# **Eye Morphology IMPC\_EYE\_002**

#### **Purpose**

To detect abnormalities in eye morphology.

#### **Experimental Design**

- Minimum number of animals: 7M + 7F
- Age at test: Week 15
- 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
- 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 QC

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

#### **Parameters and Metadata**

**Eye** IMPC\_EYE\_001\_001 | v1.0

simpleParameter

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

**Description:** eye

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

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#### Bulging eye IMPC\_EYE\_002\_001 | v1.0

simpleParameter

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

**Description:** bulging\_eye

Options: absent, no data left eye, no data right eye, present left eye, present right eye,

present both eyes, no data for both eyes, no data left eye, present right eye,

no data right eye, present left eye,

#### Eye Hemorrhage or Blood Presence IMPC\_EYE\_003\_001 | v1.0

simpleParameter

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

**Description:** eye\_hemorrhage\_or\_blood\_presence

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

#### Eyelid morphology IMPC\_EYE\_004\_001 | v1.0

simpleParameter

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

**Description:** eyelid\_morphology

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

no data right eye, left eye abnormal,

#### Eyelid closure IMPC\_EYE\_005\_001 | v1.0

simpleParameter

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

**Description:** eyelid\_closure

Options: normal, no data left eye, no data right eye, left eye closed, right eye closed,

both eyes closed, no data for both eyes, no data left eye, right eye closed,

no data right eye, left eye closed,

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## Narrow eye opening IMPC\_EYE\_006\_001 | v1.0

simpleParameter

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

**Description:** narrow\_eye\_opening

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

no data right eye, left eye abnormal,

#### **Cornea** IMPC\_EYE\_007\_001 | v1.0

simpleParameter

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

**Description:** cornea

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

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#### Corneal opacity IMPC\_EYE\_008\_001 | v1.0

simpleParameter

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

**Description:** corneal\_opacity

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

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## Corneal vascularization IMPC\_EYE\_009\_001 | v1.0

simpleParameter

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

**Description:** corneal\_vascularization

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

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## Iris/Pupil IMPC\_EYE\_010\_001 | v1.0

simpleParameter

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

**Description:** iris\_pupil

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

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## Pupil Position IMPC\_EYE\_011\_001 | v1.0

simpleParameter

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

**Description:** pupil\_position

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

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#### simpleParameter

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

**Description:** pupil\_shape

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

no data right eye, left eye abnormal,

## Pupil Dilation IMPC\_EYE\_013\_001 | v1.0

simpleParameter

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

Description: pupil\_dilation

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

## Pupil Light Response IMPC\_EYE\_014\_001 | v1.0

simpleParameter

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

Description: pupil\_light\_response

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

## **Iris Pigmentation** IMPC\_EYE\_015\_001 | v1.0

simpleParameter

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

**Description:** iris\_pigmentation

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

#### **Lens** IMPC\_EYE\_016\_001 | v1.0

simpleParameter

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

**Description:** lens

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

#### Lens Opacity IMPC\_EYE\_017\_001 | v1.0

simpleParameter

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

**Description:** lens\_opacity

Options: absent, no data left eye, no data right eye, present left eye, present right eye,

present both eyes, no data for both eyes, no data left eye, present right eye,

no data right eye, present left eye,

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#### Fusion between cornea and lens IMPC\_EYE\_018\_001 | v1.0

simpleParameter

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

**Description:** fusion\_between\_cornea\_and\_lens

Options: absent, no data left eye, no data right eye, present left eye, present right eye,

present both eyes, no data for both eyes, no data left eye, present right eye,

no data right eye, present left eye,

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## Synechia IMPC\_EYE\_019\_001 | v1.0

simpleParameter

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

**Description:** synechia

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

#### Optic Disc IMPC\_EYE\_023\_001 | v1.0

simpleParameter

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

**Description:** optic\_disc

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

#### Retinal Blood Vessels IMPC\_EYE\_024\_001 | v1.0

simpleParameter

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

**Description:** retinal\_blood\_vessels

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

#### Retinal Blood Vessels Structure IMPC EYE 025 001 | v1.0

simpleParameter

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

**Description:** retinal\_blood\_vessels\_structure

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

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## Retinal Blood Vessels Pattern IMPC\_EYE\_026\_001 | v1.0

