

Project plan template: Research involving human subjects with the exception of clinical trials

General information and instructions

[Legal basis for human research projects with the exception of clinical trials](#)

The law and ordinance applicable in this template are the Federal Act on Research involving Human Beings (HRA, RS 810.30) and the Ordinance on Human research **with the exception of clinical trials** (HRO, RS 810.301, Art. 6-23).

Reporting guidelines and checklist for the main study types are listed by the Equator network (<http://www.equator-network.org/reporting-guidelines/>) and should accordingly be addressed in the project protocol (STROBE statement).

The template is intended for research projects with persons in which study specific health-related personal data and/or biological material are to be collected (not yet available) in order to answer a scientific question. For further use projects, please use the appropriate protocol template (either with or without consent) on the homepage www.swissethics.ch.

For **multicenter** studies, the language used in the protocol should be **English**. For **monocentric** studies the protocol can also be written in a national language, i.e. **German, French or Italian**, even though the template is in English.

Ensure that the criteria for selecting the persons intended to participate and the trial design allow an appropriate representation of the groups of persons who are relevant for answering the scientific question; in particular, they must take into account the distribution of genders and age groups. All applications submitted to the Ethics Committee should also address the representativeness of the persons involved, in particular the issue of **sex and gender** (unless totally irrelevant). Based on the recommendations "sex and gender in research involving humans according to the HRA" ([swissethics.ch / topics / sex and gender equitable research](http://swissethics.ch/topics/sex-and-gender-equitable-research)), a set of instructions has been elaborated by a group of experts to guide researchers in the writing of their research documentation, including a grid inspired by the SAGER guidelines. Researchers need to know that the check-up grid provided in the instructions are used by ethics committees' members to review all protocols and related documents.

- Use the text passages that are written in black.
- **Delete all instructions and explanations** ([written in blue](#)), including this page.
- Write the protocol in a gender-neutral language.
- In places where the information is redundant, it is acceptable to refer to another section, to document or to state its redundancy but the section must not be deleted.
- Header and footer should contain the following information (on all pages): [Study ID], [version x, DD/MM/YYYY], [Page x of xx].
- The protocol has to be signed by the project leader, the Sponsor (if applicable) and in case of a multicentric project by the different local project leaders as well. Electronic signatures are accepted under the following conditions:
 - The service provider used for the electronic signature process must have a system that verifies that the electronic signature is correct and genuine and properly embedded in the document.
 - **Copy-paste of scanned signatures are not accepted.**

- If the protocol is signed by hand, the scans of the wet-ink signed signature pages are uploaded to BASEC separately.
- The protocol must be submitted via BASEC in an Optical Character Recognition (OCR) PDF format, i.e. in a searchable PDF format.

Be aware that the content of the protocol has to be identical to the content of the BASEC research project application form. You can refer to the protocol in the research project application form in BASEC to avoid redundancies but not vice versa.

Change history

Version Nr	Version date	Modified without version change	Description, comments	Control
1.0	2013		Initial version	AGEK
2.0	19.07.17		Total revision of all paragraphs (which have been either simplified, condensed or deleted)	PG
		X	Removed 'logo of the institution' on project title page.	PG
2.1	07.10.17		Added 'project title' on signature page	PG
		X	Chapter 7.2. Added obligation to ensure data quality and data traceability throughout the study, when using softwares without audit trail (blue text only) Chapter 9. References: Updated weblinks	PG
		X	Revised Chapter 5.4. to better differentiate project leader obligations between HRO Art. 19 and Art. 23 (blue text only). Typo.	PG
2.2	12.11.19		Chapter 5.6: added the obligation to notify the ECs of the project discontinuation within 90 days (HRO, Art. 22). Replaced "and the principles of GCP" with "and the principles and procedures for integrity in scientific research involving human beings" on the signature page.	PG
2.3	20.04.20		Chapter 5.7: specified the liability for the Sponsors of Category A studies	PG
		X	Updated 'General information and instructions' with a note on the use of the electronic signature.	PG
2.4	27.11.21		Chapter 5.2: added text and refence to art. 15 HRA	PG
		X	Added note to chapter 7.2 on the use of Excel.	PG
2.5	31.08.22		Added new chapter 3.5: Identification and description of the In Vitro Diagnostic (IVD) device under investigation	PG
		X	Corrected formatting errors	PG
		X	Instructions on sex and gender-equitable research, and other minor formal changes, have been added on page 1.	PG
3.0	16.09.2024		New version adapted to the amended HRO, status as of November 1, 2024.	PG
3.1	16.09.2024		Removed reference to Art. 26 HRO and corresponding sentence on the storage of the key in chapter 7.3	PG

 Remove the 'General information and instructions' and the table 'Change history'

and add the logo of your institution in the header 

Project Title

Research legislation: Ordinance on human research with the exception of Clinical trials (HRO) [1].

