

Autopsy practice Case report

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Clinical data:

32-yr old female patient.

No significant disease in patient history.


No family history of breast or ovarian carcinoma.

2010

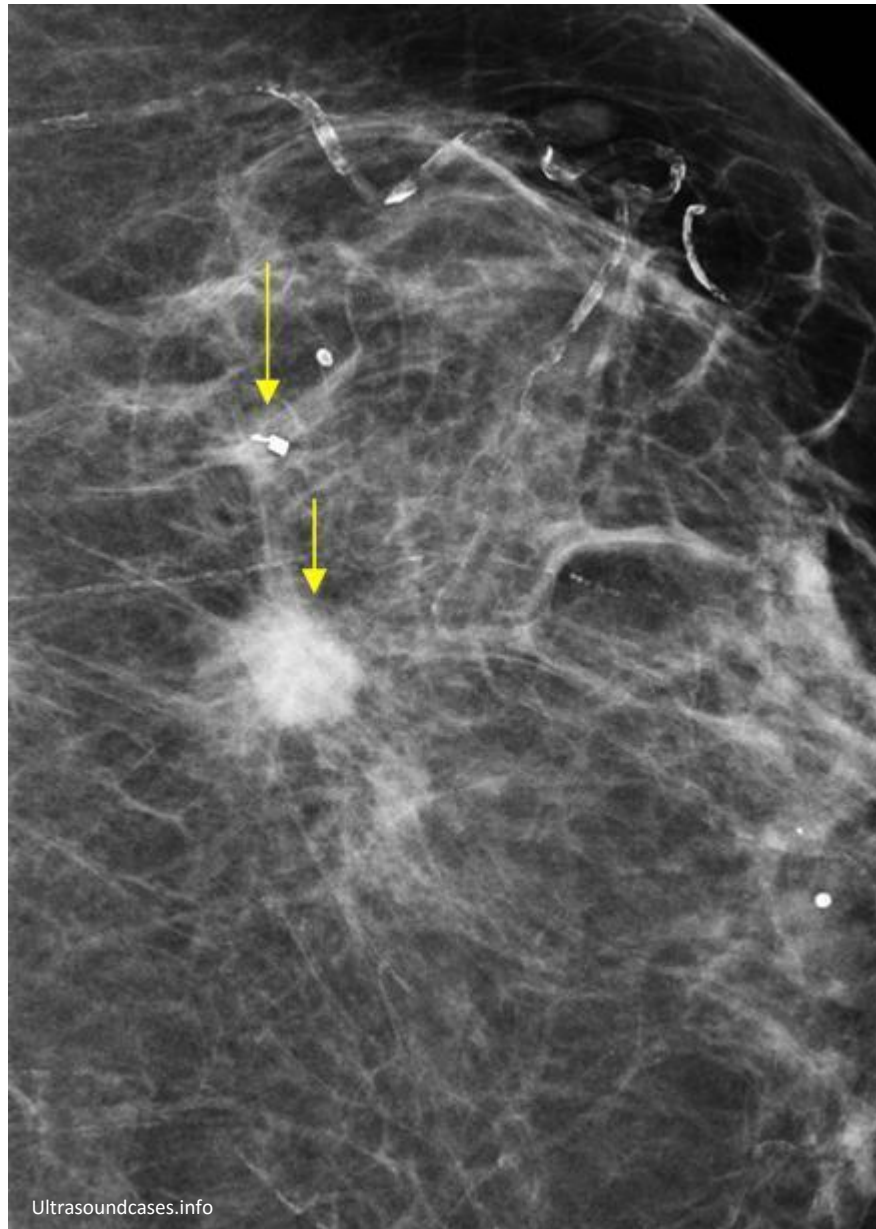
Palpable mass of 1 cm in the right breast.

Diagnostic workup:

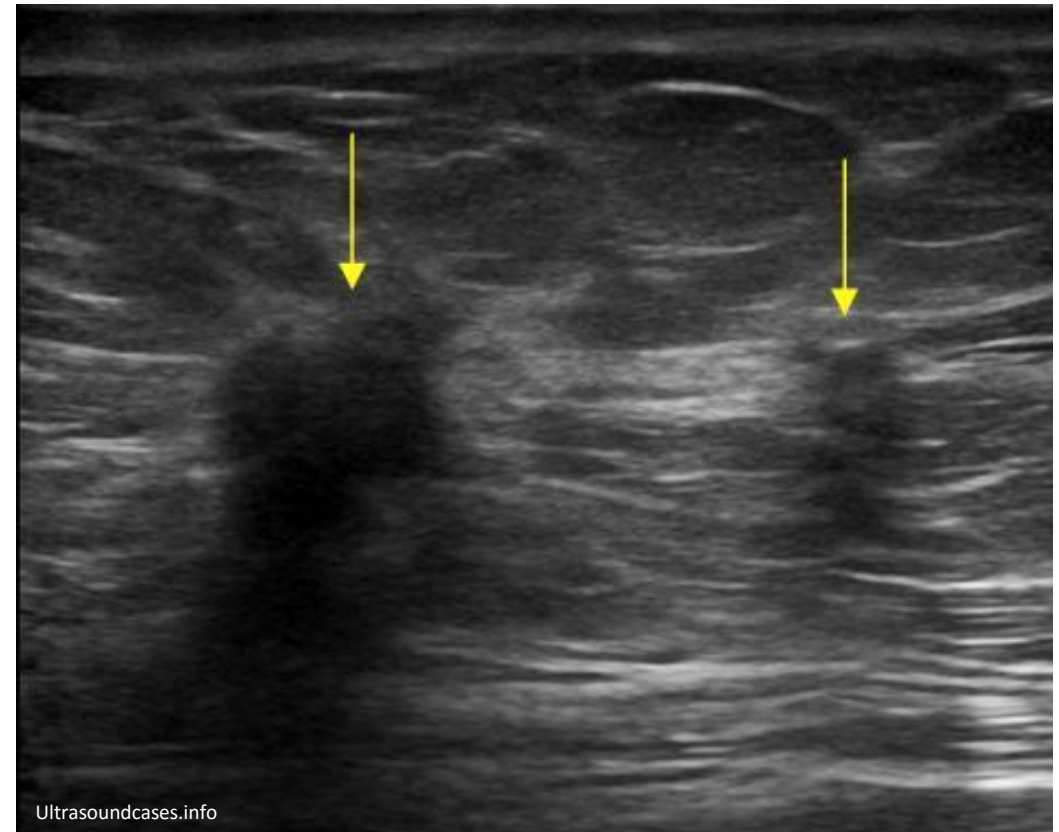
Two foci in the right breast (8-8 mm each), 1 focus in the left breast (8 mm).



Mammography



Ultrasound





FNAB: indicative of malignancy.

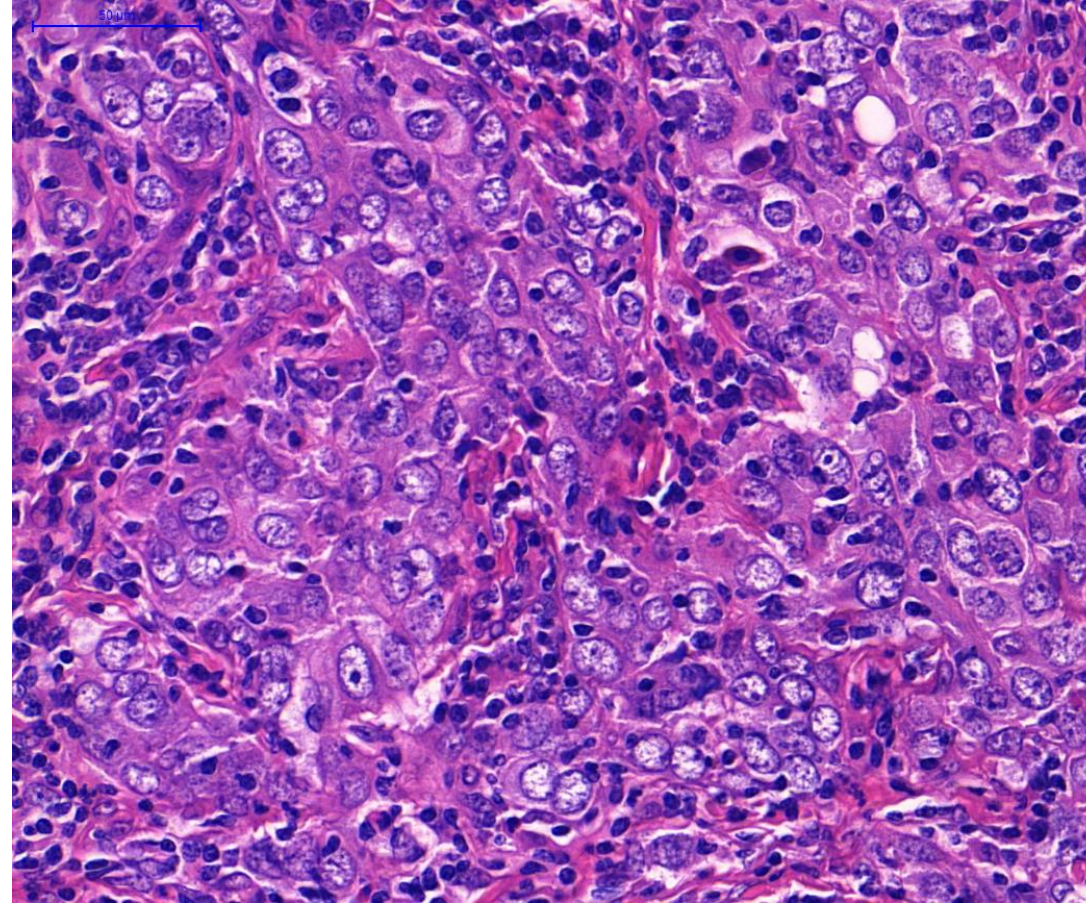
Clinical staging:

- Abdominal ultrasound, chest X-ray – no distant metastasis.
- Axilla: clinically negative (ultrasound).
- Bone scan: pending.

