Gerner I, Hoefer T, Liebsch M, Herzler M (2005) Regulatory use of (Q)SARs in toxicological hazard assessment strategies. *Naunyn Schmiedebergs Arch Pharmacol* 371: R134
9. Spielmann H (2005) Predicting the risk of developmental toxicity from in vitro assays. *Toxicol Appl Pharmacol* 207: 375-380
10. Genschow E, Seiler A, Spielmann H (2004) Considering the test performance for three class data using linear discriminant analysis: A case study. *ATLA* 32: 713-723
11. Gerner I, Spielmann H, Hoefer T, Liebsch M, Herzler M (2004) Regulatory use of (Q)SARs in toxicological hazard assessment strategies. *SAR QSAR Environ Res* 15: 359-366
12. Hoefer T, Gerner I, Gundert-Remy U, Liebsch M, Schulte A, Spielmann H, Vogel R, Wettig K (2004) Animal testing and alternative approaches for the human health risk assessment under the proposed new European chemicals regulation. *Arch Toxicol* 78: 549-564
13. Spielmann H (2004) Predicting The risk of developmental toxicity from In vitro assays. *Toxicol Appl Pharmacol* 197: 163-164
14. Spielmann H, Gerner I, Hoefer T, Liebsch M, Herzler M (2004) Regulatory use of (Q)SARs in toxicological hazard assessment. *ALTEX* 21: 178-179
15. Liebsch M, Spielmann H, Koeter HBWM (2003) In vitro alternatives accepted as new OECD test guidelines: A result of validation and careful international commenting. *Naunyn Schmiedebergs Arch Pharmacol* 367: R168
16. Spielmann H (2003) Validation and regulatory acceptance of new carcinogenicity tests. *Toxicol Pathol* 31: 54-59
17. Balls M, Bogni A, Bremer S, Casati S, Coecke S, Eskes C, Prieto P, Sabbioni E, Worth A, Zuang V, Barratt M, Blaauboer B, Botham P, Combes R, Doehmer J, Fentem J, Liebsch M, Spielmann H (2002) Alternative (non-animal) methods for chemicals testing: Current status and future prospects — Overview. *ATLA* 30: ii-iii
18. Miethe G (2002) Possibilities of replacing and reducing animal tests in the pharmacopoeias: An evaluation of unused methods and proposals for change. *ATLA* 30: 229-240
19. Miethe G, Sponer G (2002) The development and approval of alternative methods to bioassays used for quality assurance, a challenge for the pharmaceutical industry and the authorities. *ALTEX* 19: 115-121
20. Spielmann H (2002) Animal use in the safety evaluation of chemicals: Harmonization and emerging needs. *ILAR J* 43 Suppl: S11-S17
21. Stitzel KA, Spielmann H, Griffin G (2002) The international symposium on regulatory testing and animal welfare: Recommendations on best scientific practices for acute systemic toxicity testing. *ILAR J* 43 Suppl: S108-S111
22. Spielmann H, Gerbracht U (2001) The use of dogs as second species in regulatory testing of pesticides — Part II: Subacute, subchronic and chronic studies in the dog. *Arch Toxicol* 75: 1-21
23. Spielmann H, Liebsch M (2001) Current Validation Studies on Alternatives to animal Experiments in Europe. *AATEX* 7: 81-89
24. van der Valk J, Stamatii A, Spielmann H, Blaauboer B (2001) Eleventh International Workshop on In Vitro Toxicology — 25-28 October 2000 Pueblo Acanilado, El Campello (Alicante), Spain. *Toxicol In Vitro* 15: 261-262
25. Balls M, Berg N, Bruner LH, Curren RD, de Silva O, Earl LK, Esdaile DJ, Fentem JH, Liebsch M, Ohno Y, Prinsen MK, Spielmann H, Worth AP (1999) Eye irritation testing: The way forward — The report and recommendations of ECVAM Workshop 34. *ATLA* 27: 53-71
26. Spielmann H (1999) Fortschritte bei der Reduktion behördlich vorgeschriebener Tierversuche in der Toxikologie. *Bioforum* 10: 606-609
27. Spielmann H (1999) Alternatives to the Draize eye test: Current status of validation and acceptance in Europe. *ALTEX* 16: 171-172
28. Gerbracht U, Spielmann H (1998) The use of dogs as second species in regulatory testing of pesticides. I. Interspecies comparison. *Arch Toxicol* 72: 319-329
29. Spielmann H, Liebsch M, Reinhardt C (1998) ERGATT/ECVAM Workshop on Acceptance of Validated Alternative Methods: Amden III. *ALTEX* 15: 18-22

30. Tichias K, Fentem J, Basketter D, Botham P, Brooker P, Bruner L, Evans P, Fairhurst S, Fassold E, Fielder R, Gerberick F, Harvey P, Koeter H, Parsons P, Schleder E, Shannon D, Spielmann H (1998) Progress in toxicological testing: Reduction and refinement issues — Recommendations from a Joint UK Government/ECVAM Meeting. ATLA 26: 619-627
31. Todd M, Garthoff B, Bernhardt W, Bode G, Farr S, Kolar R, Lumley C, Pieters M, Rogiers V, Sauer U, Spielmann H, Straus J, Warngard L (1998) Issues relating to the release of proprietary information and data for use in the validation of alternative methods. ATLA 26: 13-20
32. Zarnow K, Spielmann H (1998) Möglichkeiten zur Reduzierung oder zum Ersatz von Tierversuchen die in DIN-Normen vorgeschrieben sind. Reduction and replacement of animal tests required in standards for safety testing. ALTEX 15: 129-140
33. Gruber FP, Spielmann H (1996) Replacement of the frog test in physiology teaching by the myograph: Practical validation in Germany. ALTEX 13: 190-194
34. Spielmann H (1996) Unterschiedliche Konzepte der toxikologischen Risikobewertung bei der Anwendung von Tierversuchen und in vitro Methoden. Different concepts for risk assessment have to be applied if the data are derived from testing in animals or from testing in vitro. ALTEX 13: 140-143
35. Spielmann H (1996) A German Study on "the use of dogs as the second species in regulatory testing of pesticides". ATLA 24: 609-610
36. Spielmann H, Reinhardt C (1996) OECD is accepting test guidelines for validated in vitro toxicity tests in 1996. ALTEX 13: 167-174
37. Balls M, De Klerck W, Baker F, von Beek M, Bouillon C, Bruner L, Carstensen J, Chamberlain M, Cottin M, Curren R, Dupuis J, Fairweather F, Faure U, Fentem J, Fisher C, Galli C, Kemper F, Knaap A, Langley G, Loprieno G, Loprieno N, Pape W, Pechovitch G, Spielmann H, Ungar C, White I, Zuang V (1995) Development and validation of non-animal tests and testing strategies: The identification of a coordinated response to the challenge and the opportunity presented by the sixth amendment of the cosmetics directive (76/768/EEC). ATLA 23: 398-409
38. Balls M, Goldberg AM, Fentem JH, Broadhead CL, Burch RL, Festing MF, Frazier JM, Hendriksen CF, Jennings M, van der Kamp MD, Morton DB, Rowan AN, Russell C, Russell WM, Spielmann H, Stephens ML, Stokes WS, Straughan DW, Yager JD, Zurlo J, van Zutphen BF (1995) The three Rs: The way forward: The report and recommendations of ECVAM Workshop 11. ATLA 23: 838-866
39. Balls M, Blaauboer B, Fentem J, Bruner L, Combes R, Ekwil B, Fiedler RJ, Guillouzo A, Lewis RW, Lovell DP, Reinhardt CA, Repetto G, Sladowski D, Spielmann H, Zucco F (1995) Practical aspects of the validation of toxicity test procedures. The report and recommendations of ECVAM Workshop 5. ATLA 23: 129-147
40. Curren R, Southey J, Spielmann H, Liebsch M, Fentem J, Balls M (1995) The role of prevalidation in the development, validation and acceptance of alternative methods. ATLA 23: 211-217
41. Fentem J, Prinsen MK, Spielmann H, Walum E, Botham PA (1995) Validation — Lessons learned from practical experience. Toxicol In Vitro 9: 857-862
42. Gunzel P, Halle W (1995) Bemerkungen zur Arbeit von W. Halle und H. Spielmann in ALTEX 11, 1994, 148-154 Zur Qualität der Vorhersage der akuten Toxizität (LD50) aus der Zytotoxizität (IC50x) für eine Gruppe von 26 Neurotropika aufgrund der Daten des "Erweiterten Registers der Zytotoxizität". ALTEX 12: 104-107
43. Hartung T, Spielmann H (1995) Der lange Weg zur validierten Ersatzmethode. The sophisticated process of validation. ALTEX 12: 98-103
44. Liebsch M, Spielmann H (1995) Von Menschen und Mäusen, Ersatz der Aszitesmaus zur Produktion monoklonaler Antikörper in Deutschland. Bundesgesundheitsblatt 38: 227-231
45. Blaauboer B, Balls M, Bianchi V, Bolcsfoldi G, Guilouzo A, Moore GA, Odland L, Reinhardt C, Spielmann H, Walum E (1994) The ECITTS integrated toxicity testing scheme: the application of in vitro test systems to the hazard assessment of chemicals. Toxicol In Vitro 8: 845-846
46. Walum E, Balls M, Bianchi V, Blaauboer B, Bolcsfoldi G, Guilouzo A, Moore GA, Odland L, Reinhardt C, Spielmann H (1992) ECITTS: An integrated approach to the application of in vitro test systems to the hazard assessment of chemicals. ATLA 20: 406-439
47. Balls M, Blaauboer B, Brusik D, Frazier J, Lamp D, Pemberton M, Reinhardt C, Roberfroid M, Rosenkranz H, Schmid B, Spielmann H, Stamatii AL, Walum E (1990) Report and recommendations of the CAAT/ERGATT workshop on the validation of toxicity test procedures. ATLA 18: 313-337
48. Balls M, Botham P, Cordier A, Fumero S, Kayser D, Koeter H, Koundkijan P, Lindauist NG, Meyer O, Pioda L, Reinhardt C, Rozemond H, Smyrniotis T, Spielmann H, von Looy H, van der Venne MT, Walum E (1990) Report and recommendations of an international workshop on promotion of the regulatory acceptance of validated non-animal toxicity test procedures. ATLA 18: 339-344