Type of Research Project: Research project involving human subjects

Risk Categorisation: Provide Risk category A or B acc. to ordinance HRO Art.7

Project leader: Title, Name, Position, Address, Phone, e-mail.

Sponsor: Institution, Address, contact details, if applicable. See note below.

The project leader is a qualified individual by education and training (HRO Art.4), who is responsible for the whole project. In case of a multicenter project, list the centers names and the names of the local responsible project leaders. Ensure compatibility with BASEC research application form.

The sponsor is responsible for organising the research project, and in particular for the initiation, management and financing of the project in Switzerland. The project leader can assume the role of the sponsor (HRO Art. 3). It is the responsibility of the Sponsor and of the Project leader to ensure that role and responsibilities of the project leader and of the Sponsor are clearly defined in the project plan and understood by all. Ensure compatibility with BASEC research application form.

PROTOCOL SIGNATURE FORM

(only for monocentric studies, delete this signature form for multicenter studies)

Study Title *Full study title as written out on title page*

The project leader has approved the protocol version [**x (dated DD.MM.YYYY)**] (version and date must coincide with the footer) and confirms hereby to conduct the project according to the protocol, the Swiss legal requirements [1, 2], current version of the World Medical Association Declaration of Helsinki [3] and the principles and procedures for integrity in scientific research involving human beings.

The project leader has received the ICF and consider it appropriate for use.

Project leader:

Site [*name and address of site*]

Name:

Date: _____ Signature: _____

If applicable and not identical with project leader:

Sponsor:

Name:

Date: _____ Signature: _____

The sponsor is responsible for organising the research project, and in particular for the initiation, management and financing of the project in Switzerland. The project leader can assume the role of the sponsor (HRO Art. 3). It is the responsibility of the Sponsor and of the Project leader to ensure that role and responsibilities of the project leader and of the Sponsor are clearly defined in the project plan and understood by all. Ensure compatibility with BASEC research application form.

PROTOCOL SIGNATURE FORM

(only for multicentric projects in Switzerland, delete this signature form for monocentric projects)

Study Title *Full study title as written out on title page*

The project leader at the main coordinating center and the project leader at the local center/site have approved the protocol version [**x (dated DD.MM.YYYY)**] (version and date must coincide with the footer) and confirm hereby to conduct the project according to the protocol, the Swiss legal requirements [1,2], the current version of the World Medical Association Declaration of Helsinki [3] and the principles and procedures for integrity in scientific research involving human beings.

The project leader at main center has received the ICF and consider it appropriate for use.

Project leader (main center/site)

Site *[name and address of site]*

Name:

Date: _____ Signature: _____

If applicable and not identical with project leader:

Sponsor:

Name:

Date: _____ Signature: _____

Local project leader at local center/site:

This page must individually be signed by all participating local project leaders.

Site *[name and address of site]*

Name of local project leader: _____

Date: _____ Signature: _____

TABLE OF CONTENTS

TABLE OF CONTENTS	6
GLOSSARY OF ABBREVIATIONS	7
1 BACKGROUND AND PROJECT RATIONALE	8
2 PROJECT OBJECTIVES AND DESIGN	8
2.1 Hypothesis and primary objective (and if applicable also secondary objectives)	8
2.2 Primary and secondary endpoints	8
2.3 Project design	8
3 PROJECT POPULATION AND STUDY PROCEDURES	9
3.1 Project population, inclusion and exclusion criteria	9
3.2 Recruitment, screening and informed consent procedure	9
3.3 Study procedures	10
3.4 Withdrawal and discontinuation	10
3.5 <i>DELETE Chapter 3.5 if not applicable and UPDATE the Table of Contents:</i> Identification and description of the In Vitro Diagnostic (IVD) device under investigation	11
4 STATISTICS AND METHODOLOGY	13
4.1. Statistical analysis plan	13
4.2. Handling of missing data	13
5 REGULATORY ASPECTS AND SAFETY	13
5.1 Local regulations / Declaration of Helsinki	13
5.2 Notification of safety and protective measures (HRA Art. 15, HRO Art. 20)	13
5.3 Serious events (HRO Art. 21)	13
5.4 Procedure for investigations involving radiation sources	14
5.5 Amendments	14
5.6 End of project	14
5.7 Insurance	15
6 FURTHER ASPECTS	15
6.1 Overall ethical considerations	15
6.2 Risk-Benefit Assessment	15
6.3 <i>If applicable:</i> Rationale for the inclusion of vulnerable participants	15
7 QUALITY CONTROL AND DATA PROTECTION	16
7.1 Quality measures	16
7.2 Data recording and source data	16
7.3 Confidentiality and coding	16
7.4 Retention and destruction of project data and biological material	17
8 FUNDING / PUBLICATION / DECLARATION OF INTEREST	18
9 REFERENCES	18
<i>If applicable:</i> Appendix 1: Schedule of assessments	19

