Swiss Donation Pathway

Identification, reporting and treatment of a DCD donor

Module — 9

Version 2.0 – February 2026

CNDO
Nationaler Ausschuss für Organspende
Comité National du don d'organes

swiss transplant

CONTENT

For the sake of readability, the generic masculine form is used. However, all references to persons apply to all genders. The term 'organ donation' also includes tissue donation, where applicable.

1.0
Introduction

1.1 History

The donation of organs after cardio-circulatory arrest came at the beginning of the history of organ donation, and it was also common in Switzerland [1]. It was generally recognized that a person's death is imminent once their heart has stopped beating. In the first guidelines of the Swiss Academy of Medical Sciences (SAMS) on the determination of death in 1969, the key criterion was cardio-circulatory arrest, taking priority over the state of brain death with the failure of brain function, despite the heart continuing to beat. Historically, however, donation after brain death (DBD) rapidly became the standard, while organ donation after cardio-circulatory arrest became increasingly uncommon. This development also resulted in the perception of "normal donation" moving towards DBD. With the implementation of the new Swiss Transplantation Act in 2007, all DCD activities were suspended as a result of legal uncertainties [2]. On the initiative of Swisstransplant, all involved experts were invited to a round table in 2009 in order to begin with the reintroduction of DCD in Switzerland [3, 4]. In a legal assessment by Olivier Guillod in 2011, the legal uncertainties with regard to DCD were clarified, and DCD was deemed legally permissible [5]. A completely new DCD programme was subsequently developed, and it was established within Swiss networks [6].

1.2 Key points of DCD

DCD is a combination of two processes – the palliative care of a patient and the facilitation of organ donation. The possibility of DCD must be considered as soon as it becomes clear that a patient's death in hospital is imminent. This generally involves patients in an intensive care unit or resuscitation room, for whom, given the ineffectiveness or futility of the possible therapeutic measures, the decision is made to make a change in the treatment goal towards palliative care. If there is a high probability that the patient will die shortly after life-sustaining medical measures are withdrawn, the patient can be considered as potential DCD donor. This possibility must then be aligned with the patient's wishes, and with medical-ethical guidelines. All decisions and actions are embedded within the palliative care steps of end-of-life care, with the aim of upholding the patient's interests during this phase. Ensuring the best possible palliative care under consideration of the patient's wishes and the needs of their relatives has absolute priority. The question of organ donation is only discussed once a definitive decision has been made to change the treatment objective to palliative care. If the death is considered not natural, the public prosecutor's office must be consulted before the change in the treatment objective towards palliative care. If there are no absolute contraindications (see SDP Module 1), the wishes of the deceased person must be ascertained. In the event of consent, the organs are further evaluated and all details are recorded in the Swiss Organ Allocation System (SOAS). Following verification of the entries, the donor is approved by the Medical Advisor. In accordance with the established algorithms and the available typing data, suitable recipients are selected in line with national allocation criteria.

The change towards palliative measures is planned with great care and implemented in accordance with palliative guidelines [7 – 10]. The relatives are able to accompany the patient during the dying phase (**Fig 1**: Arrow 2). Once cardiac arrest has been confirmed via continuous ECG monitoring and transthoracic echocardiography (TTE), the relatives take their leave.
After a waiting time of at least five minutes, two specialist doctors confirm death on the basis of the neurological examinations described in the guidelines of the Swiss Academy of Medical Sciences (SAMS). Organ procurement is then carried out, either as rapid procurement or under abdominal normothermic regional perfusion (aNRP). Responsibility for the entire process, from donor recognition to the confirmation of death, lies with the treatment team of the intensive care unit. All measures for organ donation, from change of treatment objective to palliative care to the determination of death, are preparatory measures (**Fig. 1**: Arrow 1) and are subject to strict limitations with regard to appropriateness, necessity and consent [10]