3. Alternativmethoden in der Toxikologie

Alternative methods in toxicology

1. Berube K, Aufderheide M, Breheny D, Clothier R, Combes R, Duffin R, Forbes B, Gaca M, Gray A, Hall I, Kelly M, Lethem M, Liebsch M, Merolla L, Morin JP, Seagrave J, Swartz MA, Tetley TD, Umachandran M (2009) In vitro models of inhalation toxicity and disease. The report of a FRAME workshop. *ATLA* 37: 89-141
2. Buesen R, Genschow E, Slawik B, Visan A, Spielmann H, Luch A, Seiler A (2009) Embryonic stem cell test remastered: Comparison between the validated EST and the new molecular FACS-EST for assessing developmental toxicity in vitro. *Toxicol Sci* 108: 389-400
3. Marx-Stoelting P, Adriaens E, Ahr HJ, Bremer S, Garthoff B, Gelbke HP, Piersma A, Pellizzer C, Reuter U, Rogiers V, Schenk B, Schwengberg S, Seiler A, Spielmann H, Steemans M, Stedman, DB, Vanparys P, Vericat JA, Verwei M, van der Water F, Weimer M, Schwarz M (2009) A review of the implementation of the embryonic stem cell test (EST). The report and recommendations of an ECVAM/ReProTest Workshop. *ATLA* 37: 313-328
4. Scott L, Eskes C, Hoffmann S, Adriaens E, Alepee N, Bufo M, Clothier R, Facchini D, Faller C, Guest R, Harbell J, Hartung T, Kamp H, Varlet BL, Meloni M, McNamee P, Osborne R, Pape W, Pfannenbecker U, Prinsen M, Seaman C, Spielmann H, Stokes W, Trouba K, Berghe CV, Goethem FV, Vassallo M, Vinardell P, Zuang V (2009) A proposed eye irritation testing strategy to reduce and replace in vivo studies using Bottom-Up and Top-Down approaches. *Toxicol In Vitro*
5. Trauer S, Patzelt A, Otberg N, Knorr F, Rozycki C, Balizs G, Buttemeyer R, Linscheid M, Liebsch M, Lademann J (2009) Permeation of topically applied caffeine through human skin — A comparison of in vivo and in vitro data. *Br J Clin Pharmacol* 68: 181-186
6. Pauluhn J, Hahn A, Spielmann H (2008) Assessment of early acute lung injury in rats exposed to aerosols of consumer products: attempt to disentangle the "Magic Nano" conundrum. *Inhal Toxicol* 20: 1245-1262
7. Schafer-Korting M, Bock U, Diembeck W, Dusing HJ, Gamer A, Haltner-Ukomadu E, Hoffmann C, Kaca M, Kamp H, Kersen S, Kietzmann M, Korting HC, Krachter HU, Lehr CM, Liebsch M, Mehling A, Muller-Goymann C, Netzlaff F, Niedorf F, Rubbelke MK, Schafer U, Schmidt E, Schreiber S, Spielmann H, Vuia A, Weimer M (2008) The use of reconstructed human epidermis for skin absorption testing: Results of the validation study. *ATLA* 36: 161-187
8. Spielmann H, Vogel R (2008) The extended 1-generation study (OECD 415), as a replacement of the mammalian 2-generation study (OECD 416). *AATEX* 14: 795-798
9. Spielmann H, Grune B, Liebsch M, Seiler A, Vogel R (2008) Successful validation of in vitro methods in toxicology by ZEBET, the National Centre for Alternatives in Germany at the BfR (Federal Institute for Risk Assessment). *Exp Toxicol Pathol* 60: 225-233
10. Spielmann H (2008) Developmental and reproductive toxicity testing: Animal studies are not predictive for humans. *ATLA* 36: 715-716
11. Kandarova H, Richter H, Liebsch M, Lademann J (2007) Stratum corneum architecture of reconstructed human skin models monitored by fluorescent confocal laser scanning microscopy. *Laser Phys Lett* 4: 308-311
12. Kejlova K, Jirova D, Bendova H, Kandarova H, Weidenhoffer Z, Kolarova H, Liebsch M (2007) Phototoxicity of bergamot oil assessed by in vitro techniques in combination with human patch tests. *Toxicol In Vitro* 21: 1298-1303
13. Spielmann H, Hoffmann S, Liebsch M, Botham P, Fentem JH, Eskes C, Roguet R, Cotovio J, Cole T, Worth A, Heylings J, Jones P, Robles C, Kandarova H, Gamer A, Remmele M, Curren R, Raabe H, Cockshott A, Gerner I, Zuang V (2007) The ECVAM international validation study on in vitro tests for acute skin irritation: Report on the validity of the EPISKIN and EpiDerm assays and on the Skin Integrity Function Test. *ATLA* 35: 559-601
14. Brendler-Schwaab S, Kasper P, Aeby P, Epe B, Frotschl R, Gocke E, Hertel C, Kirchner S, Liebsch M, Meurer K, Plappert-Helbig U, Schmidt E (2006) New aspects of photogenotoxicity testing: Prevalidation of the photo-micronucleus test and the photo-comet assay. *Mutagenesis* 21: 277-278
15. Buesen R, Kaltenhauser J, Genschow E, Visan A, Slawik B, Schlechter K, Becker K, Spielmann H, Seiler A (2006) Establishing predictive molecular markers of differentiation as toxicological endpoints in the embryonic stem cell test (EST). *Naunyn Schmiedeberg's Arch Pharmacol* 372: 130
16. Herzler M, Spielmann H, Gerner I, Liebsch M, Hoefler T (2006) Use of in vitro data and (Q)SARs to classify eye irritating chemicals in the EU — Experience at the BfR. *ALTEX* 23 Suppl: 239-245
17. Kandarova H, Liebsch M, Spielmann H, Genschow E, Schmidt E, Traue D, Guest R, Whittingham A, Warren N, Gamer AO, Remmele M, Kaufmann T, Wittmer E, De Wever B, Rosdy M (2006) Assessment of the human epidermis model SkinEthic RHE for in vitro skin corrosion testing of chemicals according to new OECD TG 431. *Toxicol In Vitro* 20: 547-559
18. Kandarova H, Richter H, Liebsch M, Lademann J (2006) Stratum corneum architecture of reconstructed human skin models monitored by fluorescent confocal laser scanning microscopy. *Laser Phys Lett* 4: 308-311

19. Kandarova H, Kejlova K, Jirova D, Bendova H, Tharmann J, Traue D, Spielmann H, Liebsch M (2006) ECVAM feasibility study: Can the pre-validated in vitro skin model phototoxicity assay be upgraded to quantify phototoxic potency of topical phototoxins? *Naunyn Schmiedebergs Arch Pharmacol* 372: 131
20. Kandarova H, Liebsch M, Schmidt E, Genschow E, Traue D, Spielmann H, Meyer K, Steinhoff C, Tornier C, De Wever B, Rosdy M (2006) Assessment of the skin irritation potential of chemicals by using the SkinEthic reconstructed human epidermal model and the common skin irritation protocol evaluated in the ECVAM skin irritation validation study. *ATLA* 34: 393-406
21. Schaefer-Korting M, Bock U, Gamer A, Haberland A, Haltner-Ukomadu E, Kaca M, Kamp H, Kietzmann M, Korting HC, Krachter HU, Lehr CM, Liebsch M, Mehling A, Netzlaff F, Niedorf F, Rubbelke MK, Schafer U, Schmidt E, Schreiber S, Schroder KR, Spielmann H, Vuia A (2006) Reconstructed human epidermis for skin absorption testing: Results of the German prevalidation study. *ATLA* 34: 283-294
22. Seiler A, Buesen R, Hayess K, Schlechter K, Visan A, Genschow E, Slawik B, Spielmann H (2006) Current status of the embryonic stem cell test: the use of recent advances in the field of stem cell technology and gene expression analysis. *ALTEX* 23 Suppl: 393-399
23. Seiler A, Buesen R, Visan A, Spielmann H (2006) Use of murine embryonic stem cells in embryotoxicity assays: The embryonic stem cell test. *Methods Mol Biol* 329: 371-395
24. Spielmann H, Seiler A, Bremer S, Hareng L, Hartung T, Ahr H, Faustman E, Haas U, Moffat GJ, Nau H, Vanparys P, Piersma A, Sintes JR, Stuart J (2006) The practical application of three validated in vitro embryotoxicity tests. The report and recommendations of an ECVAM/ZEBET workshop (ECVAM workshop 57). *ATLA* 34: 527-538
25. Spielmann H, Vogel R (2006) REACH testing requirements must not be driven by reproductive toxicity testing. *ATLA* 34: 365-366
26. Trauer S, Kandarova H, Schmidt E, Traue D, Schaefer U, Lehr CM, Liebsch M (2006) In vitro skin absorption of butyl methoxydibenzoylmethane determined in human epidermis and in a reconstituted human epidermis model. *Naunyn Schmiedebergs Arch Pharmacol* 372: 130
27. Vuia A, Bock U, Diembeck W, Dusing HJ, Gamer AO, Haltner-Ukomadu E, Hoffmann C, Kaca M, Kamp HG, Kersen S, Kietzmann M, Korting HC, Krachter HU, Lehr CM, Liebsch M, Mehling A, Muller-Goymann C, Netzlaff F, Niedorf F, Rubbelke MK, Schafer UF, Schmidt E, Spielmann H, Weimer M, Schaefer-Korting M (2006) Skin absorption testing via reconstructed human epidermis — Results of the German validation study. *Naunyn Schmiedebergs Arch Pharmacol* 372: 130
28. Aufderheide M, Costa DL, Devlin R, Feron V, Harkema JR, Hayashi Y, Pauluhn J, Spielmann H (2005) Experimental assessment of the toxicological effects of inhaled complex mixtures on the respiratory system, 23-25 April 2005, Barcelona, Spain. Summary and conclusions of the review committee. *Exp Toxicol Pathol* 57 Suppl 1: 239-243
29. Bremer S, Cortvriendt R, Daston G, Eletti B, Mantovani A, Maranghi F, Pelkonen O, Ruhdel I, Spielmann H (2005) Reproductive and developmental toxicity. *ATLA* 33 Suppl 1: 183-209
30. Eskes C, Bessou S, Bruner L, Curren R, Harbell J, Jones P, Kreiling R, Liebsch M, McNamee P, Pape W, Prinsen MK, Seidle T, Vanparys P, Worth A, Zuang V (2005) Eye irritation. *ATLA* 33 Suppl 1: 47-81
31. Gerner I, Liebsch M, Spielmann H (2005) Assessment of the eye irritating properties of chemicals by applying alternatives to the Draize rabbit eye test: The use of QSARs and in vitro tests for the classification of eye irritation. *ATLA* 33: 215-237
32. Kandarova H, Liebsch M, Gerner I, Schmidt E, Genschow E, Traue D, Spielmann H (2005) The EpiDerm test protocol for the upcoming ECVAM validation study on in vitro skin irritation tests — An assessment of the performance of the optimised test. *ATLA* 33: 351-367
33. Kandarova H, Liebsch M, Spielmann H, Genschow E, Schmidt E, Traue D, Guest R, Whittingham A, Warren N, Garner AO, Remmele M, Kaufmann T, Wittmer E, De Wever B (2005) Assessment of the human epidermis model skinethic RHE (TM) for in vitro skin corrosion testing according to OECD TG 431. *Naunyn Schmiedebergs Arch Pharmacol* 371: R124
34. Liebsch M, Botham P, Fentem J, Heylings J, Roguet R, Hartung T, Eskes C, Hoffmann S, Cole T, Worth A, Zuang V, Spielmann H (2005) The ECVAM validation study of three in vitro methods for acute skin irritation — Interim report of the validation management team. *Naunyn Schmiedebergs Arch Pharmacol* 371: R124
35. Liebsch M, Spielmann H, Pape W, Krul C, Degueray A, Eskes C (2005) UV-induced effects. *ATLA* 33 Suppl 1: 131-146
36. Schlechter K, Buesen R, Slawik B, Spielmann H, Seiler A (2005) Replacement of fetal calf serum in the embryonic stem cell test. *Naunyn Schmiedebergs Arch Pharmacol* 371: R126
37. Schleder E, Genschow E, Spielmann H, Stropp G, Kayser D (2005) Oral acute toxic class method: A successful alternative to the oral LD50 test. *Regul Toxicol Pharmacol* 42: 15-23
38. Schreiber S, Mahmoud A, Vuia A, Rubbelke MK, Schmidt E, Schaller M, Kandarova H, Haberland A, Schafer UF, Bock U, Korting HC, Liebsch M, Schaefer-Korting M (2005) Reconstructed epidermis versus human and animal skin in skin absorption studies. *Toxicol In Vitro* 19: 813-822

39. Schreiber S, Haberland A, Maia CS, Schaller M, Korting HC, Schimke I, Liebsch M, Schaefer-Korting M (2005) The impact of skin viability on drug metabolism and permeation — Bovine serum albumin toxicity on keratinocytes. *Naunyn Schmiedebergs Arch Pharmacol* 371: R92
40. Zuang V, Alonso MA, Botham PA, Eskes C, Fentem J, Liebsch M, van de Sandt JJ (2005) Skin irritation and corrosion. *ATLA* 33 Suppl 1: 35-46
41. Buesen R, Visan A, Slawik B, Schlechter K, Genschow E, Spielmann H, Seiler A (2004) Improving the embryonic stem cell test (EST) by establishing molecular endpoints: A prevalidation study. *Naunyn Schmiedebergs Arch Pharmacol* 369: R112
42. Buesen R, Visan A, Genschow E, Slawik B, Spielmann H, Seiler A (2004) Trends in improving the embryonic stem cell test (EST), an overview. *ALTEX* 21: 15-22
43. Buesen R, Visan A, Slawik B, Schlechter K, Genschow E, Spielmann H, Seiler A (2004) Current improvements in the embryonic stem cell test (EST). *ALTEX* 21: 145
44. Genschow E, Spielmann H, Scholz G, Pohl I, Seiler A, Clemann N, Bremer S, Becker K (2004) Validation of the embryonic stem cell test in the international ECVAM validation study on three in vitro embryotoxicity tests. *ATLA* 32: 209-244
45. Kandarova H, Liebsch M, Genschow E, Gerner I, Traue D, Slawik B, Spielmann H (2004) Optimisation of the EpiDerm test protocol for the upcoming ECVAM validation study on in vitro skin irritation tests. *ALTEX* 21: 107-114
46. Kandarova H, Liebsch M, Spielmann H, Genschow E, Schmidt E, Guest R, Whittingham A, Warren N, Gamer AO, Remmele M, Kaufmann T, Wittmer E, De Wever B (2004) Assessment of the human epidermis model Skin Ethic RHE™ for in vitro skin corrosion testing according to OECD TG 431. *ALTEX* 21: 160-161
47. Liebsch M, Botham P, Fentem JH, Heylings JR, Roguet R, Hartung T, Eskes C, Hoffmann S, Cole T, Worth A, Zuang V, Spielmann H (2004) The ECVAM validation study of three in vitro methods for acute skin irritation — Interim Report of the validation Management Team. *ALTEX* 21: 165
48. Piersma A H, Genschow E, Verhoef A, Spanjersberg MQ, Brown NA, Brady M, Burns A, Clemann N, Seiler A, Spielmann H (2004) Validation of the postimplantation rat whole-embryo culture test in the international ECVAM validation study on three in vitro embryotoxicity tests. *ATLA* 32: 275-307
49. Schlechter K, Buesen R, Slawik B, Spielmann H, Seiler A (2004) Reduction and replacement of fetal calf serum in the embryonic stem cell test. *ALTEX* 21: 176
50. Seiler A, Visan A, Buesen R, Genschow E, Spielmann H (2004) Improvement of an in vitro stem cell assay for developmental toxicity: the use of molecular endpoints in the embryonic stem cell test. *Reprod Toxicol* 18: 231-240
51. Spielmann H, Genschow E, Brown NA, Piersma AH, Verhoef A, Spanjersberg MQ, Huuskonen H, Paillard F, Seiler A (2004) Validation of the rat limb bud micromass test in the international ECVAM validation study on three in vitro embryotoxicity tests. *ATLA* 32: 245-274
52. Spielmann H (2004) Is it possible to predict teratogenicity with in vitro tests? *Eur J Pharm Sci* 23: S29-S30
53. Buesen R, Visan A, Slawik B, Schlechter K, Genschow E, Spielmann H, Seiler A (2003) Verbesserung des Embryonalen Stammzelltests (EST) I: Etablierung molekularer Endpunkte für die Entwicklung in Herzmuskelzellen. *ALTEX* 20: 164
54. Buesen R, Seiler A, Visan A, Slawik B, Genschow E, Spielmann H (2003) Improving the embryonic stem cell test (EST) by standardizing protocols for development into nerve and cartilage tissue. *Naunyn Schmiedebergs Arch Pharmacol* 367: R161
55. Genschow E, Seiler A, Spielmann H (2003) Vorhersage der embryotoxischen Eigenschaften von Arzneistoffen und Chemikalien im embryonalen Stammzelltest (EST). *ALTEX* 20: 172
56. Holzhuetter HG, Genschow E, Diener W, Schleder E (2003) Dermal and inhalation acute toxic class methods: Test procedures and biometric evaluations for the Globally Harmonized Classification System. *Arch Toxicol* 77: 243-254
57. Kaltenhaeuser J, Genschow E, Becker K (2003) Use of quantitative gene expression data to detect embryotoxic effects on mouse embryonic stem cells. *ALTEX* 20: 178
58. Kandarova H, Liebsch M, Spielmann H (2003) Untersuchungen zur Entwicklung eines gemeinsamen Testprotokolls für die Hautmodelle EPISKIN und EpiDerm im Rahmen der geplanten ECVAM Validierung von in vitro Hautirritationstests. *ALTEX* 20: 179
59. Liebsch M, Kandarova H, Slawik B, Jirová D, Kejlová K, Spielmann H (2003) ECVAM Machbarkeitsstudie: Kann der prävalidierte in vitro Hautmodell-Phototoxizitätstest zum Test für die Wirkungsstärke (Potenz) topischer Phototoxine ausgebaut werden? *ALTEX* 20: 186
60. Luber P, Bartelt E, Genschow E, Wagner J, Hahn H (2003) Comparison of broth microdilution, E Test, and agar dilution methods for antibiotic susceptibility testing of *Campylobacter jejuni* and *Campylobacter coli*. *J Clin Microbiol* 41: 1062-1068
61. Seiler A, Buesen R, Visan A, Slawik B, Genschow E, Spielmann H (2003) In vitro Embryotoxizitätstestsprüfungen in embryonalen Stammzellen der Maus. *ALTEX* 20: 200

