Edema JAX_EDM_001

Purpose

Complete Freund's Adjuvant (CFA) induced paw edema is used to measure local inflammatory response.

Experimental Design

Minimum number of mutant animals: 7 males + 7 females

Age at test: 17 weeks

Sexual dimorphism:

Procedure

1. Baseline measurement
    1. Turn on the callipers and check they are set to record millimetres.
    2. Anaesthetise the mouse.
    3. Once the mouse is anaesthetised, position the callipers on the ball. of the mouse's paw. The callipers should touch and close the ball of the mouse's paw (just below the toes).
    4. Once the callipers are positioned correctly, the size of the edema should be recorded.
    5. Repeat the measurement three separate times.
3. Challenge
    1. The challenge should be administered shortly after the baseline measurement has been completed, while the mouse is still anaesthetised.
    2. Administer the challenge to the plantar surface of the right hind paw.
5. Test 1
    1. 24 hours after the challenge injection was administered, re-measure the mouse's paw.
    2. The mouse will not be anaesthetised and will need to be restrained.
    3. Measure the paw using the saw protocol as was used during the baseline measurement.
7. Test 2
    1. 48 hours after the challenge injection was administered, re-measure the mouse's paw, following the same protocol as was used during test 1.

Notes

This procedure is a pilot study from the Pain Phenotyping Pilot

Parameters and Metadata

Baseline: size of edema JAX_EDM_001_001 | v1.0

seriesParameter

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

Unit Measured: mm

Increments: 1, 2, 3,

Baseline: average size of edema JAX_EDM_002_001 | v1.0

simpleParameter

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

Unit Measured: mm

Derivation: meanOfIncrements('JAX_EDM_001_001',1)

Test 1: size of edema JAX_EDM_003_001 | v1.0

seriesParameter

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

Unit Measured: mm

Increments: 1, 2, 3,

Test 1: average size of edema JAX_EDM_004_001 | v1.0

simpleParameter

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

Unit Measured: mm

Derivation: meanOfIncrements('JAX_EDM_003_001',1)

Test 2: size of edema JAX_EDM_005_001 | v1.0

seriesParameter

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

Unit Measured: mm

Increments: 1, 2, 3,

Test 2: average size of edema JAX_EDM_006_001 | v1.0

simpleParameter

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

Unit Measured: mm

Derivation: meanOfIncrements('JAX_EDM_005_001',1)

Challenge JAX_EDM_007_001 | v1.0

procedureMetadata

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

Options: CFA,

Site of challenge injection JAX_EDM_008_001 | v1.0

procedureMetadata

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

Options: Plantar surface of right hind paw,

Anaesthetic for challenge injection JAX_EDM_009_001 | v1.0

procedureMetadata

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

Options: Isoflurane,

Site of edema measurement JAX_EDM_010_001 | v1.0

procedureMetadata

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

Options: Right hind paw,

Time between baseline measurement and challenge injection JAX_EDM_011_001 | v1.0

procedureMetadata

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

Unit Measured: min

Options: 1,

Time between challenge and test 1 JAX_EDM_012_001 | v1.0

procedureMetadata

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

Unit Measured: Hours

Options: 24,

Time between challenge and test 2 JAX_EDM_013_001 | v1.0

procedureMetadata

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

Unit Measured: Hours

Options: 48,

Calipers manufacturer JAX_EDM_014_001 | v1.0

procedureMetadata

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

Options: Mitutoyo,

Calipers model JAX_EDM_015_001 | v1.0

procedureMetadata

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

Options: Absolute AOS Digimatic (Item No. 500-196-30),

Experimenter ID JAX_EDM_016_001 | v1.0

procedureMetadata

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