GLOSSARY OF ABBREVIATIONS

<i>BASEC</i>	<i>Business Administration System for Ethical Committees</i>
<i>CRF</i>	<i>Case report form</i>
<i>FOPH</i>	<i>Federal Office of Public Health</i>
<i>HRA</i>	<i>Human Research Act</i>
<i>HRO</i>	<i>Ordinance on Human</i>

1 BACKGROUND AND PROJECT RATIONALE

The project must address a relevant scientific question and potentially provide valuable generalizable knowledge. The legal requirements must be fulfilled and the ethical standards must be guaranteed. Provide information about the actual scientific background, cite relevant literature including relevant systematic reviews, and explain why you chose the question that will be answered through this project. Provide information about the disease background, epidemiology, current standard of care, pre-clinical and clinical data, scientific rationale and significance according to HRA Art.5 and 10. Explain why the question of the project provides new scientific input for the community, what is the potential project benefit and expected new information to be gained. Note that scientific value is essential for ethical conduct of every project.

State the risk category for research projects according to art. 7 HRO: A or B and explain rationale behind the risk categorization.

Note: A research project falls under Category A if the planned measures collecting personal data or for sampling biological material entail only minimal risks and burdens, and it falls under Category B if the planned measures entail more than only minimal risks and burdens. Art. 7 HRO given examples of minimal risks and burdens.

Evaluate overall risk of project in relation to formal categorization.

2 PROJECT OBJECTIVES AND DESIGN

2.1 Hypothesis and primary objective (and if applicable also secondary objectives)

Describe a clear hypothesis that will be answered through the conduct of the project and the primary objective. In very rare cases a hypothesis might not be required (e.g. exploratory projects). If applicable: secondary objectives.

2.2 Primary and secondary endpoints

Describe the variable of primary interest and the rationale for its selection. In general, a single variable and a single time point are used regarding the primary endpoint. Describe baseline factors that may have an influence on the primary endpoint, e.g. age, gender, etc. In rare cases, for example for qualitative project designs the listing of endpoints may not be possible or needed. If applicable: provide a list of all secondary endpoint parameters to be assessed. The secondary endpoint(s) are used to answer the secondary objectives. Describe also the baseline factors that may have an influence, e.g. smoking, blood pressure, etc.

Any endpoint should be measurable and should give information towards the project objective. If you do not choose endpoints to measure, please provide information about the association between exposure and outcome and how you plan to quantitate this.

2.3 Project design

Both the project design and selected methods should be appropriate to answer the research question and address the hypothesis. Specify the study design (e.g. exploratory, confirmatory qualitative research, fundamental research; project set-up e.g. multicenter / single center; national/ international) and its features and how these are justified by the objectives of the project.

3 PROJECT POPULATION AND STUDY PROCEDURES

3.1 Project population, inclusion and exclusion criteria

Describe project population, total number of participants, including the control groups.

Ensure that the criteria for selecting the persons intended to participate and the trial design allow an appropriate representation of the groups of persons who are relevant for answering the scientific question; in particular, they must take into account the distribution of genders and age groups. The exclusion or intended underrepresentation of relevant groups of persons must be stated and justified (Art. 2 Bst. c HRO).

Refer to the recommendations “sex and gender in research involving humans according to the HRA” ([swissethics.ch / topics / sex and gender equitable research](http://swissethics.ch/topics/sex-and-gender-equitable-research)) to address “sex and gender” issues in this chapter. Describe how recruitment of the subjects is conducted to ensure “sex and gender” balance is achieved or give an explanation why this would not be possible and how this imbalance would impact the scientific validity of the investigation result.

List all project **inclusion criteria**, such as for example: signed informed consent, target disease, diagnosis, therapeutic method, surgical procedure(s), clinical history, etc.; age; ethnic, sociodemographic background; life style factors e.g. exercise, smoking history etc.

List all project **exclusion criteria** such as for example: pregnant or lactating women; specific medication or treatment, other clinically significant concomitant diseases (e.g. hepatic dysfunction, cardiovascular disease, etc.); life style factors, inability to follow procedures or insufficient knowledge of project language, inability to give consent.

3.2 Recruitment, screening and informed consent procedure

Informed consent procedure: swissethics strongly recommends to exclusively use the swissethics templates for writing the patient information documents and informed consent forms (ICF). They meet the legal requirements of Switzerland. The templates can be downloaded in German, French and Italian from swissethics.ch/templates and checklists/patient information and declaration of consent.

A Guidance document on “How to write comprehensible patient information and consent forms for research” and a “Glossary for medical terms and abbreviations” are available on [swissethics.ch/templates/patient information and declaration of consent](http://swissethics.ch/templates/patient-information-and-declaration-of-consent). swissethics strongly recommends to read the guidance document before writing the ICF.

If the Sponsor or investigator plan to develop an electronic ICF for the study, swissethics strongly recommends to refer to the Guidance document on the development and use of an Electronic Informed Consent (eIC), published on [swissethics.ch/topics/position papers](http://swissethics.ch/topics/position-papers), to meet international and national requirements.