62. Visan A, Buesen R, Slawik B, Schlechter K, Spielmann H, Seiler A (2003) Verbesserung des Embryonalen Stammzelltests (EST) II: Differenzierung in spezifische Gewebe und Etablierung entwicklungsspezifischer, molekularer Endpunkte. *ALTEX* 20: 205-206
63. Buesen R, Seiler A, Pohl I, Visan A, Genschow E, Spielmann H (2002) Improving the embryonic stem cell test (EST) by establishing molecular endpoints of tissue specific development. *Naunyn Schmiedebergs Arch Pharmacol* 365: R132
64. Buesen R, Seiler A, Visan A, Pohl I, Genschow E, Spielmann H (2002) Improving the embryonic stem cell test (EST) by establishing molecular endpoints of tissue-specific development. *Reprod Toxicol* 16: 426-427
65. Genschow E, Scholz G, Brown N, Piersma A, Brady M, Clemann N, Huuskonen H, Paillard F, Bremer S, Becker K, Spielmann H (2002) Development of prediction models for three in vitro embryotoxicity tests in an ECVAM validation study. *In Vitro Mol Toxicol* 13: 51-66
66. Genschow E, Spielmann H, Scholz G, Seiler A, Brown N, Piersma A, Brady M, Clemann N, Huuskonen H, Paillard F, Bremer S, Becker K (2002) The ECVAM international validation study on in vitro embryotoxicity tests: Results of the definitive phase and evaluation of prediction models. *European Centre for the Validation of Alternative Methods. ATLA* 30: 151-176
67. Genschow E, Spielmann H, Scholz G, Seiler A, Clemann N, Bremer S, Becker K (2002) Validation study of the embryonic stem cell test (Est) In the international ecvam validation study on in vitro embryotoxicity tests. *Reprod Toxicol* 16: 428
68. Gribaldo L, Alison M, Andrews PW, Bremer S, Donovan PJ, Knaan-Shanzer S, Mertelsmann R, Spielmann H, Testa NG, Triffitt JT, Zipori D, de Wynter E (2002) Meeting summary: European Workshop on Stem Cells, European Centre for the Validation of Biomedical Testing Methods, Institute for Health and Consumer Protection, Joint Research Centre, Ispra, Italy, November 21-23, 2001. *Exp Hematol* 30: 628-633
69. Liebsch M, Spielmann H (2002) Currently available in vitro methods used in the regulatory toxicology. *Toxicol Lett* 127: 127-134
70. Seiler A, Buesen R, Visan A, Pohl I, Spielmann H (2002) Differentiation of murine embryonic stem cells into different cell types and the detection of tissue specific molecular markers used for embryotoxicity testing. *Reprod Toxicol* 16: 434
71. Seiler A, Visan A, Pohl I, Genschow E, Buesen R, Spielmann H (2002) Etablierung molekularer Endpunkte zur Weiterentwicklung des Embryonalen Stammzelltests (EST) mit embryonalen Stammzellen der Maus (Zelllinie D3). Improving the embryonic stem cell test (EST) by establishing molecular endpoints of tissue specific development using murine embryonic stem cells (D3 cells). *ALTEX* 19 Suppl 1: 55-63
72. Spielmann H, Liebsch M (2002) Validation successes: chemicals. *ATLA* 30 Suppl 2: 33-40
73. Spielmann H (2002) Das Weißbuch für eine neue Chemikalienpolitik der EU, Bewertung der Chancen von in vitro Methoden aus der Sicht von ZEBET. White Paper of the European Commission — Strategy for a new chemicals policy. *ALTEX* 19 Suppl 1: 20-25
74. Zuang V, Balls M, Botham PA, Coquette A, Corsini E, Curren RD, Elliott GR, Fentem JH, Heylings JR, Liebsch M, Medina J, Roguet R, van de Sandt JJ, Wiemann C, Worth AP (2002) Follow-up to the ECVAM prevalidation study on in vitro tests for acute skin irritation. The European Centre for the Validation of Alternative Methods Skin Irritation Task Force report 2. *ATLA* 30: 109-129
75. Brown NA, Genschow E, Scholz G, Piersma A, Brady M, Clemann N, Huuskonen H, Paillard F, Bremer S, Becker K (2001) A European Centre for the Validation of Alternative Methods (ECVAM) validation of micromass, whole embryo and embryonic stem cell culture tests for embryotoxicity. *Teratology* 63: 3A
76. Genschow E, Liebsch M, Halle W, Spielmann H (2001) Report on the ICCVAM workshop on in vitro methods for assessing acute systemic toxicity. *ALTEX* 18: 115-116
77. Imai K, Spielmann H, Scholz G, Pohl I, Nakamura M (2001) In vitro embryotoxicity testing of polymeric substances for dental use by differentiation of embryonic stem cells. *AALTEX* 8: 31-39
78. Klemm M, Genschow E, Pohl I, Barrabas C, Liebsch M, Spielmann H (2001) Permanent embryonic mouse germ cell-lines, an in vitro alternative to in vivo germ cell mutagenicity tests. *ALTEX* 18: 127-130
79. Klemm M, Genschow E, Pohl I, Barrabas C, Liebsch M, Spielmann H (2001) Permanent embryonic germ cell lines of BALB/cJ mice — An in vitro alternative for in vivo germ cell mutagenicity tests. *Toxicol In Vitro* 15: 447-453
80. Liebsch M, Traue D, Barrabas C, Spielmann H, Uphill P, Wilkins S, McPherson J, Wiemann C, Kaufmann T, Remmele M, Holzhutter H G (2001) ECVAM "catch-up" validation study on the use of EpiDerm (TM) for skin corrosivity testing. *Naunyn Schmiedebergs Arch Pharmacol* 363: 678
81. Spielmann H, Scholz G, Klemm ZM (2001) The use of transgenic embryonic stem (ES) cells and molecular markers of differentiation for improving the embryonic stem cell test (EST). *Teratology* 63: 3A-4A
82. Spielmann H (2001) Acute phototoxicity testing. *Environ Mutagen Research* 23: 45-56