Treatment plan:

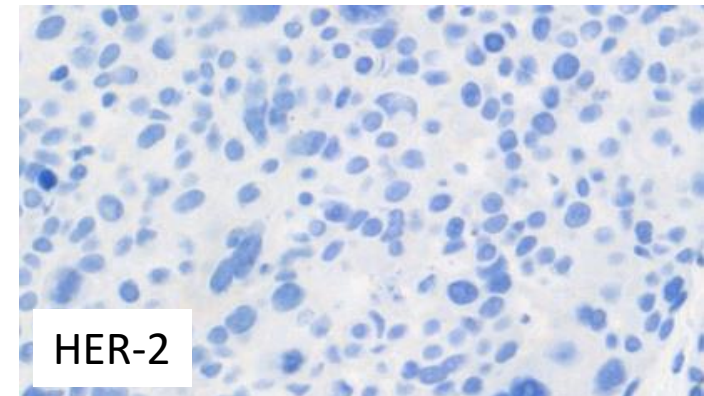
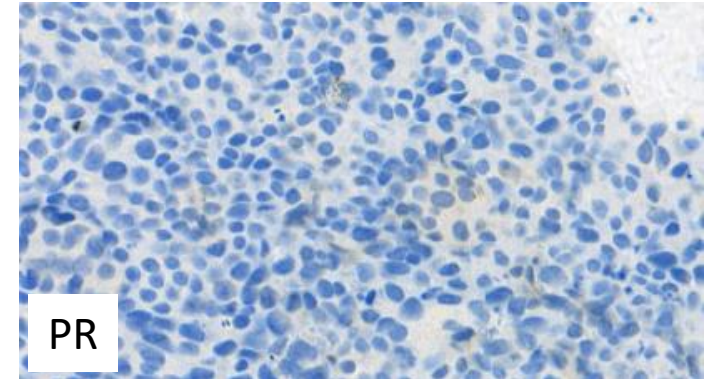
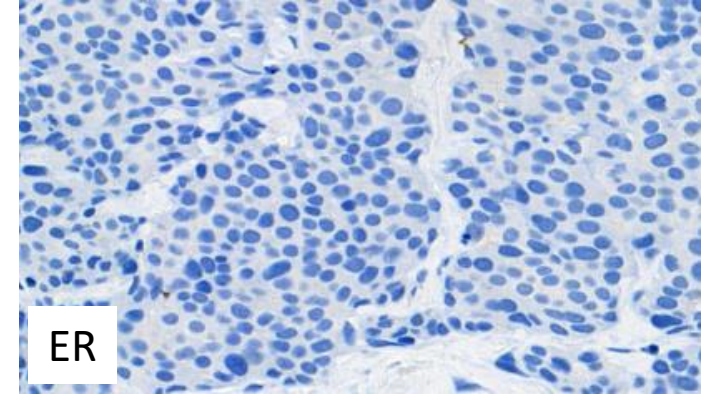
Bilateral mastectomy and sentinel lymph node removal with intraoperative frozen section analysis.

Surgical specimen



Bilateral, multifocal invasive ductal carcinoma, grade 3.
(Invasive breast carcinoma, No Special Type).

Intraoperative frozen section analysis:
Right side: tumor-free sentinel lymph node (0/1).
Left side: tumor-free adipose tissue.



Triple negative phenotype

Further treatment:

Left axillary block dissection: Tumor-free lymph nodes (0/6).

Bone scintigraphy: No sign of metastasis.

Adjuvant chemotherapy: FEC100-TXT protocol (Aug-Dec, 2010)

5-fluoro-uracil, epirubicin, cyclophosphamid, Taxotere (=docetaxel)

Bilateral breast reconstruction with latissimus dorsi lobe (2011)

The patient was well and tumor-free until the end of 2013.

2014

MRI: Pathological mass in the right breast on the outer rim of the implant, involving the rib (size: 22x28 mm). Core biopsy: Infiltrating duct carcinoma.

Chemotherapy: Bevacizumab (Avastin – anti-VEGF) + paclitaxel >> parcial remission

From 2015 on: progression:

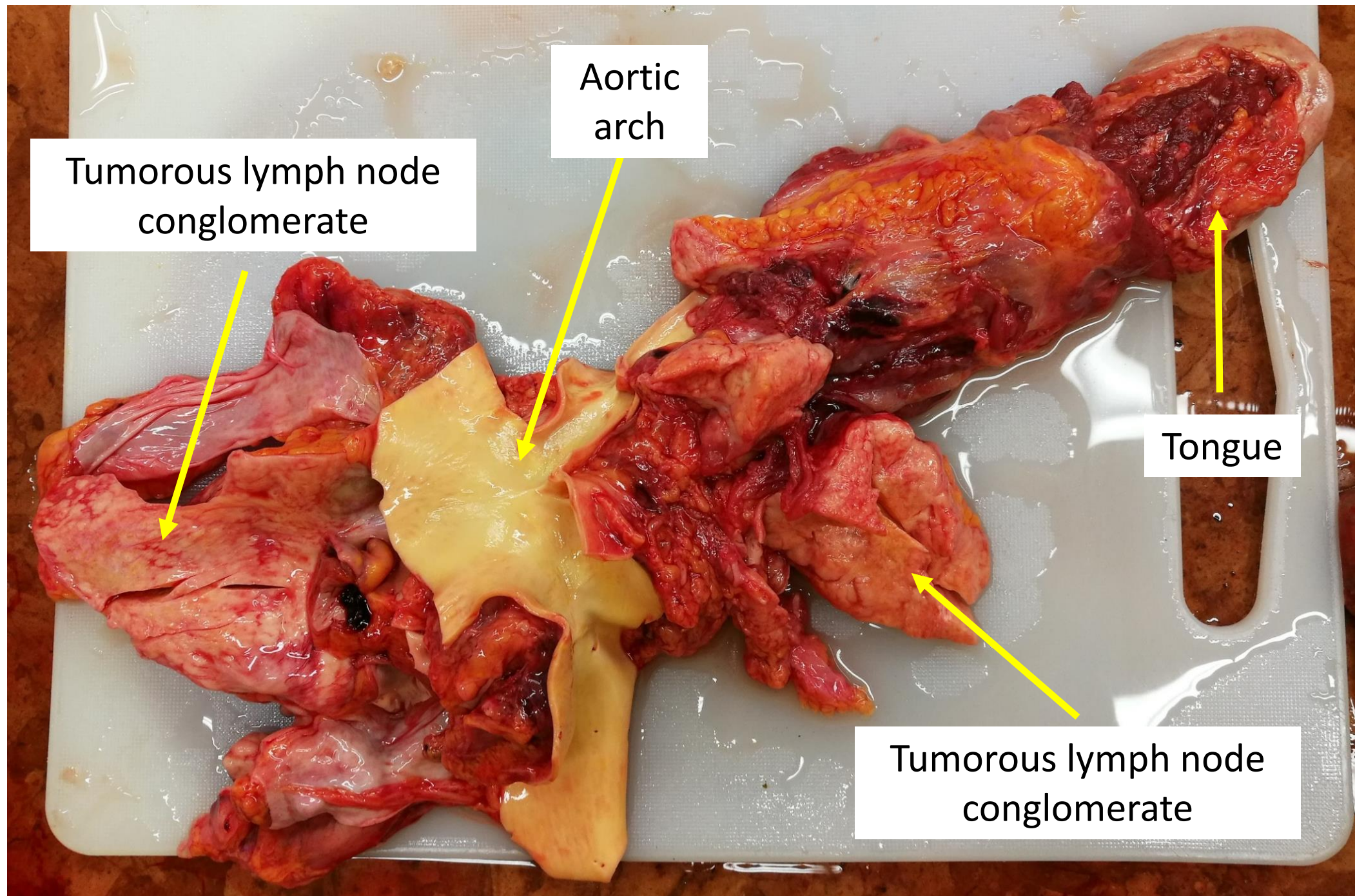
- Parasternal, mediastinal, pelvic lymph node involvement
- Bone, lung and brain metastasis

Chemotherapy according to several protocols.

2017

Progressing weakness, worsening performance status.
Gastric bleeding due to ulcer.

The patient passed away on Dec 13, 2017.

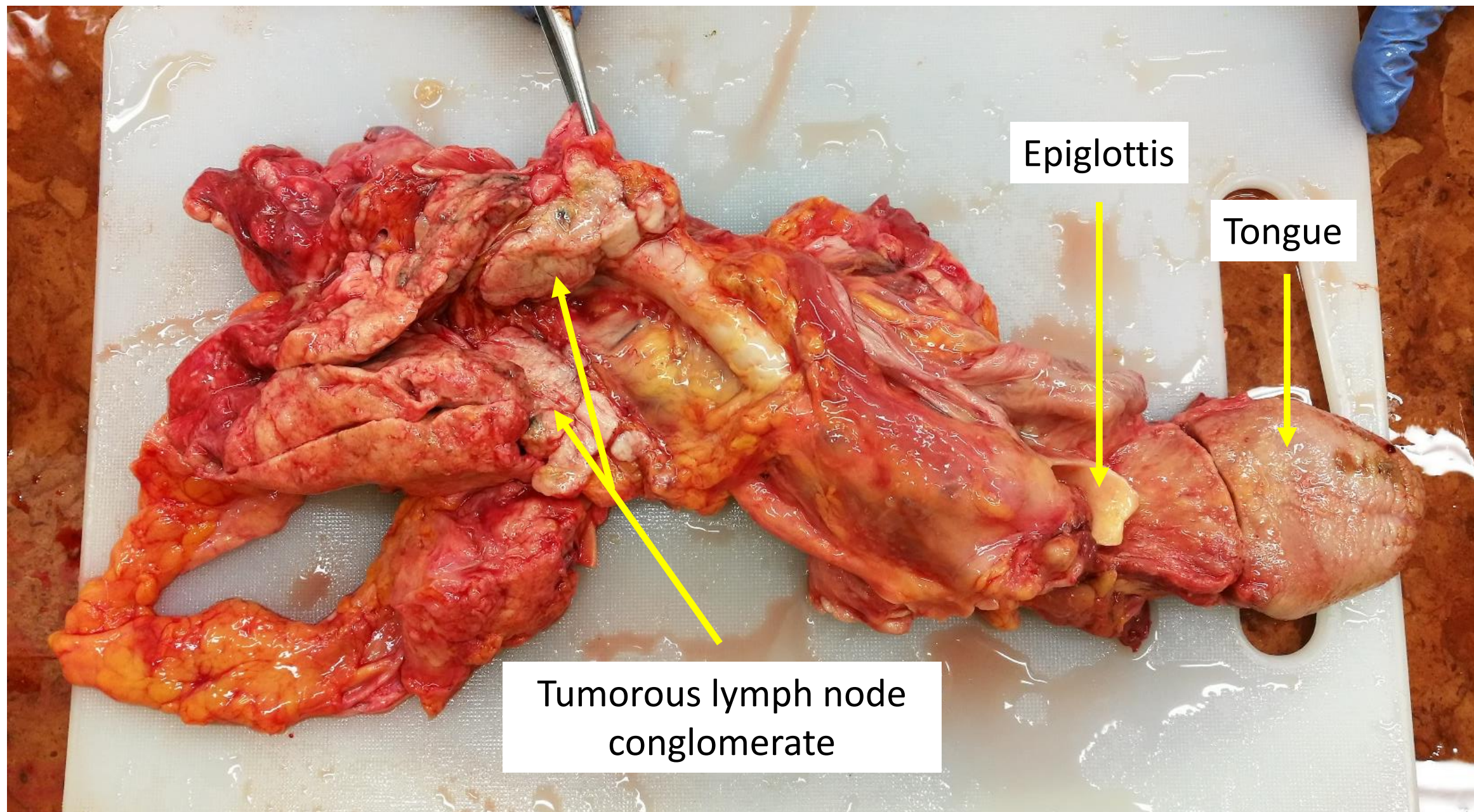


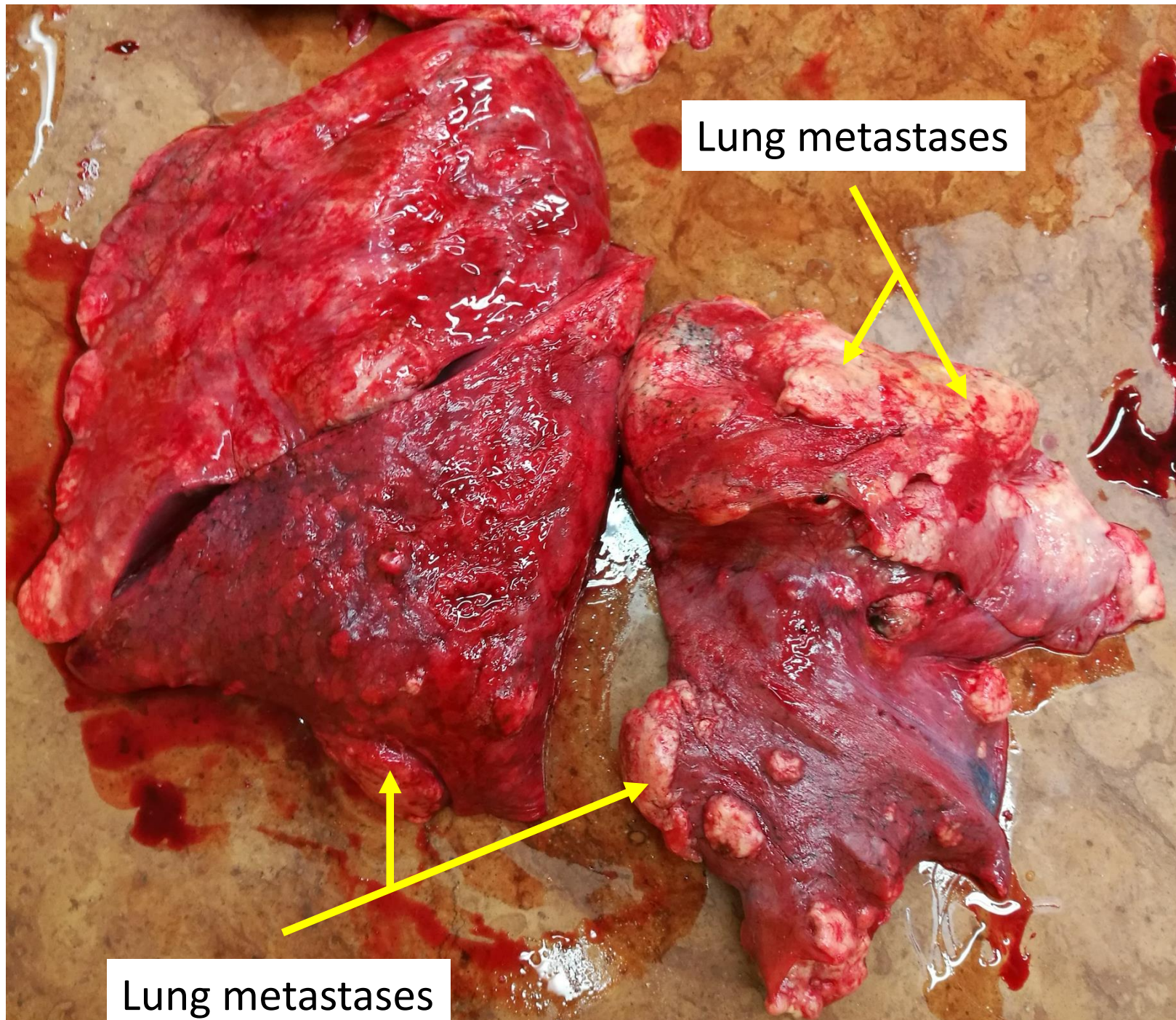
Tumorous lymph node conglomerate

Aortic arch

Tongue

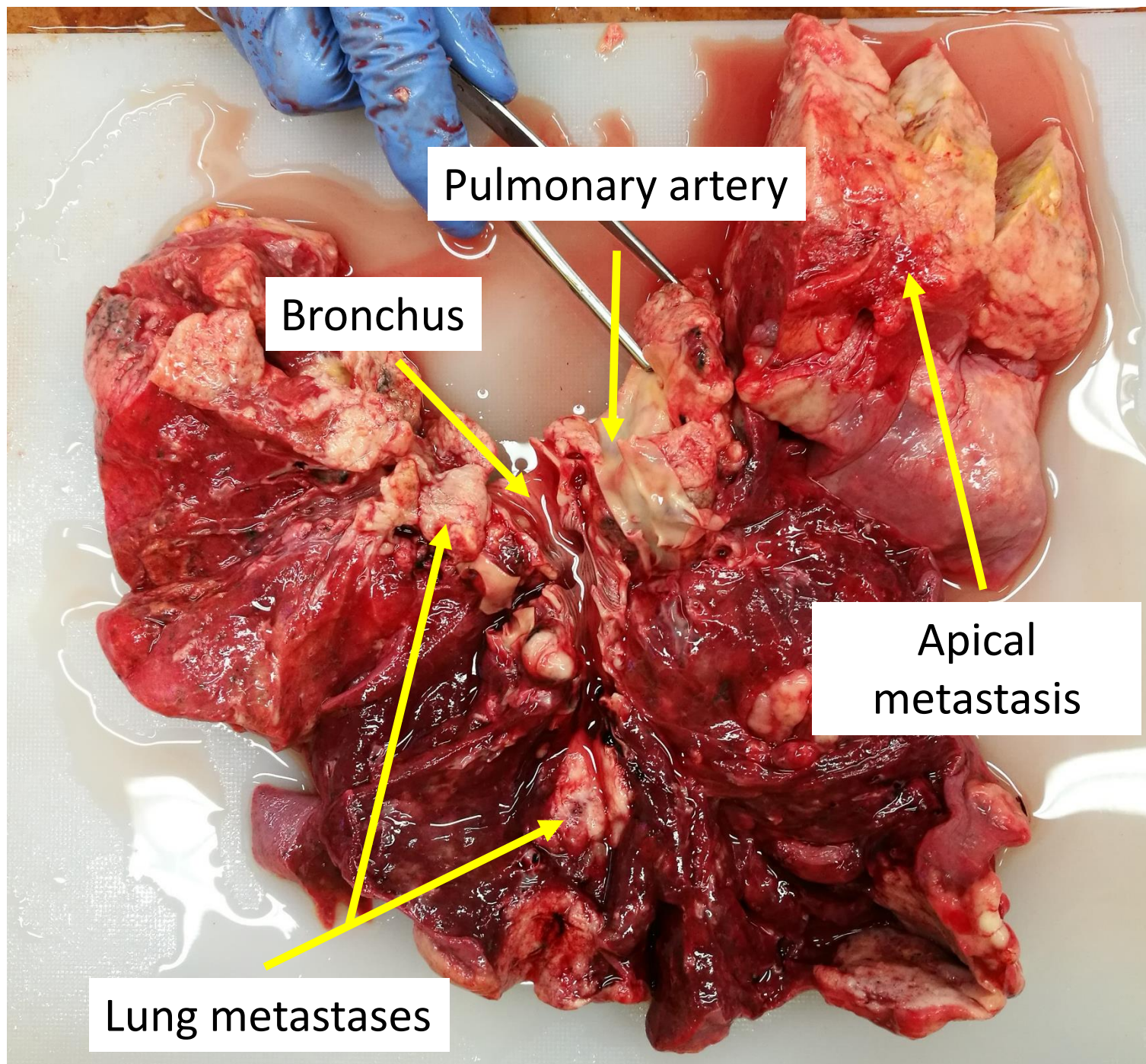
Tumorous lymph node conglomerate

