

Service Level Agreement between the Eurotransplant Reference Laboratory and the Tissue Typing Laboratory in Leiden

The Eurotransplant Reference Laboratory (ETRL) is the leading organizer for transplantation related immunological proficiency testing in Europe. It is the link between Eurotransplant and the tissue typing laboratories affiliated to transplantation centres collaborating within the framework of Eurotransplant, or to countries exchanging organs with Eurotransplant.

The main activities of the ETRL are:

1. Organization of the External Proficiency Testing (EPT) including the release of the certificates of fulfilment and/or participation.
2. Organization and supervision of the Acceptable Mismatch (AM) program for highly sensitized patients.
3. Provision of immunological back-up for all transplant centres and the Eurotransplant allocation office.
4. Quality assurance and training of all tissue typing laboratories affiliated to Eurotransplant, as well as training and guiding of new laboratories and/or laboratories situated in possible future member states of Eurotransplant.
5. Performing histocompatibility related assays for laboratories not accredited by the European Federation for Immunogenetics (EFI), situated in future member states of Eurotransplant.

The Tissue Typing Laboratory in Leiden (NLBTT) is a renowned EFI and ISO accredited laboratory for histocompatibility testing, including HLA typing at low, medium, and high resolution level, screening for transplantation relevant antibodies, as well as crossmatching. For Eurotransplant related activities, NLBTT has the same responsibilities and competences as any other Eurotransplant-affiliated laboratory.

The ETRL and NLBTT agree that for the following activities ETRL can utilize the facilities, infrastructure and knowledge of the NLBTT. The responsibilities for these activities are as follows:

1. External Proficiency Testing:

ETRL:

- The EPT manager notifies the senior technician of the NLBTT screenings lab on the shipment dates of the upcoming EPT exercises in a timely manner. In case of potential planning issues, the senior technician of the NLBTT screenings lab will directly contact the EPT manager. Practical issues regarding the shipment will be discussed with the personnel from NLBTT that are directly involved with the shipment.
- Release the information on the shipment dates of upcoming EPT exercises.
- Inform NLBTT on the required number of samples for EPT exercises in case of reference testing.
- Select blood samples for HLA typing and crossmatch EPT exercises.
- Select sera from the serum bank for screening and crossmatch EPT exercises.
- Active participation in the shipment of EPT samples and final inspection by the EPT manager.
- Analysis of the data reported by the participants.

- Report the results to the participants.
- Release certificates at the end of every calendar year.

NLBTT:

- Provide support in logistics of EPT sample shipment following the appropriate SOP.
- Perform reference testing of EPT samples upon request, within the deadline as set for the EPT or within two weeks after request of LMX and Luminex SAB tests.
- Prepare IgM control serum.

2. Acceptable Mismatch program:

ETRL:

- Evaluate eligibility of all patients submitted to the AM program.
- Is responsible for the administration and providing information to the NLBTT about the patient samples to be tested for the AM program.
- Evaluate all relevant histocompatibility data and accept or deny patients for inclusion into the AM program following the Eurotransplant manual Chapter 10.
- Inform the transplant centres on the decision regarding eligibility for the AM program, and request the signed acceptance form when appropriate.
- Register the patients into the AM program and make changes in histocompatibility status when required.
- Perform updates at the request of recipient centers.
- Regular checks to ascertain whether recipients still meet the criteria of the AM program.
- Perform data analyses with respect to all matters affecting the AM program.
- Release specifications for the AM program.
- Release SOP for NLBTT on how to deal with AM requests arriving from other centres.

NLBTT:

- Is responsible for taking delivery, processing and storage of patient samples requested by ETRL following the appropriate SOP. In case of uncertainties the NLBTT will contact the ETRL for clarification.
- Perform a CDC screening once a month for sera from all AM candidates that have arrived since the last CDC screening.
- Perform requested Luminex SAB assays within one week of request date if the standard assay is requested. In case of the non-standard assay within 3 weeks after request.
- Perform additional antibody screening, crossmatches, and HLA typing for (potential) AM patients if requested by the ETRL.
- Perform additional crossmatches within 4 weeks after request.
- The abovementioned turnaround time will currently not always be met as NLBTT has a temporary shortage of trained technicians. It is anticipated that from 01-06-2023 NLBTT will be able to meet the listed turnaround times. In case the turnaround time is not (expected to be) met, NLBTT will inform the ETRL immediately.
- Report the raw data of the results to the ETRL of antibody screening, crossmatches and HLA typing of (potential) AM patients as requested by the ETRL.
- Provide back-up for administrative tasks related to the AM program. This back-up works according to the rules and regulations of the AM program as described in the Eurotransplant manual Chapter 10.

3. Immunological back-up

- The ETRL offers a 24/7 immunological back-up for all transplantation related immunological aspects both to the Eurotransplant allocation office and the transplantation centres. This duty is shared between immunologists of the ETRL and NLBTT with a back-up and final responsibility by the ETRL.

4. Quality assurance and training of tissue typing laboratories affiliated to Eurotransplant.

ETRL:

- Training of and visits to laboratories with performance issues. Establishment of an individual scheme for typing and screening for laboratories of new member states of Eurotransplant.
- Visit tissue typing laboratories for educational purposes.
- Collaborate with the local person in charge of the implementation of this country in Eurotransplant.
- Invite, after consultation of NLBTT, delegates of other tissue typing laboratories for visits/training at NLBTT.

NLBTT:

- Perform HLA typing and antibody screening of the patients of the country in question at the request of the ETRL and report the data to Eurotransplant/ETRL.
- Provide assistance in terms of methods and practical and/or theoretical applications to the visiting laboratory.

5. Tests on behalf of non-EFI accredited laboratories of future Eurotransplant member states.

ETRL:

- Send requests to NLBTT to perform HLA typing, antibody screening and identification, acceptable mismatch determinations for patients of possible future member states. The ETRL will arrange financial compensation by Eurotransplant where applicable.

NLBTT:

- Perform assays as requested by the ETRL and send the results to the ETRL.

Data issues

NLBTT will not be made aware of any histocompatibility data that needs to be assessed in the framework of the EPT as organized by the ETRL. EPT results will be published on the ETRL website where it is accessible to all participating tissue typing laboratories simultaneously. Data storage of the ETRL and NLBTT are completely separated and ETRL data is not accessible to NLBTT co-workers and vice versa.

Scientific issues

Studies with respect to HLA typing, screening for transplantation-relevant antibodies, crossmatching, and new relevant methodologies can be initiated by either the ETRL or NLBTT and will be performed in mutual understanding. Studies based on the Eurotransplant databases can only be done if the ETRL is fully informed and involved.

Additional activities not directly related to Eurotransplant

The ETRL aims to increase the quality of other European EPT by storing of samples from other European EPT programs, for eventual typing in case of disputed discrepancies. Shipment of selected samples to other EPT organizers for screening with the help of NLBTT.

The AM program officer organises the internal proficiency testing for the immunological backup regarding AM offers. This yearly exercise involves selecting 12-15 AM offers for analysis by the immunologists on call.

Miscellaneous

This is a Service Level Agreement for indefinite duration which can only be terminated upon mutual agreement of signees with a notice period of 1 year.

The responsible persons of the ETRL and NLBTT meet at least every 2 years for a revision and/or prolongation of this SLA. Other issues dealing with the daily work will be discussed at the level of the technical supervisors.

Leiden, 04-11-2022

On behalf of NLBTT,

Dr. D.L. Roelen:



On behalf of the ETRL,

Dr. S. Heidt:

