

# Experimental design IMPC\_EXD\_001

## Purpose

The experimental workflow capture form is an institute overview form to capture how the phenotyping procedures are implemented. The questions have been based on the requirements of the Animal Research: Reporting In Vivo Experiments guidelines (ARRIVE) (Kilkenny PLOS One 2010), and Gold Standard Publication Checklist (GSPC) reporting guidelines (Hooijmans ATLA 2010).

## Notes

Data is collected at a minimum annually.

To account for variation within an institution across pipelines or projects, there is an option to submit up to two blocks of information which are distinguished by the pipeline and project information provided.

The questions are based on the ontology developed to describe experimental implementation by the IMPC Statistics technical group. The ontology can be examined at <http://bioportal.bioontology.org/ontologies/3180>

## Parameters and Metadata

**Submitter ID** IMPC\_EXD\_001\_001 | v1.1

simpleParameter

Req. Analysis: false

Req. Upload: false

Is Annotated: false

Description: submitter\_id

---

**Name of phenotyping project** IMPC\_EXD\_002\_001 | v1.1

seriesParameter

Req. Analysis: false

Req. Upload: true

Is Annotated: false

Description: name\_of\_phenotyping\_project

Increments: Minimum 1

---

## Name of pipeline IMPC\_EXD\_003\_001 | v1.1

seriesParameter

Req. Analysis: false

Req. Upload: true

Is Annotated: false

Description: name\_of\_pipeline

Increments: Minimum 1

---

## Start date IMPC\_EXD\_004\_001 | v1.1

simpleParameter

Req. Analysis: false

Req. Upload: true

Is Annotated: false

Description: start\_date

---

## End date IMPC\_EXD\_005\_001 | v1.1

simpleParameter

Req. Analysis: false

Req. Upload: false

Is Annotated: false

**Description:** end\_date

---

## **Control design** IMPC\_EXD\_006\_001 | v1.0

seriesParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

**Description:** control\_design

**Increments:** Minimum 1

**Options:** Littermate control, Line mate control, Pooled genetic control,  
Production colony control,

---

## **Frequency of controls** IMPC\_EXD\_007\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

**Description:** frequency\_of\_controls

**Options:** Parallel control with knockout, Weekly control, Biweekly control,  
Regular control with phenotyping run (same week), Monthly control,

---

## **Number male controls** IMPC\_EXD\_008\_001 | v1.0

simpleParameter

Req. Analysis: false

Req. Upload: true

Is Annotated: false

Description: number\_male\_controls

---

## Number female controls IMPC\_EXD\_009\_001 | v1.0

simpleParameter

Req. Analysis: false

Req. Upload: true

Is Annotated: false

Description: number\_female\_controls

---

## Genetic background IMPC\_EXD\_010\_001 | v1.0

seriesParameter

Req. Analysis: false

Req. Upload: true

Is Annotated: false

Description: genetic\_background

Increments: Minimum 1

---

## Controls and knockout same source IMPC\_EXD\_011\_001 | v1.0

simpleParameter

Req. Analysis: false

Req. Upload: true

Is Annotated: false

**Description:** controls\_and\_knockout\_same\_source

**Options:** Yes, No,

---

## **Control animal source** IMPC\_EXD\_012\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** false

**Is Annotated:** false

**Description:** control\_animal\_source

---

## **Core colony source** IMPC\_EXD\_013\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

**Description:** core\_colony\_source

**Options:** Internally sourced, Externally sourced,

---

## **Core stock strategy** IMPC\_EXD\_014\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

**Description:** core\_stock\_strategy

**Options:** Control breeding, Externally managed control, Uncontrolled stock management,

---

## **Knockout batch strategy** IMPC\_EXD\_015\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

**Description:** knockout\_batch\_strategy

**Options:** Single batch, Single batch per sex, Single batch mixed, Multiple batches, Variable batch,

---

## **Blinding - Body Weight** IMPC\_EXD\_016\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

**Description:** blinding\_body\_weight

**Options:** Unblinded, Blinded, Genotype free blinding, Allele free blinding, Test not run,

---

## **Blinding - CSD** IMPC\_EXD\_017\_001 | v1.0

simpleParameter

Req. Analysis: false

Req. Upload: true

Is Annotated: false

Description: blinding\_csd

Options: Unblinded, Blinded, Genotype free blinding, Allele free blinding, Test not run,

---

## Blinding - Grip strength IMPC\_EXD\_018\_001 | v1.0

simpleParameter

Req. Analysis: false

Req. Upload: true

Is Annotated: false

Description: blinding\_grip\_strength

Options: Unblinded, Blinded, Genotype free blinding, Allele free blinding, Test not run,

---

## Blinding - Acoustic startle IMPC\_EXD\_019\_001 | v1.0

simpleParameter

Req. Analysis: false

Req. Upload: true

Is Annotated: false

Description: blinding\_acoustic\_startle

Options: Unblinded, Blinded, Genotype free blinding, Allele free blinding, Test not run,

---

## Blinding - Calorimetry IMPC\_EXD\_020\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

**Description:** blinding\_calorimetry

**Options:** Unblinded, Blinded, Genotype free blinding, Allele free blinding, Test not run,

---

## **Blinding - IPGTT** IMPC\_EXD\_021\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

**Description:** blinding\_ipggt

**Options:** Unblinded, Blinded, Genotype free blinding, Allele free blinding, Test not run,

---

## **Blinding - ABR collection** IMPC\_EXD\_022\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

**Description:** blinding\_abr\_collection

**Options:** Unblinded, Blinded, Genotype free blinding, Allele free blinding, Test not run,

---

## **Blinding - ABR annotation** IMPC\_EXD\_023\_001 | v1.0

simpleParameter



**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

**Description:** blinding\_abr\_annotation

**Options:** Unblinded, Blinded, Genotype free blinding, Allele free blinding, Test not run,

---

## **Blinding - DEXA** IMPC\_EXD\_024\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

**Description:** blinding\_dexa

**Options:** Unblinded, Blinded, Genotype free blinding, Allele free blinding, Test not run,

---

## **Blinding - X-ray imaging** IMPC\_EXD\_025\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

**Description:** blinding\_x\_ray\_imaging

**Options:** Unblinded, Blinded, Genotype free blinding, Allele free blinding, Test not run,

---

## **Blinding - X-ray annotation** IMPC\_EXD\_026\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

**Description:** blinding\_x\_ray\_annotation

**Options:** Unblinded, Blinded, Genotype free blinding, Allele free blinding, Test not run,

---

## **Blinding - Slit lamp collection** IMPC\_EXD\_027\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

**Description:** blinding\_slit\_lamp\_collection

**Options:** Unblinded, Blinded, Genotype free blinding, Allele free blinding, Test not run,

---

## **Blinding - Slit lamp annotation** IMPC\_EXD\_028\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

**Description:** blinding\_slit\_lamp\_annotation

**Options:** Unblinded, Blinded, Genotype free blinding, Allele free blinding, Test not run,

---

## Blinding - Ophthalmoscope collection IMPC\_EXD\_029\_001 | v1.0

simpleParameter

Req. Analysis: false

Req. Upload: true

Is Annotated: false

Description: blinding\_ophthalmoscope\_collection

Options: Unblinded, Blinded, Genotype free blinding, Allele free blinding, Test not run,

---

## Blinding - Ophthalmoscope annotation IMPC\_EXD\_030\_001 | v1.0

simpleParameter

Req. Analysis: false

Req. Upload: true

Is Annotated: false

Description: blinding\_ophthalmoscope\_annotation

Options: Unblinded, Blinded, Genotype free blinding, Allele free blinding, Test not run,

---

## Blinding - Hematology IMPC\_EXD\_031\_001 | v1.0

simpleParameter

Req. Analysis: false

Req. Upload: true

Is Annotated: false

Description: blinding\_hematology

Options: Unblinded, Blinded, Genotype free blinding, Allele free blinding, Test not run,

---

## Blinding - Clinical chemistry IMPC\_EXD\_032\_001 | v1.0

simpleParameter

Req. Analysis: false

Req. Upload: true

Is Annotated: false

Description: blinding\_clinical\_chemistry

Options: Unblinded, Blinded, Genotype free blinding, Allele free blinding, Test not run,

---

## Blinding - Insulin IMPC\_EXD\_033\_001 | v1.0

simpleParameter

Req. Analysis: false

Req. Upload: true

Is Annotated: false

Description: blinding\_insulin

Options: Unblinded, Blinded, Genotype free blinding, Allele free blinding, Test not run,

---

## Blinding - Immunophenotyping collection IMPC\_EXD\_034\_001 |

v1.0

simpleParameter

Req. Analysis: false

Req. Upload: true

Is Annotated: false

Description: blinding\_immunophenotyping\_collection

Options: Unblinded, Blinded, Genotype free blinding, Allele free blinding, Test not run,

---

## Blinding - Immunophenotyping annotation IMPC\_EXD\_035\_001 | v1.0

simpleParameter

Req. Analysis: false

Req. Upload: true

Is Annotated: false

Description: blinding\_immunophenotyping\_annotation

Options: Unblinded, Blinded, Genotype free blinding, Allele free blinding, Test not run,

---

## Blinding - Heart weight IMPC\_EXD\_036\_001 | v1.0

simpleParameter

Req. Analysis: false

Req. Upload: true

Is Annotated: false

Description: blinding\_heart\_weight

Options: Unblinded, Blinded, Genotype free blinding, Allele free blinding, Test not run,

