

# Organ Weight UCD\_OWT\_001

## Purpose

To evaluate weight of organs.

## Experimental Design

- **Minimum number of animals** : 4M + 4F
- **Age at test:** Week 16

## 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

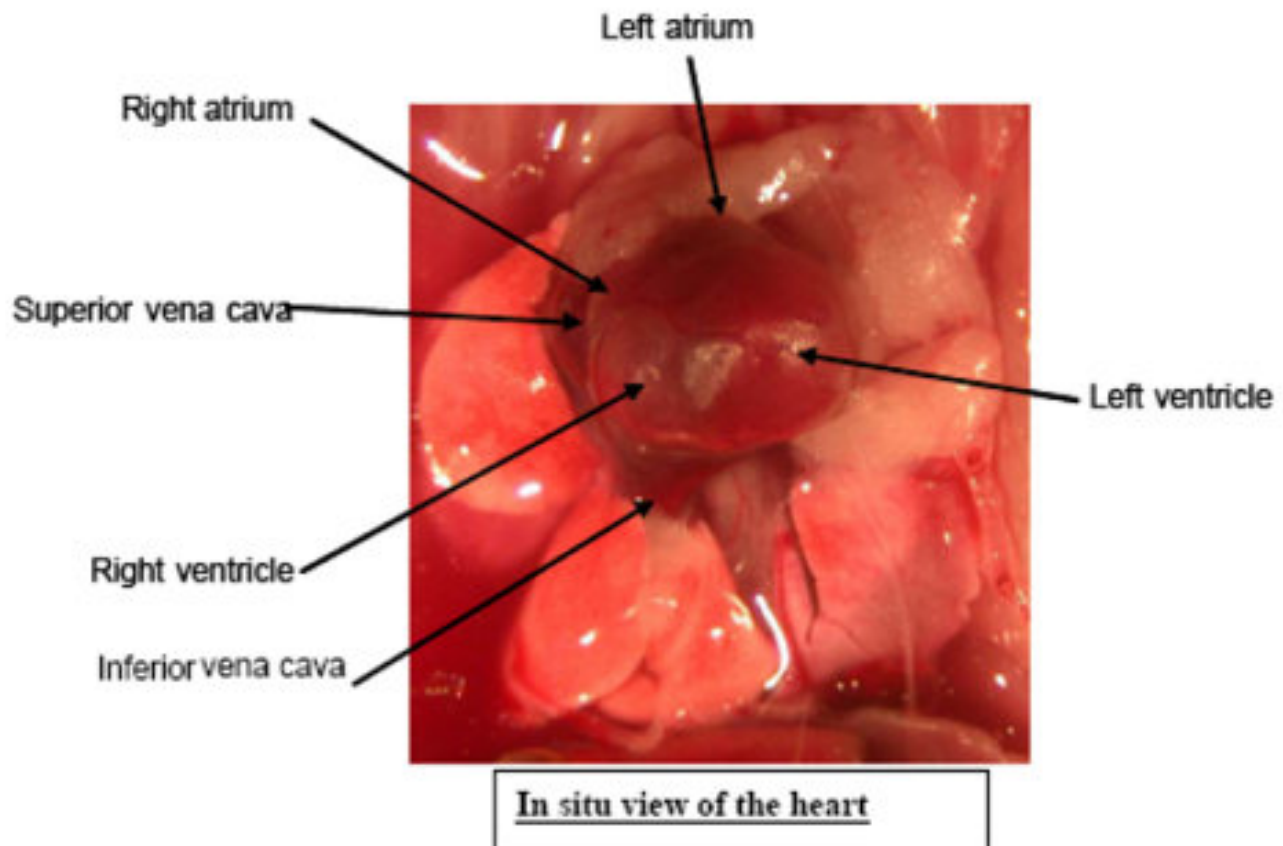
Methods and procedures used not including center-specific data entry methods.

