



Diagnosis and lab activities

The haematology department focus on diagnosis of haematological and haemato-oncological pathologies combining morphological and flow cytometric analyses of peripheral blood smears and bone marrow aspirates as well as other materials including bronchial washes, pleural effusions, cerebrospinal fluid (CFS), etc. In addition, cytogenetic analyses are performed in collaboration with the EOLAB.

The haematology laboratory is also responsible for the processing of hematopoietic stem cell products. This comprises freezing and storage of peripheral stem cells for the purpose of autologous transplantation. This activity is integrated in Transplants Unit of IOSI and is the only one in the Canton Ticino to be accredited according to the European standards JACIE.

Counselling

The clinical activities of the hematology service comprise the treatment of all hematological disorders. Patients with haemato-oncological disorders requiring intensive chemotherapies are treated in collaboration with the colleagues from oncology at the Oncology institute of Southern Switzerland in Bellinzona. Also patients requiring autologous hematopoietic stem cell transplantation are treated in Bellinzona. For the treatment of acute/chronic leukaemia and myelodysplastic diseases the haematology service actively collaborates in the Swiss Group of Clinical Research on Cancer (SAKK).

The outpatient service of the hematology offers assessment and treatment of haematological diseases including patients with any kind of coagulation disorders. Moreover, the medical team of haematology unit offers counselling for other clinics (surgery, gynaecology, medicine, etc.).



Characteristics and delivery of the service

How to access lab services

The diagnostic service of the laboratory can be accessed by clients inside the EOC and by external clients (clinics, medical offices). If possible, we ask you to announce bone marrow samples for morphological analysis and flow cytometry in advance to the laboratory.

How to arrange appointments

Appointments for patient examination, admission or second opinions can be made through the secretarial office of the Haematology service.

Sample delivery

The samples for flow cytometry must reach the laboratory within 72 hours from the sampling if they are sent in heparin. EDTA-samples should arrive in the laboratory within 24 hours. Liquor specimens should be processed within two hours after the examination.

Laboratory results

Laboratory reports are sent directly to the physician. For physicians inside the EOC, analyses results are available in electronic version on the internal computer network. Upon request, test results will also be reported by telephone. The written report is sent as soon as possible, usually within 1-3 days after the analysis.

Diagnostic offer

The laboratory analysis includes:

- morphologic assessment of peripheral smears, bone marrow aspirate, cytopsin preparation (liquor, pleural effusion, ascites)
- staining according to Pappenheim (PAPP)
- iron stain
- Special stainings: Iron, myeloperoxidase (MPO), Sudan Black B Stain (SBB, Sudan-Black-(B), non-specific esterase (α -NBE, α - Naphtylbutyrat-Esterase), periodic acid-Schiff Stain (PAS)
- Urine hemosiderin testing
- Immunophenotypical analysis of peripheral blood, bone marrow aspirate, cerebrospinal fluid, and various effusions
- Assessment of lymphocyte subgroups (CD4/CD8)
- Measuring of CD34 precursors
- Paroxysmal nocturnal haemoglobinuria (PNH)
- Processing and storage of peripheral stem cell for autologous use
- T-SPOT test for tuberculosis diagnosis

All the services are subject to regular internal and external controls, performed by specialised national and international institutions.