---

## Blinding - Open field IMPC\_EXD\_037\_001 | v1.0

simpleParameter

Req. Analysis: false

Req. Upload: true

Is Annotated: false

Description: blinding\_open\_field

Options: Unblinded, Blinded, Genotype free blinding, Allele free blinding, Test not run,

---

## Blinding - Gross pathology collection IMPC\_EXD\_038\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

**Description:** blinding\_gross\_pathology\_collection

**Options:** Unblinded, Blinded, Genotype free blinding, Allele free blinding, Test not run,

---

## Blinding - Gross pathology annotation IMPC\_EXD\_039\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

**Description:** blinding\_gross\_pathology\_annotation

**Options:** Unblinded, Blinded, Genotype free blinding, Allele free blinding, Test not run,

---

## Blinding - ECG IMPC\_EXD\_040\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

**Description:** blinding\_ecg

**Options:** Unblinded, Blinded, Genotype free blinding, Allele free blinding, Test not run,

---

## Blinding - Echo IMPC\_EXD\_041\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

**Description:** blinding\_echo

**Options:** Unblinded, Blinded, Genotype free blinding, Allele free blinding, Test not run,

---

## Blinding - Plethysmography IMPC\_EXD\_042\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

**Description:** blinding\_plethysmography

**Options:** Unblinded, Blinded, Genotype free blinding, Allele free blinding, Test not run,

---

## Blinding - Adult Lac Z collection IMPC\_EXD\_043\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

**Description:** blinding\_adult\_lac\_z\_collection

**Options:** Unblinded, Blinded, Genotype free blinding, Allele free blinding, Test not run,

---

## Blinding - Adult Lac Z annotation IMPC\_EXD\_044\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

**Description:** blinding\_adult\_lac\_z\_annotation

**Options:** Unblinded, Blinded, Genotype free blinding, Allele free blinding, Test not run,

---

## Blinding - Embryo Lac Z collection IMPC\_EXD\_045\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

**Description:** blinding\_embryo\_lac\_z\_collection

**Options:** Unblinded, Blinded, Genotype free blinding, Allele free blinding, Test not run,

---

## Blinding - Embryo Lac Z annotation IMPC\_EXD\_046\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

**Description:** blinding\_embryo\_lac\_z\_annotation



**Options:** Unblinded, Blinded, Genotype free blinding, Allele free blinding, Test not run,

---

## **Instrumentation effects - Body weight** IMPC\_EXD\_047\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

**Description:** instrumentation\_effects\_body\_weight

**Options:** Controlled instrumentation strategy, Active randomisation instrumentation strategy, Active randomisation and minimisation instrumentation strategy, Causal randomisation instrumentation strategy, Causal randomisation and minimisation instrumentation strategy, Test not run,

---

## **Instrumentation effects - Heart weight** IMPC\_EXD\_048\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

**Description:** instrumentation\_effects\_heart\_weight

**Options:** Controlled instrumentation strategy, Active randomisation instrumentation strategy, Active randomisation and minimisation instrumentation strategy, Causal randomisation instrumentation strategy, Causal randomisation and minimisation instrumentation strategy, Test not run,

---

## **Instrumentation effects - Grip strength** IMPC\_EXD\_049\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

**Description:** instrumentation\_effects\_grip\_strength

**Options:** Controlled instrumentation strategy, Active randomisation instrumentation strategy, Active randomisation and minimisation instrumentation strategy, Causal randomisation instrumentation strategy, Causal randomisation and minimisation instrumentation strategy, Test not run,

---

## Instrumentation effects - Acoustic startle IMPC\_EXD\_050\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

**Description:** instrumentation\_effects\_acoustic\_startle

**Options:** Controlled instrumentation strategy, Active randomisation instrumentation strategy, Active randomisation and minimisation instrumentation strategy, Causal randomisation instrumentation strategy, Causal randomisation and minimisation instrumentation strategy, Test not run,

---

## Instrumentation effects - Calorimetry IMPC\_EXD\_051\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

**Description:** instrumentation\_effects\_calorimetry

**Options:** Controlled instrumentation strategy, Active randomisation instrumentation strategy, Active randomisation and minimisation instrumentation strategy, Causal randomisation instrumentation strategy, Causal randomisation and minimisation instrumentation strategy, Test not run,

---

## Instrumentation effects - IPGTT IMPC\_EXD\_052\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

**Description:** instrumentation\_effects\_ipgtt

**Options:** Controlled instrumentation strategy, Active randomisation instrumentation strategy, Active randomisation and minimisation instrumentation strategy, Causal randomisation instrumentation strategy, Causal randomisation and minimisation instrumentation strategy, Test not run,

---

## Instrumentation effects - ABR IMPC\_EXD\_053\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

**Description:** instrumentation\_effects\_abr

**Options:** Controlled instrumentation strategy, Active randomisation instrumentation strategy, Active randomisation and minimisation instrumentation strategy, Causal randomisation instrumentation strategy, Causal randomisation and minimisation instrumentation strategy, Test not run,

