Only fill in blue boxes by applicant. Do not remove (parts of) questions.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Stipulations AWB Utrecht:   * 1. Report changes to the AWB ([info@ivd-utrecht.nl](mailto:info@ivd-utrecht.nl))   2. Report unforeseen dead animals and animals with unexpected discomfort to the AWB ([info@ivd-utrecht.nl](mailto:info@ivd-utrecht.nl)) and the animal facility   3. Investigation into a possible illness/cause of death is mandatory.   4. [Checklist monitoring animal experiments](https://ivd-utrecht.nl/en/forms/checklist-for-monitoring-animal-experiments): At the beginning of the experiment and every 3 months thereafter.   5. Within 2 weeks after closing a WP and at the end of each calendar year, the welfare evaluation is sent to the AWB ([info@ivd-utrecht.nl](mailto:info@ivd-utrecht.nl)).   6. Extra stipulations:   Stipulations CCD:  No Yes: | | | | | | | |
| **Approved AWB:** name |  | Stamp AWB Utrecht | **Conclusion of work protocol** | | | |  |
| Date: date | | Date: | | Initials: | | |
| **Number work protocol** | | **WP Alignment** | Shape  Description automatically generated with low confidenceCheckmark with solid fill | | Shape  Description automatically generated with low confidenceCheckmark with solid fill | |
| **Is assigned by GDL/IvDU** | | Record holder |  | Head of Unit |  | |
| BSO |  | Veterinarian |  | |
| Compliance |  | Statistician |  | |
| RIE |  | SEC |  | |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Does this concern an animal experiment | No / Yes | Project number (CCD) | | | AVD | | | Type experiment(appendix CCD project): | | | Choose |
| Unique title of the work protocol |  | | | | | | | | | | |
| Animal facility: | Choose | | When GDL: section concerned: | | | Choose | Different Cost center/WBS: | | | No / Yes | |
| Planned start date: | Date | | Planned end date: | Date | | | If yes, please fill: | |  | | |

*Indicate* ***below*** *the* ***alarm icon*** *(in numbers) who is the first (1) and second (2) point of contact for animals with unexpected discomfort or animals found dead.*[](https://ivd-utrecht.nl/en/infocentre/explanation-of-work-protocol)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Parties involved: |  | First + last name | Initials | Mobile phone | E-mail | Qualification | Faculty/Institute/ Department |
| Study Director (SD) |  |  |  |  |  | Art. 9 |  |
| Alternate Study Director (ASD) |  |  |  |  |  | Choose |  |
| Departmental Lab Animal Coordinator |  |  |  |  |  |  |  |
| Co-worker |  |  |  |  |  | Choose |  |
| Co-worker |  |  |  |  |  | Choose |  |
| Co-worker |  |  |  |  |  | Choose |  |
| Co-worker |  |  |  |  |  | Choose |  |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Contact person Animal facility *(Will be filled in by the facility)* |  |  |  |  |  |  |
| Contact person  Animal section *(Will be filled in by the facility)* |  |  |  |  |  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| After conclusion of the work protocol, please send original study dossier and raw data to the address below (please fill in name and full postal address): |  | Approval: | | |
| Click here to insert text |  | Approval PI  *Name*  Date | Approval SD  Date | Approval ASD  Date |

# 1. Description of the experiment (See: [Guideline experimental design and statistics](http://www.ivd-utrecht.nl/en/advice-and-support/forms-and-guidelines/))

a. Summary

|  |
| --- |
| **a.1 In no more than five lines, give a brief summary of the **purpose** of the experiment in **simple English.**** |
|  |
| Also give the short summary in ****simple Dutch.**** |
|  |

b. Specific research question and experimental design

|  |
| --- |
| b.1 What is the specific research question/hypothesis in this work protocol and how does it fit into the research strategy (refer to relevant part of the project and type of animal experiment)? |
|  |
| b.2 Indicate why the experiment described is the best possible answer to the research question. Give reasons for the choice of animal species, strain, sex, age and, if applicable, use of the specific genetically modified animals |
|  |
| b.3 Is this a:  experimental study  observational study  pilot study  training (answer 1F)? *If pilot, what is the reason?* |
|  |
| b.4 What is (in general terms) the experimental design? |
|  |
| b.5 Which (and how many) experimental groups (treatment /control groups) are there? Insert a table if this helps to clarify the set up. |
|  |