simpleParameter

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

**Description:** retinal\_blood\_vessels\_pattern

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

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#### Persistence of hyaloid vascular system IMPC\_EYE\_027\_001 | v1.0

simpleParameter

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

**Description:** persistence\_of\_hyaloid\_vascular\_system

-	eye, no data right eye, present r both eyes, no data left eye, pr eye,		
Slit Lamp observations simpleParameter	tion IMPC_EYE_028_001	v1.1	
Req. Analysis: false	Req. Upload: false	Is Annotated: false	
Description: slit_lamp_observation			
Ophthalmoscope Observation IMPC_EYE_029_001   v1.1 simpleParameter			
Req. Analysis: false	Req. Upload: false	Is Annotated: false	
Description: ophthalmoscope	e_observation		
Slit I amn Fauinme	ent ID IMPC EVE 030 00	1 Lv1 2	

procedureMetadata

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

Description: slit\_lamp\_equipment\_id

## Slit Lamp Equipment Manufacturer IMPC\_EYE\_031\_001 | v1.2

procedureMetadata

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

**Description:** slit\_lamp\_equipment\_manufacturer

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

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#### Slit Lamp Equipment Model IMPC\_EYE\_032\_001 | v1.2

procedureMetadata

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

**Description:** slit\_lamp\_equipment\_model

Options: SL30, SL130, BQ 900 LED/IM-900, S350, SL-15, SL 990, SL 139, 30 SL-M,

Micron III slit lamp extension, SL-7E,

## Ophthalmoscope Equipment ID IMPC\_EYE\_033\_001 | v1.2

procedureMetadata

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

**Description:** ophthalmoscope\_equipment\_id

# Ophthalmoscope Equipment Manufacturer IMPC\_EYE\_034\_001 |

v1.2

procedureMetadata

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

**Description:** ophthalmoscope equipment manufacturer

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

Heine / Volk, Keeler LTD,

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#### Ophthalmoscope Equipment Model IMPC\_EYE\_035\_001 | v1.2

procedureMetadata

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

**Description:** ophthalmoscope\_equipment\_model

Options: Sigma 150K, Omega 500 Unplugged, Micron III, Genesis-D,

OMEGA 180 / Superfield NC,

Xenon Nova 175W light source + HOPKINS optic 1218AA /Nikon D5100 + 85 mm f/1.8 lens,

Omega 180 / 60D, SL4 4AA, Genesis, Genesis-DF, Micron IV,

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#### Experimenter ID IMPC\_EYE\_036\_001 | v1.1

Reg. Analysis: false Reg. Upload: true **Is Annotated:** false **Description:** experimenter\_id Optical Coherence Tomography Equipment ID IMPC\_EYE\_037\_ 001 | v1.1 procedureMetadata Req. Analysis: false Req. Upload: false Is Annotated: false **Description:** optical\_coherence\_tomography\_equipment\_id **Optical Coherence Tomography Equipment Manufacturer** IMPC\_EYE\_038\_001 | v1.2 procedureMetadata Req. Analysis: true Req. Upload: false Is Annotated: false **Description:** optical coherence tomography equipment manufacturer Options: Bioptigen, Heidelberg Engineering,

Optical Coherence Tomography Equipment Model IMPC\_EYE \_039\_001 | v1.2

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

**Description:** optical\_coherence\_tomography\_equipment\_model

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

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## Scheimpflug Equipment ID IMPC\_EYE\_040\_001 | v1.1

procedureMetadata

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

Description: scheimpflug\_equipment\_id

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## Scheimpflug Equipment Manufacturer IMPC\_EYE\_041\_001 | v1.4