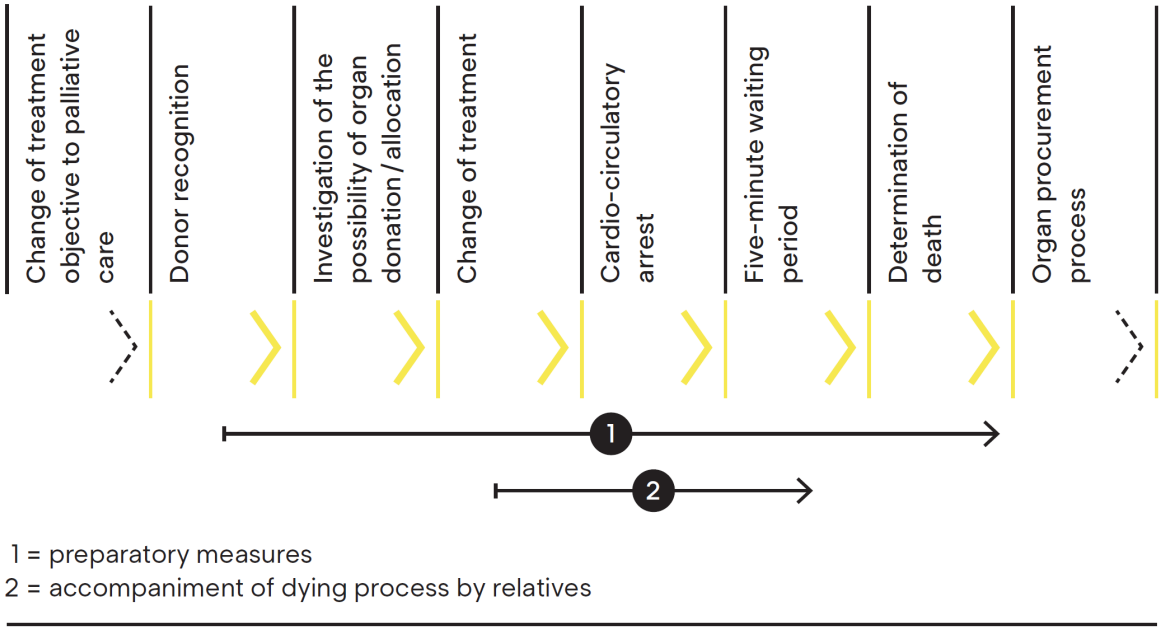

Figure1 : Diagram of DCD process steps

2.0
Donor recognition

Patients with an infaust prognosis and relevant life – support measures are to be considered as potential donors and must be evaluated with regard to donor suitability. Life-sustaining measures must be continued until the patient's wishes have been clarified, in order to ensure medically and ethically sound care and, where appropriate, organ donation.

If there is a likelihood that brain death will occur within the next 48 hours whilst circulatory function is maintained, and the patient is therefore eligible for a DBD donation, this period should be allowed to elapse. According to the guidelines of the Swiss Academy of Medical Sciences (SAMS), organ-preserving therapy with a view to transplantation prior to death is permitted for a period of two days, taking into account the patient's wishes and those of their relatives. If brain death does not occur, a DCD-Donation may subsequently be evaluated.

Any patient who, following consent to organ donation, is not brain dead within 48 hours and who will die rapidly following the withdrawal of life-sustaining medical measures is a potential DCD donor. It is important that the possibility of organ donation is considered before a change of the treatment objective towards palliative care is implemented, in order make the donation possible provided it conforms to the patient's wishes.

2.1 Prerequisite to change the treatment objective to palliative care

A change of treatment objective to palliative care is a prerequisite for organ donation after cardio-circulatory arrest. The decision must be made independently of organ donation and prior to any further assessment. The decision is based on the alignment of the evaluation within the treatment team (prognosis) with the real or assumed wishes of the patient. Once this decision has been made, the question of the possibility of organ donation can be raised.

In 1995, a classification of criteria for cardiac death was developed in Maastricht (revised in 2013) [10].

Maastricht classification

Category I:	Dead on arrival in hospital
Category II:	Death after unsuccessful resuscitation
Category III:	Death after withdrawal of life-sustaining treatment
Category IV:	Cardio-circulatory arrest after death due to primary brain damage
Category V:	Unexpected cardio-circulatory arrest in a critically ill patient

Categories I, II, IV and V correspond to organ donation following an unexpected or uncontrolled cardio-circulatory arrest. Category III corresponds to organ donation following a change in the treatment objective towards palliative care.

In the case of DCD Maastricht III, the agreed change in treatment goal is the fundamental prerequisite that must be met for an organ donation assessment to take place. The change in treatment objective is a medical decision based on prognosis and the wishes of the patient. The prognosis is an assessment of the best possible outcome and the probability that it will occur, but also the likely progression

A change of treatment objective to palliative care can be initiated for two reasons. Firstly, the prognosis is infaust, i.e., short or medium-term survival is not possible, and treatment is therefore ineffective. In this case, the termination of therapy is also indicated from a purely medical perspective.
In the second situation, the prognosis does not meet the expectations of the patient in terms of quality of life, i.e., the continuation of therapy is not in their interest in view of the anticipated poor quality of life. This is referred to as futile care. Here too, a change of treatment objective to palliative care is indicated, which must be justified by the patient's presumed wishes as expressed in an advance directive or as determined through discussions with relatives.

It is essential in the evaluation of the treatment objective that this evaluation is carried out with maximum care and consideration by the treatment team. This decision must not be influenced by the possibility of organ donation. The prognosis assessment and the alignment with the patient's wishes comprise subjective elements and must be protected from any possible conflicts of interest. It is for this reason that any change of treatment objective to palliative care must always be clearly determined and carefully documented before the possibility of organ donation is investigated. Members of the treatment teams of potential transplant candidates must not be involved in the decision to change a treatment objective to palliative care. Organ donation can only be considered if the change in treatment goal has been agreed upon by consensus with the relatives.

Figure2 : Basic requirements for organ donation following cardiac arrest

2.2 Identification of DCD donors in the emergency department / intensive care unit

Potential DCD donors are usually in the accident and emergency department or the intensive care unit. If the patient is in the accident and emergency department, it is recommended that they be transferred to the intensive care unit for further decisions and measures, as there is usually more time and expertise available there to implement a comprehensive end-of-life care plan and the associated organ donation assessment.

Ideally, an initial assessment should be carried out prior to transfer to an intensive care unit to determine whether the patient is eligible for organ donation and whether consent can generally be assumed. In many cases, the latter is not possible, as relatives should not be confronted with the question of organ donation whilst in the accident and emergency department.

It is generally advisable to consult a medical professional from the organ donation networks at an early stage before any change in treatment goal is implemented (prior to any extubation and/or discontinuation of life-sustaining medical measures, such as ECMO in cases of terminal heart failure).

A potential donor must be identified as such quickly, particularly in the emergency department but also in the intensive care unit if they are unstable, so that the donation can be carried out if it is in accordance with their wishes.

2.3 Preparatory measures in the treatment of a DCD donor

Measures taken during the treatment of a possible DCD donor that serve the sole purpose of organ donation are considered preparatory measures, are subordinate to the palliative process and are limited by law [2]. All decisions and actions form part of the palliative therapy stages of end-of-life care, with the requirement to protect the interests of the patient in this final phase. Preparatory measures are permissible if they are essential for a successful transplantation and if they are reasonable given the circumstances. Treatment generally involves continuing intensive care measures in the sense of organ-preserving therapy and the examinations necessary for the organ donation assessment. This requires the patient's consent, or, if unknown, the consent of the relatives. Ante mortem mechanical resuscitation and the insertion of an arterial cannula for the administration of cooling fluid are prohibited by law [10].

3.0
Donor evaluation

Once a potential organ donor has been identified, it must be determined whether the criteria for organ procurement are met. It must be established whether organ donation is in accordance with the patient's wishes and whether it is medically feasible and ethically and legally permissible. Four questions must be answered before the specific planning of organ procurement and allocation can begin (see Figure 3):

- Has the decision about a change of treatment objective to palliative care been taken?
- Does the organ donation, including the necessary preparatory measures, correspond to the patient's wishes (consent)?
- Will the patient die rapidly, such that organ donation is possible (time to death under 2 hours)?
- Are there no absolute contraindications to organ donation?

Some questions are easy to answer, whilst for others it is advisable to contact a medical professional with relevant experience as early as possible, i.e. a member of staff at the hospital, the relevant organ donation networks or Swisstransplant.
For an organ donation to take place, all four questions must be answered with 'Yes'; otherwise, organ donation is not possible. The process is stopped and no further clarifications are necessary.

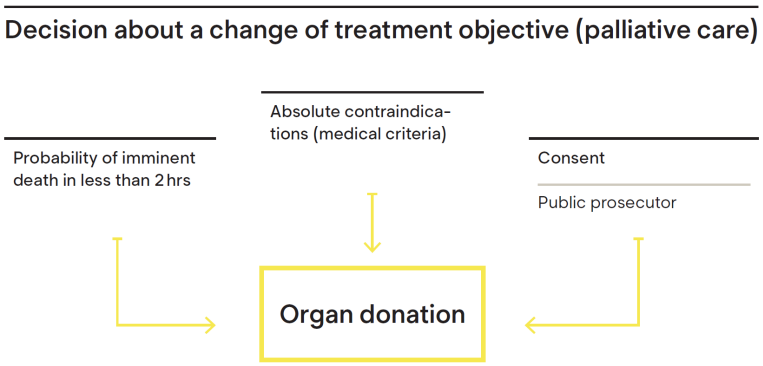

Figure3 : Organ donation assessment

3.1 Consent

If there is no documented expression of will (donor card, living will or other documents), then the patient's wishes with regard to organ and tissue donation must be clarified in the discussion with the relatives. If the patient's wishes cannot be determined with certainty, the relatives must decide in accordance with the patient presumed wishes. If there are no close acquaintances who can provide a statement, a donation is not permitted.
It is important that the relatives are fully informed about the entire process and the necessary medical measures. The timeline of the organ donation process must be outlined, and the location where treatment will be withdrawn and the procedure at that

point must be discussed. It is also important to explain to the relatives that an organ donation may not be possible (exceeding the 120-minute agony phase, no allocation of organs based on medical findings) and how the process proceeds in this situation.

3.1.1 Unclear / unusual death

In the event of an unnatural death – accident, crime, suicide, unclear cause of death – the legal authorities must be notified in accordance with the applicable cantonal procedure in order to obtain permission for organ procurement. This must take place after consent to organ donation has been given, but before a change in treatment and thus before death occurs. It must be clarified which public prosecutor's office is responsible (place of the event vs. place of death). The public prosecutor's office will then issue its instructions (whether a pre-mortem body search is required, which organs may be removed, and whether a forensic post-mortem examination must follow). Cantonal regulations must be complied with, especially in the event of the transfer of a potential DCD donor to a central hospital.

3.2 Probability of imminent death

The key criterion for identifying a patient who is eligible for a DCD-Donation is their dependence on mechanical or pharmacological support of vital functions, such that they will die within a short time – in Switzerland within two hours – if this support is withdrawn. This is typically the case with high dependence on catecholamines, mechanical circulatory support or mechanical ventilation. The underlying cause is very often severe neurological damage, cardiovascular insufficiency or respiratory failure; frequently it is a combination of these conditions.