c. Statistics

|  |  |  |  |
| --- | --- | --- | --- |
| c.1 What is/are the primary and secondary outcome variable(s)? | | | |
| Variable | Primary (1) or secundary (2)? | Continuous or categorical? | What values can it take? |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
| c.2 What is the experimental unit? (e.g. animal, cage) | | | |
|  | | | |
| c.3 Are there other independent variables you want to include in the analysis or correct for? If yes, which ones? | | | |
|  | | | |
| c.4 To what extent are there paired experimental units or dependent observations and if so, what form? | | | |
|  | | | |
| c.5 What is the analysis plan for processing your data? | | | |
|  | | | |

d. Power analyses

|  |  |  |  |
| --- | --- | --- | --- |
| d.1 Motivate your minimum desired effect (E) (clinically/scientifically relevant) that you want to be able to demonstrate. | | | |
|  | | | |
| *Please fill in the data below* | | | |
| Primary outcome variable | Effect (E) | SD of the outcome variable | Effect Size (ES = E/SD) |
|  |  |  |  |
| d.2 Which test from your analysis plan forms the basis for the calculation of the sample size (n)? | | | |
|  | | | |
| d.3 Give the calculation how n is determined, or give sceenshot of G\*Power or other software: | | | |
|  | | | |
| d.4 Calculation of the total number of experimental units | | | |
| **number of exp. units per group (from power analysis or estimation): n** | **total % that cannot be included in the analysis: u** | **Total (t) number of exp. units per group: t = (100/(100-u)) x n =** | **Total (T) number of exp. units per experiment: T = t x groups =** |
|  |  |  |  |
|  |  |  |  |
| Grand Total animals  = | | |  |

e. Randomization and blinding

|  |  |
| --- | --- |
| e.1 Do you randomize your study? If so, how? If not, why not? | |
|  | |
| e.2 Is blinding used in the treatment of animals and in the analysis of results? If so, how? If not, why not? | |
|  | |
| e.3 Will this study be preregistered?  Yes, at [Preclinicaltrials.eu](https://preclinicaltrials.eu/)  Yes, at another preregistration website1  No2 *Preregistration is mostly done based on an accorded WP. Enter your registration details (ID), date and website, if any, later in the WZEV.* | |
| 1Give the URL of the preregistration website you used |  |
| 2Justify why you do not preregister |  |

f. Training staff involved [](https://ivd-utrecht.nl/nl/infocentrum/toelichting-werkprotocol)

##### Complete only if training is part of the work protocol

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *Describe the training plan according to the following points* | | | | | | | | | | |
| Name trainee(s) | |  | Name supervisor (trainer) | |  | | | Name assessor | |  |
| f.1 Please indicate which EPA(s) is (are) being trained. | | | | | | | | | | |
|  | | | | | | | | | | |
| f.2 Are a SOP and the assessment model (DOPS) available? | | | | | | | | | | |
| SOP:  No /  Yes (please attach) | | | | | | Assessment model:  No /  Yes (please attach) | | | | |
| f.3 How do you prepare for the described training? | | | | | | | | | | |
|  | | | | | | | | | | |
| f.4 Describe the different training phases, go-no go moments and the maximum number of animals used for training only. | | | | | | | | | | |
| Phase | Description | | | Go-no go moment | | | Target level | | Number of animals | |
| **1** |  | | |  | | |  | |  | |
| **2** |  | | |  | | |  | |  | |
| **Grand total** | | | | | | | | |  | |

# 2. Animals

a. Species to be used: Choose

| Group | Breed/strain name (Please indicate the official strain name and/or supplier reference number) | Supplier | GDL strain name | Number of animals | Sex | GA1 | Immune com­pe­tent | Origin code | Age | Weight |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | Choose |  |  | Choose | Choose | Choose | Choose |  |  |
|  |  | Choose |  |  | Choose | Choose | Choose | Choose |  |  |
|  |  | Choose |  |  | Choose | Choose | Choose | Choose |  |  |
| **1If genetically modified:** | | **KG/IG-nummer :** IG-number | | **Classification** **:** fill in | | | **containment level**: Choose | | | |

b. Surplus animals: [](https://ivd-utrecht.nl/en/infocentre/explanation-of-work-protocol)

|  |
| --- |
| Surplus animals choose be used, because: |
|  |

# 3. Housing

| Experimen­tal group | Group housing | Bedding | Enrichment | Food1 | Water1 | Housing types |
| --- | --- | --- | --- | --- | --- | --- |
|  | Choose | Choose | Choose | Choose | Choose | Choose |
|  | Choose | Choose | Choose | Choose | Choose | Choose |
|  | Choose | Choose | Choose | Choose | Choose | Choose |
|  | Choose | Choose | Choose | Choose | Choose | Choose |
| Are the animals temporarily housed in a way other than the above during the experiment?  Yes, state method and duration: | | |  | | | |
| Explanation of different housing requirements: | | |  | | | |

