

Minutes: AWERB

Status: Chair approved

Meeting held: 4 June 2019

Present

Attendees: 10 plus 1 in attendance, 6 by invitation, 8 apologies.

1 PROJECT LICENCE AMENDMENT

A project licence holder who was looking to amend his project licence was welcomed to the meeting. He explained that he was seeking several amendments to his project licence including:

- 1) Modification of the wording in relation to artificial insemination.
- 2) Induction of oestrus this would expedite the breeding and therefore result in each female being required for a shorter time before rehoming hence a refinement and reduction.
- 3) Specific mention of muscle histopathology post mortem being removed as they actually analysed many tissues in the treatment trials.
- 4) Increasing the number of MRI and CT examinations under general anaesthesia so allowing the study to be extended for evaluation of the cardiac phenotype.
- 5) Increasing the number of conscious echocardiography sessions and Holter ECG sessions to up to 12 per animal so allowing the researchers to follow the cardiac phenotype up to 36 months of age as current finding were interesting and could inform early recognition of cardiac complications in humans with this disease.
- 6) Modifying the wording for the electrophysiology, so allowing the researchers to use percutaneous subdermal electrodes in conscious animals as was routinely done with clinical veterinary patients (GA can interfere with interpretation of the EEG). The electrodes were normally well tolerated.
- 7) Modifying the wording for the cognitive testing, allowing use of reward-based tasks this would be a refinement as the animals would have more interaction with the handler.
- 8) Addition of cystocentesis for urine collection to protocols 2, 4 and 5. Urine was frequently used as a biomarker for humans and was used to determine any specific renal toxicity of novel drugs administered parenterally. A clause had been added re the adverse effects of the procedure, however, cystocentesis done under ultrasound guidance and sterile conditions had minimal likelihood of complications.

A query was raised about whether free catch urine was an option if it did not interfere with the experimental design and was convenient? The project licence holder advised though that cystocentesis was required because it allowed them to collect an uncontaminated sample at a defined time point which for pharmacokinetic studies was important Ureteral catheterisation was not suitable because of the trauma that this procedure could induce to the epithelium which could artificially exaggerate certain renal biomarkers.

AWERB were in the main happy with the proposed amendments, however the following concerns were raised:

- As there would be a reduction in females born, would that lead to existing females having to breed more frequently or have more litters? It was explained that the reduction in females should occur at the same time as an increase in the males, so the number of litters required should reduce over the course of this project. The licence holder also did not anticipate any female being bred from more times than already stipulated in the licence.
- What steps would be taken to ensure that a female had recovered from a previous pregnancy? All carriers were considered on an individual basis to assess their suitability for breeding as already stipulated in the licence.
- Were there adequate staffing resources in the unit to cope with the increased litters? Accommodation had been expanded to allow increased numbers, so it was felt there were adequate resources to cope with the projected dog numbers.
- Would the reduction in stud males lead to inbreeding? The project licence holder advised that inbreeding was not an issue as they carefully mapped breeding to ensure that this did not happen.
- Would keeping the affected animals longer be detrimental to their health? There were well defined end points in the licence, so the animals would be treated exactly the same, whatever time frame they were at. They would only be allowed to continue to 36 months if they had not reached a humane end point.

The project licence holder was thanked for attending the meeting and was advised that the amendment would be further discussed with a decision relayed after the meeting.

The Committee confirmed that they were happy for the amendments to be submitted however they were keen that the humane endpoints be reviewed to ensure they were as clear as possible. Other areas that needed to be reviewed was having an upper age limit for when the animals could be bred to added to the licence as well as regular checks made on their wellbeing. A meeting would therefore be held with the project licence holder to review these areas.

2 NEW PROJECT LICENCE HOLDER APPLICATION:

A project licence holder who was looking to apply for a new project licence was welcomed to the meeting. An RVC scientist who had reviewed the project licence to provide an immunologist's perspective on the proposed science was also welcomed to the meeting.

