

UNIVERSITÀ DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Hematology

2223-3-H4102D058-H4102D075M

Aims

At the end of the clerkship the student has the knowledge to recognize and interpret the main diseases of the blood and lymphatic system.

In particular, the student is able to interpret the signs, symptoms and laboratory data that characterize:

- · acute myeloid and lymphoid leukemias
- chronic myeloid leukemia
- chronic myeloproliferative diseases: polycythemia Vera, essential thrombocythemia and idiopathic myelofibrosis
- indolent Non-Hodgkin lymphoma
- aggressive Non-Hodking lymphoma
- Hodking Lymphoma
- Multiple Myeloma
- Monoclonal Gammopathies of Undetermined Significance (MGUS) and Waldenstrom macroglobulinemia
- aplastic anemia and nocturnal paroxysmal hemoglobinuria (EPN)
- · hemolytic anemias
- idiopathic thrombocytopenic purpura (ITP)

Furthermore, the student has the knowledge to describe the main therapeutic tretments of the diseases described above, with particular attention to the methods of use of:

- autologous hematopoietic stem cell transplantation
- · allogeneic transplantation of hematopoietic stem cells
- new immunotherapies (including CAR-T)

The student is able to describe the principles of the morphological and molecular diagnostics of the hematological diseases and the basis of the Transfusion Medicine.

Contents

HEMATOLOGY I

- 1. Clinical approach to the ambulatory patient presenting with hemorrhagic symptoms
- 2. Clinical approach to the ambulatory patient presenting with thrombotic symptoms
- 3. Management of the outpatient anticoagulation clinics
- 4. Laboratory diagnosis of coagulation disorders
- 5. Aphaeretic therapies
- 6. Blood transfusion therapy
- 7. Phlebotomy
- 8. Plasma exchange treatments

HEMATOLOGY II

- 1. The clinical history of Acute Leukemia
- 2. The clinical history of chronic myelogenous leukemia
- 3. The clinical history of Polycythemia Vera, Essential Thrombocythemia, Myelofibrosis
- 4. The clinical history of indolent Non-Hodgkin Lymphoma
- 5. The clinical history of aggressive Non-Hodgkin Lymphoma
- 6. The clinical history of Hodgkin Lymphoma
- 7. The clinical history of Multiple Myeloma
- 8. The clinical history of Monoclonal gammopathy of Undetermined Significance (MGUS) and Waldenstrom macroglobulinemia
- 9. The clinical history of aplastic anemia and nocturnal paroxysmal hemoglobinuria
- 10. The clinical history of hemolytic anemias
- 11. Autologous Hematopoietic stem cell transplantation
- 12. Allogeneic hematopoietic stem cell transplantation
- 13. New Immunotherapies (including CAR-T cells)
- 14. Immune Thrombocytopenic Purpura (ITP)
- 15. The morphologic diagnosis of hematologic diseases: principle of flow cytometry
 - 16. The molecular diagnosis of hematologic diseases

Detailed program

HEMATOLOGY I

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Basic Clinical Skills course

Teaching form

Practical guided observation activities with briefings and debriefings by hospital tutors

Textbook and teaching resource

TO BE DEFINED

Semester

SECOND TERM

Assessment method

practical skills observation and rating scale assessment

Office hours

APPOINTMENT BY EMAIL

Sustainable Development Goals

GOOD HEALTH AND WELL-BEING | QUALITY EDUCATION | GENDER EQUALITY