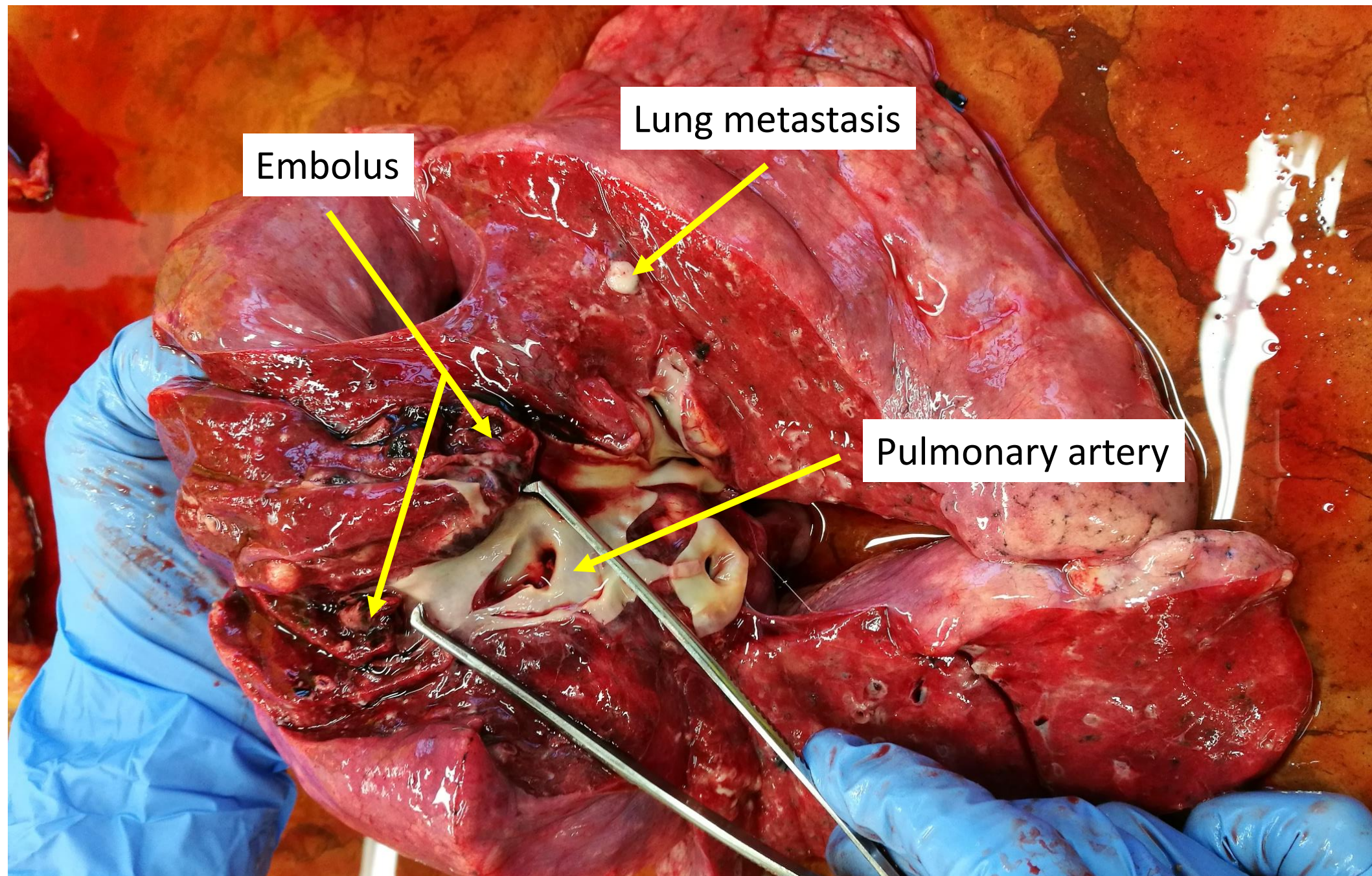




Lung metastases

Lung metastases

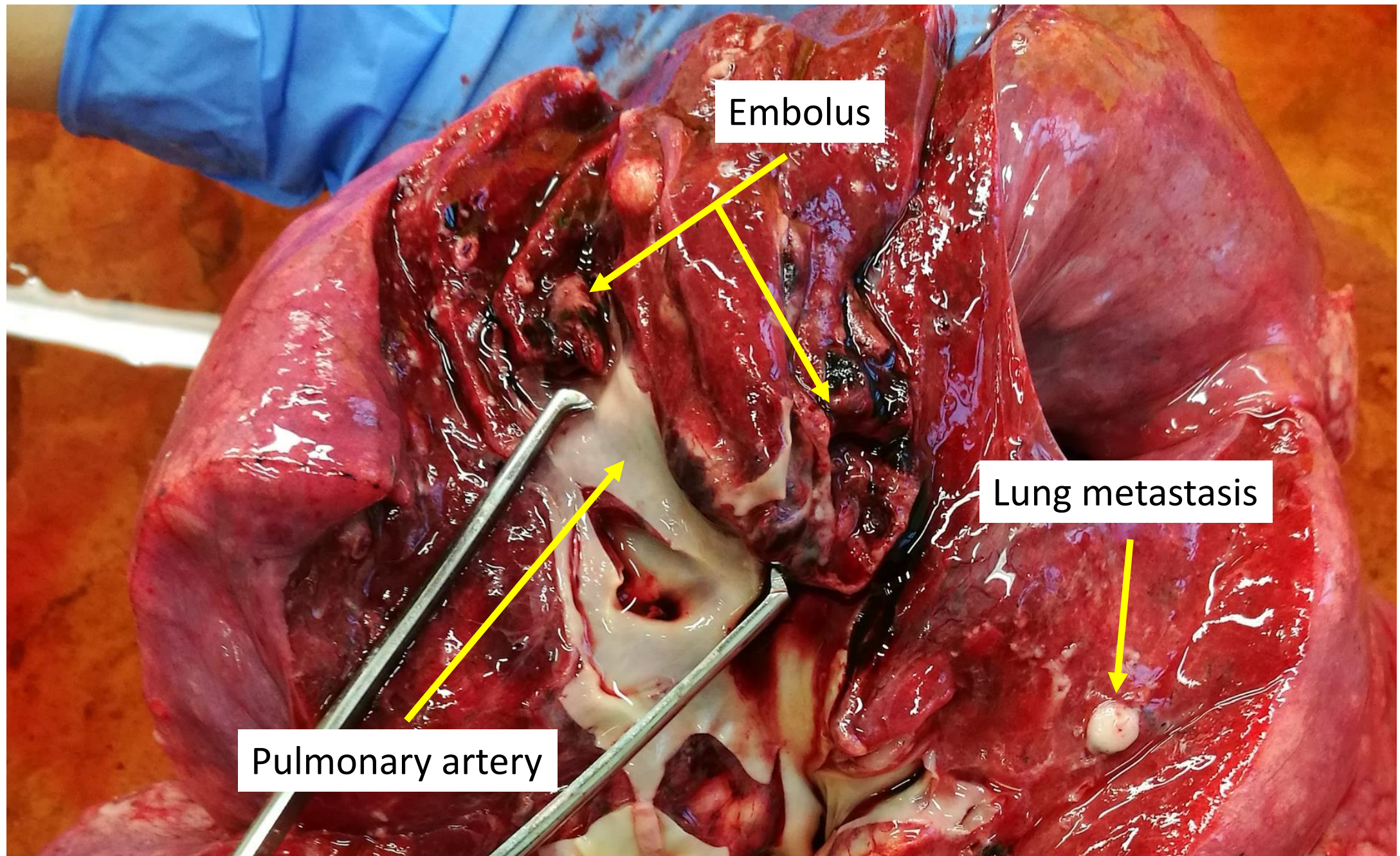




Embolus

Lung metastasis

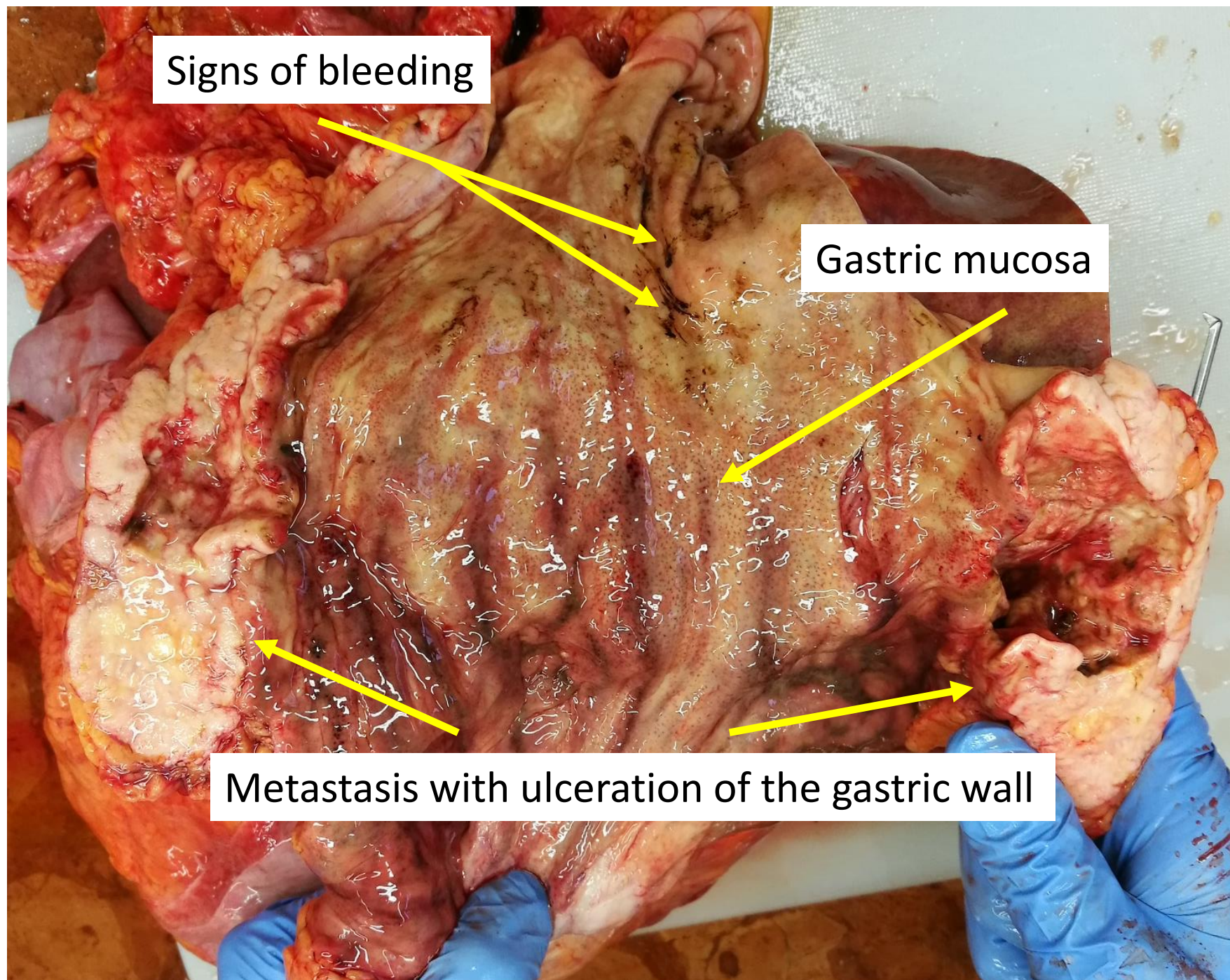
Pulmonary artery

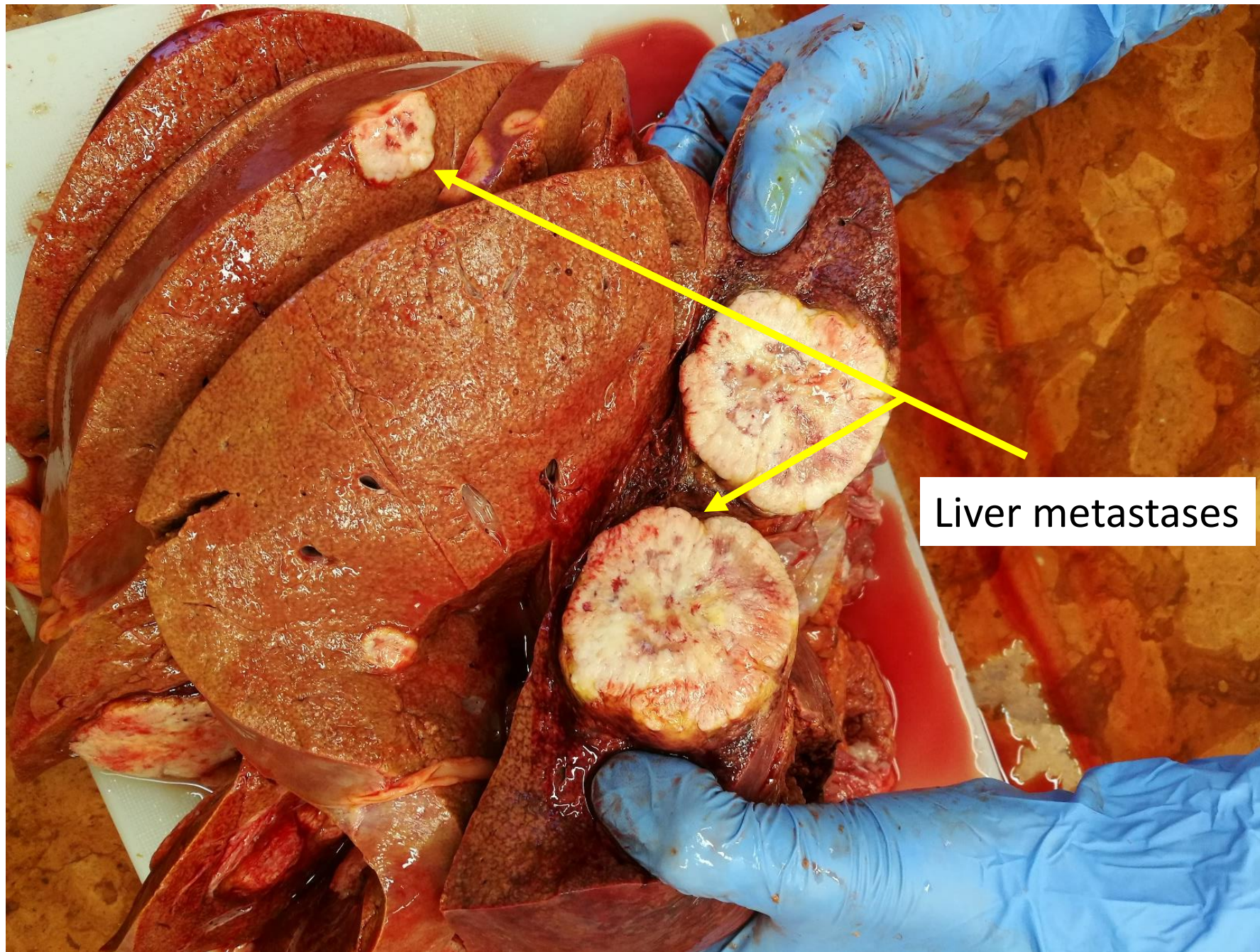