---

---

## Instrumentation effects - DEXA IMPC\_EXD\_054\_001 | v1.0

simpleParameter

Req. Analysis: false

Req. Upload: true

Is Annotated: false

**Description:** instrumentation\_effects\_dexa

**Options:** Controlled instrumentation strategy, Active randomisation instrumentation strategy, Active randomisation and minimisation instrumentation strategy, Causal randomisation instrumentation strategy, Causal randomisation and minimisation instrumentation strategy, Test not run,

---

## Instrumentation effects - Slit lamp IMPC\_EXD\_055\_001 | v1.0

simpleParameter

Req. Analysis: false

Req. Upload: true

Is Annotated: false

**Description:** instrumentation\_effects\_slit\_lamp

**Options:** Controlled instrumentation strategy, Active randomisation instrumentation strategy, Active randomisation and minimisation instrumentation strategy, Causal randomisation instrumentation strategy, Causal randomisation and minimisation instrumentation strategy, Test not run,

---

## Instrumentation effects - Ophthalmoscope IMPC\_EXD\_056\_001 |

v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

**Description:** instrumentation\_effects\_ophthalmoscope

**Options:** Controlled instrumentation strategy, Active randomisation instrumentation strategy, Active randomisation and minimisation instrumentation strategy, Causal randomisation instrumentation strategy, Causal randomisation and minimisation instrumentation strategy, Test not run,

---

## Instrumentation effects - Hematology IMPC\_EXD\_057\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

**Description:** instrumentation\_effects\_hematology

**Options:** Controlled instrumentation strategy, Active randomisation instrumentation strategy, Active randomisation and minimisation instrumentation strategy, Causal randomisation instrumentation strategy, Causal randomisation and minimisation instrumentation strategy, Test not run,

---

## Instrumentation effects - Clinical chemistry IMPC\_EXD\_058\_001

| v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

**Description:** instrumentation\_effects\_clinical\_chemistry

**Options:** Controlled instrumentation strategy, Active randomisation instrumentation strategy, Active randomisation and minimisation instrumentation strategy, Causal randomisation instrumentation strategy, Causal randomisation and minimisation instrumentation strategy, Test not run,

---

## Instrumentation effects - Immunophenotyping IMPC\_EXD\_059\_

001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

**Description:** instrumentation\_effects\_immunophenotyping

**Options:** Controlled instrumentation strategy, Active randomisation instrumentation strategy, Active randomisation and minimisation instrumentation strategy, Causal randomisation instrumentation strategy, Causal randomisation and minimisation instrumentation strategy, Test not run,

---

## Instrumentation effects - Open field IMPC\_EXD\_060\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

**Description:** instrumentation\_effects\_open\_field

**Options:** Controlled instrumentation strategy, Active randomisation instrumentation strategy, Active randomisation and minimisation instrumentation strategy, Causal randomisation instrumentation strategy, Causal randomisation and minimisation instrumentation strategy, Test not run,

---

## Instrumentation effects - ECG IMPC\_EXD\_061\_001 | v1.0

simpleParameter

Req. Analysis: false

Req. Upload: true

Is Annotated: false

**Description:** instrumentation\_effects\_ecg

**Options:** Controlled instrumentation strategy, Active randomisation instrumentation strategy, Active randomisation and minimisation instrumentation strategy, Causal randomisation instrumentation strategy, Causal randomisation and minimisation instrumentation strategy, Test not run,

---

## Instrumentation effects - Echo IMPC\_EXD\_062\_001 | v1.0

simpleParameter

Req. Analysis: false

Req. Upload: true

Is Annotated: false

**Description:** instrumentation\_effects\_echo

**Options:** Controlled instrumentation strategy, Active randomisation instrumentation strategy, Active randomisation and minimisation instrumentation strategy, Causal randomisation instrumentation strategy, Causal randomisation and minimisation instrumentation strategy, Test not run,

---

## Instrumentation effects - Plethysmography IMPC\_EXD\_063\_001

| v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

**Description:** instrumentation\_effects\_plethysmography

**Options:** Controlled instrumentation strategy, Active randomisation instrumentation strategy, Active randomisation and minimisation instrumentation strategy, Causal randomisation instrumentation strategy, Causal randomisation and minimisation instrumentation strategy, Test not run,

---

## Instrumentation effects - Gross pathology IMPC\_EXD\_064\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

**Description:** instrumentation\_effects\_gross\_pathology

**Options:** Controlled instrumentation strategy, Active randomisation instrumentation strategy, Active randomisation and minimisation instrumentation strategy, Causal randomisation instrumentation strategy, Causal randomisation and minimisation instrumentation strategy, Test not run,

