



Home Office

PPL Standard Condition 18 Notification Form

Please use this form to notify the Animals in Science Regulation Unit (ASRU) of procedural-related adverse effects that have exceeded or are likely to exceed the severity limitations or controls described in the project licence. ASRU will use this information to determine whether any further action is required.

Do not use to report:

- adverse effects that are due to non-procedural issues;
- potential non-compliance (report by other means);
- issues without adverse welfare consequences.

If you are in doubt whether or not you need to fill in this form, please contact your assigned Inspector.

Please clearly title your document: **'ASRU_establishment name_PPL number_PPLh surname_date_sc18'** and send to your Inspector (e.g. using cjsm) with the subject heading 'PPL SC 18 Notification PPL [Number] – **Check Home Office's Updated Bridging Ways of Working for updated advice on email addresses and subject headings. Cjsm no longer necessary.**

Establishment Licence name	University of Cambridge
Establishment Licence number	X81BD37B1
Name of PPL holder	Ole Paulsen
PPL number	PP0499088
Protocol no	10
Protocol title	In vivo behaviour and neural recording (head-restrained)
Severity classification	Moderate
1. Date of incident	11 th of March, 2024
2. Species	Mouse

3. Brief details of study and how the limits or constraints have been breached	The limits have been breached on day 3 after craniotomy surgery when the mouse weight has decreased below the point outlined for humane end-point. The mouse recovered unremarkably immediately after surgery (performed by Urte Beatrice Baublyte, PIL I29829152, 53 surgeries+post-operative periods with no adverse effects completed). Analgesic Metacam was injected intraperitoneally prior to surgery, and mouse was allowed to recover in a heated incubator for 3 hours, with water and food provided. Overnight, soaked diet with additional Metacam was placed in the home cage. On day 1 after the surgery, the mouse had lost 13% of his initial weight – such an amount is relatively often observed on the first day and is nearly always followed by complete recovery. The mouse was showing mild signs of pain, so Metacam was injected intraperitoneally in addition to presence in soaked diet. Although the behaviour was not concerning (mouse was seen feeding, grooming, exploring), a note was made to monitor him closely the following day. On days 2-4, a substitute PIL holder (Annie Durand-Marandi (PIL I15727907, 25 surgeries+post-operative periods completed), accompanied by Jessy Lemoine) carried out the checks since the original researcher was away to attend to a family matter abroad. On day 2, the mouse lost additional 8% of original weight and was showing signs of pain, although he was grooming, remained responsive and warm. Metacam was injected intraperitoneally and also placed on the snout to be consumed when grooming. As mice have previously been seen to recover successfully despite delays and mouse seemed to be doing better in the afternoon, increased care has been given (boost gel, peanut butter, heat pad) but decision to cull was not taken. On day 3, the weight reduced again by 6% but the responsible researcher was informed the mouse was more responsive and showed less signs of pain (eyes fully open). Metacam was given intraperitoneally, in soaked diet and on the snout. Additional care was given (peanut butter, boost gel, heat pad). He had better coat condition and showed less signs of pain during a second
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	check in the afternoon, but a decision was made to cull the mouse if he did not gain weight the next day (in retrospect, decision to cull should have been taken on this day). The next day, attention was drawn by the facility's animal technicians that the mouse still seemed in pain and was too light, and was culled using a Schedule 1 method.
4. Have you taken advice from the Named Animal Care and Welfare Officer/Named Veterinary Surgeon/others?	The incident has been discussed with the NACWO of the animal facility the incident took place at, the same day. Improved action plan for future post-operative checks has been discussed. The responsible researcher was also encouraged to take decisive actions earlier in the future.
5. Cause of Problem, if known	The cause of non-recovery is not known. Normally, recovery happens by the third day with additional support for the animal's welfare provided (as was in this case); it did not happen this time. The decision to cull the animal ideally should have been taken earlier. The other five mice (one from the same litter) in this surgery batch recovered unremarkably.
6. Action that has been or will be taken <i>(For example, formulation of drug changed, supportive treatment given, study design modified). If no action needed, indicate why (for example, none required as study has been terminated and will not be repeated)</i>	Action to cull the non-recovering animal will be taken sooner by closer inspection of the weight loss percentages (treating sharp drops in weight as more concerning) and clinical sign presentation, and condition improvements will be disregarded if they are not sufficiently quick. If any concern about an animal arises, the NACWO or NVS will be contacted as soon as possible for advice. If the checks are carried out by a different researcher than the one responsible, more precise communication about the animal's condition will be ensured. Additionally, to ensure that mice ingest sufficient analgesic post-surgery, soaked diet (in which analgesic is presented) will be placed in cages 2-3 days prior to surgery so that mice learn to recognise it as feed. Heating pad will be provided immediately after surgery in all cases, not only if the mice are showing clinical signs.
7. Reported by (name)	Urte Beatrice Baublyte
8. Date	11 th of March, 2024

*****For official use*****

Inspector’s comments and recommendations:

Comments and recommendations	Thank you for submitting this PPL SC18 Notification. Please note that this case has been referred to ASRU Enforcement for further investigation. (Please see the inspector’s comments on the attached form). You will be contacted by a member of the Enforcement Team in due course regarding this case. In the meantime, please continue working as necessary within the authorities on your licences, and in accordance with your establishment’s internal governance, processes, and standards, unless contacted to say otherwise.
Inspector name	Karen Mason
Date	02/04/2024