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1 Objective

In vitro diagnostic medical devices and accessories for such devices are referred to as 'IVD' in this information sheet. This information sheet is valid under the new regulation that comes/came into force on 26 Mai 2022 and it is intended for sponsors of performance studies with IVD, contract research organisations (CROs), and investigators. It provides guidance on the authorisation process, reporting requirements of sponsors, and the surveillance by the Swiss Agency for Therapeutic Products, Swissmedic. This document does not cover clinical investigations of medical devices that are not IVD. For clinical investigations, please refer to information sheet BW600_00_0015_MB.

2 Introduction

The Swiss Human Research Act (HRA, SR 810.30) regulates biomedical research on human subjects and is based on internationally recognised principles. It shall in particular ensure that
- the investigational medical device must demonstrate a sufficient stage of development for its intended use on humans.
- the investigation must satisfy scientific and ethical criteria
- the dignity, personality and health of human subjects must be protected.

IVD include, for example, reagents, calibrators, control material, kits, instruments, apparatus, equipment, software and systems.

3 Legal basis, standards, and guidances

The information in this document is in summarised form. For that reason, please consult the valid legal texts, standards and guidelines in order to appraise a specific situation.

3.1 Legal texts

The following legal texts describe requirements applicable to performance studies with IVD in Switzerland:
- HRA: Swiss Federal Act on Research involving Human Beings (Human Research Act; SR 810.30)
- TPA: Swiss Federal Act on Medicinal Products and Medical Devices (Therapeutic Products Act; SR 812.21)
- ClinO-MD: Swiss Ordinance on Clinical Trials with Medical Devices (SR 810.306).
- HRO: Ordinance on human research with the exception of clinical trials (SR 810.301)

These texts extensively refer to European requirements [Regulation (EU) 2017/746 (the European in-vitro-diagnostic device regulation, IVDR)] and implementing regulations (such as implementing regulation 2022/1107 on common specifications for certain class D in vitro diagnostic medical devices).

For selected aspects they also refer to requirements of the Swiss Ordinance on Clinical Trials in Human Research (ClinO; SR 810.305), the Swiss Ordinance on Organisational Aspects of the Human Research Act (HRA Organisation Ordinance, OrgO-HRA; SR 810.308), and the Swiss Ordinance on In vitro Diagnostic Medical Devices (IvDO, SR 812.219).

You can find Swiss legal texts in German, French and Italian together with English translations at www.fedlex.ch. As English is not an official language of the Swiss Confederation, English translations of legal texts are for information purposes only and have no legal force.
3.2 Guidance documents, templates, international conventions

- Swiss documents
  - Guidance and templates published by cantonal ethics committees: www.swissethics.ch.
- Standards:
  - ISO 20916, In vitro diagnostic medical devices — Clinical performance studies using specimens from human subjects — Good study practice
  - Other standards that reflect the status of science and technology with regard to the development and manufacturing of IVD
- International conventions: Declaration of Helsinki, Biomedicine Convention, Additional Protocol by the Council of Europe to the Biomedicine Convention, CIOMs Guidelines, etc.

4 ISO 20916 standard

Art. 3 to 5 ClinO-MD, Chapters 2 and 4 ClinO-MD; Art. 67, Annexes XIII and XIV of Regulation (EU) 2017/746

Standard ISO 20916 describes principles relevant to clinical performance studies with IVD using specimens from human subjects. It defines internationally recognised terms, describes the content of the documents necessary and the obligations of involved persons. The standards describes ethical considerations, study planning, site initiation, conduct, close-out and auditing.

For clinical trials involving particularly low risks, certain deviations are possible, particularly for post-market trials. However, the protection of the participants and data quality and security must not be affected by such deviations.

The sponsor is required to address compliance to the standard and disclose any deviations from the standard in the following documents: Clinical Performance Study Plan (CPSP)\(^1\), 'list of standards'\(^2\), Swissmedic authorisation application form.

5 Authorisation of performance studies with IVD

5.1 Study categories and responsible authorities

Art. 2-2a, 6-7, 16-18, 33-34, 38-39, 42, and Annex 1 ClinO-MD

a) Terms and definitions:
- 'Clinical trial' in Swiss legal texts is an umbrella term used for clinical investigations with medical devices, performance studies with IVD, clinical trials of medicinal products, and clinical trials conducted with other interventions (e.g. surgical interventions, other therapies).
- A ‘performance study’ is a study undertaken to establish or confirm the analytical or clinical performance of an IVD.
- An ‘interventional performance study’ is a performance study where the test results may influence patient management decisions and/or may be used to guide treatment

b) Applicable procedures for performance studies

The Swiss legislation distinguishes between different types of research. Below, you can find a decision tree showing the type of research and to which institution you have to file an authorisation

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\(^1\) Expected contents of a CPSP are listed in Annex XIII of the IVDR, and in the Annex to ISO 20916.
\(^2\) A template for the list of standards is available at www.swissmedic.ch/ci.
application. In case of doubt, contact the cantonal ethics committee, which in Switzerland is the responsible entity for the delimitation and categorisation of research projects.

### Decision tree for authorisation applications

<table>
<thead>
<tr>
<th>Decision Tree</th>
<th>Outcome</th>
</tr>
</thead>
</table>
| Is the IVD\(^1\) under investigation or will it just be used during the research project? | The IVD will be used but it is not under investigation
(a) When used for medical purposes, products that are not under investigation must be conforming products\(^2\). This applies to devices and medicinal products, including those used for concomitant treatments required by the study plan and for diagnostic purposes. For example, make sure that pregnancy tests, tests in connection with the health of subjects, side effects, disease progression and other IVD are CE-marked for the purpose intended in the study.
(b) Research use only products (RUO) provide results that are used during data analysis or for other research purposes. They do not fall under the IVD regulation. Do not communicate individual test results obtained with RUO, as these products are not allowed to be used for medical decisions concerning subjects.
(c) Make sure that the underlying research activity is duly authorised, consult with the ethics committee\(^3\) if unsure whether it falls under the HRO, ClinO-MD, or ClinO. |
| Will individual test results be disclosed to the subjects or to professionals in charge of subjects? | Individual test results will not be communicated
They cannot influence patient management decisions and cannot be used to guide treatment.
(a) If the study is conducted in Switzerland, submit your project to the ethics committee\(^3\) (no submission to Swissmedic required). For delimitation and categorisation see Art. 2a ClinO-MD on performance studies outside the scope of the ClinO-MD, and Art. 6a para. 1 ClinO-MD on category A2 studies. Consult with the ethics committee\(^3\) in case of doubt.
(b) If specimens of Swiss patients will be transferred abroad for a study conducted abroad, no approval of that study is required in Switzerland. Make sure that necessary provisions have been taken\(^4\). |
| Will there be patients/subjects in Switzerland? | Specimens only will be tested in Switzerland, the patients/subjects will be managed abroad
Submit your project to the ethics committee\(^3\) for approval under the provisions of the HRO (no submission to Swissmedic required). Before you initiate activities, make sure the study is duly approved in the foreign countries involved. |
| Does the study plan prescribe the choice and use of the IVD? | The study observes regular IVD use in the market
The IVD is legally placed on the market and is used during normal medical practice independently of study participation.
Submit your project to the ethics committee\(^3\) (no submission to Swissmedic required). For delimitation and categorisation see Art. 2a ClinO-MD on HRO studies, and Art. 6a para. 1 ClinO-MD on category A2 studies. It is not possible to promote, suggest or investigate off-label use in an observational study. |
Is the IVD CE-marked?

yes → The IVD is not CE-marked

no → The IVD is not CE-marked. The vast majority of these performance studies fall under subcategory C2 (art. 6a, para. 2 letter b ClinO-MD). On the same day, submit an authorisation application to Swissmedic and to the ethics committee\(^3\).

If specific conditions are fulfilled\(^5\), certain performance studies with in-house manufactured IVD might fall under category A and need to be submitted to the ethics committee\(^3\) (no submission to Swissmedic is then required).