Check that the layout of the information respects the epicene language, or is it written in an inclusive format.

If applicable, ensure that the issue of contraception and pregnancy are fully and clearly presented.

If applicable, describe any compensation or payments given to the project participants. A guide on the monetary contributions to patients participating in research projects is available on [www.swissethics.ch / topics / position papers](http://www.swissethics.ch/topics/position-papers).

The project leader explains to each participant the nature of the research project, its purpose, the procedures involved, the expected duration, the potential risks and any discomfort it may entail. Each participant is informed that the participation in the research project is voluntary and that he/she may withdraw from the research project at any time and that withdrawal of consent will not affect his/her subsequent medical assistance and treatment. The participants are informed that he/she can ask any question. Enough time is given to the participant. The time depends on the type of data and/or biological sample collection, the risks, and other factors (see the guidance document “Guideline of swissethics for the time for consideration between information and

consent” published on [swissethics.ch/topics/position papers](http://swissethics.ch/topics/position_papers), available in German and French). If relevant, specify the timeframe given.

All participants are given an information document and a consent form describing the research project. The formal consent of a participant, using the approved consent form, is obtained before the participant is enrolled in the research project.

The participant should read, understand, and voluntarily agree before signing and dating the informed consent form, and is given a copy of the signed document. The consent form is signed and dated by the participant and the project leader (or her/his designee). The signed consent form it is retained as part of the investigation records.

In cases presymptomatic genetic testing or prenatal genetic testing is conducted, results arise which concern the health of the person concerned the participants must additionally receive information on the following:

- a. the purpose, nature and significance of the test;
- b. the frequency and nature of the disorder screened for;
- c. medical, psychological and social implications of the test;
- d. the possible significance of the results for the person concerned and for family members, and their right not to know.

When presymptomatic testing is conducted, the person concerned must additionally be informed about the conditions under which insurance providers may request the disclosure of data from genetic tests performed (Art. 43 and Art. 44 Federal Act on Human Genetic Testing).

When a prenatal risk assessment is conducted, the pregnant woman must additionally be informed about the matters specified in Art. 23 Federal Act on Human Genetic Testing.

Screening and recruitment:

Describe location (hospital, community, city etc.) of recruitment. Describe procedures for participant recruitment, e.g., “consecutive ongoing recruitment through project leader in daily clinical practice”, or “participant recruitment through referring physician”. When using advertisement/flyer as a recruitment tool, the document should be uploaded in BASEC and have to be in line with the guidelines published on www.swissethics.ch.

If applicable, describe screening process and list any screening procedures, such as laboratory or diagnostic tests necessary to meet inclusion and exclusion criteria. Any screening procedure that is not routine/daily practice can only be performed once informed consent has been obtained. Describe the informed consent process including ample time for consideration given to the participants and opportunity to ask questions.

Describe how recruitment of the subjects is conducted to ensure an appropriate representation of the groups of persons who are relevant for answering the scientific question. This must particularly take into account the distribution of age groups and “sex and gender” balance (see also chapter general information and chapter 3.1).

3.3 Study procedures

Describe overall project duration, incl. recruitment period and project duration for each participant. Provide a description and sequence of all planned procedures, such as the use of questionnaires, project visits, and permitted timeframe for each visit. Describe material sampled and stored, as well as quantities, methods and tests used for sample collection and analysis. Compile a summary table listing all project visits including relevant procedures, sampling and timelines (i.e. a schedule of assessment): include the table here or refer to appendix 1.

Describe any expected biases to your project and measures taken to reduce them.

3.4 Withdrawal and discontinuation

Describe reasons for which a participant is “withdrawn from the project”, e.g. withdrawal of informed consent, disease progression, etc.

Describe procedures to follow upon premature participant withdrawal (i.e. final examinations, etc.) or upon withdrawal of informed consent. Describe the appropriate technical procedures how the data is anonymised (if this is the case) and the material destroyed in case of withdrawal. If this is not possible, provide a justification. In longitudinal studies, refer how to handle drop-outs.

Note on the anonymisation of biological material and health-related personal data: In most projects data and biological material are coded and stay coded over time. If a person withdraws, biological material and health-related personal data is only considered anonymised when its association with a specific person is rendered impossible or eliminated in such a way as to allow this association to be re-established only with disproportionate effort. If anonymisation is the chosen method, it must be effected using a method based on the current state of the art and the technical procedure must be described.

In any case (coding or anonymisation) items of data which, individually or in combination, allow the association with a specific person to be easily re-established, such as the first name, surname, address or date of birth, must be deleted or modified. If anonymization is chosen, unique identification numbers must/should also be deleted and the method used for anonymisation must be documented, including a description of the residual risk of reidentification (Art. 25 HRO).

