



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## COURSE SYLLABUS

### Pharmacological Treatment of Diabetes Mellitus

2425-5-H4101D380

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#### Aims

This course aims to provide the scientific basis and essential clinical knowledge related to the pharmacological therapy of diabetes mellitus, with particular reference to type 2 diabetes. The pharmacological therapy of type 2 diabetes has witnessed a revolution in recent years, with continuous updates and introduction of new classes of drugs capable of significantly impacting not only glycemic control, but also long-term complications. On the one hand, the course presents a practical clinical approach that can be useful in guiding the future doctor in choosing the most appropriate therapy for the patient with diabetes who is being treated in his or her clinic; on the other hand, it delves into the scientific evidence underlying the recommendations of the guidelines in order to offer the participant a critical vision of the topic.

#### Contents

Metformin, Sulfonylureas, Glinides, Thiazolidinediones, GLP1-RA and multi agonists, SGLT2-i, DPP4-i, insulin therapy

#### Detailed program

**Metformin:** mechanism of action, clinical use, efficacy, dosage. side effects, evidence of cardiovascular and renal protection, contraindications, placement within national and international guidelines, real-world data on its real use in clinical practice.

**Sulfonylureas and Glinides:** mechanism of action, clinical use, efficacy, dosage. side effects, evidence of cardiovascular and renal protection, contraindications, placement within national and international guidelines, real-world data on its real use in clinical practice.

**Thiazolidinediones:** mechanism of action, clinical use, efficacy, dosage. side effects, evidence of cardiovascular

and renal protection, contraindications, placement within national and international guidelines, real-world data on its real use in clinical practice.

**GLP1-RA and multi agonists:** mechanism of action, clinical use, efficacy, dosage. side effects, evidence of cardiovascular and renal protection, contraindications, placement within national and international guidelines, real-world data on its real use in clinical practice.

**SGLT2-i:** mechanism of action, clinical use, efficacy, dosage. side effects, evidence of cardiovascular and renal protection, contraindications, placement within national and international guidelines, real-world data on its real use in clinical practice.

**DPP4-i:** mechanism of action, clinical use, efficacy, dosage. side effects, evidence of cardiovascular and renal protection, contraindications, placement within national and international guidelines, real-world data on its real use in clinical practice.

**Insulin therapy:** mechanism of action, clinical use, efficacy, dosage. side effects, evidence of cardiovascular and renal protection, contraindications, placement within national and international guidelines, real-world data on its real use in clinical practice.

## **Prerequisites**

Enrollment in the fifth or sixth year of the master's degree course in medicine and surgery.

## **Teaching form**

Frontal lessons: 7 hours of lessons.

The courses will all be delivered in "in presence" mode

## **Textbook and teaching resource**

Powerpoint slides given to the participants.

## **Semester**

Second semester.

## **Assessment method**

Attendance to the Course

## **Office hours**

Teachers receive on appointments requested by email  
stefano.ciardullo@unimib.it

## **Sustainable Development Goals**

GOOD HEALTH AND WELL-BEING | QUALITY EDUCATION

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