Overview activities 2021

Animal Ethical Committee University Maastricht

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Introduction

Animal experimentation requires approval of the CCD (Central Commission Animal testing). By Dutch law, the Animal Welfare Body (IvD) coordinates a project proposal (PP) with the applicant especially with respect to the technical aspects and the implementation of the 3R’s (Replacement, Reduction, Refinement) before the project proposal will then be submitted to the CCD by the UM license holder. The CCD will request an advice from an Animal Ethical Committee (DEC), usually the DEC preferred by the applicant. For researchers affiliated to UM, this is the DEC-UM. The DEC-UM will judge the project proposal based on its scientific and ethical merits, including the 3R’s, and will advise the CCD within 20 working days. To expedite this process, the DEC-UM is composed of members with expertise in different scientific areas (see Table 1). Whenever necessary, the DEC-UM asks questions to the responsible researcher for clarification and invites them to the plenary meeting if needed. The CCD will make a decision based on the advice of the DEC and can provide a permit or a disapproval of the project to the license holder. After approval of the PP, further details on practical animal experimentation are discussed with the IvD and secured in a work protocol, before the start of the actual animal experiment itself.

The composition of the DEC-UM with the respective expertise of its members is indicated below. Also, an overview of the DEC-UM activities in 2021 is given.

The DEC-UM

*Composition*

In 2021, the composition of the DEC-UM has not been changed. In line with the composition requirements described in the law on animal testing (WoD), as of January 1, 2022, the DEC-UM is composed of the following members shown in Table 1.

**Table 1**. Composition DEC-UM op January 1, 2022

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Member | Scientific focus | Expertise | Involved in animal research | Affiliated to the license holder |
| Member 1 (chair) | Veterinary medicine | VM;SA;D;P;HC | I | NA |
| Member 2 | Cardiology | SA;D | I | A |
| Member 3 (vice-chair) | Oncology | SA;D;P | I | A |
| Member 4 | Neurology | D;SA;HC | I | A |
| Member 5 | Pulmonology | SA;D;HC | NI | NA |
| Member 6 | Ethics | E;SA;D;HC | NI | NA |
| Member 7 | Biomaterials | SA;D;HC | I | NA |
| Member 8 | Pharmacology/Toxicology | SA;D;HC | NI | NA |
|  |  |  |  |  |
| Advisor |  | Chair IvD | I | A |
| Secretary |  |  | NI | A |

**Abbreviations**: SA = the scientific research areas and applications implementing animal testing, taking into account replacement, reduction and refinement on the scientific focus; D = design of animal tests, including statistical aspects; VM = veterinary medicine practice in context of research or wild-life animals; HC = housing and caring of animals applied in research; E = ethics; P = protection of research animals; NI = not involved in animal testing; NI-NL = not involved in animal testing within the Netherlands; I = involved in animal testing; NA = not affiliated to license holder; A = affiliated to license holder

*License holder*

The DEC-UM advised the CCD for project proposals from the UM (UM, FHML). In 2021, no project proposals from an external license holder have been evaluated by the DEC-UM.

Activities DEC-UM

*Meetings*

The DEC-UM organized 9 online – due to Covid-19 measures – meetings in 2021 to plenarily discuss the CCD requests to provide an advice regarding new project proposals or project amendments. Based on these plenary meetings, the DEC-UM prepared advices for the CCD. The responsible researchers of one proposal have been invited to a digital plenary meeting to provide additional explanations.

*CCD-requests to the DEC-UM*

In 2021, the DEC-UM completed 12 CCD-requests: 11 new project proposals and 1 resubmission (see Figure 1). The DEC-UM has formulated an advice towards the CCD for 11 proposals (92%). One proposal (8%) was judged ‘not testable/not assessable in current form’ and returned as such to the CCD. The CCD informed the applicant about this decision and gave the opportunity to re-submit the proposal. The DEC-UM proved a positive advice for 10 proposals (91%) and a positive advice with a clause for 1 proposal (9%). Advices were given unanimously, for 1 proposal (9%) external advice was requested.



Figure 1. Processing time DEC-UM for completed CCD-requests in 2021

The purple dashed line indicates the maximal allowed processing time of 20 working days to provide advice to the CCD. # = proposal not testable /not assessable. Blue = new proposal, yellow = re-submitted proposal.

The processing time (working days) to compose an advice towards the CCD is indicated in Figure 1. The average processing time for the DEC-UM in 2021 was 18.8 working days. This is slightly higher compared with the processing time of 2020, however without reaching statistical difference and still below the maximal allowed processing time of 20 working days, given by the CCD to the DEC (purple line). For one proposal this maximal allowed processing time was exceeded, due to the complexity of the application and also limited accuracy in answering questions. This delay has been communicated with the CCD, with requesting an official extension of 15 days as indicated by the law (EU 2010/63, Art.41-2).

*Animal numbers and discomfort*

All project proposals in 2021 encompassed together 29817 animals (Figure 2), 12029 (40.3%) mice, 1981 (6.6%) rats, 40 (0.1%) rabbits and 15767 (52.9%) zebrafish. Figure 3 indicates the percentage animals per species assumed to be exposed to mild, moderate or severe discomfort. Mice are mainly exposed to moderate discomfort (87.3%), while rats (81.1%) and rabbits (100%) are described to experience mainly mild discomfort. For 0.8% of the mice, severe discomfort is expected. Zebrafish will experience mild (40.6%) and moderate (40.9%), but also severe (18.5%) discomfort. The 2 project proposals expecting severe discomfort, have been approved with a legal retrospective assessment at the end of the project.



Figure 2. Number of animals per species requested in 2021.



Figure 3. Distribution of animals per species according expected discomfort indication.

*National meetings*

The Dutch association for animal ethical committees (NVDEC) is representative for all the 16 DEC’s in several meetings, among others with the CCD. In 2021, the DEC-UM participated in the meetings for DEC chairs and secretaries, organized by NVDEC, on April 20 (online) and October 26 (online), as well as in the meetings for CCD-DEC chairs and secretaries, organized by the CCD on April 20 and October 26 (both online). The meeting organized by NVDEC always preceded the meetings organized by CCD.

*Education*

In the Laboratory Animal Science Course at UM/FHML, organized in April and October 2021, the ethicist DEC-UM gave lectures on the law on animal testing (WoD), the role of the DEC and from a more general point of view ethics concerning animal testing.