The assessment of **the probability of imminent death**, i.e. the expected duration of the dying phase, is of central importance in making the decision whether a DCD-Donation can take place or not.

The terminal phase, with its five-minute waiting time, and the preparation for surgery can result in ischaemic damage to the organs intended for transplantation. If the terminal phase lasts too long, the organs can no longer be transplanted with an acceptable outcome. Consequently, only patients for whom the terminal phase following the withdrawal of life-sustaining measures is short enough to ensure that ischaemia-related damage to the organs remains within tolerable limits are considered as potential donors. A short terminal phase can be expected if intensive care support for the vital organs is high, leading to cardio-circulatory arrest shortly after such support is withdrawn. The experience of the intensive care physician and the clinical examination, incorporating the **Wisconsin Score** and/or **DCD-N Score,** are important parameters for a reliable assessment [11, 12]. If the probability is high enough, the patient is a potential donor and organ donation can be planned. If it is low, organ donation should not be planned, as a failed attempt at organ donation can place a considerable strain on the end-of-life care process. The decision lies with the treatment team and must always be made in the best interests of the patient and their relatives.

3.3 Contraindications

The following contraindications exist for organ donation:

- Newborns < 28 days old or < 44 weeks postmenstrual age
- Therapy-refractory systemic infections or infections of unknown origin
- Certain degenerative diseases of the central nervous system (CNS) e.g., rabies, prion disease, etc.
- Active leukemia, lymphoma, or plasmacytoma

Regarding malignant neoplasms, a highly differentiated approach is required nowadays. In principle, malignant neoplasms can be transmitted to immunosuppressed organ recipients from donors with known or unknown malignant tumours, but this risk is small if donors are carefully selected (only approximately 0.05% of organ recipients develop a tumour transmitted from the donor) [13]. A history of cancer – or, in certain circumstances, even an active tumour – is therefore not an absolute contraindication. The expected risk of tumour transmission must be carefully weighed against the benefits of a possible transplant. Advances in medicine and recent findings allow for a more liberal inclusion of donors with neoplasms, especially in the case of early-stage, locally limited tumours; in some cases, a transferred neoplasm in the recipient may even be treatable. However, particular vigilance should be exercised with regard to the detection of malignant neoplasms in the donor. In this context, a detailed medical history of the donor is very important, as are additional laboratory tests including tumour markers, although routine tumour marker screening is not considered to be effective [13]. Imaging techniques should be used carefully, including CT imaging of the thorax, abdomen and pelvis. A tissue biopsy during organ removal can help to rule out malignant tumours. During organ removal, all intrathoracic and intra-abdominal organs should be inspected (including those not intended for transplantation).

The recommendations published to date classify tumours based on the probable risk of transmission. These recommendations are based on literature references, registry data and expert opinions, and are assessed differently internationally. In general, organ donors with curatively treated tumours who have undergone appropriate careful follow-up care and have been documented as completely tumour-free for a sufficient period of time are acceptable for carefully selected recipients. There is no international consensus on the period of time required to be tumour-free before donation; it varies between > 5 and > 10 years depending on the tumour type and stage [13].

Primary tumors in the central nervous system (CNS) account for up to 1.5% of causes of death in organ donors [13]. The two most important factors in assessing CNS tumors in terms of their transmission risk in the context of organ donation are 1) the histologically determined WHO grade of the CNS tumor and 2) any tumor intervention (surgery, shunt, chemotherapy, and/or radiotherapy). In general, the higher the tumor grade and the more interventions, the higher the risk of transmission [13]. However, a study published in 2023 from England showed that the risk of tumor transmission in transplants from deceased donors with primary brain tumors is lower than previously assumed, even in donors who are considered high-risk. In 778 transplanted organs from 282 deceased donors with primary brain tumors, including 262 with high-grade brain tumors, no transmission could be detected [14].
In malignant melanoma, a 74% transmission rate and a 60% mortality rate in recipients have been demonstrated [13]. Published data remain insufficient, so that a high transmission rate for malignant melanoma must still be assumed. In view of this fact, a superficial tumor with a tumor thickness < 1.5 mm after curative tumor resection and a

recurrence-free period of > 10 years is considered an acceptable risk with a low transmission rate for the recipient.