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 and other organs, record the weights in the Centre-specific database, and place the heart in fixative

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 other organs, and record the weights 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 UCD\_OWT\_001\_001 | v1.0

simpleParameter

Req. Analysis: false

Req. Upload: true

Is Annotated: false

Unit Measured: g

Description: body\_weight

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## Heart weight UCD\_OWT\_002\_001 | v1.0

simpleParameter

Req. Analysis: false

Req. Upload: true

Is Annotated: true

Unit Measured: mg

Description: heart\_weight

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## Spleen weight UCD\_OWT\_003\_001 | v1.0

simpleParameter

Req. Analysis: false

Req. Upload: true

Is Annotated: true

Unit Measured: g

Description: spleen\_weight

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## Left kidney UCD\_OWT\_004\_001 | v1.0

simpleParameter

Req. Analysis: false

Req. Upload: true

Is Annotated: true

Unit Measured: g

Description: left\_kidney

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## Right kidney UCD\_OWT\_005\_001 | v1.0

simpleParameter

Req. Analysis: false

Req. Upload: true

Is Annotated: true

Unit Measured: g

Description: right\_kidney

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## **Tibia length** UCD\_OWT\_006\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** false

**Is Annotated:** true

**Unit Measured:** mm

**Description:** tibia\_length

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## **Pancreas weight** UCD\_OWT\_007\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** false

**Is Annotated:** true

**Unit Measured:** g

**Description:** pancreas\_weight

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## **Liver weight** UCD\_OWT\_008\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** false

**Is Annotated:** true

**Unit Measured:** g

**Description:** liver\_weight

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## Thymus weight UCD\_OWT\_009\_001 | v1.0

simpleParameter

Req. Analysis: false

Req. Upload: false

Is Annotated: true

Unit Measured: g

Description: thymus\_weight

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## Brain weight UCD\_OWT\_010\_001 | v1.0

simpleParameter

Req. Analysis: false

Req. Upload: false

Is Annotated: true

Unit Measured: g

Description: brain\_weight

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## Left lung weight UCD\_OWT\_011\_001 | v1.0

simpleParameter

Req. Analysis: false

Req. Upload: false

Is Annotated: true

Unit Measured: g

Description: left\_lung\_weight

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## Right lung weight UCD\_OWT\_012\_001 | v1.0

simpleParameter

Req. Analysis: false

Req. Upload: false

Is Annotated: true

Unit Measured: g

Description: right\_lung\_weight

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## Left adrenal gland weight UCD\_OWT\_013\_001 | v1.0

simpleParameter

Req. Analysis: false

Req. Upload: false

Is Annotated: false

Unit Measured: g

Description: left\_adrenal\_gland\_weight

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## Right adrenal gland weight UCD\_OWT\_014\_001 | v1.0

simpleParameter

Req. Analysis: false

Req. Upload: false

Is Annotated: false

Unit Measured: g

Description: right\_adrenal\_gland\_weight

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## Left epididymus weight UCD\_OWT\_015\_001 | v1.0

simpleParameter

Req. Analysis: false

Req. Upload: false

Is Annotated: false

Unit Measured: g

Description: left\_epididymus\_weight

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## Right epididymus weight UCD\_OWT\_016\_001 | v1.0

simpleParameter

Req. Analysis: false

Req. Upload: false

Is Annotated: false

Unit Measured: g

Description: right\_epididymus\_weight

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## Left epididymus adipose tissue weight UCD\_OWT\_017\_001 | v1.0

simpleParameter

Req. Analysis: false

Req. Upload: false

Is Annotated: false

Unit Measured: g

Description: left\_epididymus\_adipose\_tissue\_weight



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## Right epidymus adipose tissue weight UCD\_OWT\_018\_001 | v1.0

simpleParameter

Req. Analysis: false

Req. Upload: false

Is Annotated: false

Unit Measured: g

Description: right\_epidymus\_adipose\_tissue\_weight

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## Left testis weight UCD\_OWT\_019\_001 | v1.0

