Eye Morphology TCPLA_EYE_002

Purpose

To detect abnormalities in eye morphology.

Experimental Design

- **Minimum number of animals :** 7M + 7F
- **Age at test:** Week 58
- **Sex:** We do not expect the results of this test to show sexual dimorphism

Procedure

1. Examine the anterior of both eyes (e.g. with slit lamp) and record any abnormalities
2. Test the iris/pupil light response
3. Image abnormal eyes as a minimum or all eyes if capacity permits
4. Dilate both eyes
5. Examine the anterior and posterior of both dilated eyes (e.g. with slit lamp and ophthalmoscope) and record any abnormalities
6. Image abnormal eyes as a minimum or all eyes if capacity permits

OCT:

1. Turn on the OCT and start the database
2. Anaesthetize mouse
3. Prepare mouse eyes with drops and place contact lens (focal length 10 mm) on the right eye
4. Enter mouse data in the “Create new patient file” area and switch to the “Acquisition” window
5. Move the OCT camera to the right position and activate measurement modus
6. Place mouse collaterally to the OCT camera on the right side of a platform that is fixed in front of the OCT lens
7. Search the contact lens in the live picture of the fundus image field and place the pupil of the mouse eye in the centre of the window
8. Move the OCT camera such that OCT lens and contact lens touch each other
9. Focus the fundus picture by slightly moving up/down or forward/backward
10. Save fundus images
11. Set the "Ref.Arm“ ruler such that the section of the retina is placed in the centre of the blue rectangle
12. Set the mode of measurement on "vertical, horizontal line“
13. Move the blue horizontal line in the fundus image field to the optic nerve level
14. Save images of retinal sections
15. Move the OCT camera to the left position

16. Repeat measurement procedure for the left eye

Scheimpflug Imaging:

1. Turn on the Pentacam and start the patient data management
2. Apply one drop 0.5% Atropine to each mouse eye for pupil dilation
3. Enter mouse data in the “Patient” group box and switch to the Scan menu
4. Activate the “1 Picture” modus in the “Image Options” area
5. Move Pentacam to the right position
6. Hold the mouse on a platform such that the vertical LED 475 nm light slit is orientated in the center of the right eye ball
7. Guarantee optimal focus by using the fine adjustment software tool in the adjustment window
8. Start imaging manually by pressing the “Start Scan” button
9. Scheimpflug images are saved automatically
10. Move Pentacam to the left position
11. Repeat measurement procedure for the left eye

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 for both eyes is recorded under one parameter to distinguish phenotypes of incomplete penetrance in individuals and if an observation for one or both eyes cannot be made, this is recorded as ‘no data’. The IMPC analysis pipeline does not take into account whether an abnormality is fully penetrant or not and the same weight is given for an abnormal observations in one or both eyes. In cases where it is not possible to confirm if an abnormality is present or not, the data is not included in the statistical analysis. The following logic is applied in determining whether to include the data in analysis:
    - If at least one of the eyes shows an abnormality in a particular parameter, the data for that specimen will be included in the statistical analysis even if the other eye is marked as "no data".
    - If the eyes are marked as "no data", or one eye is normal and the other eye is "no data" for a particular parameter the data for that specimen will not be included in the statistical analysis.

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

Left corneal thickness TCPLA_EYE_066_001 | v1.2

simpleParameter

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

Unit Measured: um

VIP of right fundus TCPLA_EYE_074_001 | v1.1

seriesMediaParameter

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

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Slit Lamp Equipment Model TCPLA_EYE_032_001 | v1.2

procedureMetadata

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

Options: SL130, BQ 900 LED/IM-900, SL 990, Micron III slit lamp extension, 30 SL-M, SL-15, SL-7E, SL30, S350, SL 139,

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Topical Anesthetic TCPLA_EYE_044_001 | v1.1

procedureMetadata

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

Options: Oxybuprocain, Phenylephrine hydrochloride, Mydriacyl, Atropine sulphate, No anesthesia, Hydrochloride, Atropine,

