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A catalogue of criteria to objectify the harm-benefit analysis according to Austrian legislation

Project: Developing a methodology to evaluate animal experiments

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1. Proposal by the researcher



Project evaluation
→ Project acceptable?

















2. Project evaluation by the authority

Directive 2010/63/EU*) → Austrian Animal Experimentation Act (TVG 2012)

Project evaluation shall verify that the project meets the following criteria**):

- the project is justified from a scientific or educational point of view or required by law
- the purposes of the project justify the use of animals
- procedures to be carried out as painlessly***) and in the most environmentally sensitive manner possible.

^{*)} European Parliament (2010): Directive 2010/63/EU of the European Parliament and of the Council of 22 September 2010 on the protection of animals used for scientific purposes. In: Official Journal of the European Union October 20, 2010 L 276/33-79.

Article 38 (Project evaluation)

^{**)} Tierversuchsgesetz 2012 - TVG 2012. (Austrian) Animal Experimentation Act 2012, Federal Law on Experiments on Live Animals (*BGBI*. I No. 114/2012 of 28 Dec. 2012); § 29 (1) ("Projektbeurteilung")

^{***)} Directive: "in the most humane [...] manner possible"



2. Project evaluation by the authority

Project evaluation shall consist in particular of the following*):

- evaluation of the objectives of the project, the predicted scientific benefits or educational value;
- assessment of the compliance with the requirements of the 3Rs
- assessment and assignment of the classification of the severity
- harm-benefit analysis



3. Harm-benefit analysis

"a harm-benefit analysis of the project, to assess whether the harm to the animals in terms of suffering, pain and fear*) is justified by the expected outcome taking into account ethical considerations, and may ultimately benefit human beings, animals or the environment,



in which the completed catalogue of criteria [...] has to be considered," **)

The Minister for Science and Research publishes***)

- until 31 Dezember 2015
- a catalogue based on scientific criteria
- in order to objectify the harm-benefit analysis



4. Requirements for an appropriate catalogue

- structuring the discussion
- objective and transparent decision making
- fair evaluation
- intersubjective comparing of results (cf. review Varga et al.*);
 - → aspect of justice; coherent standard of protection
- integrate ethical criteria
 into the evaluation procedure
 which will be typically carried out by non-ethicists



4. Requirements for an appropriate catalogue

- a. assistance for the researcher to provide the relevant information
- **b. assistance for the authority** who conducts the project evaluation but not intended to replace a well informed responsible decision

should include all relevant criteria



5. Relevant criteria

Annex VI of the Directive 2012/63/EU:

Aspects that a proposal has to comprise for approval

→ § 21 Austrian Animal Experiment Regulation (TVV 2012*)

*) Tierversuchs-Verordnung 2012 – TVV 2012 (*BGBI*. II No. 522/2012 of 28 Dec. 2012)

messerl _i		X 1	Directive 2012/63/EU RICHTLINIE 2010/63/EU DES EUROPÄISCHEN PARLAMENTS UND DES RATES von zum Schutz der für wissenschaftliche Zwecke verwendeten Tiere
observational strate ical design to minimise animal numbers, pain, distress and environmental impact where VI 6. Biostatistics		VI Ia) Use Origin Numbers Species Life Stages	T OF ELEMENTS REFERRED TO IN ARTICLE 37(1)(c) 1. Relevance and justification of the following: (a) use of animals including their origin, estimated numbers, species and life stages;
	7. Reuse of animals and the accumulative the animals. 8. The proposed severity classification of p	VI 1b) Method VI 2.3R's	(b) procedures. 2. Application of methods to replace, reduce and refine the use of animals in procedures.
e of unjustified duplication of procedures where VI 9. Duplication of	Avoidance of unjustified duplication of pr appropriate.	VI 3. An aesth. An alges. Pain Relieving VI 4. Minimising of Pain (Livespan)	The planned use of anaesthesia, analgesia and other pain relieving methods. Reduction, avoidance and alleviation of any form of animal suffering, from birth to death where appropriate.
of killing. Care VI 11. Killing	11. Methods of killing. 12. Competence of persons involved in the	VI 5. Humane endpoints 32	5. Use of humane end-points.

6. Categories

A1) General project data



A2) Assignement to one of the legal purposes

Information about special aspects:
Duplication of experiments
Experiments using special species
Reuse of animals

- B) Alternatives? / Indispensability
- C) Importance of the project (incl. benefit
- D) Quality of the experiment
 Scientific quality and efficiency
 Quality of the personnel
- E) Burdens of the animals
- F) Breeding, husbandry and care
- G) Harm-benefit analysis
- H) Retrospective assessment



Symposium at the Messerli Research Institute, March 2013: "Taking Ethical Considerations into Account? Methods to Carry Out the Harm-Benefit Analysis According to the EU Directive 2010/63/EU."



Photos: http://www.vetmeduni.ac.at/en/messerli/infoservice/messerli-news/symposium-on-the-ethical-evaluation-of-animal-experiments/photos/



- 1) Checklist structure
- 2) Scoring methodology
- 3) Comparative approach















1) Checklist structure (checking facts)

 "Yes" / "No" respectively "correct" / "not applicable" e.g.:

Does the leader of a project including surgery has an academic qualification corresponding to § 27(1) No.1 TVG 2012*)? Yes

o No

If not, does she/he has a corresponding education, o Yes which one: _____ No

Does the leader has sufficient specialized knowledge? 🗶 Yes

Which one: <u>FELASA-Course category C</u> o No

















2) Scoring methodology (evaluation by weighting of issues)

- Questions will be answered according to each category
- The applicant is asked to describe an issue
- Additionally he has to answer specific questions by grading (e.g. 1–5) or awarding points (ready answers are offered)
- For the project evaluation, the authority/committee makes its own assessment and checks if the applicant's estimation is plausible



2) Scoring methodology (evaluation by weighting of issues)

 After describing the issue the researcher has to answer additional questions, e.g.:

Realistic potential of the experiment to achieve the objective	Estimation Researcher	Estimation Authority
	 1. Excellent 2. Very good 3. Good 4. Average 5. Inadequate 	 1. Excellent 2. Very good 3. Good 4. Average 5. Inadequate

 The proposed evaluation by grades is based on the project evaluation for funding as used by the FWF*) in Austria

^{*)} Fonds zur Förderung der wissenschaftlichen Forschung (Austrian Science Fund) FWF (2012): Bewertungshandbuch für das "Translational-Research-Programm", Appendix I: Fragen an FachgutachterInnen eines TRP-Projekts, Section 1. Note: The criteria aim also to projects in the field of basic research, see Section 1 No. 1.



3) Comparative approach

- Extremes for the adjustment of the catalogue
- Which appraisals are a "no go", cf. Zurich "Negative List"*)



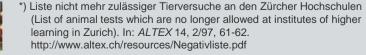












8. Overall judgement



Harm-benefit analysis

- Presumably, the results of each category will be determined
- the results of each category go into the overall judgement (harm-benefit analysis)













9. The project



Outline

- 2013 June 2014: development of the Austrian Catalogue of Criteria
- June 2014 June 2015: evaluation of the catalogue
- Dec. 2015: final report















Thank you for your attention!













