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
Name of pipeline **IMPC_EXD_003_001 | v1.1**

**Description:** name_of_pipeline

**Increments:** Minimum 1

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Start date **IMPC_EXD_004_001 | v1.1**

**Description:** start_date

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End date **IMPC_EXD_005_001 | v1.1**

**Description:**
Description: end_date

Control design  IMPC_EXD_006_001 | v1.0
seriesParameter


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


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
Number female controls  IMPC_EXD_009_001 | v1.0
simpleParameter

Genetic background  IMPC_EXD_010_001 | v1.0
seriesParameter

Controls and knockout same source  IMPC_EXD_011_001 | v1.0
simpleParameter
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**


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**


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**
Blinding - Grip strength IMPC_EXD_018_001 | v1.0
simpleParameter

Blinding - Acoustic startle IMPC_EXD_019_001 | v1.0
simpleParameter

Blinding - Calorimetry IMPC_EXD_020_001 | v1.0
simpleParameter
Description: blinding_calorimetry

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

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

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**Blinding - DEXA** IMPC_EXD_024_001 | v1.0

Description: blinding_dexa

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

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**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,

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**Blinding - X-ray annotation** IMPC_EXD_026_001 | v1.0
simpleParameter


Description: blinding_x_ray_annotation

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

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Blinding - Slit lamp collection IMPC_EXD_027_001 | v1.0

simpleParameter


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


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


Description: blinding_clinical_chemistry

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

Blinding - Insulin  IMPC_EXD_033_001 | v1.0


Description: blinding_insulin

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

Blinding - Immunophenotyping collection  IMPC_EXD_034_001 | v1.0


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

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**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

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**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


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


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


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,

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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,

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

**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,

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**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,

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**Instrumentation effects - Calorimetry** IMPC_EXD_051_001 | v1.0

**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

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

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

v1.0

simpleParameter
Instrumentation effects - Ophthalmoscope  
**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,  

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Instrumentation effects - Hematology  
**IMPC_EXD_057_001 | v1.0**  
**simpleParameter**  

**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,  

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Instrumentation effects - Clinical chemistry  
**IMPC_EXD_058_001 | v1.0**  
**simpleParameter**  

**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

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

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,

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**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,

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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,

Instrumentation effects - Gross pathology IMPC_EXD_064_001 | v1.0

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

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,

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**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,

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**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,

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**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,

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**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,

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**Operator effects - CSD** IMPC_EXD_071_001 | v1.0

simpleParameter


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,

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**Operator effects - Grip strength** IMPC_EXD_072_001 | v1.0

simpleParameter


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

simpleParameter

**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

**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

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,

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**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


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


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


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


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


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**

**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:**

**Options:**
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 - 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,
**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,

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**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,

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**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,

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**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,

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**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,

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**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

simpleParameter


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


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


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
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


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


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


Description: order_effects_immunophenotyping

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

**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

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

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
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

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

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


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


Description: subject_selection_gross_pathology

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