---

## Instrumentation effects - Insulin IMPC\_EXD\_065\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

**Description:** instrumentation\_effects\_insulin



**Options:** Controlled instrumentation strategy, Active randomisation instrumentation strategy, Active randomisation and minimisation instrumentation strategy, Causal randomisation instrumentation strategy, Causal randomisation and minimisation instrumentation strategy, Test not run,

---

## Instrumentation effects - Embryo Lac Z IMPC\_EXD\_066\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

**Description:** instrumentation\_effects\_embryo\_lac\_z

**Options:** Controlled instrumentation strategy, Active randomisation instrumentation strategy, Active randomisation and minimisation instrumentation strategy, Causal randomisation instrumentation strategy, Causal randomisation and minimisation instrumentation strategy, Test not run,

---

## Instrumentation effects - Adult Lac Z IMPC\_EXD\_067\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

**Description:** instrumentation\_effects\_adult\_lac\_z

**Options:** Controlled instrumentation strategy, Active randomisation instrumentation strategy, Active randomisation and minimisation instrumentation strategy, Causal randomisation instrumentation strategy, Causal randomisation and minimisation instrumentation strategy, Test not run,

---

## Instrumentation effects - X-ray IMPC\_EXD\_068\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

**Description:** instrumentation\_effects\_x\_ray

**Options:** Controlled instrumentation strategy, Active randomisation instrumentation strategy, Active randomisation and minimisation instrumentation strategy, Causal randomisation instrumentation strategy, Causal randomisation and minimisation instrumentation strategy, Test not run,

---

## Operator effects - Body weight IMPC\_EXD\_069\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

**Description:** operator\_effects\_body\_weight

**Options:** Single operator, Active operator randomisation, Active operator randomisation with minimisation, Balanced operator, Balanced operator with minimisation, Minimized operator, Test not run,

---

## Operator effects - Open field IMPC\_EXD\_070\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

**Description:** operator\_effects\_open\_field

**Options:** Single operator, Active operator randomisation,  
Active operator randomisation with minimisation, Balanced operator,  
Balanced operator with minimisation, Minimized operator, Test not run,

---

## Operator effects - CSD IMPC\_EXD\_071\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

**Description:** operator\_effects\_csd

**Options:** Single operator, Active operator randomisation,  
Active operator randomisation with minimisation, Balanced operator,  
Balanced operator with minimisation, Minimized operator, Test not run,

---

## Operator effects - Grip strength IMPC\_EXD\_072\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

**Description:** operator\_effects\_grip\_strength

**Options:** Single operator, Active operator randomisation,  
Active operator randomisation with minimisation, Balanced operator,  
Balanced operator with minimisation, Minimized operator, Test not run,

---

## Operator effects - Acoustic startle IMPC\_EXD\_073\_001 | v1.0

simpleParameter

Req. Analysis: false

Req. Upload: true

Is Annotated: false

**Description:** operator\_effects\_acoustic\_startle

**Options:** Single operator, Active operator randomisation, Active operator randomisation with minimisation, Balanced operator, Balanced operator with minimisation, Minimized operator, Test not run,

---

## Operator effects - Calorimetry IMPC\_EXD\_074\_001 | v1.0

simpleParameter

Req. Analysis: false

Req. Upload: true

Is Annotated: false

**Description:** operator\_effects\_calorimetry

**Options:** Single operator, Active operator randomisation, Active operator randomisation with minimisation, Balanced operator, Balanced operator with minimisation, Minimized operator, Test not run,

---

## Operator effects - IPGTT IMPC\_EXD\_075\_001 | v1.0

simpleParameter

Req. Analysis: false

Req. Upload: true

Is Annotated: false

**Description:** operator\_effects\_ipgtt

**Options:** Single operator, Active operator randomisation,  
Active operator randomisation with minimisation, Balanced operator,  
Balanced operator with minimisation, Minimized operator, Test not run,

---

## Operator effects - ABR collection IMPC\_EXD\_076\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

**Description:** operator\_effects\_abr\_collection

**Options:** Single operator, Active operator randomisation,  
Active operator randomisation with minimisation, Balanced operator,  
Balanced operator with minimisation, Minimized operator, Test not run,

---

## Operator effects - ABR annotation IMPC\_EXD\_077\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

**Description:** operator\_effects\_abr\_annotation

**Options:** Single operator, Active operator randomisation,  
Active operator randomisation with minimisation, Balanced operator,  
Balanced operator with minimisation, Minimized operator, Test not run,

---

## Operator effects - DEXA IMPC\_EXD\_078\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

**Description:** operator\_effects\_dexa

**Options:** Single operator, Active operator randomisation, Active operator randomisation with minimisation, Balanced operator, Balanced operator with minimisation, Minimized operator, Test not run,

