

# UNIVERSITÀ DEGLI STUDI DI MILANO-BICOCCA

# SYLLABUS DEL CORSO

# Malattie del Sangue

2425-3-H4601D013-H4601D036M

### Aims

The main objectives of the course are to provide a general framework relating to the classification and clinical characteristics of anemias, acute and chronic leukemias, myelodysplastic syndromes, Hodgkin and non-Hodgkin lymphomas and multiple myeloma, as well as to provide the molecular basis of their pathogenesis. Particular attention will be paid to pathologies of dental interest, in order to encourage a multidisciplinary clinical approach.

### Contents

The form includes the following contents:

- · Introduction to the hematopoietic system
- Anemias: classification, clinical characteristics and molecular mechanisms
- Chronic Myeloid Leukemia: classification, clinical characteristics and molecular mechanisms
- Chronic Lymphatic Leukemia: classification, clinical characteristics and molecular mechanisms
- Acute Myeloid Leukemia: classification, clinical characteristics and molecular mechanisms
- Acute Lymphoblastic Leukemia: classification, clinical characteristics and molecular mechanisms
- Myelodysplasias: classification, clinical characteristics and molecular mechanisms
- Hodgkin lymphomas: classification, clinical characteristics and molecular mechanisms
- Non-Hodgkin's lymphomas: classification, clinical characteristics and molecular mechanisms
- Multiple Myeloma: classification, clinical characteristics and molecular mechanisms

#### **Detailed program**

Morphology, phyisiology and physiopathology of the blood and the bone marrow; hematopoietic stem cells;

anaemias; thrombocytopenias; main clonal disorders, such as: acute myeloid leukemias, myelodysplastic syndromes, chronic myeloid leukemia, acute lymphoblastic leukemia, chronic lymphocytic leukemia, main Philadelphia-negative myeloproliferative disorders, main monoclonal gammopathies, Hodgkin and non-Hodgkin lymphomas.

- Anaemias: causes, symptoms and signs.
- Leucemie acute mieloidi: molecular mechanisms, symptoms, signs, prognosis, evolution.
- Myelodysplastic syndromes: molecular mechanisms, symptoms, signs, prognosis, evolution.
- Leucemia mieloide cronica: molecular mechanisms, symptoms, signs, prognosis, evolution, role of targeted therapies in the treatment of LMC.
- Acute lymphoblastic leukemia: molecular mechanisms, symptoms, signs, prognosis, evolution.
- Chronic lymphocytic leukemia: molecular mechanisms, symptoms, signs, prognosis, evolution.
- Main Philadelphia-negative myeloproliferative disorders: polycythaemia vera, essential thrombocythemia, idiopathic myelofibrosis: molecular mechanisms, role of JAK2, MPL and CALR; symptoms, signs, prognosis, evolution.
- Main monoclonal gammopathies: multiple myeloma and MGUS; molecular mechanisms, symptoms, signs, prognosis, evolution.
- Hodgkin and non-Hodgkin lymphomas: molecular mechanisms, symptoms, signs, prognosis, evolution, main differences

#### **Prerequisites**

Please refer to what is defined in the general description of the course.

#### **Teaching form**

80% of the teaching activities will have a delivery nature (DE), carried out in the form of frontal teaching. 20% will have an interactive nature (DI), carried out in particular as a collegial discussion of case studies focused on the topics addressed in DE.

The teaching activity will be delivered in person (80%) and remotely (20%), in synchronous mode.

#### Textbook and teaching resource

Harrison – Principles of internal medicine. Slides and reference articles (on request).

#### Semester

Second semester.

#### Assessment method

Written multiple choice exam (closed questions) and oral upon request of the student or teacher.

The exam is intended to test the knowledge and skills acquired in the different modules that make up the teaching and the student's ability to develop the notions in a mature manner.

#### **Office hours**

On appointment.

## **Sustainable Development Goals**

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