

## Work-schedule and time-schedule for STEP

### General clinical considerations: (exchange = 2-way exchange, cycle, or chain)

- Donors, recipients (and kidneys) are identified by SCTP-numbers
- Match-runs should be scheduled, in good advance, by the STEP steering committee (SC) and Scandi transplant (SCTP). Dates should be communicated to the local STEP contacts (mail) and on the SCTP web-page ([link](#))
- Medical data on donors (incl. results of radiological exams) should be available in YASWA (separate list). Complete patient records and complete radiological examinations exchanged at specific request
- Communication between participating centres is managed mainly by the local STEP coordinators
  
- Altruistic donors could be used to start kidney chains
- Kidney chains should preferably be performed without (or with limited) interruption and could be closed by a directed donation to the waiting list
- Kidney chains should preferably start and end in the same country
- Nested exchanges should be considered (and prepared) as possible alternatives in case of cancellations or withdrawals
  
- LD-pairs are managed locally and kidneys are shipped. This implies that the main focus of the participating centres should be on:
  - o The local donor – can donation be performed safely, can a good functioning kidney graft be procured and shipped?
  - o The local recipient – is the offered kidney suitable for the recipient and can transplantation be performed with a good result?
- Possible unforeseen events and complications related to kidney exchange should be discussed with the LD-pairs (including last-minute cancellations, non-transplantable recipients/kidneys and alternative allocation of donated kidneys)
  
- Dates for kidney exchanges should be decided in collaboration between the participating centres
- Kidney exchanges should normally be performed within 3 months after being identified in a match-run
- Exchanges should preferably be scheduled for Wednesdays or Thursdays
  
- To reduce the risk of unforeseen events (such as late cancellations), LD-pairs should be adequately monitored up until the exchange
  
- When performing exchanges, donor surgery (anaesthesia, start of operation and kidney removal) should be coordinated and adjusted to the transport time schedule
- When performing exchanges, there should be a dedicated coordinator at each participating centre, handling intra-operative communication and supervising transportation
- Transportation is planned by the organ coordinators at participating centres

BEFORE the match-run:

1. Three weeks before a scheduled match-run.
  - a. SCTP will send an email reminder to the STEP SC and to local contacts on all participating centres about the upcoming match-run
  - b. Medical data, HLA-data (incl. acceptable mismatches) and antibody data on new LD-pairs should be finalized in YASWA
  - c. Medical data, HLA-data (incl. acceptable mismatches) and antibody data on existing LD-pairs should be updated in YASWA (if necessary)
  
2. Last week before the match-run.
  - a. **Deadline (day -7)** for data entry into YASWA on LD-pairs that should take part in the upcoming match-run
  - b. SCTP will perform a quality-check on the data entered into YASWA and send a list with LD-pairs to be confirmed by the local contacts on each participating centre
  - c. **Deadline (day -1)** for confirming incompatible LD-pairs to SCTP

AFTER the match-run:

1. Day of the match-run (**day 0**)
  - a. SCTP will send the result of the match-run to the STEP SC and to all centres participating in STEP
  - b. Recipients in the identified exchanges are temporarily withdrawn from the kidney waiting list by SCTP
  
2. First week after the match-run
  - a. **Deadline (day +7)** for local immunological and medical evaluation of the identified exchanges, by the participating centres
    - i. Are the exchanges acceptable?
    - ii. Basic donor medical data and results of radiological exams should be available in YASWA
    - iii. Complete donor medical files and/or radiological exams exchanged only at specific request\_(managed by local STEP-coordinators)
  - b. **TC meeting (day +7)** with the participating centres (summoned by the STEP SC)
    - i. Decision to proceed or not?
    - ii. Appointment of facilitating centre/facilitator for each exchange
      1. Coordinates work/activities in the exchange
    - iii. Appointment of local STEP-coordinators at each participating centre
      1. Coordinates local work/activities
      2. Communicates with the other centres participating in the exchange
    - iv. First round of cross-matches is scheduled/planned
  
3. Second week after match-run
  - a. First round of cross-matches is performed
    - i. Coordinated by local STEP-coordinators
  - b. **Contact (day +14)** between the local STEP coordinators
    - i. Are cross-matches negative?
    - ii. Proceed or not?
    - iii. Possible date-s for exchanges discussed (preferably within 3 months from match-run)
  
4. Third week after the match-run
  - a. Local discussion with LD-pairs
    - i. Information on exchanges and consent to proceed?
    - ii. Information on suggested date-s
  - b. Contact between local STEP-coordinators
    - i. Are all centres and LD-pairs willing to proceed?
    - ii. Dates for exchanges are confirmed
  - c. **Deadline (day +21)** for final decision to proceed and plan for the exchange

BEFORE the exchange:

1. Four weeks before the exchange
  - a. Second round of cross-matches are performed
    - i. Coordinated by local STEP-coordinators
  - b. Contact between local STEP-coordinators
    - i. Verification of negative cross-matches
  - c. Pre-treatment could be started (if required)
2. Two weeks before the exchange
  - a. Transportation is discussed/planned between organ coordinators at the participating centres
3. One week before the exchange
  - a. TC between participating centres (summoned by the facilitating centre)
    - i. Unresolved issues?
    - ii. Appointment of dedicated organ coordinators to be present in OR during exchange, including dedicated phone number-s
    - iii. Preservation issues
    - iv. Transportation issues (incl. backup plan-s), estimated times of arrival at receiving centre?
4. Day before the exchange
  - a. Contact between local STEP-coordinators
    - i. Are LD-pairs operable?

DURING the exchange:

1. Day of the exchange
  - a. Close communication between dedicated organ coordinators during exchange, including:
    - i. Anaesthesia
    - ii. Start of surgery
    - iii. Progress, problems?
    - iv. Ready to remove kidney – synchronized decision to clamp renal vessels?
    - v. Kidney removed, time of cold perfusion (hh.mm)
    - vi. Kidney on its way
    - vii. Reports during transportation
    - viii. Kidney has arrived
    - ix. Kidney has been transplanted, time of re-perfusion (hh.mm)
  - etc.

AFTER the exchange:

1. Day after the exchange
  - a. Contact between local STEP-coordinators
    - i. Post-operative status of LD-pairs and transplanted kidneys
    - ii. Registration of cold ischemia times for transplanted kidneys in YASWA

<b>STEP: Basic clinical information on living kidney donors required in YASWA</b>
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**Exchange of complete (anonymized) medical records and radiology only at specific request**

1. Basic data
  - a. Age (years)
  - b. Gender (F/M)
  - c. BW (kg)
  - d. Height (cm)
  - e. BMI
2. Co-morbidity
  - a. If YES (description in free text)
3. Ongoing medication
  - a. If YES: (description in free text)
4. Renal
  - a. P/S-Creatinine
  - b. Clearance: adjusted (mL/min/1.73m<sup>2</sup>) and non-adjusted/absolute (mL/min)
  - c. Side selection (for donor nephrectomy) by center performing donor surgery
    - i. Right or left (R/L)
    - ii. Split-function R/L (%)
    - iii. Number of arteries (after nephrectomy) (n)
    - iv. Number of veins (after nephrectomy) (n)
    - v. Normal urinary outflow (Y/N)
    - vi. Any anomalies? (description in free text)