Embolus

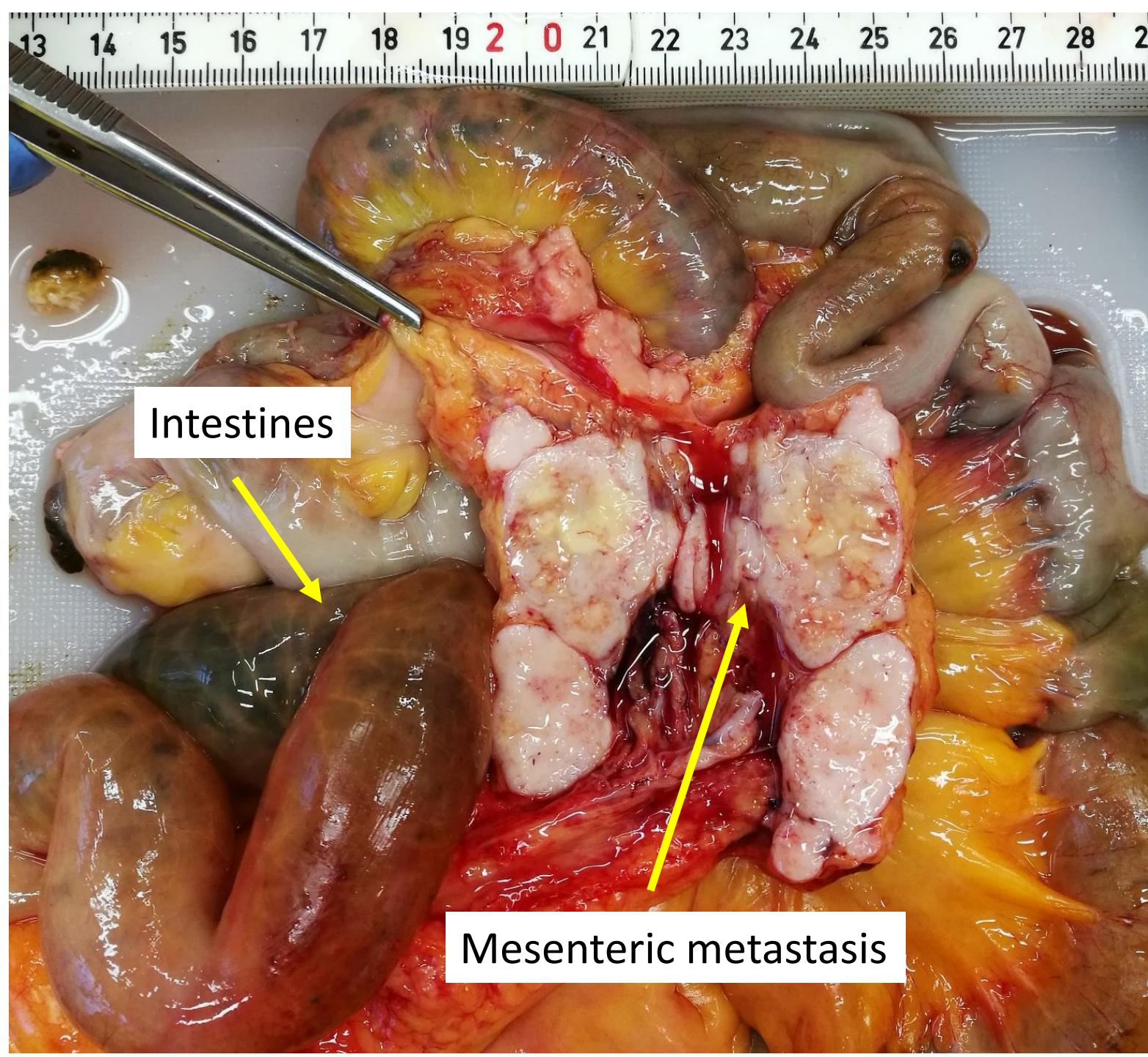
Lung metastasis

Pulmonary artery



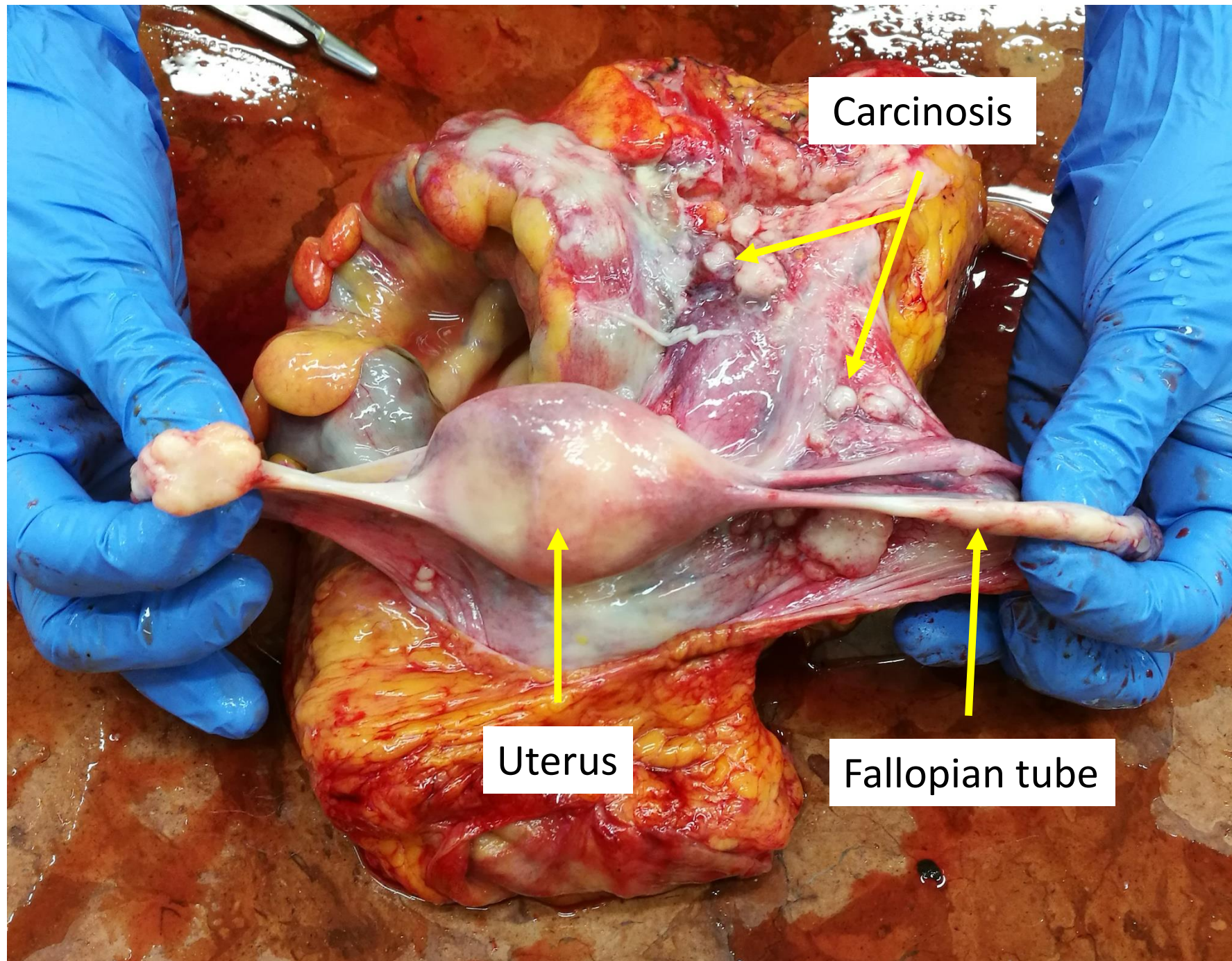


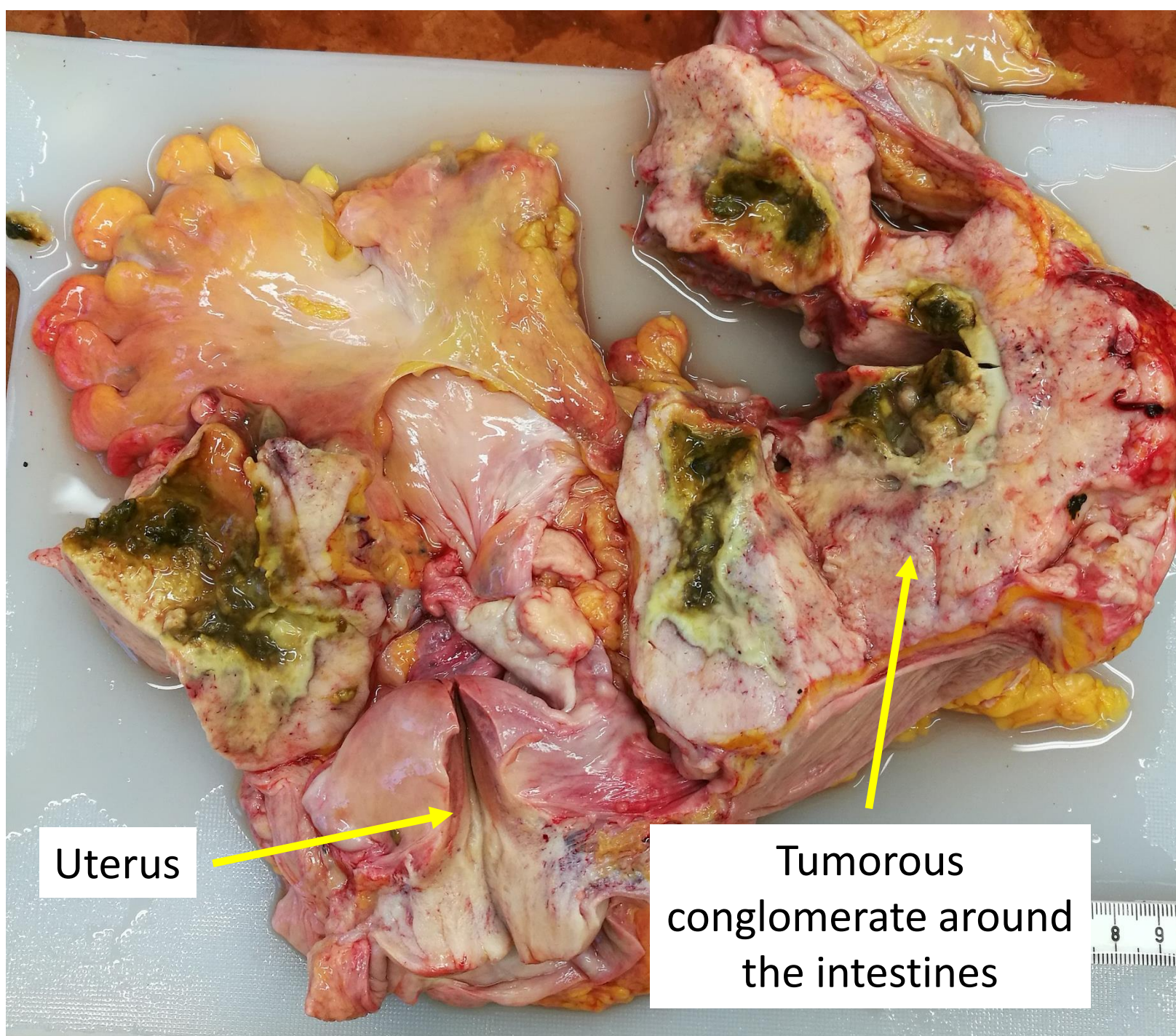
Liver metastases



Intestines

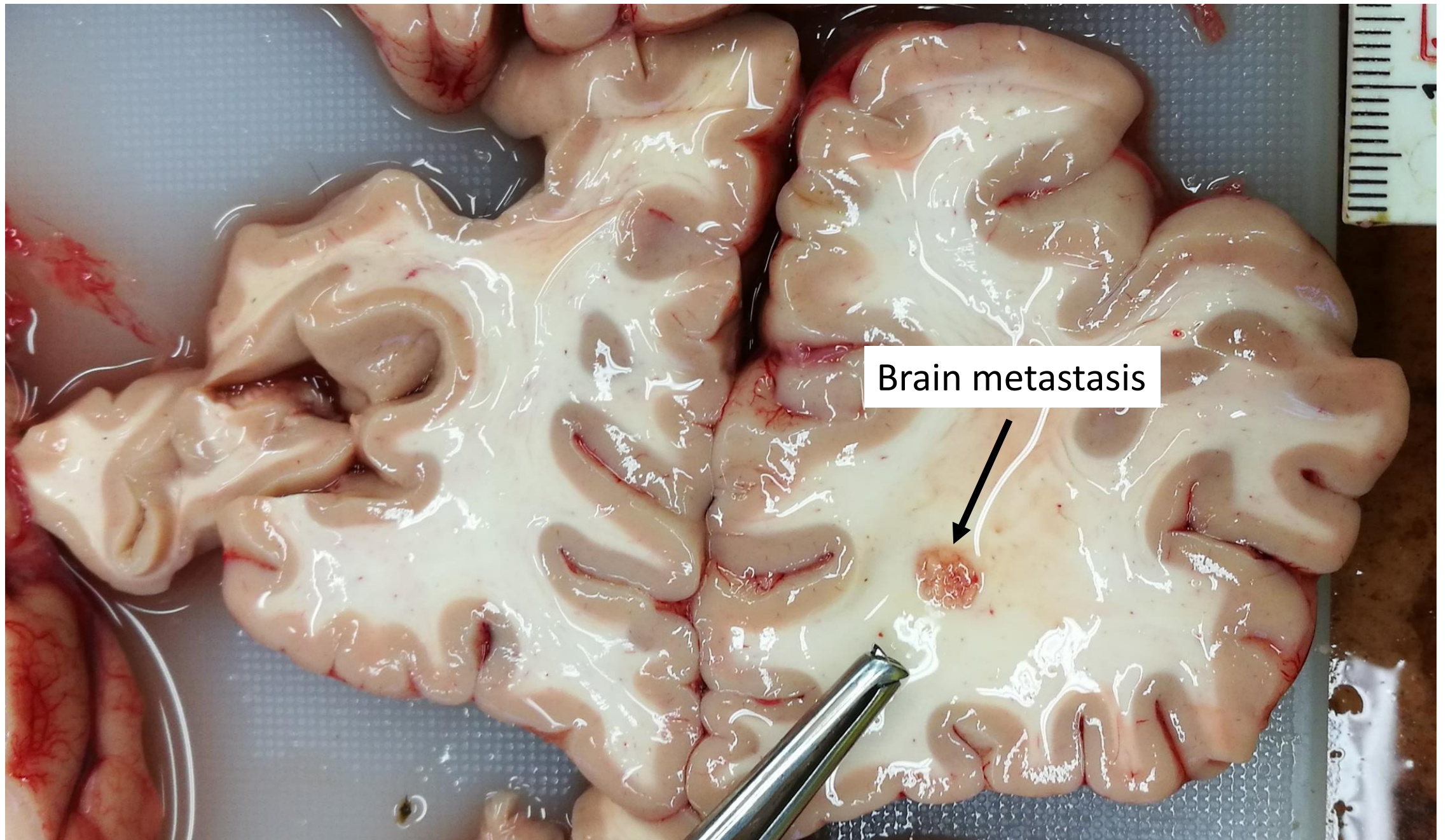
