Virtual Drum HMGULA_VDR_001

Purpose

To detect abnormalities in eye morphology.

Experimental Design

- **Minimum number of animals :** 7M + 7F
- **Age at test:** Week 77
- **Sex:** We do not expect the results of this test to show sexual dimorphism

Procedure

1. Turn on the OptoMotor system and start the patient data management
2. Place the mouse on the central stage in the drum
3. Select the visual acuity testing conditions: contrast 99,72% and rotation speed 12 °/s, and start the trial.
4. Once the staircase testing is reaching the final spatial frequency threshold value save the measurement and result.

Notes

- As a minimum, all abnormalities should be imaged.
    - Where capacity permits, all mice can be imaged

- Majority of parameters can be analysed using the standard approach for assessing categorical data. To increase power for analysis purposes, where an abnormality is detected in the left, right or both eyes, the data may be combined to generate one "abnormal" category.

Data QC

Image QC is typically performed during data collection to ensure high quality images are captured whilst eyes are dilated etc.

Parameters and Metadata

Visual properties HMGULA_VDR_001_001 | v1.0

simpleParameter

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

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Virtual drum description HMGULA_VDR_002_001 | v1.0

simpleParameter

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

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Spatial frequency threshold HMGULA_VDR_003_001 | v1.0

simpleParameter

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

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Body weight Virtual Drum HMGULA_VDR_004_001 | v1.0

simpleParameter

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

Unit Measured: g

Datetime of measurement HMGULA_VDR_005_001 | v1.0

procedureMetadata

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

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Equipment name HMGULA_VDR_006_001 | v1.0

procedureMetadata

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

Options: Mouse OptoMotry System, Mouse OptoMotor Drum,

Virtual drum manufacturer HMGULA_VDR_007_001 | v1.0

procedureMetadata

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

Options: CerebraMechanics, Lethbridge, Canada, Striatech GmbH, Tübingen, Germany,

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Virtual drum test HMGULA_VDR_008_001 | v1.0

procedureMetadata

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

Options: Simple staircase,

Virtual drum direction HMGULA_VDR_009_001 | v1.0

procedureMetadata

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

Options: Randomized/combined,

Virtual drum contrast HMGULA_VDR_011_001 | v1.0

procedureMetadata

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

Options: 100,

Virtual drum drift speed HMGULA_VDR_010_001 | v1.0

procedureMetadata

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

Options: 12,