Will it be used according to the CE marked instructions for use (on-label use)?

no → There will be off-label use during the study. On the same day, submit an authorisation application to Swissmedic and to the ethics committee\(^3\) (category C1 interventional performance study according to Art. 6a para. 2 letter a ClinO-MD).

yes → ON the same day, submit an authorisation application to Swissmedic and to the ethics committee\(^3\) (no submission to Swissmedic required, category A1 or A2 interventional performance study according to Art. 6a, para. 1 ClinO-MD).

Has the IVD been prohibited in Switzerland?

no → The IVD can legally be placed on the market, put into service and used. Submit your project to the ethics committee\(^3\) (no submission to Swissmedic required, category A1 or A2 interventional performance study according to Art. 6a, para. 1 ClinO-MD).

yes → The IVD is prohibited. It cannot legally be placed on the market, put into service and/or used in Switzerland. On the same day, submit an authorisation application to Swissmedic and to the ethics committee\(^3\) (category C3 interventional performance study according to Art. 6a, para. 2 letter c ClinO-MD).

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\(^1\) The IVD can be used alone, or used as part of a system, including software (e.g. an app). Refer to the IVDO for definitions and exceptions. Consult information sheet BW630_30_007e_MB (Medical Device Software) and the European guidance document MDCG 2019-11 in order to determine whether a software is an IVD.

\(^2\) See annex A7 of this information sheet for guidance on interventional performance studies with IVD manufactured and used in the same healthcare institution.

\(^3\) The application for the clinical trial is submitted to the ethics committee responsible for the investigator. In a multicentric clinical trial the application is submitted to the lead ethics committee responsible for the coordinating investigator. The coordinating investigator is the individual with responsibility in Switzerland for coordinating the investigators responsible for the various trial sites in Switzerland. The list of ethics commissions that details the cantons for which they are responsible can be found here: [www.swissethics.ch/en/ethikkommissionen](http://www.swissethics.ch/en/ethikkommissionen).

\(^4\) You can find templates for material transfer agreements on the website of the Swiss Biobanking Platform. On the website of [swissethics](http://www.swissethics.ch) you can find a template for a general consent for specimens taken in the clinical routine, and a template for a study specific informed consent form for specimens taken specifically for the study ([www.swissethics.ch > Templates > Patient information and Declaration of consent](http://www.swissethics.ch)). Please contact the cantonal ethics committee in case of doubt.

\(^5\) See annex A7 of the information sheet for guidance on interventional performance studies with IVD manufactured and used in the same healthcare institution.
5.2 Applications to Swissmedic for the authorisation of category C interventional performance studies (pre-market)
Arts. 16-20 and Annex 1 ClinO-MD; Art. 54 TPA; FeeO-Swissmedic

5.2.1 First submission to Swissmedic of an authorisation application

<table>
<thead>
<tr>
<th>First submission of an authorisation application</th>
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<tr>
<td>Use the form BW610_10_024e_FO. The form also contains a list of required documents. See annex A6 for instructions on how to create an eDok and submit an application.</td>
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</tbody>
</table>

EMDN code for medical devices:
In the authorisation application form, you are required to enter the European Medical Device Nomenclature (EMDN) code applicable to the devices. The EMDN has been published by the European commission and is available free of charge at https://webgate.ec.europa.eu. You can also consult a questions and answers document on EMDN published by the European commission (md_q-a_emdn_en_0.pdf).

Simplified review:
Under the conditions listed in Art. 17 para. 2 ClinO-MD, you may ask Swissmedic to perform a simplified review of your submission:

1. The performance study falls under category C1 or C2 and concerns the investigation of an IVD classified as risk class A or B according to Art. 14 IvDO3.
2. The use of the investigational IVD is at most associated with minimal risks to the subjects.
3. The investigators have agreed in written form to inform the Sponsor without delay of all serious adverse events or other (new) circumstances that could threaten the safety of subjects or device users according to Art. 32 ClinO-MD (see also sections 7.2.2 and 7.2.3 of this information sheet).
4. The Sponsor has a risk management system in place to monitor safety.

To check if your project meets these conditions and to apply for a simplified review, please complete and submit the form BW610_10_025e_FO in addition to the form BW610_10_024e_FO (active pdf format, some questions will pop up as you fill in the fields).

In case Swissmedic deems the application for a simplified review to be unsubstantiated or unjustified, you will receive a preliminary letter from Swissmedic (explaining that a rejection of the application for simplified review is foreseen, including the reasons). Upon receipt of the preliminary letter, you will have the opportunity to clarify any misunderstandings, submit corrections and missing information. You will also have the option to withdraw the application for simplified review and switch to a regular review of the submission (fees for regular reviews will then be applicable, see below) or the option to withdraw the application for the performance study altogether. Swissmedic will initiate a regular review only after you have submitted a request for a regular review.

Incomplete submissions:
In case of incomplete requests, stringent deadlines apply for the end of the application. Please make sure you or your deputy will be available for handling requests after the submission.

While the following documents are essential, they are regularly missing in applications, leading to delays. Please make sure you submit the following documents, they need to show the name of the investigational device and identification of exact models and versions that are foreseen in the performance study:

3 Consult the latest revision of MDCG 2020-16 for guidance of classification of IVD.
- List of applicable standards, includes information on applicable EU common specifications\(^4\), and the GSPR information. A template for the list of standards and GSPR information is available at [www.swissmedic.ch/ci](http://www.swissmedic.ch/ci) > EN > Forms and templates.

- The statement of the manufacturer according to Annex XIV point 4.1 of the IVDR, and declaration for access of Swissmedic to additional technical documents during 10 years (dated and signed by the manufacturer).

- For category C performance studies with IVD that emit ionising radiation, please also submit the permit(s) of SFOPH according section 5.4 of this information sheet or a copy of your application.

5.2.2 Validation
A formal check of every new application will be carried out within 10 days to ensure that the performance study falls under the competence of Swissmedic and that documents have been provided as required. Submissions that fail the validation step are considered to be incomplete and will not be processed by Swissmedic. In such cases, Swissmedic requests you to complete the information/documentation within 10 days. If needed, you may request an extension of up to 20 days. Swissmedic will acknowledge the successful validation in writing, with confirmation that the application is proceeding to the content review stage.
Always send additional submissions to Swissmedic and to the ethics committee (on the same day).

5.2.3 Review and authorisation
During and/or after the content review, Swissmedic can ask for additional information. If a positive assessment is possible on the basis of the documentation submitted, Swissmedic will inform you and wait for the decision of the cantonal ethics committee. Swissmedic is only allowed to authorise a performance study after ethics committee approval.

5.2.4 Rejection, restrictions, conditions
If a positive assessment is not possible, you will receive a preliminary decision within 45 days of the validation acknowledgment of the application. The review of the contents by Swissmedic may, in certain cases, take up to 65 days (for first-in-man investigations or manufacturing using a new procedure). The cantonal ethics committee carries out its review independently. Swissmedic and the ethics committee will therefore send separate letters to you.
The two preliminary decision letters (of Swissmedic and of the ethics committee) will list the findings leading to rejection, restrictions or conditions, any missing information that must be provided, references to the current requirements.
Based on the two letters, you can clarify any misunderstandings, submit any missing information, and will also be allowed to correct application documents and resubmit these to Swissmedic and the cantonal ethics committee within approximately 30 calendar days. Please make sure you submit the same information and updated document versions on the same day to both institutions.
You may contact Swissmedic, if necessary, to ask questions regarding the identified shortcomings and discuss required changes. If issues cannot be addressed in due time, you can either request Swissmedic and the ethics committee for an extension of the deadline, or retract the application. After a retraction or a rejection, a new submission with corrected documents is possible at any later point in time.
At the end of the authorisation procedure, you will receive letters of decision.

5.2.5 Fees
The flat rate fee for handling an application for the authorisation of a clinical investigation with a medical device is CHF 5000.- for a regular review and CHF 1500.- for a simplified review (FeeO-

\(^4\) The EU implementing regulation 2022/1107 introduced common specifications for certain class D IVD. Please regularly check if other common specifications have been published.
Swissmedic. The fee will be invoiced by Swissmedic. Relevant additional workload will be invoiced at a rate of CHF 200.- per hour, for example in case of shortcomings and corrections.