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Corneal Sclerization TCPLA_EYE_080_001 | v1.1

simpleParameter

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

Options: no data right eye, present both eyes, no data left eye, no data left eye, present right eye, present left eye, absent, present right eye, no data for both eyes, no data right eye, present left eye,

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Dilation Method TCPLA_EYE_043_001 | v1.0

procedureMetadata

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

Options: None, Tropicamide+Phenylephrin, Atropine sulphate, Atropine, Cyclopentolate hydrochloride+Phenylephrine hydrochloride, Cyclopentolate hydrochloride, Tropicamide, Phenylephrine hydrochloride,

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Min right eye lens density TCPLA_EYE_057_001 | v1.1

simpleParameter

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

Unit Measured: %

Corneal ulcer TCPLA_EYE_085_001 | v1.0

simpleParameter

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

Options: no data for both eyes, absent, present right eye, no data left eye, present right eye, present left eye, present both eyes, no data left eye, no data right eye, no data right eye, present left eye,

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Iris/Pupil TCPLA_EYE_010_001 | v1.0

simpleParameter

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

Options: no data right eye, left eye abnormal, no data right eye, left eye abnormal, both eyes abnormal, no data left eye, no data left eye, right eye abnormal, no data for both eyes, normal, right eye abnormal,

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Experimenter ID TCPLA_EYE_036_001 | v1.1

procedureMetadata

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

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Iris transilumination TCPLA_EYE_082_001 | v1.1

simpleParameter

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

Options: left eye abnormal, both eyes abnormal, normal, no data left eye, no data left eye, right eye abnormal, no data right eye, right eye abnormal, no data right eye, left eye abnormal, no data for both eyes,

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Ophthalmoscope Lens Model TCPLA_EYE_089_001 | v1.1

procedureMetadata

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

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VIP of right eye TCPLA_EYE_078_001 | v1.1

seriesMediaParameter

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

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Synechia TCPLA_EYE_019_001 | v1.0

simpleParameter

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

Options: present both eyes, no data right eye, no data for both eyes, no data left eye, present right eye, no data left eye, absent, present left eye, no data right eye, present left eye, present right eye,

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Pupil Light Response TCPLA_EYE_014_001 | v1.0

simpleParameter

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

Options: no data right eye, left eye abnormal, no data left eye, left eye abnormal, right eye abnormal, no data left eye, right eye abnormal, normal, no data right eye, both eyes abnormal, no data for both eyes,

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Scheimpflug description TCPLA_EYE_053_001 | v1.0

simpleParameter

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

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Optical Coherence Tomography Equipment ID TCPLA_EYE_037_001 | v1.1

procedureMetadata

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

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Ophthalmoscope Observation TCPLA_EYE_029_001 | v1.1

simpleParameter

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

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Corneal deposits TCPLA_EYE_081_001 | v1.1

simpleParameter

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

Options: present left eye, present both eyes, present right eye, no data left eye, no data right eye, no data for both eyes, no data left eye, present right eye, absent, no data right eye, present left eye,

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Scheimpflug Equipment Manufacturer TCPLA_EYE_041_001 | v1.4

procedureMetadata

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

Options: Oculus GmbH,

Right corneal thickness TCPLA_EYE_060_001 | v1.2

simpleParameter

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

Unit Measured: um

Images Slit Lamp TCPLA_EYE_051_001 | v1.1

seriesMediaParameter

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

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Slit Lamp Equipment Manufacturer TCPLA_EYE_031_001 | v1.2

procedureMetadata

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

Options: MuLe, Kowa, Haag-Streit, CSO, Zeiss, Topcon, Phoenix Research Labs,

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Scheimpflug Equipment Model TCPLA_EYE_042_001 | v1.4

procedureMetadata

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

Options: Pentacam,

Max left eye lens density TCPLA_EYE_055_001 | v1.1

simpleParameter

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

Unit Measured: %

Retinal Blood Vessels Structure TCPLA_EYE_025_001 | v1.0

simpleParameter

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

Options: left eye abnormal, both eyes abnormal, no data left eye, right eye abnormal, no data left eye, right eye abnormal, no data right eye, left eye abnormal, normal, no data right eye, no data for both eyes,

