

# Preclinical course (aVLTP05X)

Introduction

#### Preclinical course: what is it?

- 75h. in the laboratory
- 5 credits
- lectures
- measurements
- paper research
- working with data
- test





- working with data
- test







#### **Lectures**

- Anthropometric parameters (19.10. 23.10.)
- PWV (applanation tonometry)
- PWA (applanation tonometry)
- CAVI and ABI (VaSera)
- Baroreflex sensitivity (photoplethysmography)
- ECHO
- How to work with data



### What can I do now?

- choose a topic
- start with paper research



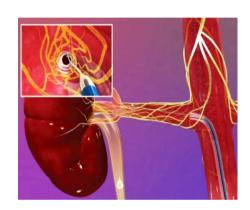
### **Topics**

- Renal denervation
- Asthma bronchiale
- Obesity
- Anticancer therapy
- Hormonal contraception



#### **Renal denervation**

- elevated blood pressure despite taking three optimally doses medications, typically:
  - a diuretic
  - a calcium-channel blocker
  - an ACE inhibitor
- renal sympathetic denervation: endovascular catheter based procedure using radiofrequency ablation





#### **Asthma bronchiale**

a long-term inflammatory disease of the airways of the lungs

#### – symptoms:

- reversible airflow obstruction
- easily triggered bronchospasms

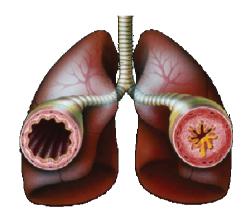
#### – medication:

Long-term asthma control medications:

inhaled leukotriene modifiers combination inhalers

Quick-relief (rescue) medications:

short-acting beta agonists anticholinergic agents oral and intravenous corticosteroids.





## **Obesity**

- childhood obesity is one of the most serious public health challenges of the 21st century
- alimentary obesity
- one-month stay in children hospital





### What else?

- ALL
- Hormonal contraception



# **Topics**

<u>Link</u>