simpleParameter

Req. Analysis: false

Req. Upload: false

Is Annotated: true

Unit Measured: g

Description: left\_testis\_weight

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## Right testis weight UCD\_OWT\_020\_001 | v1.0

simpleParameter

Req. Analysis: false

Req. Upload: false

Is Annotated: true

Unit Measured: g

Description: right\_testis\_weight

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## Left female gonadal adipose tissue weight UCD\_OWT\_021\_001 |

v1.0

simpleParameter

Req. Analysis: false

Req. Upload: false

Is Annotated: false

Unit Measured: g

Description: left\_female\_gonadal\_adipose\_tissue\_weight

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## Right female gonadal adipose tissue weight UCD\_OWT\_022\_001

| v1.0

simpleParameter

Req. Analysis: false

Req. Upload: false

Is Annotated: false

Unit Measured: g

Description: right\_female\_gonadal\_adipose\_tissue\_weight

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## Left ovary weight UCD\_OWT\_023\_001 | v1.0

simpleParameter

Req. Analysis: false

Req. Upload: false

Is Annotated: true

**Unit Measured:** g

**Description:** left\_ovary\_weight

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## **Right ovary weight** UCD\_OWT\_024\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** false

**Is Annotated:** true

**Unit Measured:** g

**Description:** right\_ovary\_weight

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## **Sub-mandibular salivary gland weight** UCD\_OWT\_025\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** false

**Is Annotated:** false

**Unit Measured:** g

**Description:** sub\_mandibular\_salivary\_gland\_weight

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## **Interscapular BAT weight** UCD\_OWT\_026\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** false

**Is Annotated:** false

**Unit Measured:** g

**Description:** interscapular\_bat\_weight

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## **Left retroperitoneal adipose tissue weight** UCD\_OWT\_027\_001 |

v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** false

**Is Annotated:** false

**Unit Measured:** g

**Description:** left\_retroperitoneal\_adipose\_tissue\_weight

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## **Right retroperitoneal adipose tissue weight** UCD\_OWT\_028\_001

| v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** false

**Is Annotated:** false

**Unit Measured:** g

**Description:** right\_retroperitoneal\_adipose\_tissue\_weight

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## **Body length** UCD\_OWT\_029\_001 | v1.0

simpleParameter

Req. Analysis: false

Req. Upload: false

Is Annotated: true

Unit Measured: mm

Description: body\_length

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## Experimenter ID UCD\_OWT\_030\_001 | v1.0

procedureMetadata

Req. Analysis: false

Req. Upload: true

Is Annotated: false

Description: experimenter\_id

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## Date of sacrifice UCD\_OWT\_031\_001 | v1.0

procedureMetadata

Req. Analysis: false

Req. Upload: true

Is Annotated: false

Description: date\_of\_sacrifice

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## Method of sacrifice UCD\_OWT\_032\_001 | v1.0

procedureMetadata

Req. Analysis: true

Req. Upload: true

Is Annotated: false

**Description:** method\_of\_sacrifice

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## **Equipment ID** UCD\_OWT\_033\_001 | v1.0

procedureMetadata

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

**Description:** equipment\_id

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## **Date equipment last calibrated** UCD\_OWT\_034\_001 | v1.0

procedureMetadata

**Req. Analysis:** false

**Req. Upload:** false

**Is Annotated:** false

**Description:** date\_equipment\_last\_calibrated

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## **Equipment manufacturer** UCD\_OWT\_035\_001 | v1.0

procedureMetadata

**Req. Analysis:** true

**Req. Upload:** true

**Is Annotated:** false

**Description:** equipment\_manufacturer

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# Equipment model UCD\_OWT\_036\_001 | v1.0

procedureMetadata

**Req. Analysis:** true

**Req. Upload:** true

**Is Annotated:** false

**Description:** equipment\_model

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