UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Oncology

2526-3-H4102D020-H4102D068M

Aims

The student will learn:

- to correctly use the terms related to the main neoplastic diseases
- the tests, the correct diagnostic procedures and the guide lines for the treatment of the main cancers.
- the main mechanisms of action of antineoplastic drugs
- Learn the diagnostics to be used in precision medicine
- Participate in the simulated discussion of clinical cases in a multidisciplinary setting.

Contents

- Cancer epidemiolgy and cancer genetics
- Early and advanced breast cancer
- Early and advanced lung cancer
- Early and advanced colorectal cancer
- Early and advanced pancreatic cancer
- Early and advanced prostate cancer
- Early and advanced melanoma

Detailed program

- Cancer Epidemiology: Prevalence and incidence of the main neoplasms in Italy and worldwide. Didactic Method (DE): Lecture, 2 hours
- Cancer Genetics: Hereditary cancer syndromes, with particular attention to King syndrome, Lynch

syndrome, and Li-Fraumeni syndrome. Didactic Method (DE): Lecture, 2 hours
- General Approach to the Patient with Suspected Oncologic Disease: Assessment of oncologic risk, medical history collection, clinically relevant signs/symptoms, care goals, principles of oncologic treatment. Didactic Method (DE): Lecture, 2 hours
- Early-Stage Breast Cancer: Classification by breast cancer subtypes, therapeutic algorithm by subtype, side effects of main targeted therapies, the role of the multidisciplinary team. Didactic Method (DE): Lecture, 2 hours
- Advanced-Stage Breast Cancer: Molecular classification, diagnostic/therapeutic innovations, care algorithm. Didactic Method (DE): Lecture, 2 hours
- Lung Cancer (NSCLC): The role of the oncologist in the multidisciplinary team, the role of liquid biopsy, drugs used in oncogene-addicted and non-oncogene-addicted tumors, main side effects, synergy with the radiation oncologist and thoracic surgeon, multidisciplinary management in the advanced stage of disease, the role of simultaneous care. Didactic Method (DE): Lecture, 2 hours
- Colorectal Cancer: The role of the oncologist in the multidisciplinary team, drugs used in early and metastatic stages, main side effects, synergy with the radiation oncologist and abdominal surgeon. Didactic Method (DE): Lecture, 2 hours
- Pancreatic Cancer in Early and Advanced Stages: Elective diagnostics, surgery and systemic therapy, care algorithms, palliative and pain-relieving treatments, new drugs. Didactic Method (DE): Lecture, 2 hours
- Prostate Cancer in Early and Advanced Stages: Elective diagnostics, surgery, radiotherapy and systemic therapy for early and metastatic disease, care algorithms, palliative and pain-relieving treatments, new drugs. Didactic Method (DE): Lecture, 2 hours
- Melanoma in Early and Advanced Stages: Elective diagnostics, surgery, radiotherapy and systemic therapy for early and metastatic disease, care algorithms, immunotherapy and targeted therapy, new drugs. Didactic Method (DE): Lecture, 2 hours

Prerequisites

SKILLS:

- identify the key elements in setting up a diagnostic path for individual cancer types
- acquisition of basic methodologies for reading data relating to practice-changing oncological studies.

Teaching form

Lectures + learning materials; analysis and discussion of simulated and real clinical cases with definition of the work up

Textbook and teaching resource

Slides used during the lessons.
DeVita, Hellman, and Rosenberg's Cancer : principles & practice of oncology ed. 2023 and in electronic format:

Semester

Second semester.

Assessment method

Oral examination integrated with the disciplines present in the vertical track.

Office hours

By appointment required by mail.

Sustainable Development Goals

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