

Age monitoring HMGU_AGE_001

Purpose

To visually examine mice routinely (at least once a month) and record behaviours and morphological abnormalities during ageing until the start of the late adult phenotyping pipeline while ensuring the welfare of the animals.

Experimental Design

- **Minimum number of animals** : 7M +7F
- **Age at test**: Unrestricted
- **Sex**: We do not expect the results of this test to show sexual dimorphism.

Procedure

1. It is important that individuals following this procedure are experienced and aware of the animal's welfare and are familiar with the animal being tested. Animals need to be treated with extra care since animals with advanced age are more fragile.
2. Allow the mice to acclimatise to the phenotyping room for a period of some minutes prior to testing.
3. The respective mouse is identified via the ear tag.
4. Take the weight of the animal.
5. While the mouse is sitting on the hand, take note about the overall appearance of the mouse (360° inspection), and the following parameters are recorded: Abnormal growth, Body posture, Activity and behaviour (unexpected behaviours, Aggression, Reduced movement, Hyperactive behaviour).
6. Grab the mouse by the neck and tail so that one can examine the belly of the mouse. Annotate for Abnormal coat, Colour or skin condition, Alopecia degree area (no alopecia, <10%, 10 to 50%, >50%, Hairless Mouse), Eyes abnormalities (Cataracts cornea opacity, Teeth abnormalities).
7. The paws are checked for deformations or other abnormalities. For easier recognition, push the leg slightly upwards, then the foot stretches, and the toes are automatically spread apart.

Notes

During this test, note any unexpected dysmorphological characteristics or unexpected behaviours (these irregularities are recorded by video sequences or photos). Additional Welfare terms can be used to label the mouse (see Welfare procedure).

Parameters and Metadata

Body weight HMGU_AGE_001_001 | v1.0

simpleParameter

Req. Analysis: false

Req. Upload: true

Is Annotated: true

Unit Measured: g

Description: body_weight

Growth HMGU_AGE_002_001 | v1.0

simpleParameter

Req. Analysis: false

Req. Upload: true

Is Annotated: false

Description: animal_growth

Options: Normal, Abnormal,

Body posture/Motor activity HMGU_AGE_003_001 | v1.0

simpleParameter

Req. Analysis: false

Req. Upload: true

Is Annotated: false

Description: body_posture_and_motor_activity

Options: Normal, Hunchback, Abnormal gait, Coordination disabilities, Other,

Behavior HMGU_AGE_004_001 | v1.0

simpleParameter

Req. Analysis: false

Req. Upload: true

Is Annotated: false

Description: animal_behaviour

Options: Normal, Aggression behavior, Reduced movement, Hyperactive behavior, Other,

Coat HMGU_AGE_005_001 | v1.0

simpleParameter

Req. Analysis: false

Req. Upload: true

Is Annotated: false

Description: Coat

Options: Normal, Abnormal,

Alopecia HMGU_AGE_006_001 | v1.0

simpleParameter

Req. Analysis: false

Req. Upload: true

Is Annotated: false

Unit Measured: %

Description: alopecia

Options: 0, 1 - 10, 10 - 50, 50 - 99, 100,

Skin HMGU_AGE_007_001 | v1.0

simpleParameter

Req. Analysis: false

Req. Upload: true

Is Annotated: false

Description: skin

Options: Normal, Redness, Flaky, Ulcerative, Lesion, Other,

Eyes HMGU_AGE_008_001 | v1.0

simpleParameter

Req. Analysis: false

Req. Upload: true

Is Annotated: false

Description: eyes

Options: Normal, Cataracts, Cornea opacity, Other,

Teeth HMGU_AGE_009_001 | v1.0

simpleParameter

Req. Analysis: false

Req. Upload: true

Is Annotated: false

Description: teeth

Options: Normal, Abnormal,

Other abnormalities HMGU_AGE_010_001 | v1.0

simpleParameter

Req. Analysis: false

Req. Upload: false

Is Annotated: false

Description: other_abnormalities

Comment HMGU_AGE_011_001 | v1.0

simpleParameter

Req. Analysis: false

Req. Upload: false

Is Annotated: false

Description: comment

Equipment ID of balance HMGU_AGE_012_001 | v1.0

procedureMetadata

Req. Analysis: false

Req. Upload: true

Is Annotated: false

Equipment manufacturer HMGU_AGE_013_001 | v1.0

procedureMetadata

Req. Analysis: false

Req. Upload: true

Is Annotated: false

Description: equipment_manufacturer

Options: Kern & Sohn GmbH,

Equipment model HMGU_AGE_014_001 | v1.0

procedureMetadata

Req. Analysis: false

Req. Upload: true

Is Annotated: false

Description: equipment_model

Options: 440-47N, 440-33, EW600-2M, EMB500-1, 572-35, 770-14, EMB220-1, PCB2000-1,

Date equipment last calibrated HMGU_AGE_015_001 | v1.0

procedureMetadata

Req. Analysis: false

Req. Upload: false

Is Annotated: false

Experimenter HMGU_AGE_016_001 | v1.0

procedureMetadata

Req. Analysis: false

Req. Upload: true

Is Annotated: false

Description: experimenter
