## Appendix D: Example scoresheet and heath monitoring templates

### Post-operative monitoring

Across the working group, different styles of scoresheet were used, as discussed in Section 3.3.3. Using this experience, we have developed example scoresheets that are intended to be easy-to-use and adaptable to local practices, following discussions between researchers and their institutional ethics committee.

The example post-operative scoresheet below (Table A) condenses the identified key health indicators into a series of tick box responses to show that either a mild or more significant form of each clinical sign is present. Any milder signs present would suggest that monitoring should continue. Any of the more significant variations being present would require a response as dictated by local procedure, typically seeking advice from veterinary staff, which may result in the administration of treatment or the culling of the animal (i.e. implementation of predetermined humane endpoint).

Indicators included cover the animal’s weight and body condition (S4 - 1), signs of infection (beginning with reddening and signs of irritation around the wound before overt signs become apparent, such as discharge from the wound), changes to gross appearance (from slight dishevelment to hunched posture and piloerection) and alterations in locomotion, which should be assessed in the cage as well as during and following handling of the animal (ranging from small locomotor changes to reluctance to move or violent reactions).

For a simpler layout, but one which may obscure some of the information, each pair of tick boxes could be replaced by a single prompt and score of 0 – 2, or one or two marks made to indicate presence of mild or more significant signs. As this scheme does not give details of what is being looked for, this is more suited to experienced researchers working in animal houses used to this form of assessment.

In both cases, space to indicate that the checks have been made, any action that should be completed following this assessment, and if and when this follow-up activity has been completed, are all included. These should be prominent so that it is easy to confirm checks have occurred and any necessary actions taken.

### Fluid restriction

Many of the health indicators that need to be monitored during fluid control are similar to those used post-operatively as discussed in Section 4.2. A modified version of the scoresheet is therefore presented, replacing the mild/severe items for infection with equivalents for skin turgor, assessed by lightly lifting the loose skin on the back of a rodent and assessing its elasticity (Table B). As measures of body weight and condition are often prioritised during fluid control, an alternative scoresheet is also presented, which concentrates on these measures, condensing the other indicators into a single tick box (Table C).

As with the post-operative scoresheet, these scoresheets are intended to be easy-to-use and easily adaptable, which should be first discussed by researchers and their institutional ethics committees and adjusted to suit local and national policies and legislation before being put into use.

**Reference**(S4 – 1): Ullman-Cullere MH, Foltz CJ. Body condition scoring: a rapid and accurate method for assessing health status in mice. Lab Anim Sci. 1999;49(3):319-23.

Table A: Example post-operative welfare assessment scoresheet

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **[Details of experimenter and ethical approval]:** | | | | | | | | | |
| **Animal i.d.:** |  | | | | | | | | |
| **Baseline weight:** |  | | | | | | | | |
| **Date:** |  |  |  |  |  |  |  |  |  |
| Days post-op: |  |  |  |  |  |  |  |  |  |
|  | | | | | | | | | |
| Weight: |  |  |  |  |  |  |  |  |  |
| % of baseline weight: |  |  |  |  |  |  |  |  |  |
|  | | | | | | | | | |
| Irritation at wound site? |  |  |  |  |  |  |  |  |  |
| Signs of infection at wound site? |  |  |  |  |  |  |  |  |  |
|  | | | | | | | | | |
| Lack of grooming/rough coat? Vocalisation on handling |  |  |  |  |  |  |  |  |  |
| Piloerection/hunched posture? |  |  |  |  |  |  |  |  |  |
|  | | | | | | | | | |
| Lethargic or slightly jumpy? |  |  |  |  |  |  |  |  |  |
| Reluctant to move or reacts violently? |  |  |  |  |  |  |  |  |  |
|  | | | | | | | | | |
| **Action required?** |  |  |  |  |  |  |  |  |  |
| **Time checked:** |  |  |  |  |  |  |  |  |  |
| **Initial:** |  |  |  |  |  |  |  |  |  |
|  | | | | | | | | | |
| **Action taken:** |  |  |  |  |  |  |  |  |  |
| **Time performed:** |  |  |  |  |  |  |  |  |  |
| **Initial:** |  |  |  |  |  |  |  |  |  |

Table B: Example fluid control welfare assessment scoresheet

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **[Details of experimenter and ethical approval]:** | | | | | | | | | |
| **Animal i.d.:** |  | | | | | | | | |
| **Baseline weight:** |  | | | | | | | | |
| **Date:** |  |  |  |  |  |  |  |  |  |
| Days of fluid control: |  |  |  |  |  |  |  |  |  |
|  | | | | | | | | | |
| Weight: |  |  |  |  |  |  |  |  |  |
| % baseline weight: |  |  |  |  |  |  |  |  |  |
|  | | | | | | | | | |
| Lack of grooming? |  |  |  |  |  |  |  |  |  |
| Piloerection/hunched posture? |  |  |  |  |  |  |  |  |  |
|  | | | | | | | | | |
| Lethargic or slightly jumpy? |  |  |  |  |  |  |  |  |  |
| Reluctant to move or reacts violently? |  |  |  |  |  |  |  |  |  |
|  | | | | | | | | | |
| Slightly reduced skin turgor? |  |  |  |  |  |  |  |  |  |
| Skin remains tented |  |  |  |  |  |  |  |  |  |
|  | | | | | | | | | |
| **Action required?** |  |  |  |  |  |  |  |  |  |
| **Time checked:** |  |  |  |  |  |  |  |  |  |
| **Initial:** |  |  |  |  |  |  |  |  |  |
|  | | | | | | | | | |
| **Action taken:** |  |  |  |  |  |  |  |  |  |
| **Time performed:** |  |  |  |  |  |  |  |  |  |
| **Initial:** |  |  |  |  |  |  |  |  |  |

Table C: Example fluid control scoresheet prioritising body weight

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **[Details of experimenter and ethical approval]:** | | | | | | [date] | | | [date] | | | … | | |
| i.d.: | Baseline weight | 95% | 90% | 85% | 80% | Weight | Body condition | Coat/ activity | Weight | Body condition | Coat/ activity | … | … | … |
| [mouse 1] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [mouse 2] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [mouse 3] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [mouse 4] |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| … |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| … |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Action required?** | | | | | |  | | |  | | |  | | |
| **Time checked:** | | | | | |  | | |  | | |  | | |
| **Initial:** | | | | | |  | | |  | | |  | | |
| **Action taken:** | | | | | |  | | |  | | |  | | |
| **Time performed:** | | | | | |  | | |  | | |  | | |
| **Initial:** | | | | | |  | | |  | | |  | | |