5.3 Submissions to Swissmedic for combined clinical trials, trials with companion diagnostics

In combined trials, both IVD (typically companion diagnostics) and medicinal products or advanced therapy medicinal products (ATMP, transplant products) are the subject of investigation. The requirements for clinical trials with medicinal products and those for interventional performance studies with IVD must both be fulfilled. You can find detailed information for your submission in annex A7.

5.4 Radioactive substances, ionising radiation, radiation protection

For performance studies with radioactive substances, requirements of the Swiss Radiological Protection Ordinance (RPO, RS 814.501) are mandatory for involved personnel and a permit of the Federal Office of Public Health (SFOPH) is required for imports and laboratories in Switzerland. A permit can be requested and additional information are available at www.bag.admin.ch/bag/en/home/gesetze-und-bewilligungen/gesuche-bewilligungen/bewilligungen-aufsicht-im-strahlenschutz.html. Questions can be sent to the Radiation Protection Division of SFOPH (str@bag.admin.ch).

According to Annex 1 number 4 ClinO-MD, the permit has to be submitted to Swissmedic for authorisation of a category C interventional performance study. Submit either the permit or a copy of your authorisation application form to SFOPH.

Other information listed in annex 1 numbers 4 and 5 ClinO-MD: Other information are usually not applicable to performance studies and need not be submitted, except if ionising radiation is applied to the subjects.

6 Review and surveillance activities by Swissmedic

Art. 54, 54b and 66 TPA; Art. 3 para 1 section f and Art. 17 ClinO-MD; Arts. 46-48 ClinO

In order to authorise category C interventional performance studies, Swissmedic checks the status of the fulfilment of General Safety and Performance Requirements (Annex I of Regulation (EU) 2017/746), if the product risks are duly considered in the performance study, and if the product data is in line with current scientific knowledge and correctly indicated in the protocol.

It is mandatory for sponsors of interventional performance studies to operate an appropriate quality assurance system and check the following (not a complete list):

- whether all duties have been assigned to specific persons,
- whether written procedures are available and up to date,
- whether the notification duties and authorisation requirements for Switzerland are correctly implemented in the written procedures,
- whether the job descriptions of personnel are complete and up to date,
- whether written contracts are available with external parties,
- the appropriateness of the basic and advanced training of involved personnel.

6.1 Frequent objections

In category C clinical trials the following aspects have recurrently led to objections. Additional information regarding each of these aspects can be found in the annex:

- CRF for documentation of adverse events and device deficiencies

- Risk reduction measures
- Handling of mortality, disabilities, patients lost to follow-up
- Inclusion and exclusion criteria, particularly vulnerable persons
- Reflection period when consenting for invasive procedures

6.2 Inspections

Like other authorities in Europe, Swissmedic may carry out inspections. Performance studies of all ClinO-MD categories, compliance with all requirements, and all companies, institutions and persons involved may be inspected. If necessary, Swissmedic may withdraw or suspend an authorisation that has been granted, or make the continuation of a study dependent on additional conditions.

7 Submissions during performance studies (notification duties, authorisations)

Sponsors must send spontaneously and without solicitation information to Swissmedic and the ethics committee. The following sections describe duties of the sponsor in regard to Swissmedic. Requirements in regard to cantonal ethics committees are not addressed in this information sheet; please follow the instructions of the cantonal ethics committees. Fulfilment of statutory reporting duties needs to be organised as part of the sponsor's quality assurance system (see chapter 6 of this information sheet).

7.1 Category A performance studies

Art. 32-39 ClinO-MD; Art. 59 para. 4 IvDO; Art. 60 para. 2 IvDO

7.1.1 Reporting duties to Swissmedic

- Materiovigilance reporting to Swissmedic is mandatory for category A performance studies if devices are CE-marked.

- If the sponsor is the manufacturer of the investigational device or Swiss representative of the manufacturer: According to Art. 59 para. 1 to 3 IvDO, the sponsor has to send reportable incidents to Swissmedic. Use the form available at www.swissmedic.ch/swissmedic/en/home/medical-devices/reporting-incidents---fscas/hersteller---inverkehrbringer.html and send it to materiovigilance@swissmedic.ch.

- If the sponsor is not the manufacturer of the investigational device or Swiss representative of the manufacturer: In case of incidents, check whether the event is subject to materiovigilance reporting duties for users (Art. 59 para. 4 IvDO). Use the guidance MU680_20_008e_WL for checking reporting duties. If the performance study is conducted in a hospital, you can also ask the materiovigilance contact person of the hospital (Art. 60 para. 2 IvDO). The sponsor has to ensure that reportable incidents are sent to Swissmedic. Use the form MU680_20_015d_FO and send it to materiovigilance@swissmedic.ch. The guidance and the form are available at www.swissmedic.ch/swissmedic/en/home/medical-devices/reporting-incidents---fscas/users---operators.html. Additionally, please note that users are legally obliged to inform the suppliers of the devices about serious incidents (Art. 59 para. 4 IvDO).

7.1.2 Reporting duties to ethics committees

- Consult information at www.swissethics.ch for preparing and sending reports to the ethics committee.

- Consult Art. 33 ClinO-MD for correct reporting of serious adverse events and device deficiencies with an SAE potential to the ethics committee. Art. 33 para. 1 describes reporting in category A2 performance studies, Art. 33 para. 6 in category A2 performance studies. Use the form BW610_20_024e_FO.
- For safety and protective measures, annual safety reports, and final reports, refer to Art. 35 to 37 and Art. 39 ClinO-MD.

### 7.2 Category C interventional performance studies

Table: Overview of submissions after authorisation of a pre-market interventional performance study.

<table>
<thead>
<tr>
<th>Type of submission</th>
<th>Deadlines</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Modifications (Art. 15 and 20 ClinO-MD)</strong></td>
<td></td>
</tr>
<tr>
<td>- requiring authorisation</td>
<td>Substantial modifications can be submitted anytime.</td>
</tr>
<tr>
<td></td>
<td>Note: If safety and protective measures are necessary, such as a temporary suspension of product use, they must be taken immediately and notified to Swissmedic and the ethics committee. Modifications can be submitted later on.</td>
</tr>
<tr>
<td>- requiring notification</td>
<td>Submit non-substantial modifications to Swissmedic asap.</td>
</tr>
<tr>
<td></td>
<td>Submit to the ethics committee either together with the next annual safety report or asap according to the document 'Substantial modifications to clinical investigations of medical devices' 1</td>
</tr>
<tr>
<td><strong>Reportable SAE and device deficiencies (Art. 33 ClinO-MD)</strong></td>
<td>7 days</td>
</tr>
<tr>
<td><strong>Safety and protective measures (Art. 34, 36 and 38 ClinO-MD)</strong></td>
<td></td>
</tr>
<tr>
<td>- temporary halt or early termination on safety grounds (Art. 36 and 38 ClinO-MD)</td>
<td>24 hours</td>
</tr>
<tr>
<td>- other measures (Art. 34 ClinO-MD)</td>
<td>2 days</td>
</tr>
<tr>
<td><strong>Annual Safety report (Art. 35 and 38 ClinO-MD)</strong></td>
<td>Not later than 1 year after the date of authorisation / the last annual safety report</td>
</tr>
<tr>
<td>** Interruption and early termination (Art. 36 and 38 OClin-MD)**</td>
<td></td>
</tr>
<tr>
<td>- on safety grounds</td>
<td>24 hours²</td>
</tr>
<tr>
<td>- not on safety grounds</td>
<td>15 days²</td>
</tr>
<tr>
<td><strong>End of the performance study in Switzerland³ (Art. 36 ClinO-MD)</strong></td>
<td>15 days</td>
</tr>
<tr>
<td><strong>Final report and summary for lay persons (Art. 37 and 38 ClinO-MD)</strong></td>
<td></td>
</tr>
<tr>
<td>- after regular study end</td>
<td>Within 1 year, exceptions are possible if motivated by scientific reasons⁴</td>
</tr>
<tr>
<td>- after interruption or early termination</td>
<td>Within 3 months</td>
</tr>
<tr>
<td><strong>Radiation incident (Art. 39 ClinO-MD, the permissible dose guide value has been exceeded in a subject)</strong></td>
<td>7 days</td>
</tr>
</tbody>
</table>

1 Available at www.swissethics.ch
2: In case of multiple Swiss centres, send the information to all ethics committees involved.
3: Last patient last visit, except if defined otherwise in the CIP
4: The scientific reasons and the deadline need to be described in the CIP
7.2.1 Modifications (amendments)
Art. 15, 20 and 48 ClinO-MD; FeeO-Swissmedic

Modifications require Swissmedic authorisation/notification as well as ethics committee authorisation/notification. Before submitting a modification, please check which documents and what information has already been provided to Swissmedic, which of these are affected by modifications, and if the modifications must be considered substantial. You only need to submit documents that are new or have been modified.