Mesenteric metastasis





Uterus

Tumorous
conglomerate around
the intestines



Brain metastasis

Summary

Underlying disease:

Invasive breast carcinoma (no special type).
Grade 3, triple negative immunophenotype.

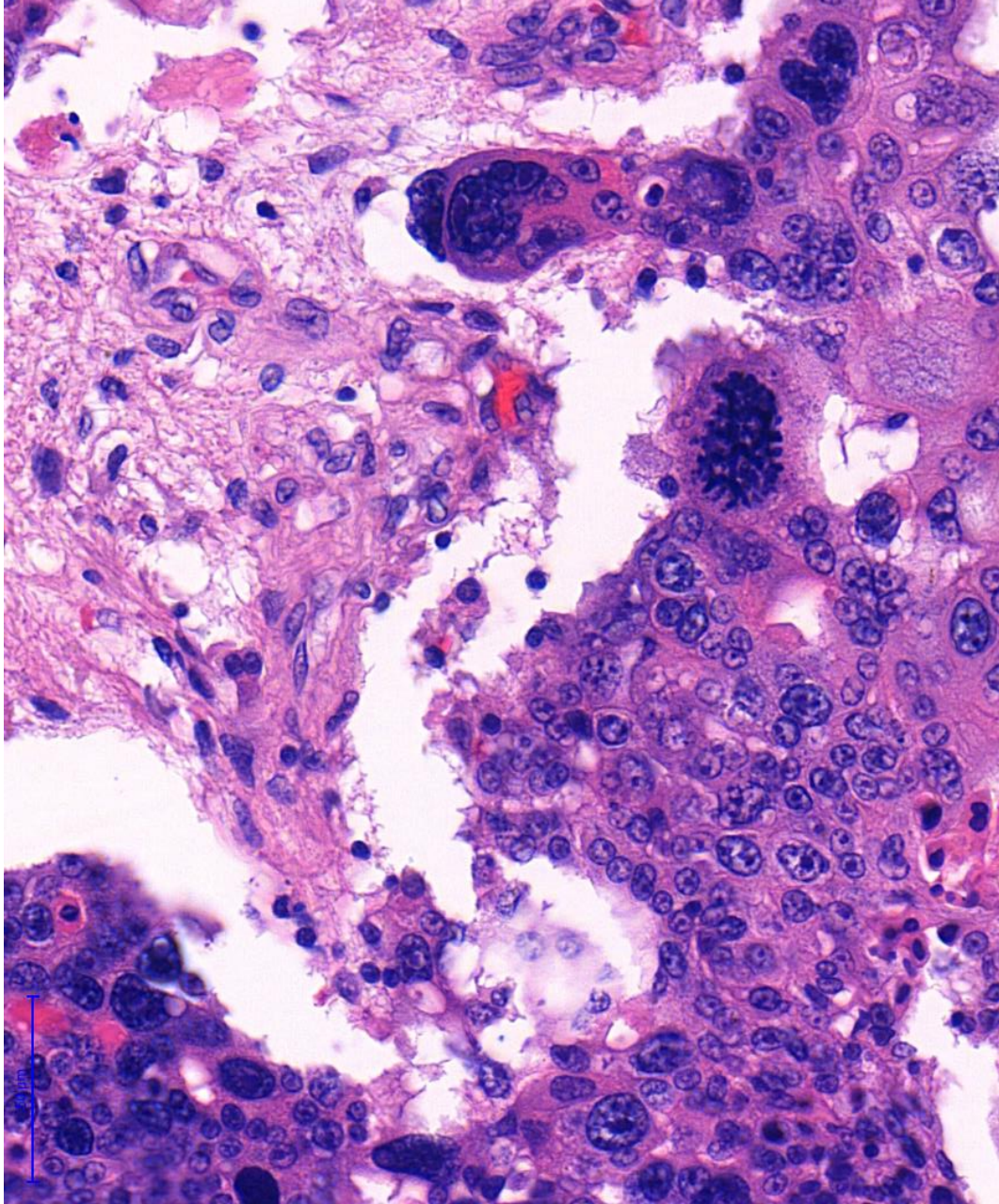
Complications:

Multiple lymph node metastases.
Multiple distant metastases (brain, liver, intestines).
Peritoneal carcinosis.
Gastric metastasis with bleeding.
Thrombosis of the right subclavian vein.

