



UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Contrast Media and Radiopharmaceutical

1819-2-H4102D014-H4102D043M

Aims

The pharmacological aspects of diagnostics medicinal products. Topics include fundamental of pharmacokinetics, pharmacodynamics and regulatory aspects related to their use in Diagnostic imaging

Contents

Pharmacology of Diagnostic Medicinal Products

Detailed program

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Pharmacology of Diagnostic Medicinal Products

Radiological contrast media: Chemical and pharmacological characteristics of biological relevance that differentiate contrast media; Main therapeutic indication and clinical and evidence based rational for the clinical use of contrast media; Main adverse event, procedures to predict, prevent and manage contrast media related adverse event. Pharmacovigilance. Radiopharmaceuticals: Nature and characteristics of radioisotopes, with specific reference to those used in diagnostic imaging; Fundamentals of radiochemistry, radiopharmaceuticals and radiopharmacology. Medicines for optical imaging: mechanism of action, instrumentation, kinetics of biodistribution and safety aspects. Risk benefit assessment for contrast media; Regulatory affairs relative to their classification and reimbursement; Introduction to gender medicine in diagnostic imaging: clinical and research aspects

Prerequisites

Basic knowledge on chemistry, physics and physiology and pharmacology

Teaching form

Lectures; active and interactive discussion on critical issues presented during the course and scientific paper

Textbook and teaching resource

Slides presented during the course; scientific papers; guide line

Semester

Second Semester

Assessment method

Written exam: multiple choice quiz for the extensive evaluation of learning. Oral exam: interview on topics covered in class aimed at verifying autonomous reflection capacity on critical points of the program

Office hours

direct contact with the teacher (telephone or email)
