

## **Title of the learning unit: Antiarrhythmics**

### **Impact of the learning unit:**

Gaining knowledge how to pharmacologically influence individual phases of cardiac action potential and acquire principles of treatment and prevention of cardiac arrhythmias.

### **Important terms**

class 1 - sodium channel inhibiting antiarrhythmics

quinidine

lidocaine

propafenone

class 2 – beta-adrenoceptor inhibiting antiarrhythmics

bisoprolol

metoprolol

esmolol

class 3 – potassium channel inhibiting antiarrhythmics

amiodarone

thyroid disorders

pulmonary fibrosis

sotalol

class 4 – calcium channel inhibiting antiarrhythmics

verapamil

antiarrhythmics not classified in Vaughan-Williams classification

adenosine

atropine

risk of arrhythmogenic effect of antiarrhythmics

### **Learning outcomes**

Student is able to define the mechanism how drugs may interfere electrophysiological processes in the membrane and thus to prevent or treat arrhythmia.

Student knows the basic pharmacological profile (mechanism of action, side effects, indications and contraindications) of antiarrhythmics.

### **Study literature**

Rang & Dale's Pharmacology E - Book, Humphrey Rang 8th edition, 2016, chapter 21, p. 247

Study materials to subjects aVLFA0822c and aVLFA0822p.

### **Exam questions**

*Special pharmacology:* 36. Antiarrhythmics

*"Essential" drugs:* 84. digoxin, 85. amiodarone, 86. verapamil