**Mustervorlage & Erläuterungen für**

**Ausführliche Vorhabenbeschreibungen für systematische Übersichtsarbeiten**

**Revised Full Proposal for Preclinical Systematic Reviews   
(Module 2)**

Please note: this template now includes Chapter 0. “Response to Reviewers´ Comments”.

To ensure comparability of all submitted outline applications please prepare your application in English **not exceeding 15 pages** (DIN A4, at least 11 point Arial and 10 point Arial for the table, margins of at least 2 cm and single-spaced lines).

Structure your application using the headings listed below. Make an entry under each heading/subheading.

**A signature of the applicant is mandatory** on the authentication sheet generated by PT-Outline (“Projektblatt”). A signature of the biometrician is not necessary. However, please ensure that the team of participating investigators has the necessary range of disciplines and expertise to carry out the systematic review.

Additionally 2 appendices are to be submitted. Do not submit any other appendices.

**SYstematic REview Protocol** (Format according to SYRCLE ([www.syrcle.nl](http://www.syrcle.nl) ))**[[1]](#footnote-1)**

**0. Response to Reviewers´ Comments**

*Please summarize in English the recommendations given to your application. Please respond with a short point-by-point reply separately to each recommendation (2 pages max.). Where necessary, refer to changes made in this revised application.*

|  |  |  |
| --- | --- | --- |
| **Item #** | **Section / Item** | **Description** |
|  | 1. **General** | |
| 1 | Title of the review |  |
| 2 | Applicant (name, affiliation) |  |
| 3 | Other contributors (names, affiliations) |  |
| 4 | Contact person (name, address, telephone, fax, e-mail) |  |
| 5 | Conflicts of interest |  |
| 6 | Date and location of protocol registration[[2]](#footnote-2) |  |
| 7 | Registration number2 |  |
| 8 | Stage of review at time of registration2 |  |
|  | 1. **Objectives** | |
|  | **Background** | |
| 9 | What is already known about this disease, models of the disease, intervention? Did you search for already existing systematic reviews in your field of interest? |  |
|  | **Need for the systematic review** |  |
| 10 | Why is it important to do this systematic review? What is the novel aspect of this review? What is the relevance of the results? Discuss potential impact and relevance for translational aspects. |  |
|  | **Research question** | |
| 11 | Specify the disease/health problem/indication areas of interest |  |
| 12 | Specify the population/species/cell culture/ etc. studied |  |
| 13 | Specify the intervention/exposure |  |
| 14 | Specify the controls |  |
| 15 | Specify the outcome measures /effects |  |
| 16 | State your research question (based on items 11-15) |  |
|  | 1. **Methods** | |
|  | **Search strategy and study identification (see Appendix 1)** | |
| 17 | Identify literature databases to search (e.g. Pubmed, Embase, Web of science) | MEDLINE via PubMed  Web of Science  SCOPUS  EMBASE  Other, namely:  Specific journal(s), namely: |
| 18 | Define electronic search strategies (e.g. use the step by step search guide[[3]](#footnote-3) and animal search filters[[4]](#footnote-4), [[5]](#footnote-5) or analogous strategies for in vitro studies | When available please add a supplementary file containing your search strategy: |
| 19 | Identify other sources for study identification | Reference lists of included studies  Books  Reference lists of relevant reviews  Conference proceedings, namely:  Contacting authors, organisations, namely:  Other, namely: |
| 20 | Define search strategy for these other sources |  |
|  | **Study selection** | |
| 21 | Define screening phases (e.g. prescreening based on title/abstract, full text screening, both) |  |
| 22 | Specify (a) the number of reviewers per screening phase and (b) how discrepancies will be resolved |  |
| 23 | *Define all inclusion and exclusion criteria based on:* | |
| 24 | Type of study (design) | Inclusion criteria:  Exclusion criteria: |
| 25 | Type of animals/cells/population (e.g. age, gender, disease model) | Inclusion criteria:  Exclusion criteria: |
| 26 | Type of intervention (e.g. dosage, timing, frequency) | Inclusion criteria:  Exclusion criteria: |
| 27 | Outcome measures/effect | Inclusion criteria:  Exclusion criteria: |
| 28 | Language restrictions | Inclusion criteria:  Exclusion criteria: |
| 29 | Publication date restrictions | Inclusion criteria:  Exclusion criteria: |
| 30 | Other | Inclusion criteria:  Exclusion criteria: |
| 31 | Sort and prioritize your exclusion criteria per selection phase | Selection phase:  1.  2.  etc.  Selection phase:  1.  2.  etc. |
|  | **Data extraction / Study characteristics to be extracted** (for assessment of external validity, reporting quality) | |
| 32 | Study ID (e.g. authors, year) |  |
| 33 | Study design characteristics (e.g. experimental groups, number of animals/samples ) |  |
| 34 | (Animal) model characteristics (e.g. species, gender, disease induction) |  |
| 35 | Intervention characteristics (e.g. intervention, timing, duration) |  |
| 36 | Outcome measures |  |
| 37 | Other (e.g. drop outs) |  |
|  | **Assessment risk of bias (internal validity) or study quality assessment**[[6]](#footnote-6) | |
| 38 | Specify  (a) the number of reviewers assessing the risk of bias/study quality in each study and  (b) how discrepancies will be resolved |  |
| 39 | Define criteria to assess  (a) the internal validity of included studies (e.g. selection, performance, detection and attrition bias) and/or  (b) other study quality measures (e.g. reporting quality, power) | By use of [SYRCLE's Risk of Bias tool[[7]](#footnote-7)](http://www.biomedcentral.com/1471-2288/14/43/abstract)  By use of SYRCLE’s Risk of Bias tool, adapted as follows:  By use of [CAMARADES' study quality checklist, e.g.[[8]](#footnote-8)](http://www.ncbi.nlm.nih.gov/pubmed/15060322)  By use of CAMARADES' study quality checklist, adapted as follows:  Other criteria, namely: |
|  | **Collection of outcome data** | |
| 40 | For each outcome measure, define the type of data to be extracted (e.g. continuous/dichotomous, unit of measurement |  |
| 41 | Methods for data extraction/retrieval (e.g. first extraction from graphs using a digital screen ruler, then contacting authors |  |
| 42 | Specify  (a) number of reviewers extracting data and  (b) how discrepancies will be resolved |  |
|  | **Data synthesis and statistical analysis plan** | |
| 43 | Specify (per outcome measure) how you are planning to combine/compare the data (e.g. descriptive summary, meta-analysis) | *.* |
| 44 | Specify (per outcome measure) how it will be decided whether a meta-analysis will be performed |  |
|  | *If a meta-analysis seems feasible/sensible, specify (for each measure):* | |
| 45 | The effect measure to be used (e.g. mean difference, standardized mean difference, risk ratio, odds ratio) |  |
| 46 | The statistical model of analysis (e.g. random or fixed effects model) |  |
| 46 | The statistical methods to assess heterogeneity (e.g. I2, Q) |  |
| 47 | Which study characteristics will be examined as potential source of heterogeneity (subgroup analysis) |  |
| 48 | Any sensitivity analyses you propose to perform |  |
| 49 | Other details meta-analysis (e.g. correction for multiple testing, correction for multiple use of control group) |  |
| 50 | The method for assessment of publication bias |  |
|  | 1. **Strategies for data management, data sharing and dissemination of results[[9]](#footnote-9)** | |
| 51 | What will be your strategies for the dissemination of results especially beyond regular journal publication? Indicate how the expected results of the systematic review will be used. |  |
| 52 | Describe what measures will be taken to ensure data management, maintenance and long-term accessibility of your results for future updates and reuse (also by third parties). Please use existing internationally accepted standards and data repositories where appropriate. |  |
| **Final approval by (names, affiliations, date):** | | |
|  | | Date: |
|  | | Date |

