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*
Description: name_of_phenotyping_project

Increments: Minimum 1

Name of pipeline IMPC_EXD_003_001 | v1.1
seriesParameter

Description: name_of_pipeline

Increments: Minimum 1

Start date IMPC_EXD_004_001 | v1.1
simpleParameter

Description: start_date

End date IMPC_EXD_005_001 | v1.1
simpleParameter

Description: end_date

Increments: Minimum 1
Control design IMPC_EXD_006_001 | v1.0

**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

**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

**Description**: end_date
Number female controls  IMPC_EXD_009_001 | v1.0

Genetic background  IMPC_EXD_010_001 | v1.0

Controls and knockout same source  IMPC_EXD_011_001 | v1.0
Description: controls_and_knockout_same_source

Options: Yes, No,

Control animal source IMPC_EXD_012_001 | v1.0
simpleParameter


Description: control_animal_source

Core colony source IMPC_EXD_013_001 | v1.0
simpleParameter


Description: core_colony_source

Options: Internally sourced, Externally sourced,

Core stock strategy IMPC_EXD_014_001 | v1.0
simpleParameter

**Description:** core_stock_strategy

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

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**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,

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**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,

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**Blinding - CSD**  
**IMPC_EXD_017_001 | v1.0**

**simpleParameter**
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

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

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

Blinding - IPGTT IMPC_EXD_021_001 | v1.0

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

Blinding - ABR collection IMPC_EXD_022_001 | v1.0

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

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

Blinding - DEXA IMPC_EXD_024_001 | v1.0

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

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
**Blinding - Slit lamp collection**  IMPC_EXD_027_001 | v1.0

**simpleParameter**

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**Description:** blinding_slit_lamp_collection

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

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**Blinding - Slit lamp annotation**  IMPC_EXD_028_001 | v1.0

**simpleParameter**

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**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,

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**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,

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**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


Description: blinding_clinical_chemistry

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

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Blinding - Insulin IMPC_EXD_033_001 | v1.0

simpleParameter


Description: blinding_insulin

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

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Blinding - Immunophenotyping collection IMPC_EXD_034_001 | v1.0

simpleParameter


Description: blinding_immunophenotyping_collection

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

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**Blinding - Immunophenotyping annotation**  IMPC_EXD_035_001  |  v1.0

simpleParameter

**Description**: blinding_immunophenotyping_annotation

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

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**Blinding - Heart weight**  IMPC_EXD_036_001  |  v1.0

simpleParameter

**Description**: blinding_heart_weight

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

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**Blinding - Open field**  IMPC_EXD_037_001  |  v1.0

simpleParameter

**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,

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**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,

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**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


Description: blinding_echo

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

Blinding - Plethysmography  IMPC_EXD_042_001 | v1.0

simpleParameter


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


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,

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**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,

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**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
**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.

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**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.

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**Instrumentation effects - Grip strength** IMPC_EXD_049_001 | v1.0
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

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

Description: instrumentation_effects_calorimetry
Instrumentation effects - IPGTT  IMPC_EXD_052_001  | v1.0

simpleParameter


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


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,

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**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,

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**Instrumentation effects - Ophthalmoscope**  IMPC_EXD_056_001 | v1.0

*simpleParameter*
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

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

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,
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,

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**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,

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**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**

**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,

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**Instrumentation effects - Echo** IMPC_EXD_062_001 | v1.0

**simpleParameter**

**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,

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**Instrumentation effects - Plethysmography** IMPC_EXD_063_001 | v1.0

**simpleParameter**
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,

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Instrumentation effects - Gross pathology  IMPC_EXD_064_001 | v1.0

simpleParameter

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,

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Instrumentation effects - Insulin  IMPC_EXD_065_001 | v1.0

simpleParameter

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

Request Analysis: false  Request 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

Request Analysis: false  Request 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

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,

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**Operator effects - Body weight** IMPC_EXD_069_001 | v1.0

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,

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**Operator effects - Open field** IMPC_EXD_070_001 | v1.0

Description: operator_effects_open_field

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,
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

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

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

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

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

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,

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**Operator effects - ABR collection** IMPC_EXD_076_001 | v1.0

*simpleParameter*

Req. Analysis: false  
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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,

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**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,

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**Operator effects - DEXA** IMPC_EXD_078_001 | v1.0
**Operator effects - X-ray imaging**  IMPC_EXD_079_001 | v1.0

**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 - Slit lamp**  IMPC_EXD_081_001 | v1.0

**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,

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**Operator effects - Ophthalmoscope**  IMPC_EXD_082_001 | v1.0

**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

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

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

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 - Gross pathology collection IMPC_EXD_088_001 | v1.0
simpleParameter


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


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

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

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

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

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

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

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.

**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.

**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  
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**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**
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

Description: order_effects_ipgtt

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

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


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


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


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**


**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**


**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**


**Description:** order_effects_ophthalmoscope
**Order effects - Hematology**  IMPC_EXD_112_001 | v1.0

simpleParameter

**Description:** order_effects_hematology

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

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**Order effects - Clinical chemistry**  IMPC_EXD_113_001 | v1.0

simpleParameter

**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
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

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

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


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


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


Description: order_effects_ecg
```
**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

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

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

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

Description: subject_selection_gross_pathology

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