83. Spielmann H (2001) In vitro embryotoxicity: from whole embryo culture to molecular endpoints in embryonic stem cells. *Frontiers in Fetal Health* Nov-Dec 3: 274-275
84. Spielmann H (2001) White Paper of the Commission of European Community — Strategy for a future chemicals policy. *ALTEX* 18: 147-148
85. Spielmann H (2001) FRAME Annual Lecture. International co-operation: An essential requirement for replacing animal toxicity tests. *ATLA* 29: 637-646
86. Spielmann H, Liebsch M (2001) Lessons learned from validation of in vitro toxicity test: From failure to acceptance into regulatory practice. *Toxicol In Vitro* 15: 585-590
87. Spielmann H, Genschow E, Scholz G, Brown NA, Piersma AH, Brady M, Clemann N, Huuskonen H, Paillard F, Bremer S, Becker K (2001) Preliminary results of the ECVAM validation study on three in vitro embryotoxicity tests. *ATLA* 29: 301-303
88. Spielmann H, Klemm M, Genschow E, Liebsch M (2001) Permanent female and male egg-lines of balb/cj mice — An alternative concept for reproductive toxicity testing? *Naunyn Schmiedebergs Arch Pharmacol* 363: 644
89. Spielmann H (2001) International cooperation: An essential requirement for replacing animal toxicity tests. *ATLA* 29: 637-646
90. Genschow E, Scholz G, Brown N, Piersma A, Brady M, Clemann N, Huuskonen H, Paillard F, Bremer S, Becker K, Spielmann H (2000) Development of prediction models for three in vitro embryotoxicity tests in an ECVAM validation study. *In Vitro Mol Toxicol* 13: 51-65
91. Halle W, Spielmann H, Liebsch M (2000) Zur Prädiktion der letalen Konzentration beim Menschen mit Hilfe von Zytotoxizitätsdaten von 50 MEIC Studien. Prediction of human lethal concentrations by cytotoxicity data from 50 MEIC chemicals. *ALTEX* 17: 75-79
92. Liebsch M, Traue D, Barrabas C, Spielmann H, Uphill P, Wilkins S, McPherson J P, Wiemann C, Kaufmann T, Remmele M, Holzhutter HG (2000) The ECVAM prevalidation study on the use of EpiDerm for skin corrosivity testing. *ATLA* 28: 371-401
93. Spielmann H, Muller L, Auerbeck D, Balls M, Brendler-Schwaab S, Castell JV, Curren R, de Silva O, Gibbs NK, Liebsch M, Lovell WW, Merk HF, Nash JF, Neumann NJ, Pape WJ, Ulrich P, Vohr HW (2000) The second ECVAM workshop on phototoxicity testing. The report and recommendations of ECVAM workshop 42. *ATLA* 28: 777-814
94. Spielmann H, Scholz G, Pohl I, Genschow E, Klemm M, Visan A (2000) The use of transgenic embryonic stem (ES) cells and molecular markers of differentiation for improving the embryonic stem cell test (EST). *Congenit Anom* 40: S8-S18
95. Genschow E, Scholz G, Brown N, Piersma A, Brady M, Clemann N, Huuskonen H, Paillard F, Bremer S, Spielmann H (1999) Development of prediction models for three in vitro embryotoxicity tests. *ATLA* 27: 293
96. Genschow E, Scholz G, Brown NA, Piersma AH, Brady M, Clemann N, Huuskonen H, Paillard F, Bremer S, Spielmann H (1999) Die Entwicklung von Prädiktionsmodellen für drei in vitro Embryotoxizitätstests im Rahmen einer ECVAM Validierungsstudie. Development of prediction models for three in vitro embryotoxicity tests which are evaluated in an ECVAM validation study. *ALTEX* 16: 73-83
97. Scholz G, Pohl I, Genschow E, Klemm M, Spielmann H (1999) Embryotoxicity screening using embryonic stem cells in vitro: correlation to in vivo teratogenicity. *Cells Tissues Organs* 165: 203-211
98. Scholz G, Genschow E, Pohl I, Bremer S, Paparella M, Raabe H, Southee J, Spielmann H (1999) Prevalidation of the embryonic stem cell test (EST) — A new in vitro embryotoxicity test. *Toxicol In Vitro* 13: 675-681
99. Scholz G, Genschow E, Brown N, Piersma A, Brady M, Clemann N, Huuskonen H, Paillard F, Bremer S, Spielmann H (1999) First results of a validation study of three in vitro embryotoxicity tests. *ATLA* 27 Spec Issue: 296
100. Scholz G, Pohl I, Genschow E, Klemm M, Spielmann H (1999) Embryotoxicity screening using ES cells in vitro: Correlation to in vivo teratogenicity. *ALTEX* 16: 174
101. Spielmann H, Genschow E, Liebsch M, Halle W (1999) Determination of the starting dose for acute oral toxicity (LD50) testing in the up and down procedure (UDP) from cytotoxicity data. *ATLA* 27: 957-966
102. Bruner LH, de Silva O, Earl LK, Easty DL, Pape W, Spielmann H (1998) Report on the COLIPA workshop on mechanisms of eye irritation. *ATLA* 26: 811-820
103. Scholz G, Pohl II, Seiler A, Bremer S, Brown NA, Piersma AH, Holzhutter HG, Spielmann H (1998) Ergebnisse der ersten Phase des ECVAM-Projektes zur Prävalidierung und Validierung von drei in vitro Embryotoxizitätstests. Results of the first phase of the ECVAM project "prevalidation and validation of three in vitro embryotoxicity tests". *ALTEX* 15: 3-8
104. Scholz G, Pohl II, Seiler A, Bremer S, Moldenhauer F, Holzhütter HG, Spielmann H (1998) In vitro testing of embryotoxicity using the embryonic stem cell test: An inter-laboratory comparison. *Naunyn Schmiedebergs Arch Pharmacol* 357: R 155
105. Spielmann H, Balls M, Dupuis J, Pape WJ, Pechovitch G, de Silva O, Holzhutter HG, Clothier R, Desolle P, Gerberick F, Liebsch M, Lovell WW, Maurer T, Pfannenbecker U, Potthast JM, Csato M, Sladowski D,

- Steiling W, Brantom P (1998) The International EU/COLIPA In Vitro Phototoxicity Validation Study: Results of phase II (blind trial). Part 1. The 3T3 NRU phototoxicity test. *Toxicol In Vitro* 12: 305-327
106. Spielmann H, Balls M, Dupuis J, Pape WJW, de Silva O, Holzhutter HG, Gerberick F, Liebsch M, Lovell WW, Pfannenbecker U (1998) A study on UV filter chemicals from Annex VII of European Union Directive 76/768/EEC, in the in vitro 3T3 NRU phototoxicity test. *ATLA* 26: 679-708
 107. Spielmann H (1998) Reproduction and development. *Environ Health Perspect* 106 Suppl 2: 571-576
 108. Spielmann H (1998) Nicht mit Tieren, toxikologische In-vitro-Prüfung von Kosmetika. *Pharmazeutische Zeitung* 46: 11-16
 109. Spielmann H, Scholz G, Bremer S, Holzhuetter HG (1998) In vitro testing of embryotoxicity using the embryonic stem cell test (EST): An interlaboratory comparison. *In Vitro Cell Dev Biol Anim* 34: 11A
 110. Spielmann H, Bochkov NP, Costa L, Gribaldo L, Guillouzo A, Heindel JJ, Karol M, Parchment R, Pfaller W, Peraita PP, Zacharewski T (1998) 13th Meeting of the Scientific Group on Methodologies for the Safety Evaluation of Chemicals (SGOMSEC): alternative testing methodologies for organ toxicity. *Environ Health Perspect* 106 Suppl 2: 427-439
 111. de Silva O, Cottin M, Dami N, Roguet R, Catroux P, Toufic A, Sicard C, Dossou KG, Gerner I, Schleder E, Spielmann H, Gupta KC, Hills RN (1997) Evaluation of eye irritation potential: statistical analysis and tier testing strategies. *Food Chem Toxicol* 35: 159-164
 112. Halle W, Liebsch M, Traue D, Spielmann H (1997) Reduction of the numbers of animals used for the classification of the acute oral toxicity of chemicals by taking into account cytotoxicity data from the Registry of Cytotoxicity. *ALTEX* 14: 8-15
 113. Ismail MS, Dressler C, Ströbele S, Daskalaki A, Philipp C, Berlien HP, Weitzel H, Liebsch M, Spielmann H (1997) Modulation of 5-ALA-induced PpIX xenofluorescence intensities of a murine tumour and non-tumour tissue cultivated on the chorio-allantoic membrane. *Lasers Med Sci* 12: 218-225
 114. Liebsch M, Barrabas C, Traue D, Spielmann H (1997) Development of a new in vitro test for dermal phototoxicity using a model of reconstituted human epidermis. Entwicklung eines neuen in vitro Tests auf dermale Phototoxizität mit einem Modell menschlicher Epidermis (EpiDerm TM). *ALTEX* 14: 165-174
 115. Spielmann H, Liebsch M, Moldenhauer F, Holzhutter HG, Bagley DM, Lipman JM, Pape WJ, Miltenburger H, de Silva O, Hofer H, Steiling W (1997) IRAG working group 2. CAM-based assays. Interagency Regulatory Alternatives Group. *Food Chem Toxicol* 35: 39-66
 116. Spielmann H, Pohl I, Döring B, Liebsch M, Moldenhauer F (1997) The embryonic stem cell test, an in vitro embryotoxicity test using two permanent mouse cell lines: 3T3 fibroblasts and embryonic stem cells. *In Vitro Toxicol* 10: 119-127
 117. Bremer S, Genart C, Bigot K, Clerici L, Spielmann H, Balls M (1996) Immunofluorescence studies of differentiating embryonic stem cells. *ATLA* 24
 118. Spielmann H, Liebsch M, Kalweit S, Moldenhauer F, Wirsberger T, Holzhuetter HG, Schneider B, Glaser S, Gerner I, Pape WJW, Kreiling R, Krauser K, Miltenburger H, Steiling W, Luepke NP, Mueller N, Kreuzer H, Muermann P, Spengler J, Bertram-Neis E, Siegemund B, Wiebel FJ (1996) Results of a validation study in Germany on two in vitro alternatives to the Draize eye irritation test, the HET-CAM test and the 3T3 NRU cytotoxicity test. *ATLA* 24: 741-858
 119. Spielmann H, Liebsch M, Döring B, Moldenhauer F (1996) First results of the EU/COLIPA validation trial "in vitro phototoxicity testing". *In Vitro Toxicol* 9: 339-352
 120. Balls M, Botham P, Bruner LH, Spielmann H (1995) The EC/HO international validation study on alternatives to the Draize eye irritation test. *Toxicol In Vitro* 9: 871-929
 121. Brown NA, Spielmann H, Bechter R, Flint OP, Freeman SJ, Inek RJ, Koch E, Nau H, Newall DR, Palmer AK (1995) Screening chemicals for reproductive toxicity: the current alternatives; the report and recommendations of an ECVAM/ETS workshop (ECVAM workshop 12). *ATLA* 23: 868-882
 122. Hartmann H, Spielmann H, Gruber FP, Schaffner G (1995) Erfahrungen mit CorrositexTM und Skin2TM. *ALTEX* 12: 35-39
 123. Liebsch M, Spielmann H (1995) Balb/c 3T3 cytotoxicity test. *Methods Mol Biol* 43: 177-187
 124. Liebsch M, Doering B, Donnelly TA, Logemann P, Rheins LA, Spielmann H (1995) Application of the human dermal model skin² ZK to phototoxicity and skin corrosivity testing. *Toxicol In Vitro* 9: 557-562
 125. Spielmann H, Liebsch M, Moldenhauer F, Holzhütter HG, de Silva O (1995) Modern biostatistical methods for assessing in vitro/in vivo correlations of severely eye irritating chemicals in a validation study of in vitro alternatives to the Draize eye test. *Toxicol In Vitro* 9: 549-556
 126. Spielmann H (1995) HET-CAM test. *Methods Mol Biol* 43: 199-204
 127. Spielmann H, Pohl I, Doering B (1995) In vitro embryotoxicity assay using two permanent cell lines: mouse embryonic stem cells and 3T3 fibroblasts. *Teratology* 6
 128. Spielmann H, Liebsch M, Pape WJ, Balls M, Dupuis J, Klecak G, Lovell WW, Maurer T, de Silva O, Steiling W (1995) EEC/COLIPA in vitro photoirritancy program: Results of the first stage of validation. *Curr Probl Dermatol* 23: 256-264