1In case of not standard feed/drinking water: Fill in ‘[hazardous substances overview’](#_Risicovolle_Stoffen_2).

# 4. Describe consecutive procedures HL seen by AWB

## a. Acclimatization: 1 week other: please define

## b. Tabel 4. Schedule of experimental procedures

| Line | Relative day in experiment | Exp. group | Description of the procedure | Dura­tion proce­dure | Description of discomfort during and as a result of the procedure | Dura­tion discom­fort | Estimated level of discom­fort | Who |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  | Choose |  |
|  |  |  |  |  |  |  | Choose |  |
|  |  |  |  |  |  |  | Choose |  |
|  |  |  |  |  |  |  | Choose |  |
|  |  |  |  |  |  |  | Choose |  |

|  |  |
| --- | --- |
| Exp. group | cumulative discomfort |
|  | Choose |

# 5. Antibiotics, anaesthesia and analgesia

## a. Are antibiotics and/or heterologous anti-microbial prophylactics and/or therapeutics administered? No / Yes: If so, please fill out the table below

| Experimental group | Substance (optional brand name) | Dose | Route of administration | Frequency | Duration treatment |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

## b. Will anaesthesia be administered? No / Yes: If so, please fill out the table below

| Anaesthesia | Substance (optional brand name) | | Route of administration | Dose |
| --- | --- | --- | --- | --- |
| Premedication agent |  | |  |  |
| Introductory agent |  | |  |  |
| Maintenance agent |  | |  |  |
| *Optional:*  Antagonize agent |  | |  |  |
| Ventilation using intubation  No /  Yes | | | | |
| How is the depth of anaesthesia monitored? | |  | | |
| *Optional*: explanation anaesthesia: | |  | | |

## c. Will analgesia be administered? No1 / Yes: If so, please fill out the table below

| Analgesia | Procedures | Substance (optional brand name) | Route of administration | Dose | Interval | Duration |
| --- | --- | --- | --- | --- | --- | --- |
| Pre-surgical agent |  |  |  |  |  |  |
| Agent during surgery |  |  |  |  |  |  |
| Post-surgical agent |  |  |  |  |  |  |
| Analgesia NOT related to any performed surgery |  |  |  |  |  |  |

|  |
| --- |
| 1If applicable, please explain why no analgesia is administered. |
|  |

# 6. Welfare check and humane end point

## a. Additional welfare checks within the scope of possible experiment-specific clinical symptoms

Depending on the experiment, so-called experiment-specific clinical symptoms can occur.

## Is this the case? No / Yes *If so, please indicate in table 6:*

1. At what time-points the animals need to be assessed. Describe the experiment-specific clinical symptoms and when in the experiment these are expected. If possible, please quantify the clinical symptom/parameter, e.g. volume of a tumour, circumference of a swollen knee joint, etc.

2. Please also describe the estimated level of discomfort (mild, moderate, severe).

## b. Table 6.: Points (relative day in experiment) of *observation* and the experiment-specific clinical symptoms that need to be assessed.

| Line | Day/period in experiment | Observation frequency | Assessment of experiment-specific clinical symptoms | Estimated level of discomfort | Who (initials see p1) |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  | Choose |  |
|  |  |  |  | Choose |  |
|  |  |  |  | Choose |  |
|  |  |  |  | Choose |  |
|  |  |  |  | Choose |  |

## c. Humane end point / Premature withdrawal of animal(s)

When a humane end point (HEP) is applied, the experiment is prematurely terminated for an individual animal or a group (i.e. before the planned end of the experiment). The goal of the HEP is to prevent avoidable discomfort. There can be three reasons to apply a HEP. You are requested to indicate which criteria you use.