For modifications, you need to submit the following documents to Swissmedic:
- A cover letter explaining the reason for the modification.
- Documents affected by the modification, with all modifications compared to the earlier version highlighted in the text. Please only submit the versions with the modifications highlighted/track-changed in the text; clean versions are not required.

a) Modifications that must be submitted for authorisation (substantial modifications)

<table>
<thead>
<tr>
<th>Submission of modifications requiring authorisation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use the form <strong>BW610_20_021e_FO</strong>. See annex A6 for instructions on how to create an eDok and submit an application.</td>
</tr>
</tbody>
</table>

Modifications that are likely to have a substantial impact on the safety, health or rights of the subjects or on the robustness or reliability of the clinical data generated in the performance study must be authorised by the ethics committee and Swissmedic before they can be implemented. Substantial modifications notably include the following: Design modifications and modifications of product administration or use; modification of safety procedures, additional interim analyses, modification of selection criteria or subject numbers foreseen; new Swiss sites or new principal investigators; changes to a primary or secondary endpoint, mode of measurement of endpoints or other aspects of the performance study design with a possible impact on results; changes in the subject information and consent forms; etc.

Submit the application to Swissmedic and to the ethics committee on the same day. Once a complete documentation has been submitted, it will be reviewed within 38 days. Within 10 days of your submission, you will receive a confirmation of receipt of complete documentation or a request to provide any missing documents. Swissmedic may extend its review period by 7 days if needed.

b) Change of sponsor, issuing of a letter of authorisation for the new sponsor

<table>
<thead>
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<th>Submission of a change of sponsor</th>
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<tbody>
<tr>
<td>Use the form <strong>BW610_20_021e_FO</strong>. See annex A6 for instructions on how to create an eDok and submit an application.</td>
</tr>
</tbody>
</table>

Submit documents at least 38 days before the scheduled date of the change.

The following documents should be submitted:
- Cover letter signed by the previous sponsor, date when its activities in the study end, explanations about the changes.
- The completed form BW610_10_021e_FO, with all the details of the new sponsor.
- Amended study documents in “Track changes” mode.

c) Modifications subject to notification only
Submission of modifications requiring notification

Use the form BW610_20_021e_FO. See annex A6 for instructions on how to create an eDok and submit an application.

Modifications that do neither fall under a) nor b) must be notified to Swissmedic and will normally lead to no further correspondence. Please be aware that Swissmedic does not issue manual acknowledgements of receipt. Immediately after a submission, you can find two automatic acknowledgements in eMessage (for successful upload and technical validation). See annex A6 for additional information.

If modifications are found that are subject to approval (instead of notification), Swissmedic will contact you. If this is the case, you will need to stop implementation of the modifications in the study and wait for authorisation. In case of gross errors or repetition, Swissmedic may open surveillance activities and asks you to check your quality assurance system and implement corrective and preventive action (CAPA) to improve submissions.

Fees: The flat rate fee for handling modifications that are subject to authorisation amounts to CHF 1000.- and is invoiced by Swissmedic. Relevant additional workload caused by shortcomings regarding the documentation and corrections will be invoiced at an hourly rate of CHF 200.-.

In case of withdrawal of a modification before review has started, the flat rate fee is not applicable. In this particular case, the work performed until withdrawal will be invoiced at a rate of CHF 200.- per hour. Likewise, in case of change of sponsor requiring authorisation the provided work will be charged to the hourly rate of CHF 200.-.

7.2.2 Safety (risks and safety measures)
Arts. 12 and 15 HRA; Art. 34 and 36.4 ClinO-MD

Submission of new circumstances that could threaten the safety of the subjects, and the corresponding safety and protective measures

Use the form BW610_20_022e_FO. See annex A6 for instructions on how to create an eDok and submit an application.

A risk mitigation responsibility lies with the sponsor and the clinical investigator. The sponsor and the investigator themselves must take all necessary measures without delay in order to protect the subjects from immediate danger. Expedited reporting to Swissmedic lies in the responsibility of the sponsor.

The reporting deadline is 2 days for measures concerning ongoing investigation, 24 hours for a temporary halt or early termination on safety grounds. The following situations in particular must be reported:
- device deficiencies requiring measures.
- previously underestimated risks, safety-related measures or modifications of the CPSP in Switzerland or abroad (includes modifications agreed upon with foreign authorities or ethics committees or those imposed by them).
- temporary halt or early termination on safety grounds in Switzerland or abroad.

7.2.3 Serious adverse events (SAEs) and device deficiencies
Art. 4, 12 and 15 HRA; Art. 4, 32 and 33 ClinO-MD; Articles 2(60), 2(61), 76 and Annex XIV chapter II letter 1 of the IVDR; Annex G of standard ISO 20916

a) General considerations
- Sponsors have to fully record adverse events and device deficiencies described in Art. 32 ClinO-MD (or Art. 76 of the IVDR) and have a duty of diligence. Notably, they need to be able to quickly
identify unexpected situations during category C interventional performance studies, including higher than expected frequency or severity of harm, and unexpected types of harm, in order to take appropriate measures and stop undue risks. The sponsor needs to be in a position to temporarily stop product use in the sites and/or take other measures. Swissmedic and ethics committees can request records according Art. 32 ClinO-MD at any time.

- For adverse events and serious adverse events, in spite of similar terminology, different sets of criteria must be used in performance studies with IVD versus clinical investigations with medical devices or clinical trials of medicinal products. Study personnel must be trained accordingly and use correct criteria in performance studies with IVD; members of events committees or safety monitoring boards also need to be trained in order to use correct criteria for performance studies with IVD.

- Adverse events (AE) and device deficiencies must be recorded by the investigator on the case report forms (CRFs). For all SAE and for all device deficiencies with an SAE potential6, please make sure that all data necessary for timely fulfilment of the reporting duty with Swissmedic are collected on the CRFs. You can find examples of templates in annex 1 of this information sheet.

- For pre-market interventional performance studies (category C), CRF concerning SAE and device deficiencies must be sent to the sponsor rapidly, normally within 24 hours to 3 days, and malfunctioning IVD should normally be returned for examination.

- The information needs to be monitored continuously by the sponsor. Queries for incomplete or non-plausible entries need to be issued rapidly. For unexpected SAEs (with regard to type, severity or frequency of harm) and device deficiencies, it may be necessary to take precautionary measures. Typically, use may need to be temporarily suspended by the investigator and/or the sponsor. During suspension, the sponsor can carry out necessary investigations, check the design of the device, hypotheses for the study, or adequateness of investigation procedures, and if necessary prepare and file amendments. See also section 7.2.2 (measures for safety reasons) and 7.2.1 (amendments).

The following events must be reported to Swissmedic within 7 days:

- Any serious adverse event in Switzerland or abroad that has a causal relationship with the IVD for performance study, the comparator or study procedures or where such causal relationship is reasonably possible (i.e. serious and not obviously unrelated to the study);
- any device deficiency with an SAE potential noted in Switzerland or abroad;
- any new finding in relation to events above.

To assess whether sending a report is mandatory, it is therefore necessary to clarify whether the issue is serious, and whether causality with the IVD for performance study, or comparator, or a study procedure can be excluded.