**E. Expertise of applicants**

|  |  |  |  |
| --- | --- | --- | --- |
| **#** | **Name** | **Affiliation** | **Role** |
|  |  |  | Expertise with the experimental model |
|  |  |  | Methodological expertise |
|  |  |  | …. |
|  |  |  | …. |

**F. Financial and Time Plan**

**Duration:**

**Financial Plan:**

Please calculate specifically and give all requested details.

The expenses should be explained.

|  |  |  |  |
| --- | --- | --- | --- |
| **Itema** | **Costs** | **Number** | **Sum in €** |
| Staff: *qualification, tasks* | *salary groupb* | *Number and  man months* |  |
| Consumablesc: *detail* |  |  |  |
| Traveld: | 1.500 |  |  |
| Commissions (incl. 19 % tax): *detail* |  |  |  |
| Other: *detail* |  |  |  |
| **Budget requested** |  | |  |
| **Institutional Overhead** (e.g. 20 % Projektpauschale for universities / university clinics) | | |  |
| **Requested Budget (SUM)** | | |  |

a Delete / add lines as needed

b Please calculate incl. employer´s contribution and negotiated special payments.

c Publication costs can only be funded if an open access publication is planned.

d Travel expenses can be applied for as flat rate: 1.500 € per full position of academic personnel (PhD stu-  
 dent=1 position)

|  |  |
| --- | --- |
| **Time plan** | |
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**APPENDICES**

1. **Search Strategy**

*Provide a sketch of your search strategy (max. one page).*

1. **References***Please indicate review/meta-analysis expertise of all above-mentioned participants by citing relevant publications and / or specifying major role in ongoing review(s) (to be identified; max. 5 publications of the last 5 years per person). Ensure that the team of investigators has the necessary expertise to carry out the review/meta-analysis.*

1. In preparation of the application the following information related to systematic reviews is worth noting: <http://syrf.org.uk/systematic-review/> or: <https://www.radboudumc.nl/en/research/technology-centers/animal-research-facility/systematic-review-center-for-laboratory-animal-experimentation>. Please use analogous strategies for in vitro studies. [↑](#footnote-ref-1)
2. can be given later [↑](#footnote-ref-2)
3. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3265183/pdf/LA-11-087.pdf [↑](#footnote-ref-3)
4. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3104815/pdf/LA-09-117.pdf [↑](#footnote-ref-4)
5. http://journals.sagepub.com/doi/pdf/10.1177/0023677213494374 [↑](#footnote-ref-5)
6. <https://bmcmedresmethodol.biomedcentral.com/track/pdf/10.1186/1471-2288-14-43?site=bmcmedresmethodol.biomedcentral.com> [↑](#footnote-ref-6)
7. <https://bmcmedresmethodol.biomedcentral.com/articles/10.1186/1471-2288-14-43> [↑](#footnote-ref-7)
8. <https://www.ncbi.nlm.nih.gov/pubmed/15060322> [↑](#footnote-ref-8)
9. For results and data publication the following page is recommended for reading: <http://syrf.org.uk/systematic-review/step-9-final-publication/> [↑](#footnote-ref-9)