---

## Operator effects - X-ray imaging IMPC\_EXD\_079\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

**Description:** operator\_effects\_x\_ray\_imaging

**Options:** Single operator, Active operator randomisation, Active operator randomisation with minimisation, Balanced operator, Balanced operator with minimisation, Minimized operator, Test not run,

---

## Operator effects - X-ray annotation IMPC\_EXD\_080\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

**Description:** operator\_effects\_x\_ray\_annotation

**Options:** Single operator, Active operator randomisation, Active operator randomisation with minimisation, Balanced operator, Balanced operator with minimisation, Minimized operator, Test not run,

---

## Operator effects - Slit lamp IMPC\_EXD\_081\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

**Description:** operator\_effects\_slit\_lamp

**Options:** Single operator, Active operator randomisation, Active operator randomisation with minimisation, Balanced operator, Balanced operator with minimisation, Minimized operator, Test not run,

---

## Operator effects - Ophthalmoscope IMPC\_EXD\_082\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

**Description:** operator\_effects\_ophthalmoscope

**Options:** Single operator, Active operator randomisation, Active operator randomisation with minimisation, Balanced operator, Balanced operator with minimisation, Minimized operator, Test not run,

---

## Operator effects - Hematology IMPC\_EXD\_083\_001 | v1.0

simpleParameter

Req. Analysis: false

Req. Upload: true

Is Annotated: false

Description: operator\_effects\_hematology

Options: Single operator, Active operator randomisation, Active operator randomisation with minimisation, Balanced operator, Balanced operator with minimisation, Minimized operator, Test not run,

---

## Operator effects - Clinical chemistry IMPC\_EXD\_084\_001 | v1.0

simpleParameter

Req. Analysis: false

Req. Upload: true

Is Annotated: false

Description: operator\_effects\_clinical\_chemistry

Options: Single operator, Active operator randomisation, Active operator randomisation with minimisation, Balanced operator, Balanced operator with minimisation, Minimized operator, Test not run,

---

## Operator effects - Immunophenotyping collection IMPC\_EXD\_085\_001 | v1.0

simpleParameter

Req. Analysis: false

Req. Upload: true

Is Annotated: false

Description: operator\_effects\_immunophenotyping\_collection



**Options:** Single operator, Active operator randomisation,  
Active operator randomisation with minimisation, Balanced operator,  
Balanced operator with minimisation, Minimized operator, Test not run,

---

## Operator effects - Immunophenotyping analysis IMPC\_EXD\_0

86\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

**Description:** operator\_effects\_immunophenotyping\_analysis

**Options:** Single operator, Active operator randomisation,  
Active operator randomisation with minimisation, Balanced operator,  
Balanced operator with minimisation, Minimized operator, Test not run,

---

## Operator effects - Heart weight IMPC\_EXD\_087\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

**Description:** operator\_effects\_heart\_weight

**Options:** Single operator, Active operator randomisation,  
Active operator randomisation with minimisation, Balanced operator,  
Balanced operator with minimisation, Minimized operator, Test not run,

---

## Operator effects - Gross pathology collection IMPC\_EXD\_088\_

001 | v1.0

simpleParameter

Req. Analysis: false

Req. Upload: true

Is Annotated: false

**Description:** operator\_effects\_gross\_pathology\_collection

**Options:** Single operator, Active operator randomisation, Active operator randomisation with minimisation, Balanced operator, Balanced operator with minimisation, Minimized operator, Test not run,

---

## Operator effects - Gross pathology annotation IMPC\_EXD\_089\_

\_001 | v1.0

simpleParameter

Req. Analysis: false

Req. Upload: true

Is Annotated: false

**Description:** operator\_effects\_gross\_pathology\_annotation

**Options:** Single operator, Active operator randomisation, Active operator randomisation with minimisation, Balanced operator, Balanced operator with minimisation, Minimized operator, Test not run,

---

## Operator effects - ECG IMPC\_EXD\_090\_001 | v1.0

simpleParameter

Req. Analysis: false

Req. Upload: true

Is Annotated: false

**Description:** operator\_effects\_ecg

**Options:** Single operator, Active operator randomisation, Active operator randomisation with minimisation, Balanced operator, Balanced operator with minimisation, Minimized operator, Test not run,

---

## Operator effects - Echo IMPC\_EXD\_091\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

**Description:** operator\_effects\_echo

**Options:** Single operator, Active operator randomisation, Active operator randomisation with minimisation, Balanced operator, Balanced operator with minimisation, Minimized operator, Test not run,

---

## Operator effects - Plethysmography IMPC\_EXD\_092\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

**Description:** operator\_effects\_plethysmography

**Options:** Single operator, Active operator randomisation, Active operator randomisation with minimisation, Balanced operator, Balanced operator with minimisation, Minimized operator, Test not run,

