UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Blood and Immune System Diseases

2223-2-I0302D007-I0302D028M

Aims

The student must be able to perform the:

-Characterization of blood cellular composition and description of main hematological and immunological diseases

Contents

By the end of the course, the students will have acquired the specific knowledge of the effects of functional alterations of haematological and immunological cells

Detailed program

BLOOD AND MORPHOLOGY OF THE BLOOD CELLS.
• Morphological characteristics of blood cells.
• Methodology for counting peripheral blood particles and for automated differentiation of leukocytes (automated leukocyte formula).
• Hemopoiesis and hemocateresis.
• Characteristics and properties of stem cells (clinical and experimental use).
• The hematological report (knowledge of direct and calculated parameters, reading and interpretation of values).
BLOOD DISEASES.
• Microcytic anemias (martial deficiency and thalassemia) with evidence of instrumental outlook.
• Normocytic anemias (post-hemorrhagic, renal failure, maturation block) with evidence of instrumental outlook.
• Macrocytic anemias (B12 deficiency and folate) with evidence of instrumental frameworks.
• Acute and chronic leukemias (definition and diagnostic framework with visualization of instrumental outlook).

• Lymphoproliferative diseases
• Myelodysplasias and myeloproliferative diseases.
• Platelet pathologies
DISEASES OF THE IMMUNE SYSTEM
• Multiple myeloma (with particular attention to the diagnostic process).
• Lymphomas (general framework).

Prerequisites

Teaching form

Lesson in attendance, subject to any ministerial changes following the COVID pandemic situation

Textbook and teaching resource

Reviews

Semester

First semester

Assessment method

"In itinere" written exam with multiple choice test, to evaluate global knowledges about course program

Final judgment is based on the grade point average normalized for credits obtained in each module

Office hours

By appointment

Sustainable Development Goals

GOOD HEALTH AND WELL-BEING