3.5 *DELETE Chapter 3.5 if not applicable and UPDATE the Table of Contents: Identification and description of the In Vitro Diagnostic (IVD) device under investigation*

Preliminary note:

As per Art 2.a ClinO-MD the conduct of **non-interventional** performance studies with IVD devices is governed by HRO chapter 2 when:

- a. biological material is collected from the participants without a surgically invasive procedure; and
- b. the participants do not undergo additional invasive or burdensome procedures compared to the procedures performed under the normal conditions of use of the device to be investigated.

A non-interventional performance study means a study undertaken to establish or confirm the analytical or clinical performance of a device in accordance with the Ordinance on In Vitro Diagnostic Medical Devices (IvDO), and in which the test results cannot influence patient management decisions or treatment (Art. 2 ClinO-MD).

If chapter 3.5 does not apply to the research project, delete it entirely and update the table of contents.

If the performance of an IVD device is investigated in the research project, identify the IVD device, including name, model/type, including software version and accessories, if any, to permit full identification.

Indicate the name of the manufacturer, address and full contact details

Give a statement concerning the regulatory classification of the IVD device and any accessories and system components that are needed.

Describe the IVD device and its intended use, clinical test purpose (including description of the analyte(s) and/or marker(s)), and all its components (software, decision algorithms, and accessories) along with supporting scientific literature.

Describe the technical and functional features of the device indicating the features that are covered by the research project.

Describe the intended performance characteristics, when applicable.

Describe how the IVD device is used, and any deviation from the commercially available IVD device, when applicable.

Indicate the necessary training and experience required for the use of the IVD device and the medical and procedures involved in the use of the IVD.

Describe the handling requirements, preparation for use, any pre-use safety or performance checks and any precautions to be taken after use (e.g., disposal, decontamination), when relevant.

If the Manufacturer's instructions for installation and use is a stand-alone document or integrated in the Investigator's Brochure, upload the document(s) to screen 6. Lead EC, point 39. Miscellaneous / Varia in the RESEARCH PROJECT APPLICATION FORM in BASEC.

Labelling, supply (re-SUPPLY) and storage conditions

Describe how the IVD device is labelled and is provided to the research site. When applicable, describe logistics of re-supply.

Note: for an IVD device that is not commercially available in Switzerland the labelling shall indicate that the IVD device is exclusively for use in the research project (ISO 20916). For commercially available IVD devices, a project specific labelling is not required.

Describe how the IVD device is stored (e.g., temperature range, exposure to light, sterile environment, etc.). IVD devices must be kept in a secure, limited access storage area under the recommended storage conditions.

For commercially available IVD devices, "supply", "storage", "return or destruction" are according to standard procedures and may be simply mentioned in the protocol without specific details.

Accountability of IVD device

Describe the procedures for the accountability of IVD device, including procedures to ensure that access to IVD device shall be controlled and the device shall be used only in the research project and according to the protocol.

Describe the process for returning unused, expired or malfunctioning IVD devices.

Describe the process for returning IVD device at project termination, when applicable.

The Sponsor keeps records to document the physical location of all IVD devices from shipment to the research site(s) until return or disposal.

The project leader or an authorized designee keep records documenting the receipt, use, return and disposal of the IVD device, which include: (when applicable),

- a) the date of receipt,
- b) the identification of the IVD device (e.g., batch number, serial number or unique code),
- c) the expiry date,
- d) the date or dates of use,
- e) the date on which the IVD device was returned or disposed of, when applicable, and
- f) the date of return of unused, expired or malfunctioning IVD devices, when applicable.

The accountability includes the accountability of the comparator(s).

Return, Analysis or Destruction of the IVD Device

Provide a statement if the IVD device is shipped back to the Sponsor disposed/destroyed at the hospital at the end of the research project. Add procedures for preparation and shipment of used IVD devices at the end of the research project.

For IVD devices already in use at the hospital "return or disposed/destroyed" are according to standard procedures and mentioning this in the protocol is enough (no details needed).

When applicable: In case of IVD device deficiency(ies), including malfunction, usability issues, or inadequacy in the information supplied by the manufacturer including labelling, the IVD devices will be returned to the Sponsor for root-cause analysis of the deficiency(ies).

Add procedures for documenting IVD device deficiencies by the research site and for providing them to the Sponsor.

4 STATISTICS AND METHODOLOGY

4.1. Statistical analysis plan

The consultation of a statistician is recommended to state the hypotheses (null, alternative hypotheses). Describe the statistical rationale for sample size in terms of the power to test the primary endpoint. If this is not possible, the planned sample size should still be justified. Give a description of the planned statistical methods for the primary endpoint. Level of significance used, e.g. significance level will be two-sided $\alpha = 0.05$. In the event of multiple endpoints, statistical adjustments for multiple testing need to be considered. If applicable: include the statistical software package(s) to be used. Include any planned interim analyses (if applicable). If “sex and gender” dimension is of primary interest, does the sample size estimation integrate this aspect? Are the statistical analyses appropriate? Include a statement that analyses of “sex and gender” differences are planned. If such an analysis is not possible, please state the reasons.