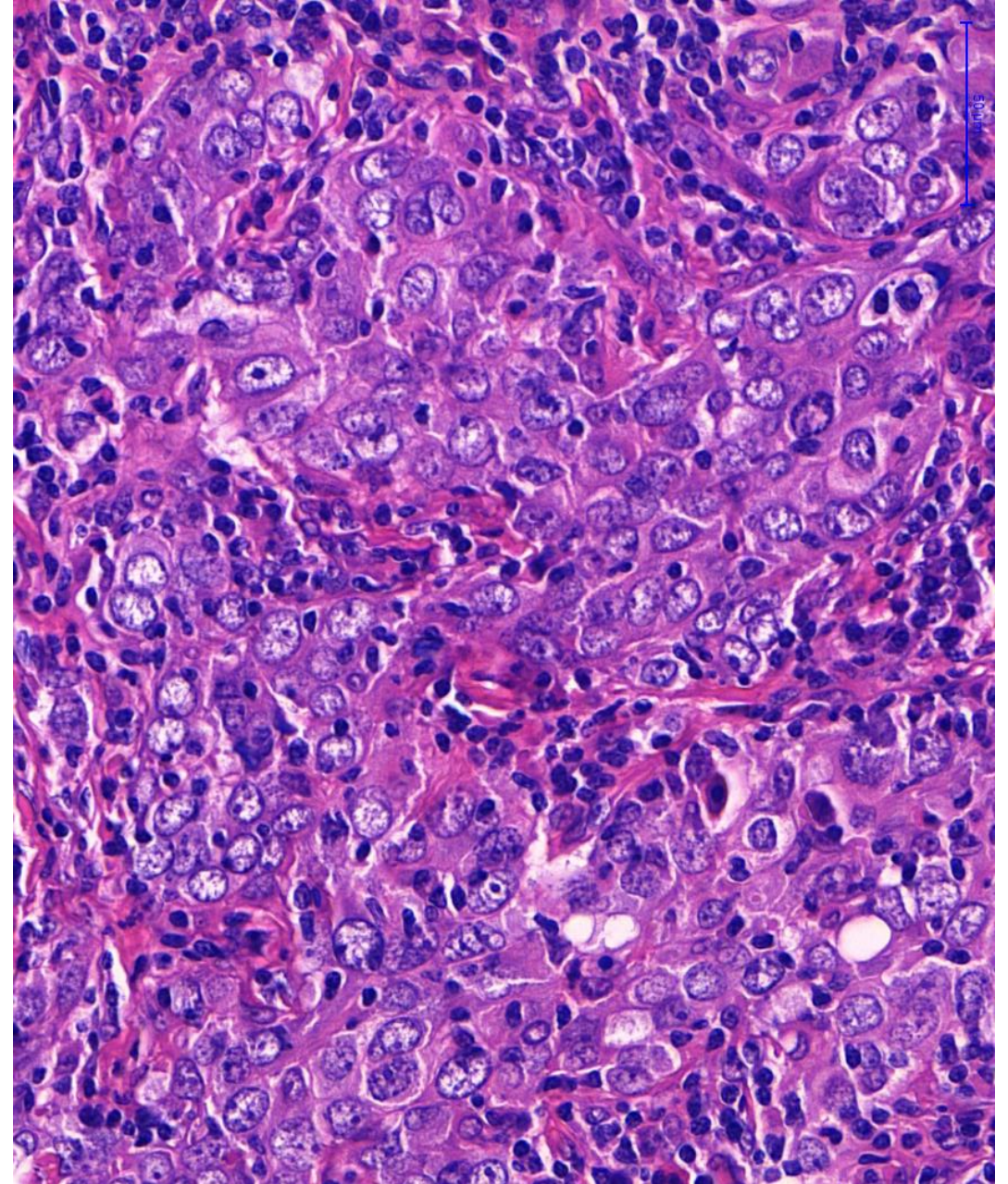
Cause of death:

Lung embolism.

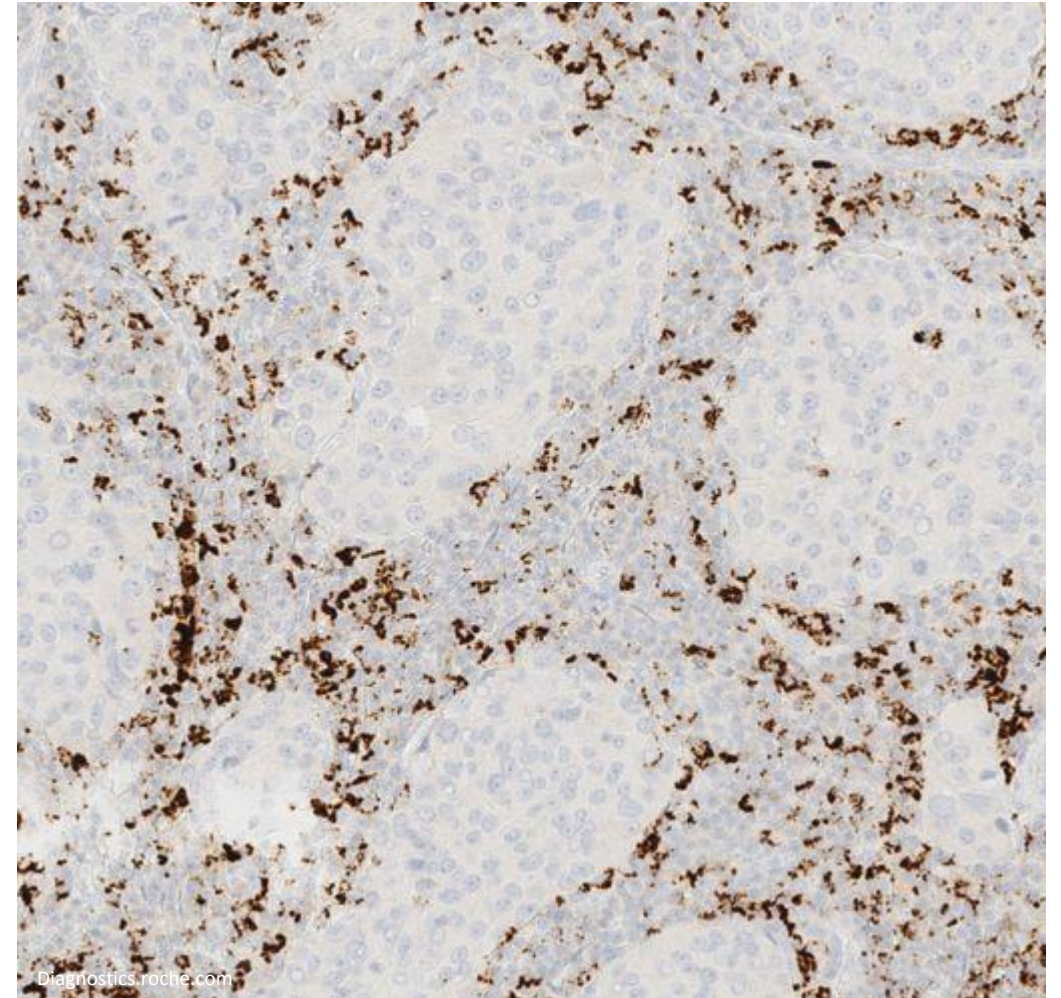
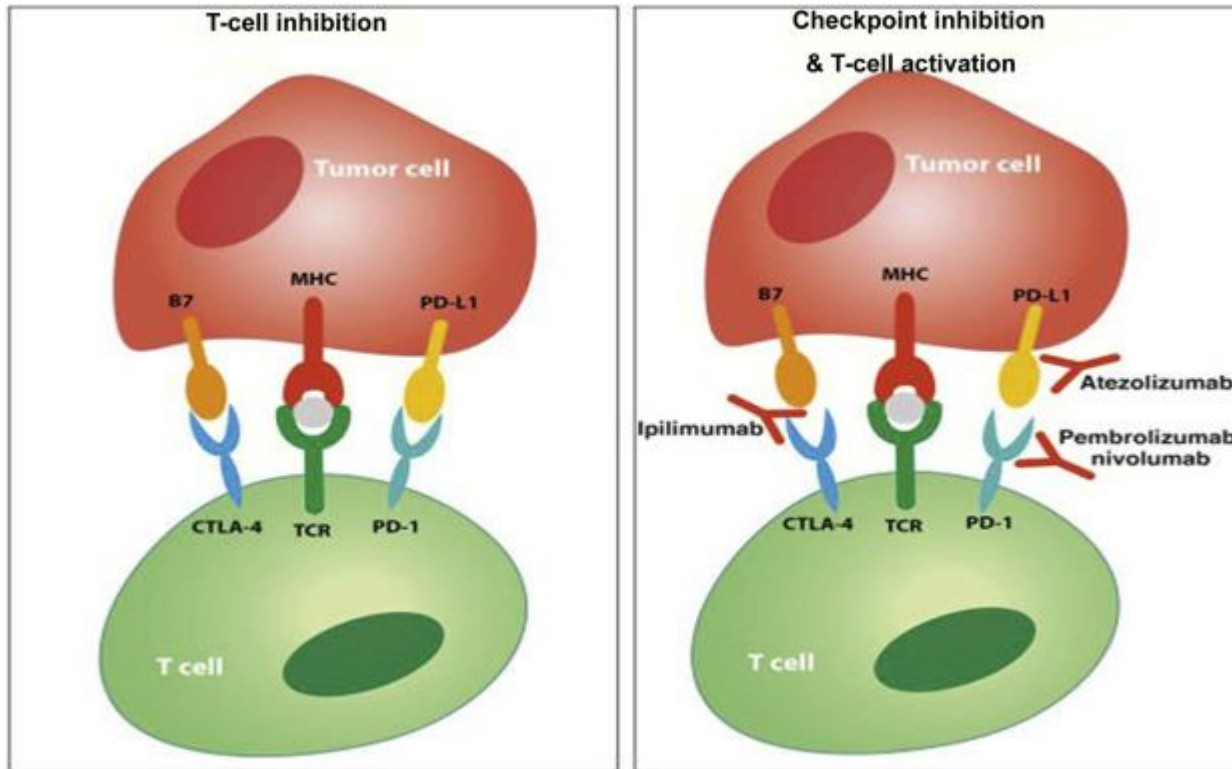
Brain metastasis



Primary tumor



Immunotherapy: immune checkpoint inhibitors
eg. PDL-1 inhibitors (atezolizumab)
Prerequisite: PDL-1 immunohistochemistry,
positive score



Breast carcinoma

Frequent! 1 out of 7-8 women affected

May occur in younger women

Therapy: multimodal

- Surgery
- Radiotherapy
- Depending on phenotype (ER/PR, HER-2!):
 - Targeted therapy: endocrine; herceptin
 - Chemotherapy
 - Novel targeted therapies

Triple negative breast carcinoma (TNBC):

- Usually grade 3
- Aggressive course
- Higher proportion under 50 years
- Characteristic for BRCA1 carriers
- Relapse usually within 5 years
- Distant metastasis: brain, liver, lung