procedureMetadata

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

**Description:** scheimpflug\_equipment\_manufacturer

Options: Oculus GmbH,

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

**Description:** scheimpflug\_equipment\_model

Options: Pentacam,

#### Dilation Method IMPC\_EYE\_043\_001 | v1.0

procedureMetadata

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

**Description:** dilation\_method

Options: Atropine, Tropicamide, Tropicamide+Phenylephrin, None,

Cyclopentolate hydrochloride, Phenylephrine hydrochloride, Atropine sulphate,

Cyclopentolate hydrochloride+Phenylephrine hydrochloride,

## Topical Anesthetic IMPC\_EYE\_044\_001 | v1.1

procedureMetadata

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

**Description:** topical\_anesthetic

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

Hydrochloride, Atropine sulphate,

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#### General Anesthetic IMPC\_EYE\_045\_001 | v1.1

procedureMetadata

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

Description: general\_anesthetic

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

# Date Slit Lamp equipment last calibrated IMPC\_EYE\_046\_001 | v1

.1

procedureMetadata

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

## Date Ophthalmoscope equipment last calibrated IMPC\_EYE\_0

47\_001 | v1.1

procedureMetadata

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

## Date Scheimpflug equipment last calibrated IMPC\_EYE\_048\_001

| v1.1

Req. Analysis: false	Req. Upload: false	Is Annotated: false	
Date OCT equipme procedureMetadata	nt last calibrated ™	PC_EYE_049_001   v1.1	
Req. Analysis: false	Req. Upload: false	Is Annotated: false	
Images Ophthalmo seriesMediaParameter	SCOPY IMPC_EYE_050_0	01   v1.1	
Req. Analysis: false	Req. Upload: false	Is Annotated: false	
Images Slit Lamp IMPC_EYE_051_001   v1.1 seriesMediaParameter			
Req. Analysis: false	Req. Upload: false	Is Annotated: false	
Sheimpflug Lens description IMPC_EYE_052_001   v1.1 simpleParameter			
Req. Analysis: false	Req. Upload: false	Is Annotated: false	

Scheimpflug description IMPC\_EYE\_053\_001 | v1.0 simpleParameter Req. Analysis: false Req. Upload: false Is Annotated: false Min left eye lens density IMPC\_EYE\_054\_001 | v1.2 simpleParameter Req. Analysis: false Req. Upload: false Is Annotated: true **Unit Measured:** % Max left eye lens density IMPC\_EYE\_055\_001 | v1.1 simpleParameter Req. Analysis: false Req. Upload: false Is Annotated: true Unit Measured: %

Mean left eye lens density IMPC\_EYE\_056\_001 | v1.1

simpleParameter

Req. Analysis: false	Req. Upload: false	Is Annotated: true	
Unit Measured: %			
Min right eye lens simpleParameter	density IMPC_EYE_057_	_001   v1.1	
Req. Analysis: false	Req. Upload: false	Is Annotated: true	
Unit Measured: %			
Max right eye lens density IMPC_EYE_058_001   v1.1 simpleParameter			
Req. Analysis: false	Req. Upload: false	Is Annotated: true	
Unit Measured: %			
Mean right eye lens density IMPC_EYE_059_001   v1.1 simpleParameter			
Req. Analysis: false	Req. Upload: false	Is Annotated: true	
Unit Measured: %			

Right corneal thick simpleParameter	KNESS IMPC_EYE_060_00	1   v1.2	
Req. Analysis: false	Req. Upload: false	Is Annotated: true	
Unit Measured: um			
Right anterior char simpleParameter	mber depth IMPC_EYE	_061_001   v1.2	
Req. Analysis: false	Req. Upload: false	Is Annotated: true	
Unit Measured: um			
Right total retinal thickness IMPC_EYE_062_001   v1.2			
simpleParameter			
Req. Analysis: false	Req. Upload: false	Is Annotated: true	
Unit Measured: um			

## Right inner nuclear layer IMPC\_EYE\_063\_001 | v1.2

simpleParameter

Req. Analysis: false Req. Upload: false Is Annotated: true Unit Measured: um Right outer nuclear layer IMPC\_EYE\_064\_001 | v1.2 simpleParameter Req. Analysis: false Req. Upload: false Is Annotated: true Unit Measured: um Right posterior chamber depth IMPC\_EYE\_065\_001 | v1.2 simpleParameter Req. Analysis: false Req. Upload: false Is Annotated: true Unit Measured: um

