

# MODULE 5 L01

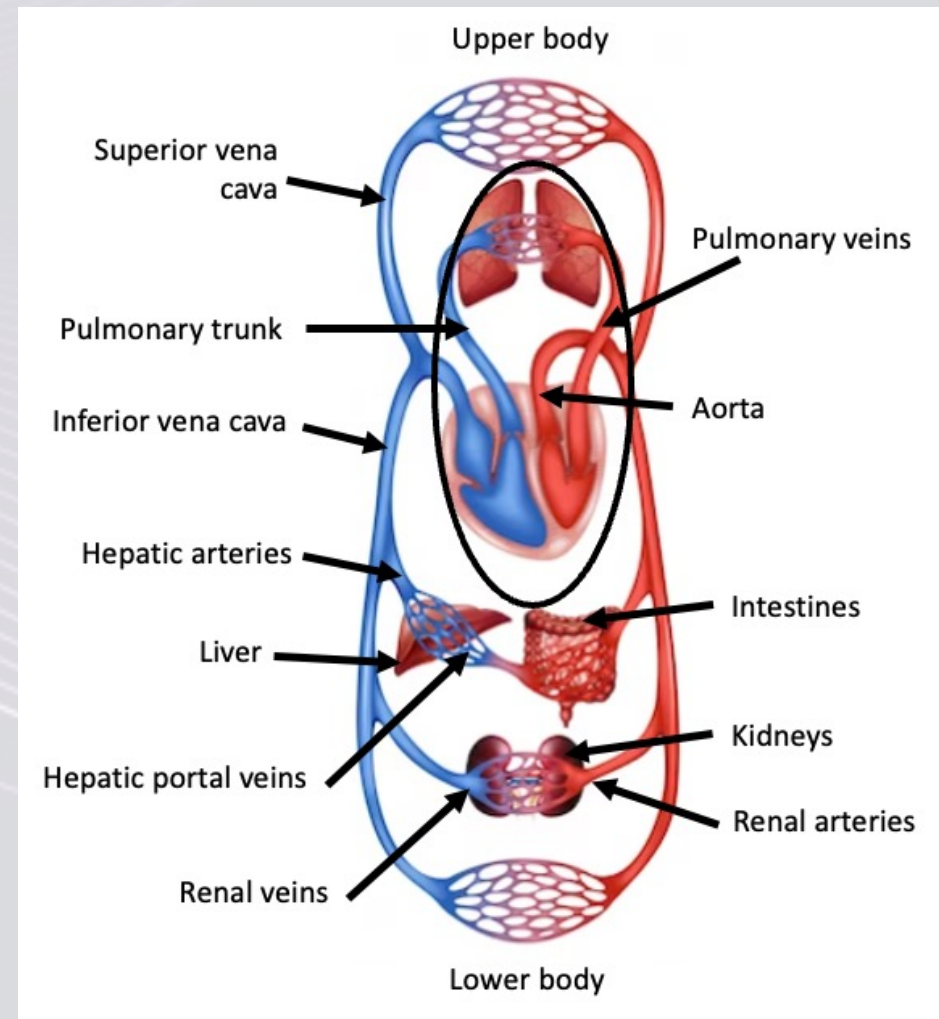
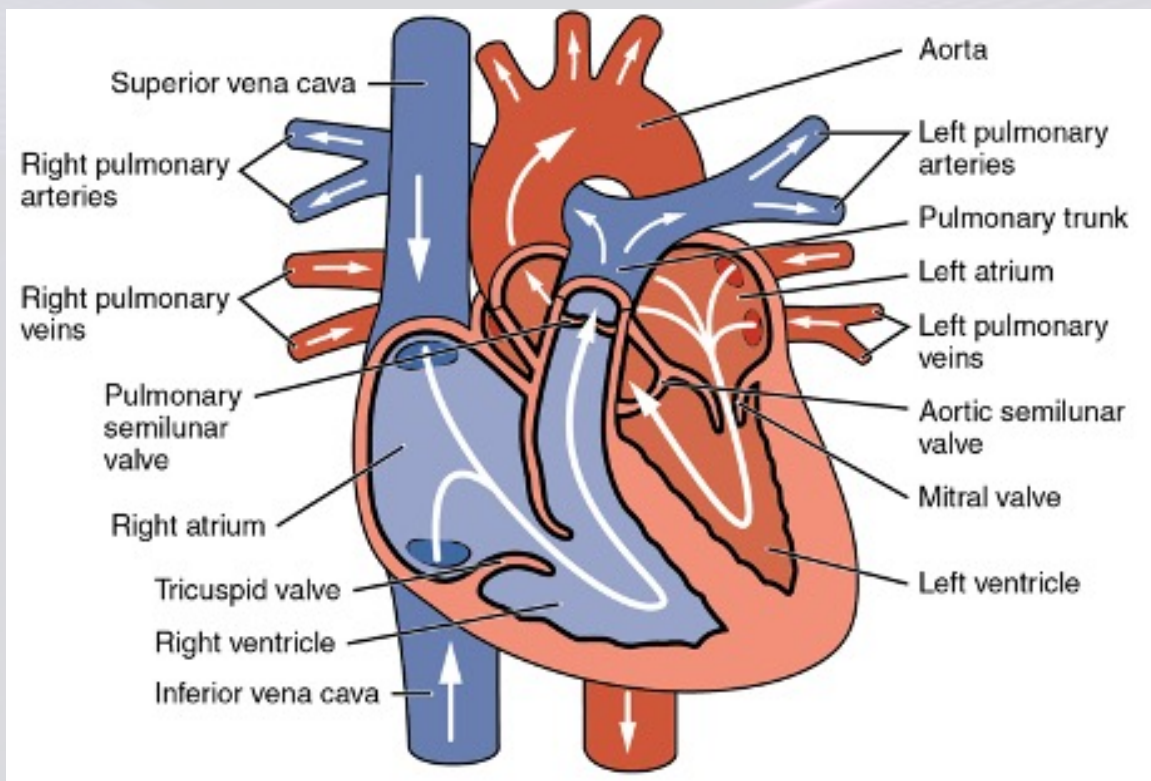
# Histology of Blood Vessels