---

## Operator effects - Insulin IMPC\_EXD\_093\_001 | v1.0

simpleParameter

Req. Analysis: false

Req. Upload: true

Is Annotated: false

**Description:** operator\_effects\_insulin

**Options:** Single operator, Active operator randomisation, Active operator randomisation with minimisation, Balanced operator, Balanced operator with minimisation, Minimized operator, Test not run,

---

## Operator effects - Embryo Lac Z collection IMPC\_EXD\_094\_001 |

v1.0

simpleParameter

Req. Analysis: false

Req. Upload: true

Is Annotated: false

**Description:** operator\_effects\_embryo\_lac\_z\_collection

**Options:** Single operator, Active operator randomisation, Active operator randomisation with minimisation, Balanced operator, Balanced operator with minimisation, Minimized operator, Test not run,

---

## Operator effects - Embryo Lac Z annotation IMPC\_EXD\_095\_001

| v1.0

simpleParameter

Req. Analysis: false

Req. Upload: true

Is Annotated: false

**Description:** operator\_effects\_embryo\_lac\_z\_annotation

**Options:** Single operator, Active operator randomisation, Active operator randomisation with minimisation, Balanced operator, Balanced operator with minimisation, Minimized operator, Test not run,

---

## Operator effects - Adult Lac Z collection IMPC\_EXD\_096\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

**Description:** operator\_effects\_adult\_lac\_z\_collection

**Options:** Single operator, Active operator randomisation, Active operator randomisation with minimisation, Balanced operator, Balanced operator with minimisation, Minimized operator, Test not run,

---

## Operator effects - Adult Lac Z annotation IMPC\_EXD\_097\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

**Description:** operator\_effects\_adult\_lac\_z\_annotation

**Options:** Single operator, Active operator randomisation, Active operator randomisation with minimisation, Balanced operator, Balanced operator with minimisation, Minimized operator, Test not run,

---

## Time effects IMPC\_EXD\_098\_001 | v1.0

simpleParameter

Req. Analysis: false

Req. Upload: true

Is Annotated: false

Description: time\_effects

Options: Uncontrolled time effect, Controlled time effect, Randomised time effect,

---

## Order effects - Body weight IMPC\_EXD\_099\_001 | v1.0

simpleParameter

Req. Analysis: false

Req. Upload: true

Is Annotated: false

Description: order\_effects\_body\_weight

Options: Alternate animal order, Cage active randomisation, Cage casual randomisation, Casual randomisation within a cage, Test not run,

---

## Order effects - CSD IMPC\_EXD\_100\_001 | v1.0

simpleParameter

Req. Analysis: false

Req. Upload: true

Is Annotated: false

Description: order\_effects\_csd

**Options:** Alternate animal order, Cage active randomisation, Cage casual randomisation, Casual randomisation within a cage, Test not run,

---

## Order effects - Grip strength IMPC\_EXD\_101\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

**Description:** order\_effects\_grip\_strength

**Options:** Alternate animal order, Cage active randomisation, Cage casual randomisation, Casual randomisation within a cage, Test not run,

---

## Order effects - Acoustic startle IMPC\_EXD\_102\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

**Description:** order\_effects\_acoustic\_startle

**Options:** Alternate animal order, Cage active randomisation, Cage casual randomisation, Casual randomisation within a cage, Test not run,

---

## Order effects - Calorimetry IMPC\_EXD\_103\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

**Description:** order\_effects\_calorimetry

**Options:** Alternate animal order, Cage active randomisation, Cage casual randomisation, Casual randomisation within a cage, Test not run,

---

## Order effects - IPGTT IMPC\_EXD\_104\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

**Description:** order\_effects\_ipggt

**Options:** Alternate animal order, Cage active randomisation, Cage casual randomisation, Casual randomisation within a cage, Test not run,

---

## Order effects - ABR collection IMPC\_EXD\_105\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

**Description:** order\_effects\_abr\_collection

**Options:** Alternate animal order, Cage active randomisation, Cage casual randomisation, Casual randomisation within a cage, Test not run,

---



## Order effects - ABR annotation IMPC\_EXD\_106\_001 | v1.0

simpleParameter

Req. Analysis: false

Req. Upload: true

Is Annotated: false

Description: order\_effects\_abr\_annotation

Options: Alternate animal order, Cage active randomisation, Cage casual randomisation, Casual randomisation within a cage, Test not run,

---

## Order effects - DEXA IMPC\_EXD\_107\_001 | v1.0

simpleParameter

Req. Analysis: false

Req. Upload: true

Is Annotated: false

Description: order\_effects\_dexa

Options: Alternate animal order, Cage active randomisation, Cage casual randomisation, Casual randomisation within a cage, Test not run,

---

## Order effects - X-ray imaging IMPC\_EXD\_108\_001 | v1.0

simpleParameter

Req. Analysis: false

Req. Upload: true

Is Annotated: false

Description: order\_effects\_x\_ray\_imaging

Options: Alternate animal order, Cage active randomisation, Cage casual randomisation, Casual randomisation within a cage, Test not run,