A summary of the project licence holder's background was provided. The aim of the project was to produce safety, efficacy and tolerability data for potential new vaccine candidates against several infectious diseases and for potential new anti-cancer agents. Using the data generated from this project, the aim was to progress the strongest candidates into clinical development.

AWERB discussed this project licence:

• There were concerns that the planned approach was too broad and tried to cover every possible angle. The project licence holder explained she had not wanted to restrict the work that could be done as the work developed. She wanted to be able to take advantage of any new development that came along that could be beneficial to them.

- The project licence was very wordy and vague: for example "subdued behavioural patterns" –
 what was meant by that? What should be given was information about the behaviours that
 might be seen and what should be done if they were, without allowing too much subjective
 interpretation.
- There were concerns about the immunology side and what could be achieved. Currently the background provided did not match the protocols and the questions that aiming to answer.

It was agreed that further discussions were needed in order to get the project licence more focused and to ensure that there were defined humane end points. The project licence would then be circulated to AWERB for further review.

3 MINUTES OF THE MEETING HELD ON 23 APRIL 2019

The minutes of the meeting held on 23 April were confirmed as an accurate record.

4 MATTERS ARISING

4.1 Item 1: New project licence application

The project licence holder had amended the project licence and a revised application had now been received and circulated.

4.2 Item 4.6: Named persons reports (April 2019 meeting)

Having named persons reports were now standing items on the agenda.

4.3 Item 5: Project licence due to expire (April 2019 meeting)

A formal letter had been sent to the project licence holder expressing AWERB's concerns that the situation of letting his project licence expire before applying for a new licence had been allowed to happen.

4.4 Item 6: Visit to facility in Canada (April 2019 meeting)

The facility had Canadian Council on Animal Care (CCAC) accreditation – this was the Canadian equivalence to AALAC accreditation.

4.5 Item 7: Checklist for reviewing project licences (April 2019 meeting)

AWERB were reminded to put together a list of what they considered when reviewing project licences. The responses would then be compiled into a check list.

4.6 Item 7: Welfare Projects (April 2019 meeting)

Several welfare projects had been undertaken including investigating different mouse nesting materials and comparing different enrichments for zebrafish too. A UFAW summer studentship to do a project comparing different types of shelter for mice had been awarded. Two undergraduates had signed up to do lab animal enrichment/husbandry projects in the coming academic year.

4.7 Item 8: Dog Rehoming Programme (April 2019 meeting)

The proposed pamphlet to give to owners explaining their new dogs background had not yet been put together.

4.8 Item 15.1: Junior technicians to attend AWERB (April 2019 meeting)

Technicians now have a standing invite to attend the AWERB meetings as observers.

4.9 Item 3.2: PPL Refresher training and culture of care workshops (March 2019 meeting)

The decision had been taken to reschedule the workshops planned for June as they clashed with exam time. Dates in July were now being considered.

4.10 Item 2: Project licence discussion (February 2019 meeting)

A question had been on the discussion forum asking if anyone was aware whether there have been any refinements of IP injections, however no viable options had been put forward.

5 PPL PRESENTATION

A project licence holder who was looking to amend her project licence was welcomed to the meeting. She explained that she was seeking two minor amendments to her project licence:

1. GM mice to be added to one of the protocols to enable further examination of the role of the innate immune system on tendon repair and healing. The hypothesis was that these mice would show improved healing compared to controls.

2. Addition of administration of substances to promote healing in two of the protocols. Pharmacological agents would be administered and their effect on tendon healing determined. Administration of these therapeutics may result in the development of a novel treatment for tendon injury. Only well-characterised substances which have previously been used in rodents with minimal adverse effects would be used, and doses and administration routes would be consistent with previous in vivo studies.

AWERB confirmed that they were happy with the proposed amendment and that it could be submitted to the Home Office.