In case of a device deficiency that causes a SAE, a report for the device deficiency and a report for the SAE need to be sent to Swissmedic. If a device deficiency causes several SAE, each SAE needs to be reported and followed-up separately.

- b) Is the event an adverse event, is it serious, what is the causal relationship between the event and the devices or study procedures, has a device deficiency a potential for causing SAE?7?

In performance studies an adverse event is any untoward medical occurrence, inappropriate patient management decision, unintended disease or injury or any untoward clinical signs, including an abnormal laboratory finding, in subjects, users or other persons, in the context of a performance study, whether or not related to the device for performance study.

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6 A device deficiency with an SAE potential is a device deficiency that might have led to a serious adverse event if appropriate action had not been taken, intervention had not occurred, or circumstances had been less fortunate

7 Art. 2(60), 2(61), 2(62) and 76.1.c of the IVDR
Seriousness criteria for adverse events in performance studies with IVD:

- a patient management decision resulting in death or an imminent life-threatening situation for the individual being tested, or in the death of the individual's offspring,
- death
- serious deterioration in the health of the individual being tested or the recipient of tested donations or materials, that resulted in any of the following
  - life-threatening illness or injury
  - permanent impairment of a body structure or a body function
  - hospitalisation or prolongation of patient hospitalisation
  - medical or surgical intervention to prevent life-threatening illness or injury or permanent impairment to a body structure or a body function
  - chronic disease
  - foetal distress, foetal death or a congenital physical or mental impairment or birth defect

A planned hospitalisation for a pre-existing condition or a procedure required by the CPSP without a serious deterioration in health is not considered to be a serious adverse event.

While continuation of a pre-existing condition is not an 'event', increased severity or clinically relevant progression of a pre-existing disease in a patient need to be documented as adverse events (e.g. increased severity of migraine, clinically relevant worsening of arrhythmia, clinically relevant progression of renal disease, etc.).

The causal relationship of each SAE with investigational devices, comparators and study procedures has to be assessed by the investigator and also by the sponsor. For the attribution, the sponsor must take into account the complete data that are available (including the technical documentation, literature, all study sites involved). Four levels of causality are used in Europe in order to correctly described the causal relationship:
- not related
- possible
- probable
- causal relationship

Also consult MDCG 2020-10/1 for correct causality attribution. Unknown causes (e.g. insufficient data available) must be adjudicated as possibly related.

Causality cannot be ruled out and you must not describe an event as "not related" if for example
- there are insufficient information for causality assessment,
- no other clear cause can be identified, and there is a correlation in time or with the bodily part concerned,
- the investigational device or a procedure could affect the bodily part concerned,
- similar events have already been recorded as side effects or complications with other, similar devices and procedures, or
- user errors are involved, e.g. in case of an injury due to an operating error.

c) Timelines and forms for notifications of sponsors to Swissmedic, forms for sponsors
For multi-centre studies, reportable SAEs and device deficiencies with an SAE potential must be reported to Swissmedic within 7 days:

Tabular summary reporting of serious adverse events and device deficiencies that occur in all centres (worldwide)
Until further notice, use the Excel table **MDCG 2020-10/2**, fill in the data in analogy with descriptions given in the guidance document **MDCG 2020-10/1**, and send the table via eMail to clinicaltrials.devices@swissmedic.ch.

The Excel table is filled in cumulatively over the course of the study, highlight all changes compared with the previous version. Always submit the Excel file to Swissmedic (not a pdf file), Swissmedic must be able to search and edit the table.

If a reportable SAE or a device deficiency with an SAE potential takes place in a Swiss centre, please also fill in and submit the following form that contains more detailed information:

**Notification of serious adverse events and device deficiencies that occur in Swiss centres**

Use the form **BW610_20_024e_FO**. See annex A6 for instructions on how to create an eDok and submit the report.

### 7.2.4 Annual safety report
*Art. 35 and 38 ClinO-MD*

**Submission of the annual safety report**

Use the form **BW610_20_021e_FO**. See annex A6 for instructions on how to create an eDok and submit an application.

From the date of approval of the performance study, a report must be submitted annually to the cantonal ethics committee and Swissmedic. A typical report includes the following information:

- Data cut-off date up to which study data has been considered in the report, and the reporting period
- Status of recruitments: Current number of subjects worldwide and in Switzerland, duration of the currently existing follow-up observations
- Status of the performance study abroad (countries involved, any study interruptions or early terminations)
- Anticipated serious adverse events: Description, occurrence in the trial arm versus control arm and medical literature, evaluation by the sponsor
- Unanticipated serious adverse events and any device deficiencies: causality of SUAE with the IVD for performance study or a procedure, possible causes, problems related to the use of the investigational devices at the centres
- Safety-relevant measures taken by the sponsor or imposed by ethics committees or authorities anywhere in the world
- Results from other performance studies with the IVD (if applicable)
- Sponsor’s conclusions regarding the safety of the subjects and the continuation of the investigation
- Annex with the cumulative list per cut-off date of reportable serious adverse events and device deficiencies

The report must be up to date, a cut-off date older than 2 months is generally not considered adequate for pre-market performance studies. You are allowed to submit annual reports to Swissmedic before the specified deadline, which especially in multinational studies allows to write and submit a joint annual report for all authorities and ethics committees involved.
7.2.5 End, discontinuation, interruption of the study
Art. 36 to 39 ClinO-MD

| Notification of end, early termination or temporary halt for reasons not related to safety |
Use the form BW610_20_021e FO. See annex A6 for instructions on how to create an eDok and submit an application.

The sponsor must notify Swissmedic of the end of a performance study within 15 days (as of last patient, last visit). A discontinuation or an interruption of the study for reasons not related to safety, and the reasons for this, must also be notified within 15 days.

The final report, with contents in accordance with Annex XIII and Art. 73 of the IVDR ("performance study report" and summary presented in terms understandable to the intended user) must generally be submitted within one year of the end of the study. Additional information concerning contents of the report are available in ISO 20916. In case of a temporary halt or early termination, the report is due within 3 months.

8 Data retention requirements
Art. 40 ClinO-MD
An archiving period of at least 10 years after the end of the study is required and is applicable to sponsors and investigators.

9 Databases used in Switzerland
Availability of a module for studies in the European database (new EUDAMED IT system) under the IVDR is expected in 2023. However, the access of Swissmedic to that database might be postponed. Until further notice, the sponsor has the obligation to submit requests and reports via the Swissmedic portal eMessage, including information about different CPSP versions used abroad, or safety measures taken abroad such as study interruptions and early terminations on safety grounds. In annex A6, you can find information explaining how to make a submission to Swissmedic. BASEC must be used for submissions to cantonal ethics committees.

10 Sponsors with registered offices abroad, submissions by third parties
Art. 4 para 3 und Annex 1 Section 2.1 ClinO-MD
Sponsors headquartered in another country must specify an agent that is domiciled or has a place of business in Switzerland as an address for correspondence. Preliminary decisions, official decisions and invoices from Swissmedic are sent to the agent. Legal and natural persons domiciled or headquartered in Switzerland can be specified as agents, e.g. distribution companies, a lawyer or the investigator.

Swissmedic accepts submissions made by
- the sponsor,
- a third party acting on behalf of the sponsor, for example a clinical research organisation. When submitting an authorisation application, list third parties in the application form.

11 Liability in the case of damage, coverage in the form of insurance
Arts. 19-20 HRA; Arts. 13-14 ClinO; Art. 15 Insurance Oversight Act (Versicherungsaufsichtsgesetz, VAG, SR 961.01) and implementing provisions in the Oversight Ordinance
An insurance company headquartered in Switzerland or with a branch office in Switzerland can be considered to offer an acceptable coverage as the subjects are able to assert their legal right of direct claim and the associated legal enforcement claims within Switzerland.
The cantonal ethics committee will review the fulfilment of the liability and coverage obligations. Cantonal ethics committees have published information on insurance coverage requirements including templates for insurance policies (see www.swissethics.ch > Templates/Checklists).

12 Penal provisions

Penal provisions in the case of offences and infringements are described in the HRA and the TPA (Arts. 62-64 HRA; Arts. 86-90 TPA).
ANNEXES

A1: Recording of adverse events and device deficiencies

Art. 12 and 15 HRA; Article 10 ClinO-MD and statement of the manufacturer according to Annex XIV Chapter I Sections 1.17 and 4.1 of Regulation (EU) 2017/746; Art. 32-33 ClinO-MD; MDCG 2020-10; Annex G of standard ISO 20916

The sponsor needs to prepare adequate case report forms (CRF). He receives CRF filled in by the centres and must satisfy risk management requirements and reporting requirements in respect of adverse events and device deficiencies. Boxes 1 to 3 show typical examples of CRF for category C interventional performance studies with IVD.

Box 1: Documentation of occurrence of adverse events and device deficiencies

Texts need to be integrated in the following CRF: procedure CRF, CRF for follow-up visits, unscheduled visits, contacts by phone.

Have there been any adverse events?
☐ Yes, please fill in an "Adverse events" form. ☐ No

Have any device deficiencies been noted (e.g. malfunctions, use errors, inadequate labelling)?
☐ Yes, please fill in a "Device deficiency" form. ☐ No

Box 2: Adverse events form

Study title
Name of sponsor

Study site: ............... Subject ID code: ............... Age of the patient on date of event onset: ............... Patient gender: ............... Date the centre became aware of event:
Date of surgically invasive sample taking: ............... Date of IVD use: ............... Date of event onset: ............... Current location of the device: ............... 

Type of information
☐ new event
☐ follow-up information

Criteria for seriousness
☐ a patient management decision resulting in death or an imminent life-threatening situation for the individual being tested, or in the death of the individual's offspring
☐ death
☐ serious deterioration in the health of the individual being tested or the recipient of tested donations or materials, that resulted in any of the following
☐ serious life-threatening illness or injury
☐ permanent impairment to a body structure or a body function
☐ in-patient hospitalisation or prolongation of existing hospitalisation
☐ a medical or surgical intervention to prevent life-threatening illness or injury or permanent impairment to a body structure or a body function
☐ chronic disease
- **foetal distress, foetal death or a congenital abnormality or birth defect**

**Description of event**
[blank space for extensive descriptions]

**Action/treatment/patient outcome**
[blank space for extensive descriptions]

**Relationship to procedure**
- not related
- possible / unknown
- probable
- causal relationship

**Relationship to device**
- not related
- possible / unknown
- probable
- causal relationship

**Expectedness**
- Anticipated
- Unanticipated

**Investigation arm**
- Investigation arm
- Comparator arm

**Outcome**
- ongoing, medical condition is not stable, please provide updates on a regular basis
- resolved without sequelae, date of event resolution: ............
- resolved with sequelae, medical condition is stable, date of event resolution: ............
### Box 3: Device deficiency form (malfunction, use error, inadequate labelling)

<table>
<thead>
<tr>
<th>Study title</th>
<th>Name of sponsor</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Study site:</th>
<th>Subject ID code:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date the centre became aware of event:</th>
<th>Date of IVD use:</th>
<th>Date of event:</th>
<th>Current location of the device:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Type of information</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>new deficiency</td>
<td></td>
</tr>
<tr>
<td>follow-up information</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Nature of the problem (tick all that apply)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Malfunction</td>
<td></td>
</tr>
<tr>
<td>Use error</td>
<td></td>
</tr>
<tr>
<td>Inadequate labelling</td>
<td></td>
</tr>
<tr>
<td>Other:</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SAE potential</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Led to a serious adverse event. Please complete an Adverse Event CRF.</td>
<td></td>
</tr>
<tr>
<td>Is a Device deficiency that did not lead to an adverse event but could have led to a medical occurrence</td>
<td></td>
</tr>
</tbody>
</table>

- if appropriate action had not been taken
- intervention had not occurred, or
- circumstances had been less fortunate

| None |  |

<table>
<thead>
<tr>
<th>Description of the deficiency (occurrence, measures taken, outcome of investigation):</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

[blank space for extensive descriptions]

[Version number] [Pagination]
A2: Risk mitigation measures

In line with the stage of clinical development, innovation and the risk potential, the sponsor is obliged to implement risk mitigation measures. Box 5 shows safety measures that need to be considered and, where necessary, included in the clinical performance study plan for pre-market interventional performance studies. The aim is to avoid problems, or identify them at an early stage, so that the subjects are not exposed to unnecessary risk. Additional measures may be necessary, depending on the specific project.

Box 4: Safety measures for pre-market interventional performance studies

a) Procedures for the installation of devices and instruction/training of users. Procedures for correct sample taking, especially if surgically invasive: Necessary qualifications, if necessary assistance with imaging or other techniques.

b) Risk-adapted recruitment, interim analyses: Do not expose an unnecessarily large number of subjects. Define phases, e.g. feasibility phase/pivotal phase. Before each new phase, carry out an interim analysis. Define the data needed for the interim analysis, incl. the minimum required follow-up of subjects who have already been treated. For interim analysis, 100% source data verification and resolution of queries (AE, SAE, device deficiencies, missing data) normally needs to be foreseen.

c) Handling of CRF: Foresee short deadlines for submission of safety relevant data to the sponsor. Readily verify the clarity of descriptions and attributes (serious/not serious, anticipated/unanticipated, relatedness to devices and procedures, device deficiencies with/without an SAE potential), rapidly issue queries. Maintain the list of AE/SAE/device deficiencies as requested by law. Retrain the sites if you see repetitive errors in CRF. Immediately evaluate measures in case of unexpected nature, severity or frequency of problems. If necessary, suspend device use until measures are completed.

d) Safety committees, e.g. data monitoring committees (DMC), data safety monitoring boards (DSMB) or data safety monitoring committees (DSMC): In double-blind randomised investigations with relevant risks, unblinded data need to be assessed periodically and in case of unexpected events. The committees oversee attributions made by investigators, may evaluate unblinded data and are expected to make independent evaluations; investigators should therefore not be part of the committees. Make sure members have been trained on European seriousness criteria and causality assessment for clinical investigations of medical devices (consult art. 2(61) IvDR for definition of SAE. guideline MDCG 2020-10 for information on causality assessment).

e) Stopping criteria: Define the type and number of incidents that will lead to the suspension of further use.

f) Systematic return and examination of devices in case of problems.

g) Sufficient duration of follow-up of subjects to fulfil the goals of the study and to ensure patient safety.

h) Contact persons, retrieval of information on serious incidents: Procedures to be followed before subjects are declared lost to follow-up should be determined in a risk-based approach. They should be timely, effective and in line with the data analysis that is planned. For details see annex 3.
Studies must be planned in such a way that the endpoints foreseen by the sponsor can be recorded correctly. The course of various diseases and different interventions can lead to mortality, and to physical or mental disability. Such events are often foreseen as endpoints and need to be retrieved. During pre-market studies with relevant risks, the events must be monitored continuously by the sponsor. It is the duty of the sponsor to rapidly identify and avert excessive risks. Deficient study planning and missing data can moreover threaten the validity of the results. Important aspects can be found in Boxes 5 and 6.

**Box 5: Organisational aspects for studies with a mortality endpoint or endpoints that lead to a loss of independence**

a) Informed consent form: The form should include the consent for the sharing of medical information with a contact person, e.g. that the investigator may clarify the state of health with the subject’s general practitioner and/or named individuals.

b) Clinical performance study plan:
   - Procedures for follow-up visits: If a subject can no longer be traced, its address and state of health should quickly be clarified by the investigator with the contact person.
   - Monitoring plan: If a subject can no longer be traced, the monitor should check with the centre on the appropriateness of attempts made to contact the subject and his contact person.
   - Missing data and statistical considerations: If the occurrence of a death or other endpoints cannot be established, sensitivity analyses should usually be provided for (analyses on the effect of the missing data on the results).

c) Reports: The number of patients lost to follow-up and the results of the sensitivity analyses should be included in final reports and publications.

**Box 6: Examples of inadequate study planning in the case of studies with a mortality endpoint or endpoints that lead to a loss of independence**

a) Clinical performance study plans that describe no measures for patients lost to follow-up.

b) Insufficient measures e.g.
   - failing to obtain the written consent of the subject with regard to obtaining health information from third parties.
   - no sensitivity analysis (failure to take into consideration that subjects lost to follow-up may have experienced a fatal outcome or severe disabilities).