129. Edwards SM, Donnelly TA, Sayre RM, Rheins LA, Spielmann H, Liebsch M (1994) Quantitative in vitro assessment of phototoxicity using a human skin model, Skin2. *Photodermatol Photoimmunol Photomed* 10: 111-117
130. Gautheron P, Giroux J, Cottin M, Audegond L, Morilla A, Mayordomo-Blanco L, Tortajada A, Haynes G, Vericat JA, Pirovano R, Gillio Tos E, Hagemann C, Vanparys P, Deknudt G, Jacobs G, Prinsen M, Kalweit S, Spielmann H (1994) Interlaboratory assessment of the bovine corneal opacity and permeability (BCOP) assay. *Toxicol In Vitro* 8: 381-392
131. Halle W, Spielmann H (1994) Zur Qualität der Vorhersage der akuten Toxizität (LD50) aus der Zytotoxizität (IC50) für eine Gruppe von 26 Neuroleptika aufgrund der Daten des "Erweiterten Registers der Zytotoxizität" Prediction of acute toxicity. *ALTEX* 11: 148-153
132. Heuer J, Graeber IM, Pohl I, Spielmann H (1994) An in vitro embryotoxicity assay using the differentiation of embryonic mouse stem cells into hematopoietic cells. *Toxicol In Vitro* 8: 585-587
133. Heuer J, Graeber IM, Spielmann H (1994) An in vitro embryotoxicity assay using the differentiation of embryonic mouse stem cells into hematopoietic cells. *In Vitro Toxicology* 7: 127
134. Spielmann H (1994) Akzeptierung der deutschen ATC-Methode zur Prüfung auf akute Toxizität durch OECD. *ALTEX* 11: 101
135. Spielmann H, Lovell WW, Hoelzle E, Johnson BE, Maurer T, Miranda M, Pape W, Sapoia O, Sladowski D (1994) In vitro phototoxicity testing. The report and recommendations of ECVAM Workshop 2. *ATLA* 22: 314-348
136. Spielmann H (1994) Anerkennung von in vitro Korrosionstests durch das amerikanische Verkehrsministerium. *ALTEX* 11: 48
137. Spielmann H, Liebsch M, Doring B, Moldenhauer F (1994) Erste Ergebnisse der Validierung von in vitro Phototoxizitätstest im Rahmen eines EG/COLIPA Projektes. First results of an EC/COLIPA validation project of in vitro phototoxicity testing methods. *ALTEX* 11: 22-31
138. Spielmann H, Balls M, Brand M, Doring B, Holzhuetter HG, Kalweit S, Klecak G, Eplattenier HL, Liebsch M, Lovell WW, Maurer T, Moldenhauer F, Moore L, Pape WJW, Pfannenbecker U, Potthast J, de Silva O, Steiling W, Willshaw A (1994) EEC/COLIPA project on in vitro phototoxicity testing: First results obtained with a Balb/c 3T3 cell phototoxicity assay. *Toxicol In Vitro* 8: 793-796
139. Heuer J, Bremer S, Pohl I, Spielmann H (1993) Development of an in vitro embryotoxicity test using murine embryonic stem cell. *Toxicol In Vitro* 7: 551-556
140. Spielmann H, Kalweit S, Liebsch M, Wirnsberger T, Gerner I, Bertram-Neis E, Krauser K, Kreiling R, Miltenburger HG, Pape W, Steiling W (1993) Validation study of alternatives to the Draize eye irritation test in Germany: Cytotoxicity testing and HET-CAM test with 136 industrial chemicals. *Toxicol In Vitro* 7: 505-510
141. Spielmann H. (1993) Möglichkeiten und Grenzen von in vitro Methoden in der Toxikologie. *Tierlaboratorium* 16: 37-51
142. Spielmann H, Vogel R (1993) Genotoxic and embryotoxic effects of gonadotropin hyperstimulated ovulation on murine oocytes, preimplantation embryos and term fetuses. *Ann Ist Super Sanita* 29: 35-39
143. Halle W, Spielmann H (1992) Two procedures for the prediction of acute toxicity (LD50) from cytotoxicity data. *ATLA* 20: 40-49
144. Spielmann H (1992) Alternative toxicity tests (correspondence). *Nature* 357: 432
145. Spielmann H (1992) Risk evaluation in teratology — Animal models with human relevance. *Reprod Toxicol* 6: 187-188
146. Spielmann H (1992) Reproduktionstoxikologie: Oogenese und frühe embryonale Entwicklung. *Fertilität* 8: 100-106
147. Vogel R, Spielmann H (1992) Genotoxic and embryotoxic effects of gonadotropin-hyperstimulated ovulation of murine oocytes, preimplantation embryos, and term fetuses. *Reprod Toxicol* 6: 329-333
148. Vogel R, Laschinski G, Spielmann H (1992) High frequency of sister chromatid exchanges in pluripotent cells derived from early mouse embryos. *J Occup Med Toxicol* 1: 301-306
149. Halle W, Baeger I, Ekwil B, Spielmann H (1991) Correlation between in vitro cytotoxicity and octanol/water partition coefficient of 29 substances from the MEIC programme. *ATLA* 19: 338-343
150. Klein G, Poeting A, Spielmann H (1991) In vitro differentiation using blastocyst-derived euploid embryonal stem (ES) cells of the mouse: A new approach to in vitro teratogenesis testing. *Teratology* 44: 30A
151. Laschinski G, Vogel R, Spielmann H (1991) Cytotoxicity test using blastocyst-derived euploid embryonal stem cells: A new approach to in vitro teratogenesis screening. *Reprod Toxicol* 5: 57-64
152. Lau CF, Vogel R, Obe G, Spielmann H (1991) Embryologic and cytogenetic effects of ethanol on preimplantation mouse embryos in vitro. *Reprod Toxicol* 5: 405-410
153. Spielmann H, Gerner I, Kalweit S, Moog R, Wirnsberger T, Krauser K, Kreiling R, Kreuzer H, Lüpke NP, Miltenburger HG, Muller N, Murmann P, Pape W, Siegemund B, Spengler J, Steiling W, Wiebel FJ (1991) Interlaboratory assessment of alternatives to the Draize eye irritation test in Germany. *Toxicol In Vitro* 5: 539-542