If different statistical methods rather than hypothesis testing are used, please describe them in detail.

4.2. Handling of missing data

Describe how missing data will be handled in the analysis. Ensure an adequate number of participants will be evaluated, e.g. by compensating for expected drop-outs or by replacement.

5 REGULATORY ASPECTS AND SAFETY

5.1 Local regulations / Declaration of Helsinki

This research project will be conducted in accordance with the protocol, the Declaration of Helsinki [3], the principles of Good Clinical Practice, the Human Research Act (HRA) and the Human Research Ordinance (HRO) [1] as well as other locally relevant regulations. The project leader acknowledges his responsibilities as both the project leader and the Sponsor (if there is no separate Sponsor).

5.2 Notification of safety and protective measures (HRA Art. 15, HRO Art. 20)

If, during the research project, circumstances arise which could jeopardise the safety or health of the participants or lead to a disproportionate relationship between the risks and burdens and the benefits, all the measures required to ensure protection are to be taken without delay.

The project leader (if applicable, in case the project leader is not also the Sponsor: and the Sponsor) is promptly notified (within 24 hours) if immediate safety and protective measures must be taken during the conduct of the research project. The Ethics Committee will be notified via BASEC of these measures and of the circumstances necessitating them within 7 days.

5.3 Serious events (HRO Art. 21)

If a serious event occurs, the research project will be interrupted and the Ethics Committee notified on the circumstances via BASEC within 7 days according to HRO Art. 21¹.

The project leader reports to the ethics committee on the connection between the event and the collection of health-related personal data (if applicable) or the sampling of biological material. At the same time, the project leader submits proposals concerning the next steps to be taken.

¹ A serious event is defined as any adverse event where it cannot be excluded, that the event is attributable to the sampling of biological material or the collection of health-related personal data, and which:

- requires inpatient treatment not envisaged in the protocol or extends a current hospital stay;
- results in permanent or significant incapacity or disability; or
- is life-threatening or results in death.

Any new relevant information and the outcome to the original Serious Event is reported to the ethics committee via BASEC. See procedure to submit Follow-ups to given in BASEC.

If necessary in order to guarantee participants' safety and health, further events (in addition to the provisions of Art. 21 HRO) are to be designated as serious in this section. The responsible ethics committee can request the project leader to designate other serious events.

Note: a template to report safety events to the Ethics Committee is available on www.swissethics.ch.

5.4 Procedure for investigations involving radiation sources

If investigations involving radiation sources are used, the project leader must submit additional documents, specified in HRO Annex 2 number 2, to the responsible ethics committee.

In addition, the project leader must submit documents, specified in HRO Annex 2 number 3 to the FOPH if:

- a. radiopharmaceutical employed is not used in accordance with the authorisation or is not authorised in Switzerland;
 - b. a medical device employed which is capable of emitting ionising radiation:
 1. is not used in accordance with the instructions for use, or
 2. does not bear a conformity marking in accordance with Article 13 MedDO; or
 - c. some other unsealed or sealed radioactive source is used
- the FOPH must also authorize the research project (HRO Art. 19).

Additionally, the project leader must comply with the assessment, notification and reporting duties set by HRO Art. 23.

5.5 Amendments

Substantial changes to the project set-up, the protocol and relevant project documents will be submitted to the Ethics Committee for approval according to HRO Art. 18 before implementation. Exceptions are measures that have to be taken immediately in order to protect the participants.

The following are considered to be substantial changes:

- a. changes affecting the participants' safety and health, or their rights and obligations;
- b. changes to the protocol which concern the objectives of the research project;
- c. a change of research site or conducting the research project at an additional site; or
- d. a change of project leader or Sponsor.

Note: An exhaustive list of substantial changes is available on www.swissethics.ch.

5.6 End of project

Upon project completion or discontinuation, the Ethics Committee is notified within 90 days.

In the absence of provisions to the contrary: The completion of the research project is defined by the last collection of health-related personal data (and if applicable) or the last sampling of biological material.

Describe what happens to the biological materials and health-related data at project end: e.g. all biological materials and health-related data are anonymised upon termination of data analysis.

Note on the anonymisation of biological material and health-related personal data: Biological material and health-related personal data is considered anonymised when its association with a specific person is rendered impossible or eliminated in such a way as to allow this association to be re-established only with disproportionate effort. Anonymisation must be effected using a method based on the current state of the art. Items of data which, individually or in combination, allow the association with a specific person to be re-established, such as the first name, surname, address, date of birth or unique identification numbers, must be deleted or modified. If applicable,

the method used for anonymisation must be documented, including a description of the residual risk of reidentification (Art. 25 HRO). You can refer to chapter 3.4, if applicable.

