## Vessels and nerves

### Arteries

- Arteries form branches on superior and inferior surfaces
- Superior surface supplied by
  - Pericardiacophrenic + musculophrenic (from internal thoracic)
  - Superior phrenic (from thoracic aorta)
- Inferior surface supplied by inferior phrenic (abdominal aorta)

# Veins

- Superior surface drained by
  - o Pericardiophrenic and musculophrenic (empty to internal thoracic)
  - Superior phrenic (drains to IVC)
  - o Some also drain into azygous and hemi-azygous
- Inferior surface drained by
  - o Inferior phrenic veins (right into IVC, left is double are to We and one to left suprarenal)

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# Lymphatics

- Superior turbee has anterior and posterior diaphragmatic nodes that ardin to parasternal, so the mediastinal, and phrenic nodes
- Inferior surface drain to anterior diaphragmatic, phrenic and superior lumbar (caval/aortic) lymph nodes

#### Nerves

- Motor from right and left phrenic nerves (C3-C5 anterior rami), innervate ipsilateral half
- Sensory also from phrenic; peripheral parts from intercostal and subcostal nerves

# Diaphragmatic apertures

• Three main - oesophageal, aortic, IVC

## Caval aperture

- Central tendon opening for IVC passage
- Right phrenic nerve and lymphatics also pass through

# Sectional medical imaging of the abdomen

- Ultrasound, CT and MRI used to examine the abdominal viscera
- MRI provides better differentiation between soft tissues, so more revealing

## **Ultrasound**