154. Vogel R, Laschinski G, Spielmann H, Ehrlich W, Drevenstedt B, Klosa J, Kroger H (1991) In vitro studies on genotoxicity and cytotoxicity of the anticancer drugs cisplatin and cofplaton, a caffeine-8-ether plus cisplatinum compound. *Mutat Res* 264: 225-230
155. Kalweit S, Besoke R, Gerner I, Spielmann H (1990) A national validation project of alternative methods to the Draize rabbit eye test. *Toxicol In Vitro* 4: 702-706
156. Laschinski G, Spielmann H, Vogel R (1990) In-vitro Testsysteme in der Reproduktionstoxikologie: Zytotoxizitätstest an embryonalen Stammzellen der Maus. *Fertilität* 6: 214-219
157. Lofberg B, Reiners J, Spielmann H, Nau H (1990) Teratogenicity of steady-state concentrations of etretinate and metabolite acitretin maintained in maternal plasma and embryo by intragastric infusion during organogenesis in the mouse: A possible model for the extended elimination phase in human therapy. *Dev Pharmacol Ther* 15: 45-51
158. Kalweit S, Gerner I, Spielmann H (1989) Validation project of alternatives for the Draize eye test. *Mol Toxicol* 1: 597-603
159. Kola I, Vogel R, Spielmann H (1989) Co-administration of ascorbic acid with cyclophosphamide (CPA) to pregnant mice inhibits the clastogenic activity of CPA in preimplantation murine blastocysts. *Mutagenesis* 4: 297-301
160. Laschinski G, Vogel R, Spielmann H (1989) Establishment of embryonic stem cells as a test system for embryotoxicity. *Teratology* 40: 289
161. Spielmann H, Vogel R (1989) Unique role of studies on preimplantation embryos to understand mechanisms of embryotoxicity in early pregnancy. *Crit Rev Toxicol* 20: 51-64
162. Spielmann H, Vogel R, Laschinski G (1989) Embryotoxicity testing using cultured embryonic stem cells from mouse blastocysts. *Zuchthygiene* 24: 170-171
163. Spielmann H, Gerner I, Kalweit S, Ewe S, Lausen A, Besoke R (1989) Der Draize-Test am Kaninchenauge - Erste Ergebnisse des BMFT-Forschungsprojektes zur Validierung von Alternativmethoden. *Bundesgesundheitsblatt* 32: 327-333
164. Spielmann H, Vogel R, Granata I, Tenschert B (1989) Abnormal development of mouse embryos exposed to methylnitrosourea before implantation. *Reprod Toxicol* 3: 27-31
165. Spielmann H (1989) Alternativmethoden zum Tierversuch in der Toxizitätsprüfung. *Spektrum der Wissenschaft* 12: 101-102

4. Information und Dokumentation von Alternativmethoden

Information and documentation of alternative methods

1. Sauer UG, Wachter T, Grune B, Doms A, Alvers MR, Spielmann H, Schroeder M (2009) Go3R - semantic Internet search engine for alternative methods to animal testing. *ALTEX* 26: 17-31
2. Grune B, Schnock A, Doerendahl A, Skolik S, Spielmann H (2006) Searching strategies for detecting publications on alternative methods: a pilot study. *ALTEX* 23 Suppl: 185-191
3. Grune B, Fallon M, Howard C, Hudson V, Kulpa-Eddy JA, Larson J, Leary S, Roi A, Van Der V, Wood M, Dorendahl A, Kohler-Hahn D, Box R, Spielmann H (2004) Report and recommendations of the international workshop "Retrieval approaches for information on alternative methods to animal experiments". *ALTEX* 21: 115-127
4. Grune B, Doerendahl A, Koehler-Hahn D, Feuerstein C, Box R, Spielmann H (2004) Indexierung biowissenschaftlicher Informationen zu Alternativmethoden. *ALTEX* 21: 156
5. Grune B, Döhrendahl A, Köhler-Hahn D, Feuerstein C, Box R, Wohlgemuth H, Spielmann H (2004) New Sources for Alternative Methods on the Internet: The Objectives of Databases and Web Sites. *ATLA* 32 Suppl 1: 573-582
6. Grune B, Doerendahl A, Koehler-Hahn D, Box R, Wohlgemuth H, Spielmann H (2003) The AnimAlt-ZEBET — Internet database on alternatives to animal experiments. *Naunyn Schmiedebergs Arch Pharmacol* 367: R168
7. Grune B, Doerendahl A, Koehler-Hahn D, Box R, Wohlgemuth H, Spielmann H (2003) AnimAlt-ZEBET — Datenbank für Alternativmethoden zu Tierversuchen im Internet. *ALTEX* 20: 173
8. Grune B, Doerendahl A, Koehler-Hahn D, Feuerstein C, Meißner M, Hoewer E, Spielmann H (2003) Indexierung biowissenschaftlicher Informationen zu Alternativmethoden. *ALTEX* 20: 174
9. Grune B, Spielmann H (2000) ZEBET database. Das BgVV öffnet die erste Datenbank über Alternativen zu Tierversuchen im Internet. *Der Tierschutzbeauftragte* 9: 27-28
10. Grune B, Herrmann S, Dorendahl A, Skolik S, Behnck-Knoblau S, Box R, Spielmann H (2000) Die ZEBET-Datenbank über Alternativmethoden zu Tierversuchen im Internet — ein konkreter Beitrag zum Schutz von Versuchstieren. The ZEBET database on alternative methods to animal experiments in the Internet — A concrete contribution to the protection of animals. *ALTEX* 17: 127-133
11. Grune B, Döhrendahl A, Skolik S, Spielmann H (1999) The ZEBET database and information service. *ALTEX* 16: 186-189

12. Janusch A, van der Kamp MDO, Bottrill K, Grune B, Anderson DC, Ekwall B, Howald M, Kolar R, Kuiper HJD, Larson J, Loprieno G, Sauer UG, Smith AJ, van der Valk JBF (1997) Current status and future developments of databases on alternative methods. ATLA 25: 411-422
13. Grune-Wolff B, Döhrendahl A, Skolik S, Spielmann H (1996) Erfassung und Verfügbarkeit von Ersatz- und Ergänzungsmethoden bei ZEBET. Der Tierschutzbeauftragte 2: 94-99
14. Spielmann H, Grune-Wolff B, Ewe S, Skolik S, Liebsch M, Traue D, Heuer J (1992) ZEBET's Data Bank and Information Service on Alternatives to the Use of Experimental Animals in Germany. ATLA 20: 362-367