



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## COURSE SYLLABUS

### Pharmacology

2526-3-H4102D020-H4102D065M

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#### Aims

1. To know the most used onco-hematological drugs
2. To understand the principles underlying onco-hematologic therapy
3. To identify and correctly solve the complex problems related to the use of onco-hematological drugs in clinical practice

#### Contents

1. classification of the most used hematological drugs: anti-anemic drugs and hematopoietic growth factors; anticoagulants and antiplatelet agents; anti-hemorrhagic drugs; lipid-lowering drugs; CAR-T cells; HER 2 Inhibitors; drugs acting on trophic factor receptors and on signaling pathways; outlines on drug affecting DNA methylation (and acetylation) in onco-hematological diseases; monoclonal antibodies used in the onco-hematological field.
2. ADME and mechanisms of actions
3. cellular, biochemical and molecular bases of the action of hematological drugs and their interactions within the human body
4. therapeutic uses
5. advantages and disadvantages of their therapeutic use

analysis of some clinical cases

## **Detailed program**

1. classification of the most used hematological drugs: anti-anemic drugs and hematopoietic growth factors; anticoagulants and antiplatelet agents; anti-hemorrhagic drugs; lipid-lowering drugs; CAR-T cells; HER 2 Inhibitors; drugs acting on trophic factor receptors and on signaling pathways; outlines on drug affecting DNA methylation (and acetylation) in onco-hematological diseases; monoclonal antibodies used in the onco-hematological field.
2. ADME and mechanisms of actions
3. cellular, biochemical and molecular bases of the action of hematological drugs and their interactions within the human body
4. therapeutic uses
5. advantages and disadvantages of their therapeutic use

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## **Prerequisites**

Basic Pharmacology course

## **Teaching form**

Lectures will be in attendance: 10 lessons of 2 hours. Lessons will be delivered in English in the form of lectures, exercises and discussions of simple clinical cases on pharmacological topics.

## **Textbook and teaching resource**

Brunton, Hilal-Dandan, Knollmann. Goodman and Gilman: The pharmacological basis of therapeutics. McGraw-Hill, 13th ed

Katzung and Trevor. Basic and clinical pharmacology. McGraw-Hill, 13th ed

## **Semester**

III year, second term

### **Assessment method**

The final evaluation will take place in presence and will consist of an oral exam on the topics discussed in the course

### **Office hours**

On appointment to be requested by email

### **Sustainable Development Goals**

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

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