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# 1. Blood Vessel Circuits



# Blood Vessels Histology

## Tunica externa (adventitia)

- Connective tissue
- Collagen fibers
- Elastic fibers (scattered)

## External elastic membrane

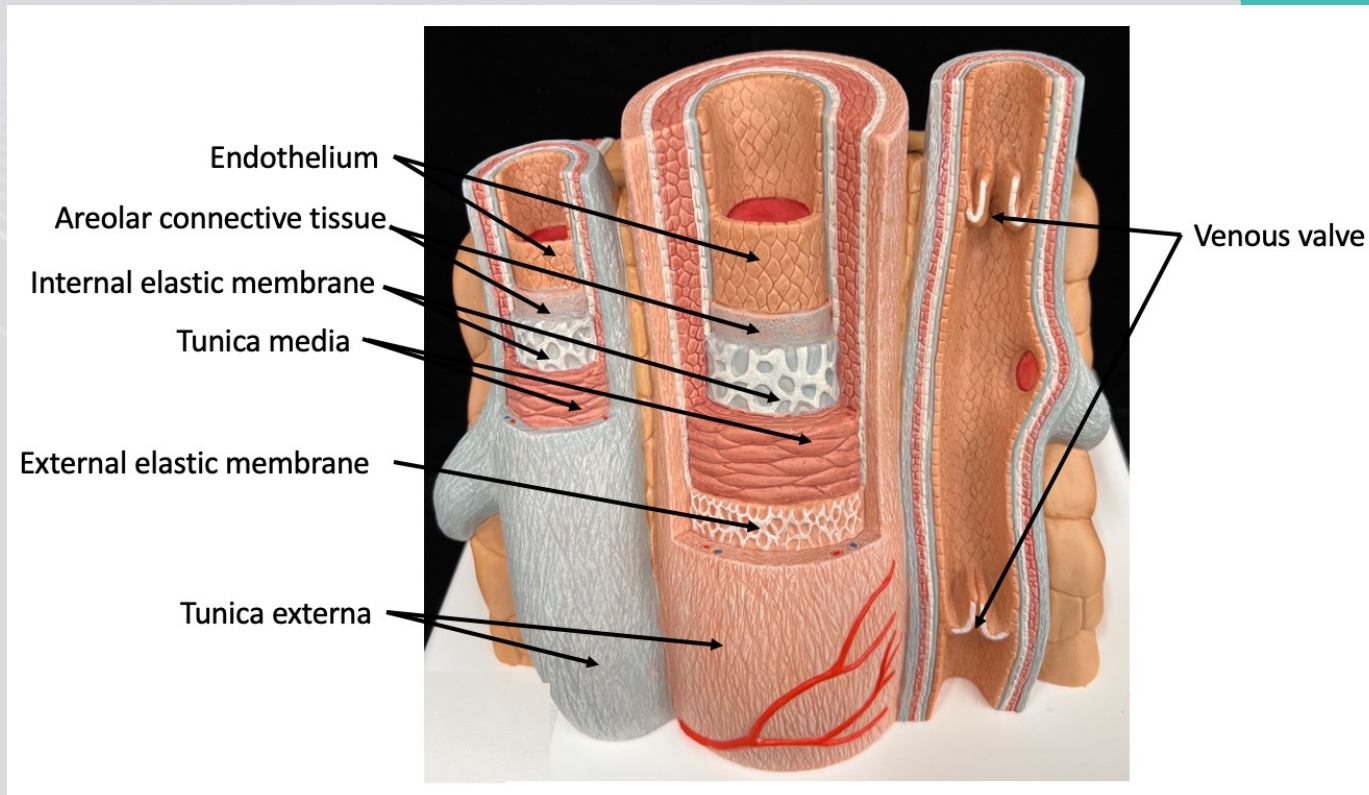
## Tunica media:

- Smooth muscle
- Elastic tissue

## Internal elastic membrane

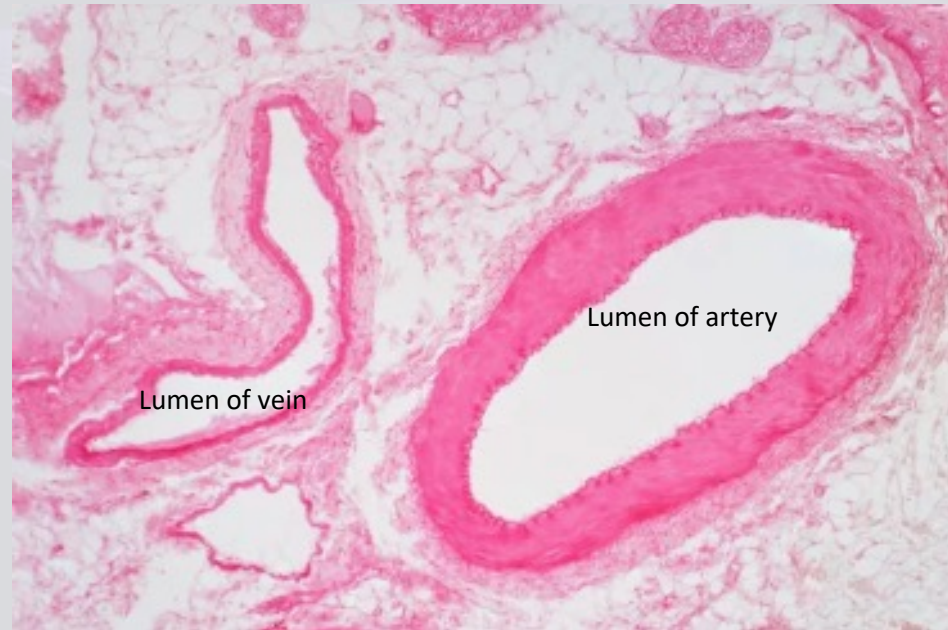
## Tunica intima:

- Endothelium
- Connective tissue (areolar) and elastic fibers

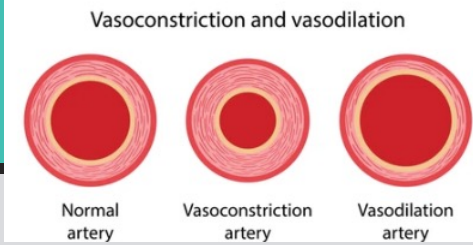




# Artery and Vein Histology



# Blood Vessel Types



## Large veins (great veins)

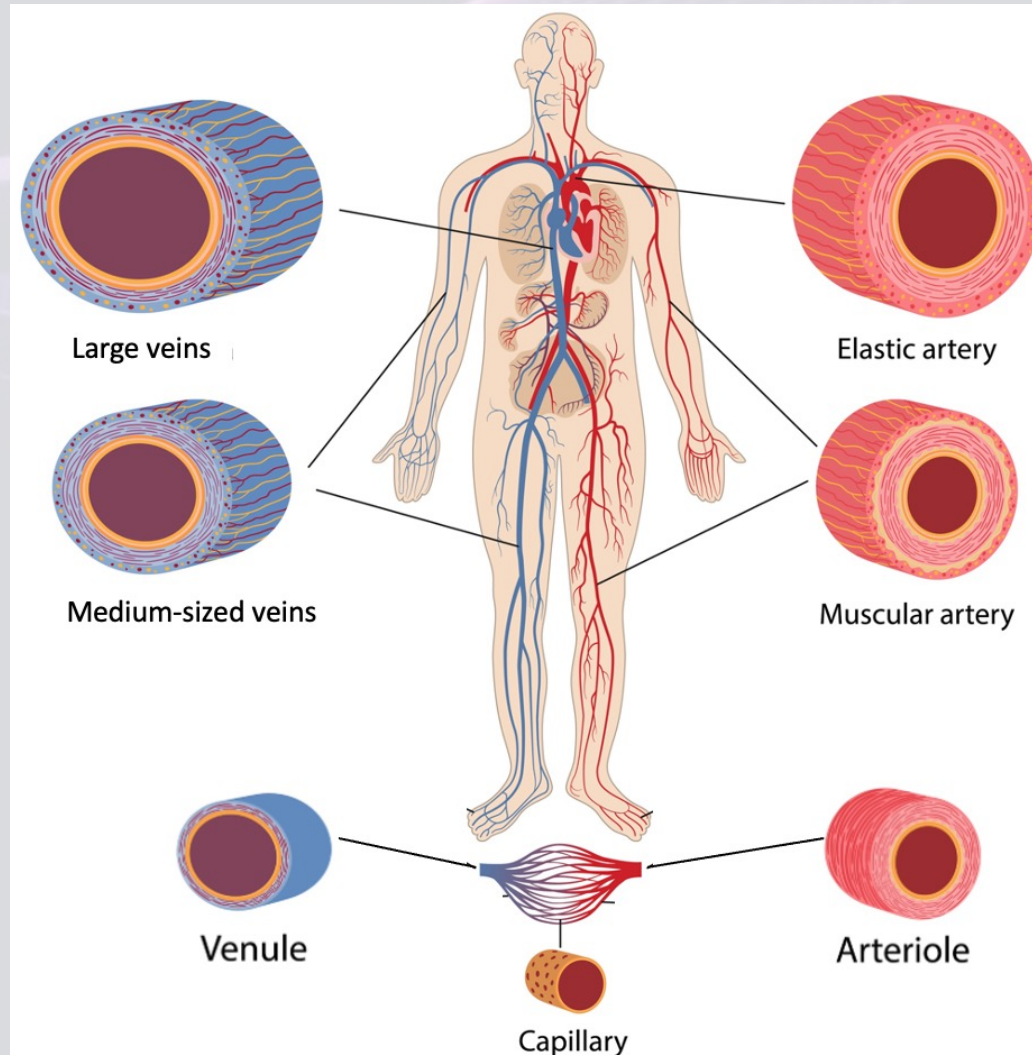
- Superior vena cava
- Inferior vena cava
- Adventitia - thickest layer

## Medium-sized veins

- Radial veins
- Ulnar veins
- Correspond to muscular artery
- Thin media
- Few smooth muscle cells

## Venules

- Smallest veins
- Collect blood from capillaries
- Some lack media



## Elastic artery

- Aorta
- Brachiocephalic trunk
- Extremely resilient
- Few smooth muscle cells
- High density of elastic fibers

## Muscular artery

- Radial artery
- Ulnar artery
- Thicker media
- Greater % of smooth muscle than elastic arteries

## Arteriole

- Considerably smaller than muscular arteries
- Very thin adventitia
- Media – scattered smooth muscle cells