Organ Weight HRWLLA_OWT_001

Purpose

To evaluate cardiac size using heart weight and body weight.

Experimental Design

Minimum number of animals: 7M + 7F

• Age at test: Week 59

Equipment

- fine forceps
- surgical scissors
- fine surgical scissor
- kim wipes (tissues) or surgical compress
- laboratory balance
- labelled jar with fixative
- corkplate or wax board
- pins
- jar containing tap water to rinse the tools

Procedure

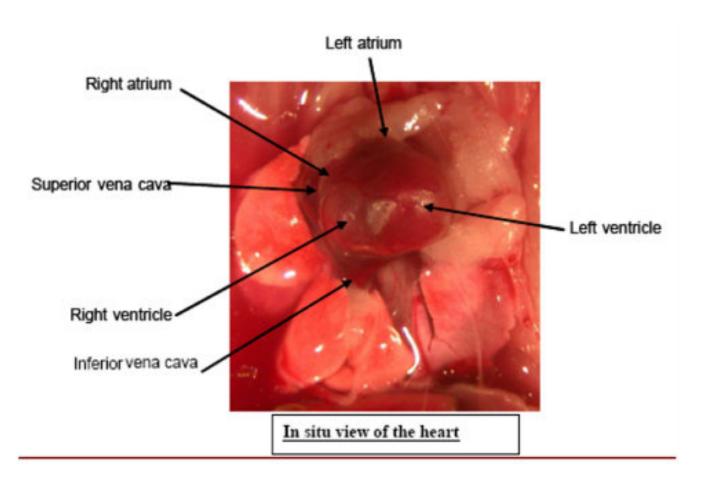
Methods and procedures used not including center-specific data entry methods.

- 1. Sacrifice the mouse
- 2. Weigh and record total body weight
- 3. Place mouse on its back and pin the mouse onto board with extended extremities (inner side of hands and foot)
- 4. Wipe or wet the mouse with 70% ethanol to control hair and dander
- 5. Option A (for mice that are undergoing complete necropsy):
 - Proceed with a complete necropsy and tissue collection according to Centre-specific technical SOP including removal of the heart by dissecting the aortic root immediately above the aortic valves and the superior vena cava above the atria
 - Remove adjacent mediastinal fat pads from the excised heart carefully with forceps

- Empty heart blood by tapping the heart on a kim wipe (absorbent pad) or surgical compress. Repeat until the heart is totally dry
- Weigh the heart, record the weight in the Centre-specific database, and place the heart in fixative
- Carefully remove adjacent mediastinal fat pads from the excised heart with forceps

6. Option B (for mice that are not undergoing complete necropsy):

- Open the skin in the ventral midline and in the direction of the extremities and extend cut to hands and feet
- Open the muscular abdominal wall in the midline and along the lower margin of the rib cage with small forceps
- Open rib cage by removing the sternum and adjacent ribs
- Remove the heart by dissecting the aortic root immediately above the aortic valves and the superior vena cava above the atria
- Remove adjacent mediastinal fat pads from the excised heart carefully with forceps
- Empty heart blood by tapping the heart on a kim wipe (absorbent pad) or surgical compress. Repeat until the heart is totally dry
- Weigh the heart and record the weight in the Centre-specific database
- Discard the heart



Notes

All data are collected at a local workstation in the necropsy room (attached to a digital balance) and uploaded to the Centre-specific pathology data capture system. Data QC Mouse weight between 5 grams and 150 grams IMPC Parameters (+ontology annotations) Weight (in mg) Data Analysis, annotation and display (+statistics) Statistics: ANOVA/Wilcoxon test using normalized heart weights (for body weight) displayed in boxplot **Parameters and Metadata** Body weight HRWLLA_HWT_007_001 | v1.3 simpleParameter Reg. Analysis: false Reg. Upload: true Is Annotated: false Unit Measured: g Equipment ID HRWLLA_HWT_006_001 | v1.0 procedureMetadata

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

Date of sacrifice HRWLLA_HWT_001_001 | v1.0

Req. Analysis: false		Is Annotated: false	
Spleen weight HRWL simpleParameter	LA_OWT_001_001 v1.1		
Req. Analysis: false	Req. Upload: true	Is Annotated: true	
Unit Measured: g			
Tibia length HRWLLA simpleParameter	_HWT_002_001 v1.1		
Req. Analysis: false	Req. Upload: false	Is Annotated: true	
Unit Measured: mm			
Date equipment last calibrated HRWLLA_HWT_009_001 v1.2 procedureMetadata			
Req. Analysis: false	Req. Upload: false	Is Annotated: false	

Equipment manufacturer HRWLLA_HWT_010_001 | v1.0

procedureMetadata

Req. Analysis: true Req. Upload: true Is Annotated: false Options: A & D, Ohaus, Mettler Toledo, Sartorius AG Germany, Denver Instrument, Radwag, Left kidney HRWLLA_OWT_002_001 | v1.1 simpleParameter Req. Analysis: false Req. Upload: true Is Annotated: true Unit Measured: g Heart weight HRWLLA_HWT_008_001 | v1.2 simpleParameter Req. Analysis: false Req. Upload: true Is Annotated: true

Equipment model HRWLLA_HWT_011_001 | v1.0

procedureMetadata

Unit Measured: mg

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

Options: GF-200, AV212C, PG3001-S, AB104-S, TE212, Scout Pro SPU123, AV2101, HR-120, AV213C, TP-114, Adventurer AX223/E, P-403, QUINTIX124-1S, MS104S, Adventurer Pro, 201-10,

Right kidney HRWLLA_OWT_003_001 | v1.2

simpleParameter

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

Unit Measured: g

Method of sacrifice HRWLLA HWT 005 001 | v1.1

procedureMetadata

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

Options: Isoflurane overdose, Ketamine (110mg/kg)/Xylazine (11mg/kg), Pentobarb (0.1ml), Cardiac puncture, Ketamine(100mg/kg)/ Xylazine (10mg/kg)/ Antisedan (1mg/kg),

Cervical dislocation, Carbon dioxide, Avertin, Anesthetized,

Ketamine (137mg/kg)/Xylazine (6.6mg/kg),

Ketamine (110mg/kg)/Xylazine (11mg/kg)/ Antisedan (1mg/kg), Exsanguination, None,

Ketamine (100mg/kg)/Xylazine (10mg/kg),

Experimenter ID HRWLLA_HWT_003_001 | v1.0

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