#### Left corneal thickness IMPC\_EYE\_066\_001 | v1.2

simpleParameter

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

Unit Measured: um			
Left anterior chamber depth IMPC_EYE_067_001   v1.2 simpleParameter			
Req. Analysis: false	Req. Upload: false	Is Annotated: true	
Unit Measured: um			
Left total retinal thickness IMPC_EYE_068_001   v1.2 simpleParameter			
Req. Analysis: false	Req. Upload: false	Is Annotated: true	
Unit Measured: um			
Left inner nuclear layer IMPC_EYE_069_001   v1.2 simpleParameter			
Req. Analysis: false	Req. Upload: false	Is Annotated: true	
Unit Measured: um			

# Left outer nuclear layer IMPC\_EYE\_070\_001 | v1.2

simpleParameter

seriesMediaParameter

Req. Analysis: false	Req. Upload: false	Is Annotated: true	
Unit Measured: um			
Left posterior chamber depth IMPC_EYE_071_001   v1.2 simpleParameter			
Req. Analysis: false	Req. Upload: false	Is Annotated: true	
Unit Measured: um			
B-scan of right retina IMPC_EYE_072_001   v1.1 seriesMediaParameter			
Req. Analysis: false	Req. Upload: false	Is Annotated: false	
B-scan of left retina IMPC_EYE_073_001   v1.1			

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

VIP of right fundus IMPC_EYE_074_001   v1.1 seriesMediaParameter			
Req. Analysis: false	Req. Upload: false	Is Annotated: false	
VIP of left fundus IN seriesMediaParameter	MPC_EYE_075_001   v1.1		
Req. Analysis: false	Req. Upload: false	Is Annotated: false	
B-scan of right cornea and lens IMPC_EYE_076_001   v1.1 seriesMediaParameter			
Req. Analysis: false	Req. Upload: false	Is Annotated: false	
B-scan of left cornea and lens IMPC_EYE_077_001   v1.1 seriesMediaParameter			
Req. Analysis: false	Req. Upload: false	Is Annotated: false	

#### VIP of right eye IMPC\_EYE\_078\_001 | v1.1

seriesMediaParameter

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

## VIP of left eye IMPC\_EYE\_079\_001 | v1.1

seriesMediaParameter

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

## Corneal Sclerization IMPC\_EYE\_080\_001 | v1.1

simpleParameter

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

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

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## Corneal deposits IMPC\_EYE\_081\_001 | v1.1

simpleParameter

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

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

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## Iris transilumination IMPC\_EYE\_082\_001 | v1.1

simpleParameter

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

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

#### Vitreous IMPC\_EYE\_083\_001 | v1.1

simpleParameter

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

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

#### Corneal mineralization IMPC\_EYE\_084\_001 | v1.0

simpleParameter

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

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

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#### Corneal ulcer IMPC\_EYE\_085\_001 | v1.0

simpleParameter

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

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

#### Lacrimation IMPC\_EYE\_086\_001 | v1.0

simpleParameter

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

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

## Right vitreous humor thickness IMPC\_EYE\_087\_001 | v1.0

simpleParameter

Req. Analysis: false	Req. Upload: false	Is Annotated: true	
Unit Measured: um			
Left vitreous humo	our thickness IMPC_EY	YE_088_001   v1.0	
Req. Analysis: false	Req. Upload: false	Is Annotated: true	
Unit Measured: um			
Ophthalmoscope Lens Model IMPC_EYE_089_001   v1.1 procedureMetadata			
Req. Analysis: false	Req. Upload: false	Is Annotated: false	
Right eye diameter IMPC_EYE_090_001   v1.0 simpleParameter			
Req. Analysis: false	Req. Upload: false	Is Annotated: true	
Unit Measured: mm			

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# Left eye diameter IMPC\_EYE\_091\_001 | v1.0

simpleParameter

Req. Analysis: false	Req. Upload: false	Is Annotated: true
Unit Measured: mm		
Retina (combined) simpleParameter	IMPC_EYE_092_001   v1.0	
Req. Analysis: false	Req. Upload: false	Is Annotated: true