---

## Order effects - X-ray annotation IMPC\_EXD\_109\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

**Description:** order\_effects\_x\_ray\_annotation

**Options:** Alternate animal order, Cage active randomisation, Cage casual randomisation, Casual randomisation within a cage, Test not run,

---

## Order effects - Slit lamp IMPC\_EXD\_110\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

**Description:** order\_effects\_slit\_lamp

**Options:** Alternate animal order, Cage active randomisation, Cage casual randomisation, Casual randomisation within a cage, Test not run,

---

## Order effects - Ophthalmoscope IMPC\_EXD\_111\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

**Description:** order\_effects\_ophthalmoscope

**Options:** Alternate animal order, Cage active randomisation, Cage casual randomisation, Casual randomisation within a cage, Test not run,

---

## Order effects - Hematology IMPC\_EXD\_112\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

**Description:** order\_effects\_hematology

**Options:** Alternate animal order, Cage active randomisation, Cage casual randomisation, Casual randomisation within a cage, Test not run,

---

## Order effects - Clinical chemistry IMPC\_EXD\_113\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

**Description:** order\_effects\_clinical\_chemistry

**Options:** Alternate animal order, Cage active randomisation, Cage casual randomisation, Casual randomisation within a cage, Test not run,

---

## Order effects - Immunophenotyping IMPC\_EXD\_114\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

**Description:** order\_effects\_immunophenotyping

**Options:** Alternate animal order, Cage active randomisation, Cage casual randomisation, Casual randomisation within a cage, Test not run,

---

## Order effects - Heart weight IMPC\_EXD\_115\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

**Description:** order\_effects\_heart\_weight

**Options:** Alternate animal order, Cage active randomisation, Cage casual randomisation, Casual randomisation within a cage, Test not run,

---

## Order effects - Open field IMPC\_EXD\_116\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

**Description:** order\_effects\_open\_field

**Options:** Alternate animal order, Cage active randomisation, Cage casual randomisation, Casual randomisation within a cage, Test not run,

---

## Order effects - Gross pathology collection IMPC\_EXD\_117\_001 |

v1.0

simpleParameter

Req. Analysis: false

Req. Upload: true

Is Annotated: false

**Description:** order\_effects\_gross\_pathology\_collection

**Options:** Alternate animal order, Cage active randomisation, Cage casual randomisation, Casual randomisation within a cage, Test not run,

---

## Order effects - Gross pathology annotation IMPC\_EXD\_118\_001

| v1.0

simpleParameter

Req. Analysis: false

Req. Upload: true

Is Annotated: false

**Description:** order\_effects\_gross\_pathology\_annotation

**Options:** Alternate animal order, Cage active randomisation, Cage casual randomisation, Casual randomisation within a cage, Test not run,

---

## Order effects - ECG IMPC\_EXD\_119\_001 | v1.0

simpleParameter

Req. Analysis: false

Req. Upload: true

Is Annotated: false

**Description:** order\_effects\_ecg

**Options:** Alternate animal order, Cage active randomisation, Cage casual randomisation,  
Casual randomisation within a cage, Test not run,

---

## Order effects - Echo IMPC\_EXD\_120\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

**Description:** order\_effects\_echo

**Options:** Alternate animal order, Cage active randomisation, Cage casual randomisation,  
Casual randomisation within a cage, Test not run,

---

## Order effects - Plethysmography IMPC\_EXD\_121\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

**Description:** order\_effects\_plethysmography

**Options:** Alternate animal order, Cage active randomisation, Cage casual randomisation,  
Casual randomisation within a cage, Test not run,

---

## Order effects - Insulin IMPC\_EXD\_122\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

**Description:** order\_effects\_insulin

**Options:** Alternate animal order, Cage active randomisation, Cage casual randomisation, Casual randomisation within a cage, Test not run,

---

## Order effects - Embryo Lac Z IMPC\_EXD\_123\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

**Description:** order\_effects\_embryo\_lac\_z

**Options:** Alternate animal order, Cage active randomisation, Cage casual randomisation, Casual randomisation within a cage, Test not run,

---

## Order effects - Adult Lac Z IMPC\_EXD\_124\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

**Description:** order\_effects\_adult\_lac\_z

**Options:** Alternate animal order, Cage active randomisation, Cage casual randomisation, Casual randomisation within a cage, Test not run,

---

## Subject selection - ABR IMPC\_EXD\_125\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

**Description:** subject\_selection\_abr

**Options:** First subject availability strategy, Active subject selection strategy, Passive subject selection strategy, Test not run,

---

## Subject selection - Gross pathology IMPC\_EXD\_126\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** false

**Description:** subject\_selection\_gross\_pathology

**Options:** First subject availability strategy, Active subject selection strategy, Passive subject selection strategy, Test not run,

---