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There are no contraindications in the following cases:
- Primary basal cell carcinoma of the skin
- Cervical carcinoma in situ
- Local, clearly defined tumor of low malignancy
  e.g., renal cell carcinoma < 2 cm

In **unclear cases**, Swisstransplant should always be consulted for donor evaluation before a potential donor is categorically excluded. The **Donor Evaluation Tool (DET)** is available for this purpose, enabling the Swisstransplant medical advisor to quickly obtain a professional assessment of donor suitability. The medical advisors are familiar with the constantly changing medical exclusion criteria and are also aware of the situation on the national waiting list (if a patient urgently needs a life-saving organ, the transplant centres are also prepared to take certain additional risks, as otherwise the patient will not survive).

In addition, the following general points should be noted:
- Advanced age is not a contraindication for organ donation.
- Hepatitis C virus (HCV): HCV antibody-positive and PCR-negative donors can donate organs to HCV antibody-negative recipients. Organs from HCV antibody-positive and PCR-positive donors may be transplanted to recipients with urgent status. In both cases, the recipient must give their written consent prior to transplantation.
- Hepatitis B virus (HBV): HBV antibody-positive and HBsAg-negative donors may donate organs to HBV antibody-negative recipients. The recipient must give their written consent prior to transplantation.
- Human immunodeficiency virus (HIV): Organs may be transplanted provided that the recipient also tests reactive for HIV. The recipient must give their written consent prior to transplantation.

In all **unclear cases**, it is recommended that a donor evaluation be carried out by Swisstransplant using the **Donor Evaluation Tool**.
The decision as to whether a patient is medically suitable for organ and/or tissue donation is the responsibility of Swisstransplant.

3.4 Transfer of a potential donor to an organ procurement hospital

If organ procurement cannot be carried out on site due to the hospital's structural conditions, the doctor refers the patient to an organ procurement hospital with the consent of the relatives. If the public prosecutor's office is involved (suspected violent crime, accident, etc.), it must be contacted before the transfer and must approve the plan

The transfer is organised by the treatment team and the transplant coordinator. A thorough handover between the doctors responsible is of paramount importance. In particular, the decision regarding the change in treatment objective must be well

documented and communicated, as the receiving doctor must complete the death certificate.

To avoid additional costs for the relatives and the referring hospitals, Swisstransplant covers the transfer of the potential donor and the return of the deceased patient to the point of origin.
The relatives must be informed in detail about the procedure. This includes the fact that there will be a change of team, that the above-mentioned donor criteria will be re-evaluated, and that there is a possibility that, despite the transfer, organ donation may not be possible.

Further details: See SDP Module 8 'Transport Logistics'.

4.0
Dying process

4.1 Immediate preparation / planning

The dying process and the subsequent organ procurement must be carefully planned. A DCD-Donation involves two processes: the change in treatment objective to palliative care and the facilitation of organ donation. The change in treatment and the dying process are governed by end-of-life care guidelines [7]. However, to enable organ donation, the dying process must be organised accordingly, particularly in terms of timing and location.

The change of treatment can take place in the intensive care unit or in the operating theatre. Should the patient's death not occur within the defined time frame, the DCD process is terminated, and palliative care of the patient will continue. The relatives must in any case be informed of this possibility in advance, as any failure of the donation process is often experienced as an additional burden.

Furthermore, the involvement of specialists such as neurologists for the determination of death, anaesthetists for re-intubation, cardiologists for the possible deactivation of pacemakers, and support staff for the relatives must be planned in advance.

