UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

# SYLLABUS DEL CORSO

## Hematology

**2021-3-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

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## Prerequisites

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