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General Anesthetic TCPLA_EYE_045_001 | v1.1

procedureMetadata

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

Options: No anesthesia, Ketamine+Medetomidine, Avertin, Isoflurane, Euthatal, Ketamine+Xylazine,

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Sheimpflug Lens description TCPLA_EYE_052_001 | v1.1

simpleParameter

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

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Right anterior chamber depth TCPLA_EYE_061_001 | v1.2

simpleParameter

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

Unit Measured: um

Bulging eye TCPLA_EYE_002_001 | v1.0

simpleParameter

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

Options: no data right eye, present left eye, no data left eye, absent, present both eyes, no data left eye, present right eye, no data right eye, present left eye, present right eye, no data for both eyes,

Fusion between cornea and lens TCPLA_EYE_018_001 | v1.0

simpleParameter

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

Options: no data right eye, present left eye, no data for both eyes,
no data left eye, present right eye, no data right eye, present left eye, absent,
present both eyes, present right eye, no data left eye,

Pupil Position TCPLA_EYE_011_001 | v1.0

simpleParameter

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

Options: left eye abnormal, no data left eye, right eye abnormal, normal, no data right eye,
no data right eye, left eye abnormal, right eye abnormal, no data left eye,
no data for both eyes, both eyes abnormal,

B-scan of left cornea and lens TCPLA_EYE_077_001 | v1.1

seriesMediaParameter

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

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Slit Lamp Equipment ID TCPLA_EYE_030_001 | v1.2

procedureMetadata

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

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Lens TCPLA_EYE_016_001 | v1.0

simpleParameter

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

Options: no data left eye, no data for both eyes, left eye abnormal,
no data left eye, right eye abnormal, no data right eye, no data right eye, left eye abnormal,
right eye abnormal, normal, both eyes abnormal,

Ophthalmoscope Equipment Manufacturer TCPLA_EYE_034_001 | v1.2

procedureMetadata

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

Options: Heine / Volk, Kowa, Phoenix, Phoenix Research Labs, Haag-Streit, Heine,
Keeler LTD, Karl Storz / Nikon,

Eyelid closure TCPLA_EYE_005_001 | v1.0

simpleParameter

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

Options: left eye closed, no data left eye, no data left eye, right eye closed, no data for both eyes, no data right eye, right eye closed, normal, both eyes closed, no data right eye, left eye closed,

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Date OCT equipment last calibrated TCPLA_EYE_049_001 | v1.1

procedureMetadata

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

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Lens Opacity TCPLA_EYE_017_001 | v1.0

simpleParameter

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

Options: present both eyes, no data right eye, present left eye, no data left eye, present right eye, present left eye, no data for both eyes, no data left eye, absent, present right eye, no data right eye,

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Optical Coherence Tomography Equipment Manufacturer

TCPLA_EYE_038_001 | v1.2

procedureMetadata

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

Options: Bioptigen, Heidelberg Engineering,

Vitreous TCPLA_EYE_083_001 | v1.1

simpleParameter

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

Options: no data left eye, right eye abnormal, no data right eye, no data for both eyes, both eyes abnormal, no data left eye, right eye abnormal, left eye abnormal, no data right eye, left eye abnormal, normal,

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Ophthalmoscope Equipment Model TCPLA_EYE_035_001 | v1.2

procedureMetadata

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

Options: Sigma 150K, Genesis-DF,
Xenon Nova 175W light source + HOPKINS optic 1218AA /Nikon D5100 + 85 mm f/1.8 lens, Genesis-D, Micron III, OMEGA 180 / Superfield NC, Genesis, SL4 4AA,
Omega 500 Unplugged, Omega 180 / 60D,

Scheimpflug Equipment ID TCPLA_EYE_040_001 | v1.1

procedureMetadata

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

VIP of left fundus TCPLA_EYE_075_001 | v1.1

seriesMediaParameter

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

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Corneal mineralization TCPLA_EYE_084_001 | v1.0

simpleParameter

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

Options: present right eye, no data right eye, absent, no data left eye, no data for both eyes, present left eye, no data right eye, present left eye, no data left eye, present right eye, present both eyes,

---

Date Ophthalmoscope equipment last calibrated TCPLA_EYE_047_001 | v1.1

procedureMetadata

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

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Left total retinal thickness TCPLA_EYE_068_001 | v1.2

simpleParameter

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

Unit Measured: um

Retinal Blood Vessels Pattern TCPLA_EYE_026_001 | v1.0

simpleParameter

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

Options: no data left eye, no data left eye, right eye abnormal, left eye abnormal, both eyes abnormal, right eye abnormal, no data for both eyes, normal, no data right eye, no data right eye, left eye abnormal,

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B-scan of right retina TCPLA_EYE_072_001 | v1.1

seriesMediaParameter

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

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Mean right eye lens density TCPLA_EYE_059_001 | v1.1

simpleParameter

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

Unit Measured: %

Slit Lamp observation TCPLA_EYE_028_001 | v1.1

simpleParameter

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

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Persistence of hyaloid vascular system TCPLA_EYE_027_001 | v1.0

simpleParameter

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

Options: no data right eye, present left eye, no data left eye, present right eye, no data for both eyes, no data left eye, present both eyes, absent, present left eye, no data right eye, present right eye,

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Images Ophthalmoscopy TCPLA_EYE_050_001 | v1.1

seriesMediaParameter

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

---

Eye TCPLA_EYE_001_001 | v1.0

simpleParameter

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

Options: present, absent both eyes, absent right eye, absent left eye,

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Optic Disc TCPLA_EYE_023_001 | v1.0

simpleParameter

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

Options: right eye abnormal, no data left eye, no data right eye, both eyes abnormal, normal, no data right eye, left eye abnormal, left eye abnormal, no data for both eyes, no data left eye, right eye abnormal,

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B-scan of left retina TCPLA_EYE_073_001 | v1.1

seriesMediaParameter

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

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Right total retinal thickness TCPLA_EYE_062_001 | v1.2

simpleParameter

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

Unit Measured: um

Retina (combined) TCPLA_EYE_092_001 | v1.0

simpleParameter

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

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Retinal Blood Vessels TCPLA_EYE_024_001 | v1.0

simpleParameter

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

Options: left eye abnormal, no data right eye, both eyes abnormal, no data left eye, right eye abnormal, right eye abnormal, no data left eye, no data for both eyes, normal, no data right eye, left eye abnormal,

---

VIP of left eye TCPLA_EYE_079_001 | v1.1

seriesMediaParameter

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

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Eyelid morphology TCPLA_EYE_004_001 | v1.0

simpleParameter

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

Options: normal, no data right eye, left eye abnormal, no data right eye, right eye abnormal, no data left eye, both eyes abnormal, left eye abnormal, no data for both eyes, no data left eye, right eye abnormal,

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Cornea TCPLA_EYE_007_001 | v1.0

simpleParameter

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

Options: left eye abnormal, no data for both eyes, no data left eye, right eye abnormal, no data right eye, both eyes abnormal, no data right eye, left eye abnormal, right eye abnormal, no data left eye, normal,

---

Left eye diameter TCPLA_EYE_091_001 | v1.0

simpleParameter

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

Unit Measured: mm

Right posterior chamber depth TCPLA_EYE_065_001 | v1.2

simpleParameter

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

Unit Measured: um

Min left eye lens density TCPLA_EYE_054_001 | v1.2

simpleParameter

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

Unit Measured: %

Iris Pigmentation TCPLA_EYE_015_001 | v1.0

simpleParameter

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

Options: normal, no data for both eyes, both eyes abnormal, no data right eye, no data right eye, left eye abnormal, no data left eye, right eye abnormal, left eye abnormal, no data left eye, right eye abnormal,

