Date: Wednesday, 05/05/2021
Time: 9:00 am
To: Committee Members
At: Virtual via Microsoft Teams
Subject: VERB 3Rs Committee

In Attendance:______________________________

Apologies:______________________________

Mentioned within text:______________________________

Minutes:______________________________

1. Minutes
The minutes from the meeting held on 7th April 2021 were approved.

2. Matters Arising
Since the last 3Rs meeting, a meeting has taken place with the group to discuss the use of Freund's Adjuvant. A recurring concern is the group's re-use of needles but they have shown willing to take on advice. will meet with the group. A note has been added to the Project Licence application so the concerns are raised when the licence is reviewed at AWERB.

will discuss with how information regarding 3Rs can be added to the UBS website.

noted that a guidance document is being put together for Freund's Complete Adjuvant and will be circulated at the earliest opportunity. It was queried whether this should be made into a UBS policy.

3. Retrospective Reviews
a) – Cartilage repair using circulating stem cells.
   The committee discussed the following:
   • The group have experienced disruption over the last few years with staffing movement and the COVID pandemic.
   • The table in section 2.1 should be revised and the total rows and columns completed.
   • Section 2.2 could be used to explain why protocol 6 had all mice returned as moderate on a mild protocol.
   • It was queried whether the use of MCMS could be included in section 2.9.
   • The answer supplied in section 3.2 should be reviewed as it implies that experiments have been performed without "clearly defined benefits". It was suggested that Reduction should be considered as animal numbers used in relation to experimental output.
• The committee would like to know if the refinement mentioned in section 3.7 and the Mouse Osteochondral Model in section 4.7 will be published and if they will be taken forward at the University of Cambridge.

• More detail could be provided across section 4 to promote the scientific benefits that have come out of the animals used and the work involved in maintaining a project licence.

b) Modeling cancer predisposition by BRCA2 mutations.
The committee discussed the following:
• This work is not continuing at the University of Cambridge.
• The 3Rs committee commended the detailed reporting in section 2.
• It was suggested that the percentages provided across section 2 should be for the individual protocol and not for the whole mouse usage.
• Information should be provided in section 2.7 or 2.8 to justify the animals wasted under protocol 5. Further information could be given if the animals were used for other purposes.
• The group were encouraged to focus on optimising their future breeding strategies to reduce breeding wastage.
• The group’s tissue sharing practice was commended. Therefore, it was recommended that the answer provided in section 2.9 is reconsidered.

• The committee seek reassurance that the publications mentioned in section 3.5 will be finished and that the group have the ability to repeat any animal work if it is required.

• Publications or presentations currently in draft or under review could be included in section 4.8.

4. Project Licence Amendments
a) Brain mechanisms underlying cognition and emotion
The committee discussed the following:
• The committee queried why no Lay Amendment Summary was provided.
• Evidence of the calculations performed to determine the number increase should be added to the Amendment paragraph in the Project Plan to improve the justification.
• It was queried whether the marmoset unit can accommodate the increase in numbers and whether the group’s funding can cover this.
• The Non-Technical Summary should be updated to reflect the amendment.

b) The role of the immune system in cardiovascular disease.
The committee discussed the following:
• The project group were commended for their knowledge and use of statistics in their experimental design and mouse number predictions.
• The committee confirmed they would support a temporary breeding licence if deemed appropriate by the Home Office Inspector.
• The committee could not assess whether protocol 6 will cumulate into a severe experience.
• Under protocol 7, justification should be provided for why the mice need to be fasted beyond the Home Office non-regulated limit of 16 hours. The committee offered to put the group in touch with the Metabolomics Unit at the University of Cambridge.
• Further information is requested for protocol 8, step 3 regarding why the mice need to be post-partum and what happens to the pups.
Protocol 8, step 6 could be regarded as a refinement if the group consider doing more non-invasive imaging.

Further information should be provided in the protocol justification/experimental design sections on protocol 8 regarding the high death rate caused by aneurysm rupture.

It was queried whether other regulated procedures increase the risk of sudden death and if analysing the data reveal any refinements that could be made to the experimental design.

The committee recommended increasing the monitoring frequency of the severe models, especially during the high-risk periods of sudden death.

It was queried whether the group have considered in-vitro assays to benchmark the elastase activity to try to refine the animal experiments.

Information should be provided regarding the successful and unsuccessful 3Rs actions as outlined in two referenced papers from 2011 and 2013.

It was noted CRUK have not been included as secondary availability. The committee felt that the transport of animals between the facilities requires 3Rs consideration.

The group should provide comment on whether the use of Acoustic Tomography (MSOT) is to be considered a refinement or if it offers a reduction.

6. Severe Severity licence reviews
   None

7. Standard Condition 18 reports
   None

8. 3Rs information/reports
   [Redacted] and [Redacted] will be attending an Animal Free Innovation meeting being held by the LASA Establishment Licence Forum.

   The Royal Society of Medicine are organising a one day online conference about monitoring during anaesthesia. Information about the meeting has been circulated to all licence holders. The 8th Annual 3Rs Symposium is being held on 3rd and 4th June. It was suggested that a representative from the committee attends.

9. Feedback from previous Retrospective Reviews*
   None

10. Minutes of AOC meeting*
    None

11. Minutes of AWERB Standing meeting*
    None

12. Any Other Business
    a) Needle re use update
       [Redacted] shared the letter sent to [Redacted] from the AWERB Standing Committee in response to the presentation she gave. [Redacted] paper was recommended and [Redacted] suggested this should be shared with this committee. [Redacted] noted the licence holder has now changed and the new licence holder should be made aware of the advice. [Redacted] confirmed that guidance notes will be useful but it should be noted that should only be used if there is no alternative.
b) MTA Update
   None

c) Website ideas follow up
   Spoken about throughout the meeting.

Date of next meeting: 2nd June 2021

*Items for information only unless un-starred by committee member