If the project also requires a FOPH approval: Within a year of completing or discontinuing a research project which included investigations involving unsealed or sealed radioactive sources, the project leader shall submit to the FOPH a final report including all information of relevance for radiological protection, and in particular a retrospective dose estimation. Routine nuclear medicine examinations involving authorized radiopharmaceuticals are exempt from these reporting requirements.

5.7 Insurance

In the event of project-related damage or injuries, the Sponsor will be liable. The liability coverage covers damage occurring up to 10 years after the completion of the research project

Note: The liability coverage requirements can be fulfilled by taking out insurance or by providing security of equivalent value. In addition, Article 11, Article 13 paragraph 1 and Article 14 ClinO apply mutatis mutandi.

Category A research projects are exempt from the liability coverage requirements specified in Article 20 HRA. For category B research projects, an additional insurance package is needed. See Annex 1 HRO for policy values for liability coverage.

6 FURTHER ASPECTS

6.1 Overall ethical considerations

Overall ethical considerations of the project: generalizability of results, i.e. overall social and/or scientific value of the whole project; justification of the study design and of procedures (burden and time effort) for participants (refer to chapter 1). Provide information about other project-specific ethical aspects, like handling of incidental findings, right of information, special risks in studies using genetic data, voluntary study participation, etc. Is there an overall fair balance for the study participant?

Note on “surplus information” and “incidental findings”: surplus information (“Ueberschussinformation”) means personal information, which arise in the course of a research project and which are not required either for the conduct thereof or to answer the scientific question. Surplus information may be an incidental finding if this information is clinically relevant. See “Guideline for handling incidental findings in medical research” published on swissethics.ch / topics / positions papers, and chapter 3.2, for further information on this subject.

6.2 Risk-Benefit Assessment

Assess the risk for project participants against a potential benefit and include a description how risks to project participants are minimized and can be managed. Each (potential) risk must be justifiable. The risk of a project includes the risks of the procedure itself (e.g. MRI, psychiatric questionnaires with potential of traumatization) and the risk of unauthorized data access and/or unwanted identification of project participants.

For studies without immediate benefit to the project participant, a rationale should be provided stating how the results of the project could benefit future patients due to e.g. a better understanding of the disease, surgical procedures etc.

6.3 *If applicable*: Rationale for the inclusion of vulnerable participants

Describe all vulnerable participants that shall be included in the research project. State why equivalent findings cannot be obtained by other means (subsidiarity). Describe the procedures taken, including how the informed consent is obtained:

Guidelines to conduct research in emergency situations are available in German, French and Italian (see HRA Art. 30, 31) and Guidelines to conduct research with children, adolescents and adults with incapacities (see HRA Art. 21, 22, 23, 24) are available on www.swissethics.ch.

7 QUALITY CONTROL AND DATA PROTECTION

7.1 Quality measures

Describe measures taken for quality assurance and quality control: e.g. double data entry, project personnel trained on all important project related aspects, planned quality visits or independent data review, etc. For quality assurance the Ethics Committee may visit the research sites. Direct access to the source data and all project related files and documents must be granted on such occasions.

The project leader has appropriate knowledge and skills in the areas of data security and data protection or is able to ensure compliance by calling in appropriate expertise (Art. 4 HRO).

7.2 Data recording and source data

Describe how project data is recorded, e.g. with paper Case Report Forms (CRF) or an electronic Case Report Form (eCRF) such as secuTrial® or Redcap®. Indicate where the project data is stored (e.g. institution server, service provider, etc.). Efforts should be made not to use any software, like Microsoft Office software's (e.g. Excel), that do not have an audit trail and do not guarantee data privacy and data reliability, as changes can be made in an uncontrolled manner. If a software without audit trail is used nonetheless, describe how data quality and data traceability throughout the research project is guaranteed.

If Microsoft Excel is used, a system must be put in place to improve data privacy and data reliability. That is with a protected cloud system that combines controlled access and user rights with tracking of changes at file / document level, and using the feature "Track changes" (see instruction for use of this functionality [here](#). Training videos on how to use this feature are available on the YouTube channel, e.g.: https://www.youtube.com/watch?v=ltz8v_z7ha4).

If paper CRFs are used, describe how data is transferred to an electronic database for later analysis. An electronic database is recommended.

List the source data (Art. 1.51, ICH E6(R2)) and source documents (Art. 1.52, ICH E6(R2)) used in the project. Source data is all information in original records, certified copies of original records of clinical findings, questionnaires, observations, or other recorded activities in a clinical investigation. If research questionnaires are answered by the participants online or at home, the process should be described in the research plan or in an annex. Clearly differentiate between source data collected on project specific documents (e.g. project CRF, project specific forms or questionnaires, not part of participant file), and routinely collected data during the daily practice. The routinely collected data is part of participant file but can also be transferred to the participant CRF.