|  |
| --- |
| I The animal suffers from discomfort that is more severe than expected or not in line with the purpose of the experiment. **Describe for which clinical symptoms (specify degree and seriousness) and on basis of what other criteria (optional) a HEP is applied.** |
|  |
| Describe the HEP ****also in Dutch.**** |
|  |
| II. The scientific goal is reached. **Describe –on animal level– when the scientific end point has been reached and what the criteria are to withdraw an animal from the experiment.** |
|  |
| III. The scientific goal can no longer be reached. **Matters that can be raised here include:**   * Exclusion criteria are criteria posed on animals that do not fit the inclusion criteria to be included in an experimental group (eg. Induction of heart failure was unsuccessful).   1. Describe the in-/exclusion criteria (in line with 1.d.4) and estimate the exclusion percentage:   2. Estimate the percentage of animals that will be excluded during the experiment due to reaching HEP:   3. Total percentage of exclusion  (u = a + b): * At which dropout rate does your study become underpowered? |
|  |

# 7. Dead animals during the experiment

|  |  |
| --- | --- |
| **Describe how and/or where animals that are killed or found dead should be stored.** |  |

# 8. Destiny of animals at the end of the experiment

If the laboratory animals are suitable for reuse or relocation afterwards, or if you do not need the whole animal for further research, then make the animals, or tissues thereof, available via the [Animal and Tissue Exchange platform](http://www.atex.uu.nl) (ATEX).

| Experimental group | Destiny | If euthanasia: method |
| --- | --- | --- |
|  | Choose | Choose |
|  | Choose | Choose |
|  | Choose | Choose |
| Clarification other method of euthanasia |  | |

# Hazardous substances

**Are biological agents (GMO yes/no) and/or biological substances and/or test substances and/or non-standard feed and/or ionizing radiation being used?**

**No /**  **Yes,** *If yes, fill in the appropriate table(s) below* ***and*** *describe any side effects with associated discomfort in the animals at* ***E****.*

1. Biological agents: (GM and non-GM) micro-organisms, transduced cells/cell lines  Yes: If yes, please fill in appendix [RIE Micro-organismen](https://www.uu.nl/organisatie/gemeenschappelijk-dierenlaboratorium/formulieren)

| Exp group | Name agent | Concentration, volume, administering route and location | Agent number PRIS | KG/IG-number | Classification | Date  authentication |
| --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |

1. Other types of biological products (e.g. organs, tissues, cells, cytokines, antibodies)  Yes: If yes, please fill in appendix [RIE Biologische Producten](https://www.uu.nl/organisatie/gemeenschappelijk-dierenlaboratorium/formulieren)

| Exp group | Name product | Concentration, volume, administering route, and location | Agent number (PRIS or other) |
| --- | --- | --- | --- |
|  |  |  |  |

1. Test/auxiliary substances (toxic substances, cytostatics, pharmaceuticals, etc.)  Yes: If yes, please fill in appendix [RIE Teststoffen](https://www.uu.nl/organisatie/gemeenschappelijk-dierenlaboratorium/formulieren)

| Exp group | Name substance | Concentration, volume, administering route, and location | Agent number PRIS |
| --- | --- | --- | --- |
|  |  |  |  |

1. Non-standard feed (including additives/supplements)  Yes: If yes, please fill in appendix [RIE Voer](https://www.uu.nl/organisatie/gemeenschappelijk-dierenlaboratorium/formulieren)

| Exp group | Name of feed | Feed additive including concentration | Agent number PRIS |
| --- | --- | --- | --- |
|  |  |  |  |

1. Describe any possible ****side effects**** of the substances listed in A. to D. and the ****corresponding**** ****discomfort****.

|  |
| --- |
|  |

1. Ionizing Radiation
2. Substances labelled radioactive  Yes: If yes, please fill in appendix [RIE Protocol Ioniserende Straling](https://www.uu.nl/organisatie/gemeenschappelijk-dierenlaboratorium/formulieren)

| Experimental group | Name substance | Concentration and volume | Administration route and location | SIT-number[[1]](#footnote-2) | Fre-quency | Duration of treatment |
| --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |

1. Body irradiation  Yes

| Experimental group | Origin | Dose/animal | SIT-number1 |
| --- | --- | --- | --- |
|  |  |  | Choose an item. |

1. C-arm imaging system (diagnostic X-ray)  Yes

| Name of authorized employee | Education level (3, 4A, 5A) | SIT-number1 |
| --- | --- | --- |
|  |  | Choose an item. |

1. Micro-CT scanner  Yes

| Name of employee[[2]](#footnote-3) | SIT-number1 |
| --- | --- |
|  | Choose an item. |

# Table Code numbers according to EU-registration

Please provisionally fill in the table below!