The project licence holder also provided an updated on the reproducibility of the model in the work done so far. There seemed to be good reproducibility based on the histology of the lesion.

The project licence holder was thanked for attending AWERB.

6 LONDON AWERB HUB MINUTES

AWERB noted the redacted minutes from the meeting held on 13 February 2019. It was reassuring to see that the issues that this AWERB faced (late PPL and PIL submissions and how to resolve this) was experienced by other AWERBs too.

7 NVS REPORT

7.1 Camden

Ferrets: several ferrets had to be euthanised following an infection. An investigation was being undertaken to identify where the infection had come from. Historical health screens have been requested from the supplier and a visit to the facility would be organised soon.

Rat cages: new larger cages were being looked into and quotes were being obtained. The unit were keen not to obtain double tier cages as they made handling of the rats difficult, plus did not provide much extra space. It was suggested that it would be useful for there to be a welfare project that looked at scoring for behavioural indicators to see whether the longer the animals were kept, affected their behaviour and how they looked and what could be done to improve the environment for them. Also did the number of times an animal was reused have an impact on their behaviour and welfare? This suggestion would be discussed with the welfare team.

7.2 Hawkshead report

AWERB noted the report.

8 NACWO REPORT

8.1 Camden

Horses feet: there has been an ongoing problem with the horses' hooves. Rubber matting for the stables was in the process of being sorted.

8.2 Hawkshead

Dogs: the refurbishment works was in the process of being finalised. The dog colony had been relocated into the new kennels.

Two bitches had whelped in May (24 hours a part). There had been a disparity in litter sizes: 4 versus 8. There had been problems of weight gain with the larger litter. AWERB's view whether in the future there should be fostering of puppies to split the litters more evenly would be sought at a future meeting where more detail could be provided. The initial thought was that if it worked well then AWERB would be happy with this.

9 COMPANION ANIMALS QUERY

It was reported that there have been discussions with the Home Office Inspector about some aspects of companion animal challenges. On several occasions it had proved necessary to bring in extra animals for companionship for surgery animals, when otherwise an animal would have been left on their own between surgeries. These companion animals then had to be euthanased. It was felt that this was not in the best interest of 3Rs and the Inspector had been asked whether he would consider allowing a pig to be singly housed without a companion for up to 72 hours in these circumstances. The Inspector had indicated verbally that he was happy with this. Therefore, AWERB were being asked if they too were happy with this proposal. This would mean for future studies where 2 animals would be used or there was a situation where an animal may be housed alone for a short period of time due to timings of surgeries, it would be ok not to bring in a companion animal in the spirit of reduction of animal use. Any singly housed animal in this situation would not be held for more than 72 hours alone.

AWERB indicated that they understood the argument for not bringing in a companion animal. It was suggested that a pig plastic model could be used as an alternative companion that could then be cleaned. The equine hospital used a plastic horse as that generally helped calm horse patients down.

They also asked whether information could be obtained on how stressed the animals generally got on being by themselves for 24 hours (for example were they not eating or drinking).

10 PROJECT LICENCES

AWERB noted that two new project licences had been granted by the Home Office since the previous meeting and two licences amended.

11 STUDY REQUESTS RECEIVED

There had been two study requests approved since the previous meeting.

12 TRAINING RECORDS

Following a query expressed at an earlier meeting by a lay member about how AWERB satisfied itself that all the people who were required to have a training record, did in fact do so and what steps were taken to identify that a training record was up to date, the lay member had now been invited to the Hawkshead campus so she could see first hand the process that has been introduced and the regular NTCO checks that were taken to evaluate and assess people.

13 SCHEDULE 1 REGISTER REVIEW

It was confirmed that the Hawkshead schedule 1 register was up to date. The Camden register was being updated and would then be transferred to the "AWERB master documents" folder.

14 DATE OF NEXT MEETING

This was scheduled for 10th July at 9.30am.

Secretary 13 June 2019