7.3 Confidentiality and coding

Important note: Biological material and health-related personal data are considered to be correctly coded if, without access to the key or to the source data, it is only possible with disproportionate effort to link the biological material or the health-related data to a specific person.

Project data will be handled with uttermost discretion and is only accessible to authorized personnel who require the data to fulfil their duties within the scope of the research project. On the CRFs and other project specific documents, participants are only identified by a unique participant number. Coding is done using a method based on the current state of the art that must be based on the current state of the art (Art. 26 HRO).

With regard to retention and storing of the project data, refer to chapter 7.4, as appropriate.

Describe if uncoded or coded (genetic or non-genetic) data is used. Describe who stores the participant identification list, how the data is protected from unauthorized or accidental disclosure, from alteration, deletion, copying and theft. Describe the processes in place, which are essential to ensure traceability (audit trail). Mention password access and safety back-ups on storage media to prevent misuse. If applicable for multicentric trials: the process can be described in an annex to cover all sites' specificities.

If applicable: **Biological material** in this project is not identified by participant name but by a unique participant number. Coding is done using a method based on the current state of the art (Art.26 HRO).

With regard to retention and storing of biological material, refer to chapter 7.4, as appropriate.

Describe the measures taken to prevent unauthorized or accidental disclosure and to prevent the biological material to be altered, destroyed or stolen. Describe the processes in place, which are essential to ensure traceability of the biological material.

Describe appropriate storage and technical requirements to be met, i.e. maintenance of the cooling system. If data or biological material collected during the research project are to be shipped outside the research site, a DTUA (Data Transfer and Use Agreement) or MTA (Material Transfer Agreement) must be issued (as applicable) and the following included in the protocol: receiver address, responsible person to whom materials or data are sent, purpose of shipment, temperature control if applicable and how participant confidentiality is guaranteed. Biological material or genetic data can only be sent abroad in the scope of the research project, if the participant involved has given his/her consent to do so upon having been sufficiently informed (HRO, Section 2).]

7.4 Retention and destruction of project data and biological material

Specify time-period and location of archiving of the project data and documents (electronic and hard copies) and the biological material.

The project leader retains all the research project data for a period of at least ten years after the completion or early termination of the research project.

Note on the storage of health-related personal data: Any person who stores health-related personal data for research must take appropriate operational and organisational measures to protect it, and in particular:

It must restrict the handling of the health-related personal data to those persons who require this data to fulfil their duties; it must prevent unauthorised or accidental disclosure, alteration, deletion and copying of the health-related personal data; it must document all processing operations which are essential to ensure traceability.

Note on the storage of biological material: Any person who stores biological material for research must comply with the principles given under the previous note on the storage of health-related personal data, and it must ensure that the technical requirements are met for appropriate storage of the biological material; here, nationally and internationally recognised guidelines must be consulted.

If applicable, describe how biological materials will be destroyed after termination of the research project and how this will be documented.

If it is planned to further use the data and/or the biological materials, such as for a registry or biobanking, provide details and clearly describe the planned use and the duration. Note: research projects that makes use of this data and/or biological material must be submitted and approved separately by the ethics committee. A separate consent must be obtained for further use of data and biological material for future research projects.

8 FUNDING / PUBLICATION / DECLARATION OF INTEREST

Describe funding sources, publication policy of the project, data sharing policy and possible conflict of interests. If applicable, reference to other places or contracts/documents where this information is captured. If applicable in multicentric projects, if there is no contract or any written agreement between the institutions, the specifics of the collaboration can be given here. Confirm that if “sex and gender” effects are observed, they will be published in the final study report. If an analysis is performed but no “sex and gender” effects are observed, this should also be published in the final study report.

9 REFERENCES

1. Ordinance on Human Research with the Exception of Clinical trials (HRO)
<https://www.fedlex.admin.ch/eli/cc/2013/642/en>
2. Human Research Act (HRA)
<https://www.fedlex.admin.ch/eli/cc/2013/617/en>
3. Declaration of Helsinki
(<https://www.wma.net/policies-post/wma-declaration-of-helsinki-ethical-principles-for-medical-research-involving-human-subjects>)
4. STROBE statement ([doi:10.1016/j.jclinepi.2007.11.008](https://doi.org/10.1016/j.jclinepi.2007.11.008))

If applicable: **Appendix 1: Schedule of assessments**

Note: Amend and expand the below example according to the specific project

<i>Time (weeks)</i>	<i>>-1 day</i>	<i>0</i>	<i>+1</i>	<i>+3</i>
<i>Visit</i>	<i>Information</i>	<i>Screening</i>	<i>1st visit</i>	<i>2nd visit</i>
<i>oral and written Information</i>	+			
<i>Written consent</i>		+		
<i>check inclusion-/exclusion criteria</i>		+		
<i>Medical history</i>		+		
<i>Participant Characteristics</i>		+		
<i>Procedures</i>			+	+
<i>Questionnaire</i>		+	+	+
<i>Sampling</i>			+	+