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Pupil Dilation TCPLA_EYE_013_001 | v1.0

simpleParameter

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

Options: no data right eye, left eye dilated, no data right eye, no data for both eyes, no data left eye, right eye dilated, no data left eye, right eye dilated, normal, left eye dilated, both eyes dilated,

---

Max right eye lens density TCPLA_EYE_058_001 | v1.1

simpleParameter

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

Unit Measured: %

Right inner nuclear layer TCPLA_EYE_063_001 | v1.2

simpleParameter

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

Unit Measured: um

Date Slit Lamp equipment last calibrated TCPLA_EYE_046_001 | v1.1

procedureMetadata

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

Corneal opacity TCPLA_EYE_008_001 | v1.0

simpleParameter

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

Options: present right eye, absent, present both eyes, no data left eye, no data for both eyes, no data left eye, present right eye, no data right eye, no data right eye, present left eye, present left eye,

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Optical Coherence Tomography Equipment Model TCPLA_EYE_039_001 | v1.2

procedureMetadata

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

Options: Spectralis, Envisu R2200, EnvisuTM R-Series SDOIS,

Left anterior chamber depth TCPLA_EYE_067_001 | v1.2

simpleParameter

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

Unit Measured: um

Ophthalmoscope Equipment ID TCPLA_EYE_033_001 | v1.2

procedureMetadata

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

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Left vitreous humour thickness TCPLA_EYE_088_001 | v1.0

simpleParameter

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

Unit Measured: um

B-scan of right cornea and lens TCPLA_EYE_076_001 | v1.1

seriesMediaParameter

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

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Narrow eye opening TCPLA_EYE_006_001 | v1.0

simpleParameter

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

Options: no data for both eyes, no data right eye, no data left eye, right eye abnormal, no data left eye, left eye abnormal, normal, right eye abnormal, both eyes abnormal, no data right eye, left eye abnormal,

---

Left inner nuclear layer TCPLA_EYE_069_001 | v1.2

simpleParameter

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

Unit Measured: um

Mean left eye lens density TCPLA_EYE_056_001 | v1.1

simpleParameter

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

Unit Measured: %

Lacrimation TCPLA_EYE_086_001 | v1.0

simpleParameter

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

Options: no data left eye, present right eye, no data left eye, present both eyes, no data right eye, present left eye, absent, present left eye, no data right eye, no data for both eyes, present right eye,

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Corneal vascularization TCPLA_EYE_009_001 | v1.0

simpleParameter

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

Options: present right eye, no data right eye, present left eye, absent, present left eye, no data right eye, no data for both eyes, no data left eye, no data left eye, present right eye, present both eyes,

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Right outer nuclear layer TCPLA_EYE_064_001 | v1.2

simpleParameter

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

Unit Measured: um

Date Scheimpflug equipment last calibrated TCPLA_EYE_048_001 | v1.1

procedureMetadata

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

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Right vitreous humor thickness TCPLA_EYE_087_001 | v1.0

simpleParameter

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

Unit Measured: um

Left posterior chamber depth TCPLA_EYE_071_001 | v1.2

simpleParameter

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

Unit Measured: um

Right eye diameter TCPLA_EYE_090_001 | v1.0

simpleParameter

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

Unit Measured: mm

Pupil Shape TCPLA_EYE_012_001 | v1.0

simpleParameter

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

Options: right eye abnormal, no data for both eyes, no data left eye, right eye abnormal, normal, no data right eye, left eye abnormal, no data left eye, both eyes abnormal, no data right eye, left eye abnormal,

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Eye Hemorrhage or Blood Presence TCPLA_EYE_003_001 | v1.0

simpleParameter

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

Options: no data left eye, present right eye, present right eye, no data right eye, no data left eye, no data right eye, present left eye, present left eye, present both eyes, no data for both eyes, absent,

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Left outer nuclear layer TCPLA_EYE_070_001 | v1.2

simpleParameter

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

Unit Measured: um
