# **Age monitoring HMGUIP\_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 HMGUIP\_AGE\_001\_001 | v1.0

simpleParameter

Req. Analysis: false Req. Upload: true Is Annotated: true Unit Measured: g Description: body\_weight Growth HMGUIP\_AGE\_002\_001 | v1.0 simpleParameter Reg. Analysis: false Reg. Upload: true Is Annotated: false **Description:** animal\_growth Options: Normal, Abnormal, Body posture/Motor activity HMGUIP\_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 HMGUIP 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** HMGUIP\_AGE\_005\_001 | v1.0

simpleParameter

Req. Analysis: false Req. Upload: true Is Annotated: false

**Description:** Coat

Options: Normal, Abnormal,

## Alopecia HMGUIP\_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** HMGUIP\_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** HMGUIP\_AGE\_008\_001 | v1.0

simpleParameter

Req. Analysis: false Req. Upload: true Is Annotated: false

**Description:** eyes

Options: Normal, Cataracts, Cornea opacity, Other,

## Teeth HMGUIP\_AGE\_009\_001 | v1.0

simpleParameter

Req. Analysis: false Req. Upload: true Is Annotated: false

**Description:** teeth

Options: Normal, Abnormal,

Other abnormalities HMGUIP_AGE_010_001   v1.0 simpleParameter			
Req. Analysis: false	Req. Upload: false	Is Annotated: false	
Description: other_abnormalities			
Comment HMGUIP_AGE_011_001   v1.0 simpleParameter			
Req. Analysis: false	Req. Upload: false	Is Annotated: false	
Description: comment			
Equipment ID of balance HMGUIP_AGE_012_001   v1.0 procedureMetadata			
Req. Analysis: false	Req. Upload: true	Is Annotated: false	

**Equipment manufacturer** HMGUIP\_AGE\_013\_001 | v1.0

procedureMetadata

Req. Analysis: false Req. Upload: true Is Annotated: false

**Description:** equipment\_manufacturer

Options: Kern & Sohn GmbH,

## Equipment model HMGUIP\_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,

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## Date equipment last calibrated HMGUIP\_AGE\_015\_001 | v1.0

procedureMetadata

Req. Analysis: false Req. Upload: false Is Annotated: false

## Experimenter HMGUIP\_AGE\_016\_001 | v1.0

procedureMetadata

Req. Analysis: false Req. Upload: true Is Annotated: false

Description: experimenter	