

# UNIVERSITÀ DEGLI STUDI DI MILANO-BICOCCA

## **COURSE SYLLABUS**

## **Diagnostics Hematology**

2223-2-I0302D008-I0302D030M

#### **Aims**

#### Student's skills:

- To describe the physiopathology of primary haemostasis, of coagulation and fibrinolytic systems and inhibitors.
- To list the drugs acting on haemostatic system and their mechanism of action.
- To describe the role of haemostasis lab and illustrate pre-analytical, analytical features and related methods.
- To describe the principles of coagulation tests. TAO lab monitoring.
- To define ABO, Rh, and other systems and their lab study.
- To describe anti-erythrocytes antibodies, methods used to detect them and clinical meaning.
- To define methods for blood group assessment and for the search of anti-erythrocytes antibodies. To describe the physiopathology of haemolytic disease of the newborn and of autoimmune anaemia.
- To define the concept of transfusion medicine, and to describe adverse reactions and transfusion safeness.

#### **Contents**

Haemostasis and fibrinolysis physiopathology and related lab tests. Platelets, red blood cell pathologies, and their diagnostics. Transfusion medicine.

## **Detailed program**

- Haemostasis lab: pre-analytical, analytical features and related methods.
- · Coagulation tests. TAO lab monitoring.

- ABO, Rh, and other systems and their lab study. Anti-erythrocytes antibodies and clinical meaning.
- Methods for blood group assessment and for the search of anti-erythrocytes antibodies. Physiopathology of Haemolytic disease of the newborn and of autoimmune anaemia.
- Blood components: preparation, storage and monitoring
- Transfusion medicine, adverse reactions and transfusion safeness.

## **Prerequisites**

Objectives of the course of Clinical Biochemical Analysis (these are the courses indicated in Regolamento)

## **Teaching form**

Lectures and exercises

## Textbook and teaching resource

Teachers will provide educational material

#### Semester

First semester

#### **Assessment method**

"In itinere" written test, aimed at evaluating candidate knowledge of the whole program, consisting in 10 open questions with short answer.

#### Office hours

By appointment

### **Sustainable Development Goals**

GOOD HEALTH AND WELL-BEING