**A4: Inclusion and exclusion criteria, particularly vulnerable persons**

*Arts. 11 and 21-31 HRA; Arts.15-17 ClinO; Arts. 60-64 IVDR*

A research project involving particularly vulnerable persons may only be carried out if equivalent findings cannot be obtained in any other way. Particularly vulnerable persons are, for example, minors (children, adolescents), adults lacking the capacity in the consent procedure, patients in emergency situations, pregnant women or embryos / foetuses. Investigations with own employees are considered as problematic due to financial dependence.

For that reason, please check the wording of the inclusion and exclusion criteria. If particularly vulnerable groups of persons are not explicitly excluded from the study, the necessary justifications must be in the documentation. Information texts and consent forms are needed for all persons taking part in the study, as is a written description of the procedure for enrolment / consent / post hoc consent.

Flow charts or diagrams, for example, may also be appropriate as a written description. These should show which person, at which point, using which documents, carries out which activities that lead to
inclusion in the study and, if in case of enrolment in an emergency situation, to obtain a correct post hoc consent.

In practice, studies under mixed conditions present particular difficulties, and especially if both vulnerable and non-vulnerable subjects are to be enrolled or if a temporary, particular vulnerability exists. In such cases, please pay particular attention to correct study planning. Considerations and examples can be found in Box 7.

Box 7: Considerations regarding performance studies with both vulnerable and non-vulnerable subjects

Example 1, mixed populations
The IVD can in principle be used for elective interventions and for emergency patients. According to inclusion and exclusion criteria, emergency patients are not excluded from the study:
- Are you sure the study should involve emergency patients?
- Does the documentation state which research question can only be investigated using the emergency patients, and why?
- Has the necessary number of emergency patients, that is needed to investigate these particular research questions, been calculated?
- For enrolment, how do you make sure that the correct number of emergency patients and elective patients will be included (stratification)?

Example 2, emergency situation at the beginning of a study
An IVD is used for emergency patients, and the study is then continued with a follow-up under regular clinical conditions.
- Who clarifies the emergency patient's capacity to consent, and how?
- When and how are the patients themselves and/or their representatives involved?
- At what point is the independent doctor involved?
- When and how, after implantation, does the post hoc consent and the consent to continue taking part in the performance study take place (now administered with the appropriate reflection period)?
- Is the written description of the whole consenting procedure available?
- Are the necessary documents for the various steps available (information and consent forms for use under emergency conditions, documented decision of the independent doctor, post-hoc information and consent forms for use of previously collected data and continued participation in the study)?

Specific provisions also apply regarding research involving prisoners (Art. 28 HRA).

A5: Reflection period when consenting for invasive procedures

Art. 16 HRA
The subject must be given an appropriate reflection period. For procedures that can be planned, the question of the time required arises in particular in the case of additional surgical sample taking and additional invasive procedures with relevant risks are performed for the purpose of the study.

Guidance and case descriptions are available on the subject:
- Decisions of the Federal Supreme Court: As a result of legal disputes, the Federal Supreme Court has commented on aspects regarding consent to invasive procedure in daily clinical practice (considerations available e.g. in the judgement of the Federal Supreme Court no. 4P.265/2002, free of charge at www.bger.ch).
A6: How to make a submission

You can find information on the eGovernment Service eMessage in various languages at:
- www.swissmedic.ch/ci and www.swissmedic.ch/performance-studies-en > How to submit
- OS000_00_005e_MB eMessage functions

The following items can be sent by email to clinicaltrials.devices@swissmedic.ch:
- Tabular listings of reportable serious adverse events and device deficiencies according to European reporting formats.
- Communications during an ongoing procedure with no documents attached, e.g. for extension of deadlines, other coordination needs, questions concerning the procedure.

In all other cases, you must follow the eGovernment submission procedures. In order for your submission to be handled correctly, standardised forms and a standardised folder structure are necessary and must always be used.

Electronic submissions consist of three steps

1. Prepare the standardised form and download the standardised folder structure
   To prepare a submission, go to www.swissmedic.ch/ci > EN > Forms and templates, choose and fill in the correct form. Go to www.swissmedic.ch/performance-studies-en > "How to submit" > "eDok electronic folder structure (ZIP)", and download the standardised folder structure.

2. Generate an eDok
   Copy the form, an accompanying letter if needed and every document into the correct folder. Your files should be in pdf or Excel format. Zip the whole structure (the standardised folders with all your files). This file is called an "eDok". One eDok includes one entire submission. In rare cases of errors due to size overload, or in case of confidentiality issues, you can split the documents (two eDoks for one submission). Explain the split in your cover letter.

3. Submit the eDok
   Send eDoks for clinical trials of devices to Swissmedic via the Swissmedic Portal eMessage (www.swissmedic.ch/emessage-en). Swissmedic also runs the platform eSubmissions, which cannot be used for devices.

In order to create an eGovernment account, you need an email-address and a mobile phone. Immediately after the registration step, you can submit to Swissmedic. A two-way identification procedure will be carried out for safety reasons each time you access the portal, with a code that is sent to your mobile phone.

For a submission, answer the questions on the screen, select your eDok, select the “Upload” button and confirm. You will receive two automatic communications. The first one shows whether the 'submit' step was successful ('delivery confirmation'). Immediately afterwards, a second communication will show whether your files passed the automatic technical validation ('acceptance of delivery' or 'acceptance of delivery denied'). Confirmations and error messages will be stored in eMessage for you. Always check the messages you receive.

You should not store files in the portal. Instead, download correspondence from Swissmedic and store your submissions and the correspondence in your trial master file, so that all authorised persons can access these during the clinical trial and the mandatory archiving period.

Trouble shooting: The error message 'acceptance of delivery denied' mostly occurs when the eDok format is not respected.
- Always provide your files in the standardised folder structure and accompanied by the corresponding Swissmedic form.
A7: Special groups of products and combined trials

a) **In-house devices**: Manufacture and use of non CE-marked IVD in healthcare institutions

Art. 9 IVDDO together with art. 5(5) of the IVDR describe the conditions allowing a healthcare institution to manufacture and use certain IVD within its own premises and without the need of a notified body and CE-marking in order to address the specific needs of target patient groups which cannot be met, or cannot be met at the appropriate level of performance, by an equivalent CE-marked device available on the market.

It is acceptable to use these IVD in monocentric category A clinical investigations in the same healthcare institution.

Consult the European guidance document MDCG 2023-1 for information about the conditions.

In the study plan, disclose that the IVD is not CE-marked and describe fulfilment of The General Safety and Performance requirements and of each condition listed in art. 5(5) of the IVDR. These cases are rare.

If an applicable General Safety and Performance Requirement (Annex I of the IVDR) is not fulfilled, or if a condition listed in art. 5(5) of the IVDR is not fulfilled: An authorisation application for a category C2 clinical investigation must be submitted to Swissmedic and to the ethics committee.

Example: There is a CE-marked device with an appropriate performance on the market.

b) **Software as an IVD**: Consult the Swissmedic information sheet BW630_30_007d_MB (Medical Device Software) and the European guidance document MDCG 2019-11 in order to determine whether a software is an IVD and to determine its risk classification.

c) **Combined trials** with a medicinal product and a companion diagnostic (or other IVD):

- The requirements for clinical trials with medicinal products, clinical trials with ATMPs\(^8\) and those for interventional performance studies with IVD must both be fulfilled. You can find additional information on combined trials in the EU guidance document MDCG 2022-10.

- Split responsibilities, split protocols: Swissmedic currently accepts combined trials described in one protocol, as well as those described in two or more subprotocols, with one or different sponsors for the medicinal product(s) and the IVD part(s). As the products will influence the safety and/or efficacy of the same treatment in the same patient, Swissmedic will carry out coordinated reviews. During an approved trial, Swissmedic accepts reports of both sponsors.

\(^8\) ATMPs include e.g. gene therapy products, somatic cell therapy products, tissue engineered products, RNA products.
For the submission of a combined trial of ATMPs and medical devices, please contact clinicaltrials.devices@swissmedic.ch for instructions.

For the submission of a combined trial of medicinal products (except ATMPs), the submission routes in Switzerland are shown below. Include all documents (for both parts) and the contract between the sponsors. Submission requirements are preliminary and may be subject to change at a later date.

Application for approval of a new combined trial (not valid for ATMPs):

<table>
<thead>
<tr>
<th>Conforming IVD*</th>
<th>Conforming medicinal product**</th>
<th>How to submit to Swissmedic</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>No</td>
<td>Submit a full documentation for the approval of an interventional performance study of an IVD with the form BW610_10_024e_FO and the standard folder structure as described in annex A6. In addition, in folder 18, insert the application form for clinical trials with medicinal products and all corresponding documents in the subfolders. In case of multiple sponsors, please specify the coordinating sponsor in your cover letter (who will be mentioned in the letter of approval of the combined trial) and any confidentiality issues between the sponsors. Upload the submission via the eMessage portal. At the end of the authorisation procedure, Swissmedic will send one letter of approval that mentions the coordinating sponsor and one invoice. It includes fees for the clinical investigation of a medical device (see section 5.2.5) and fees for the clinical trial of the medicinal product.</td>
</tr>
<tr>
<td>No</td>
<td>Yes</td>
<td>Submit a full documentation for the approval of an interventional performance study of an IVD with the form BW610_10_024e_FO and the standard folder structure as described in annex A6. In the CIP, make sure you have included the name and regulatory status of the products as well as pharmacovigilance reporting duties for the medicinal product.</td>
</tr>
<tr>
<td>Yes</td>
<td>No</td>
<td>Submit a full documentation for the approval of a clinical trial of a medicinal product according to requirements for clinical trials of medicinal products. In the CIP, make sure you have included the name and regulatory status of the products as well as vigilance reporting duties for the IVD.</td>
</tr>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>No submission to Swissmedic. Refer to section 5.1 of this information sheet (information on category A performance studies). In the CIP, make sure you have included the name and regulatory status of the products as well as materiovigilance and pharmacovigilance reporting duties.</td>
</tr>
</tbody>
</table>

* is CE-marked, is used in the trial according to its CE-marked instructions for use, and has not been prohibited in Switzerland

** is authorised by Swissmedic and is used in the clinical trial according to its authorised label

During the trial, please send reports about adverse events (AE) to Swissmedic as follows:

- **Medicinal products:** Medicinal products: Only suspected unexpected serious adverse reactions (SUSARs) occurring in clinical trials with medicinal products of the categories B and C in Switzerland have to be submitted to Swissmedic as single events. Send reports relating to medicinal products to SUSAR@swissmedic.ch, please observe the Information sheet “Safety relating to clinical trials - Compulsory notification”. They have to be submitted according the general submission process: www.swissmedic.ch > Human medicines > Clinical trials > Clinical trials on medicinal products> Submission of changes during the clinical trial and reporting.

Please consider also the chapter Safety measures in clinical trials on our homepage and the information given in the instructions.

- **IVD:** Forms for reports relating to the IVD regulation can be found at www.swissmedic.ch/ci > Forms and templates. Send European tabular SAE reports by e-mail to clinicaltrials.devices@swissmedic.ch. Send other reports via the Swissmedic portal (see annex A6).
Submissions concerning previously authorised trials:
In some occasions, an existing clinical trial of a medicinal product becomes a combined trial. For example (a) an IVD used in the trial loses its conformity and becomes an IVD under investigation, or (b) a conforming IVD will be replaced with a non-conforming* IVD, or (c) a non-conforming* IVD will be added.
Vice versa, non conforming** medicinal products can be added to an existing interventional performance study of an IVD. In that case, the interventional performance study of the IVD becomes a combined trial.

For your submission, please follow the instructions below (not valid for ATMPs).

<table>
<thead>
<tr>
<th>Reason for amendment of a trial that was previously approved by Swissmedic</th>
<th>How to submit to Swissmedic</th>
</tr>
</thead>
<tbody>
<tr>
<td>- An IVD used in the trial loses its conformity and becomes an IVD under investigation, or - a conforming IVD will be replaced with a non-conforming* IVD, or - a non-conforming* IVD will be added</td>
<td>Send an application to Swissmedic according to procedures and with the form for authorisation applications of IVD studies (see section 5.2.1.a and annex A6). In your cover letter, mention that the trial was previously approved by Swissmedic as a clinical trial of a medicinal product, the Swissmedic identification number of the trial, and the exact reason for the change to a combined trial. In folder 18 of your eDok, include the Swissmedic form for amendments to clinical trials of medicinal products and the corresponding documents in the subfolders. You need to update the CIP, the CRF, the written patient information, and possibly other study documents. Make sure the IVD and its regulatory status are correctly described in the documents. Make sure that in your project the (S)AE and device deficiencies are also fully captured according to requirements of the IVD regulation. In the CIP, also describe the reporting requirements to Swissmedic for IVD interventional performance studies. See section 7.2.2 and annex A1. Please contact the ethics committee in order to receive instructions on how to submit to them.</td>
</tr>
<tr>
<td>- A conforming medicinal product will be replaced with a non-conforming** medicinal product, or - a non-conforming** medicinal product will be added</td>
<td>Send an amendment to Swissmedic according to procedures and with the form for amendments of IVD studies (see section 7.2.1.a and annex A6). In your cover letter, mention the non-conforming medicinal product and the exact reason for the amendment. In folder 18 of your eDok, include the Swissmedic application form for clinical trials of medicinal products and the corresponding documents in the subfolders. You need to update the CIP, the CRF, the written patient information and possibly other documents. Make sure the medicinal product and its regulatory status are correctly described in the documents. Make sure that reporting duties for clinical trials of medicinal products are correctly integrated. Please contact the ethics committee in order to receive instructions on how to submit to them.</td>
</tr>
</tbody>
</table>

* is not CE-marked, or will be used in the clinical trial outside its CE-marked instructions for use (off-label use), or has been prohibited in Switzerland
** is not authorised by Swissmedic, or will be used in the clinical trial outside of its authorised label (off-label use)
Contacts in case of questions

- General questions: questions.devices@swissmedic.ch.
- Questions concerning an ongoing procedure or an approved clinical trial: Contact the person that is mentioned on Swissmedic correspondence or clinicaltrials.devices@swissmedic.ch
- Questions concerning the Swissmedic eMessage portal: eSubmission@swissmedic.ch

Further information from Swissmedic on clinical investigations with medical devices can be found on the Internet: www.swissmedic.ch/ci

Change history

<table>
<thead>
<tr>
<th>Version</th>
<th>Valid and binding as of:</th>
<th>Description, comments (by author)</th>
<th>Author’s initials</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.3</td>
<td>11.04.2023</td>
<td>Updated contents in section 5.1 (updated decision tree for authorisation applications), section 5.2.5 (flat fee for simplified reviews), section 5.2.1 (EU common specifications for certain class D IVD are now available), and annex A7 concerning in-house manufactured IVD, combined trials (MDCG 2022-10 on combined trials is now available, submissions for combined trials in Switzerland, fees for combined trials, reporting of SUSAR in combined trials, submissions when non conforming products are added to previously authorised trials).</td>
<td>sci</td>
</tr>
<tr>
<td>3.2</td>
<td>27.07.2022</td>
<td>Section 7.2.4: Clarification, the list of reportable SAE and DD needs to be a cumulative list. Section 10: Use of the term 'agent' for a clearer distinction between agents for foreign sponsors and legal representatives of manufacturers or study subjects.</td>
<td>sci</td>
</tr>
<tr>
<td>3.1</td>
<td>08.06.2022</td>
<td>Updated links and references throughout the document. New format for the decision tree in chapter 5.1. Regulatory references updated and reporting form included in chapter 7.1.2.</td>
<td>sci</td>
</tr>
<tr>
<td>3.0</td>
<td>26.05.2022</td>
<td>Doc newly created owing to revision of IVD regulatory provisions</td>
<td>sci</td>
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