The Study Director is obliged to send the fully completed welfare evaluation form (in which the table below is included with the **actual discomfort** experienced (column 12)) to the AWB ([info@ivd-utrecht.nl](mailto:info@ivd-utrecht.nl)) and to the animal welfare coordinator of his own department **within two weeks after the conclusion of the work protocol** or in the **interim when entering a new calendar year.** From this the data for the statutory required annual registration are taken.

Fill in all blue columns. Only fill in the grey columns when required (i.e. do not specify mouse or rat strains).

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| EU Submission | Number VGH | CCD nr | OWE **Click to check** | Animal Species | Specify other (in Latin) | Number of Animals | Reuse | Place of birth | NHP Place of birth | NHP Colony type: Self-sustaining colony | NHP Generation | Genetic status | Creation of a new GA line | Purpose | Specify other | Type of legislation | Specify other | Origin of legislation | Severity | Custom Severity | Explanation of warnings | Comments (in English) | Method of tissue sampling | Specify other method | Severity of genotyping | Anaesthesia | Analgesia | Kill without prior intervention | State after experiment | Work protocol number | Field 6 |
| Choose | Choose | AVD | Enter number | Choose |  | Enter number | Choose | Choose |  |  |  | Choose | Choose | Choose |  |  |  |  | Choose |  |  |  | Choose an item. |  |  | Choose | Choose | Choose | Choose |  |  |
| Choose | Choose | AVD | Enter number | Choose |  | Enter number | Choose | Choose |  |  |  | Choose | Choose | Choose |  |  |  |  | Choose |  |  |  | Choose an item. |  |  | Choose | Choose | Choose | Choose |  |  |
| Choose | Choose | AVD | Enter number | Choose |  | Enter number | Choose | Choose |  |  |  | Choose | Choose | Choose |  |  |  |  | Choose |  |  |  | Choose an item. |  |  | Choose | Choose | Choose | Choose |  |  |
| Choose | Choose | AVD | Enter number | Choose |  | Enter number | Choose | Choose |  |  |  | Choose | Choose | Choose |  |  |  |  | Choose |  |  |  | Choose an item. |  |  | Choose | Choose | Choose | Choose |  |  |
| Choose | Choose | AVD | Enter number | Choose |  | Enter number | Choose | Choose |  |  |  | Choose | Choose | Choose |  |  |  |  | Choose |  |  |  | Choose an item. |  |  | Choose | Choose | Choose | Choose |  |  |
| Choose | Choose | AVD | Enter number | Choose |  | Enter number | Choose | Choose |  |  |  | Choose | Choose | Choose |  |  |  |  | Choose |  |  |  | Choose an item. |  |  | Choose | Choose | Choose | Choose |  |  |
| Choose | Choose | AVD | Enter number | Choose |  | Enter number | Choose | Choose |  |  |  | Choose | Choose | Choose |  |  |  |  | Choose |  |  |  | Choose an item. |  |  | Choose | Choose | Choose | Choose |  |  |
| Choose | Choose | AVD | Enter number | Choose |  | Enter number | Choose | Choose |  |  |  | Choose | Choose | Choose |  |  |  |  | Choose |  |  |  | Choose an item. |  |  | Choose | Choose | Choose | Choose |  |  |
| Choose | Choose | AVD | Enter number | Choose |  | Enter number | Choose | Choose |  |  |  | Choose | Choose | Choose |  |  |  |  | Choose |  |  |  | Choose an item. |  |  | Choose | Choose | Choose | Choose |  |  |
| Choose | Choose | AVD | Enter number | Choose |  | Enter number | Choose | Choose |  |  |  | Choose | Choose | Choose |  |  |  |  | Choose |  |  |  | Choose an item. |  |  | Choose | Choose | Choose | Choose |  |  |

1. SIT = Written Internal Permit. For more information see [guideline](https://ivd-utrecht.nl/en/infocentre/explanation-of-work-protocol) to the work protocol. [↑](#footnote-ref-2)
2. This employee needs to be briefed by a level 4A radiation specialist. [↑](#footnote-ref-3)