4.2 Change of treatment, dying phase, confirmation of death

Following careful preparation of the patient and the environment, the relatives are taken to the patient so that they can accompany the patient through the dying phase. Terminal weaning, terminal extubation and palliative analgo-sedation are carried out by the treatment team in accordance with intensive care principles, in the patient's best interests and taking the palliative situation into account. Once life-sustaining measures have been withdrawn, the acute dying phase begins, leading to desaturation and increasing cardiovascular failure, and ultimately to cardio-circulatory arrest. Once cardio-circulatory arrest has been confirmed via continuous ECG monitoring and transthoracic echocardiography (TTE), the relatives say their goodbyes and are escorted out. After a waiting time of at least five minutes, death is certified in accordance with the guidelines of the Swiss Academy of Medical Sciences (SAMS). The conclusion of the examination corresponds to the time of death.

4.2.1 Determination of circulatory arrest by TTE

In accordance with the recommendation of the StA CNDO dated 22 March 2022, cardio-circulatory arrest is confirmed by means of transthoracic echocardiography (TTE). TTE is chosen for determining cardio-circulatory arrest because palpation of the absence of a pulse appears unreliable and the electrocardiogram (ECG) may show electrical activity without the presence of mechanical cardiac action.

If residual activity is detected in the four-chamber view of the right heart, cardio-circulatory arrest may also be identified if the aortic valve is no longer opening. The persisting inactivity presents as hyperechogenicity in the left ventricle and in the outflow tract (blood coagulation). However, this is not always straightforward. The lack of the arterial waveform provides further evidence when the ECG continues to show electrical activity. Experience has shown that it is often difficult to explain why the patient has been pronounced dead to relatives when the ECG continues to show sonographic activity in the right heart. It is therefore important to involve the relatives in the assessment of the diagnosis and to explain it to them.

5.0
Organ procurement

Compared to DBD, the organ-damaging warm ischemia time in DCD is a decisive factor, i.e. the period during which, following the withdrawal of life-sustaining measures, the organs are no longer adequately perfused and thus no longer supplied with oxygen, but still maintain body temperature. Organs can be irreversibly damaged during the warm ischemia time.
The functional warm ischemia time begins at MAP (mean arterial pressure) <50 mmHg and ends at the start of cold perfusion or, according to the NRP protocol, with the start of normothermic regional perfusion for the abdominal organs. The maximum tolerated functional warm ischemia time varies from organ to organ:

Maximum functional warm ischemia time by organ[1] :
Heart: 30 min
Pancreas: 30 min
Liver: 50 min (if shorter, reserve recipient)
Kidneys: 120 min
Lungs: 120 min

There are currently **two different** procedures for DCD organ procurement in Switzerland:

5.1 Rapid procurement (RP)

In rapid procurement (RP), the team begins preparations for organ procurement immediately after death has been confirmed. First, the abdominal cavity and, if necessary, the thoracic cavity are opened to provide rapid access to the organs to be removed. The large vessels (usually the aorta and vena cava) are then cannulated to ensure rapid perfusion with cold preservation solution. This perfusion lowers the temperature of the organs and reduces metabolism, thereby limiting damage caused by ischaemia. At the same time, the blood is drained via a drainage system so that the preservation solution can circulate unhindered. Once the organs are sufficiently cooled and protected, they are prepared and removed in a standardised sequence. All other technical aspects – such as the sequence, variations depending on the organ donation, or instrumentation – are described in the applicable guidelines and must be strictly adhered to (see Chapter5.3).

[1] Under reserve of shorter tolerated maximum functional warm ischemia times as defined by the individual transplant centres on their own.

