UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Pharmacology

2425-3-H4102D020-H4102D065M

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 parmacological 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