5.2 Procurement under abdominal normothermic regional perfusion (aNRP)

In organ procurement under abdominal normothermic regional perfusion, cannulation of the arterial and venous vessels takes place following confirmation of death. The following two techniques may be used for this purpose:

5.2.1 Percutaneous cannulation

This procedure is carried out by experienced intensive care specialists in the intensive care unit or in an adjacent room. The cannulas and the occlusion balloon in the descending thoracic aorta are inserted percutaneously, and their position is monitored using transthoracic echocardiography and fluoroscopy.
After a perfusion time of two to four hours, organ procurement (with the exception of the heart and lungs) can begin. From this point onwards, mean arterial blood pressure must be monitored; it should reach a target value of 60 mmHg. During perfusion, organ parameters can be monitored through regular blood sampling, and the patient is transferred to the operating theatre at the ideal time.
If the lungs and/or heart are also to be removed, transfer to the operating theatre takes place immediately after the start of aNRP so that the thoracic organs can be rapidly cooled and removed. In the case of lung procurement, the patient is reintubated and ventilated again. As the lungs are not reperfused, procurement takes place immediately (rapid procurement). In the case of heart procurement, blood must be drawn for OCS priming before the start of abdominal perfusion. Regional abdominal perfusion then begins simultaneously with the cold perfusion of the thoracic organs.
Once regional abdominal perfusion has been completed, organ procurement of the abdominal organs is carried out in the same way as in a DBD procedure.

5.2.2 Surgical cannulation

This technique is performed by experienced visceral surgeons in the operating theatre. Following laparotomy and sternotomy, the vessels (aorta and inferior vena cava) are cannulated under direct visualisation. The descending aorta is clamped or ligated just above the diaphragm.
If the lungs and/or heart are also being retrieved, the same procedure as described above is followed.

5.3 Documents

The following detailed information and instructions on DCD organ procurement are currently available on the Swisstransplant extranet [15]:

Rapid procurement (RP)
- DCD Scheme: Rapid procurement (graphical representation of the timeframes to adhere to in each step)
- SOP for Multi-Organ Retrieval DCD (preparation and procedure of rapid procurement)

Abdominal normothermic regional perfusion (aNRP), percutaneous cannulation
- DCD Scheme: Normothermic regional perfusion (aNRP) of abdominal organs
- DCD Scheme: Normothermic regional perfusion (aNRP) of abdominal organs and lungs
- DCD Scheme: Normothermic regional perfusion (aNRP) of abdominal organs and heart (with or without lungs)

Heart retrieval using the Organ Care System (OCS)
- Guideline DCD Heart Procurement OCS (inclusion criteria, OCS preparation, perfusion parameters, logistics)
- SOP OCS Heart Retrieval RP (retrieval procedure)
- SOP OCS Heart Retrieval aNRP (retrieval procedure)

6.0
After organ procurement

6.1 Restoration of the donor's body

It goes without saying that the deceased donor must be treated with dignity and respect by all persons present before, during and after organ procurement. Once the retrieval procedure has been completed, all cannulas and catheters are removed and the puncture sites dressed. The donor's body is washed, dressed in a fresh shirt and covered with a cloth. The donor's body is then transferred to the mortuary or – depending on the circumstances at the respective hospital – to a designated location. The donor's body is then released for burial.

If a post-mortem examination is scheduled for the donor following the procurement, all cannulas, catheters and the tracheal tube must be left in place.

6.2 Support for the relatives following the donation

Support for the family throughout the entire organ donation process is provided by the coordination team (see also Module 2: 'Taking care of relatives and communication').

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Changes

Date	Version	Changes
February 2026	2.0	Entire module: - Changes/corrections to improve readability. - New chapter structure introduced. - References revised and updated. Chapter 3.2. "Probability of imminent death": Supplemented with DCD-N Score. Chapter 3.3 "Contraindications": Procedure for HCV, HBV and/or HIV clarified and reference made to the Donor Evaluation Tool (DET). Chapter 5.2 "Procurement under abdominal normothermic regional perfusion (aNRP)": Distinction between percutaneous cannulation and surgical cannulation added. Chapter 5.3 "Documents": Chapter newly added.
February 2023	1.1	Correction
December 2020	1.0	Initial version

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