

# **Evaluation of Tumor Infiltrating Lymphocytes (TILs) in Metastatic Tumor Deposits:**

**Some breast carcinoma examples**

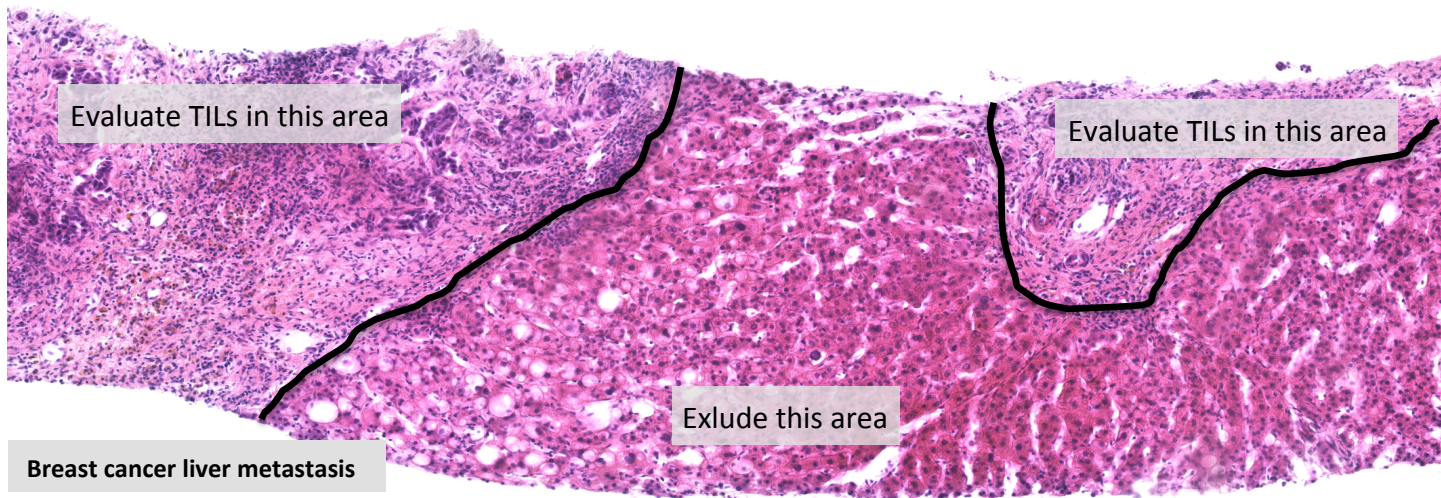
Guidelines for TILs assessment from the “International  
Immuno-Oncology Biomarker Working Group”

Authors: Cinzia Solinas<sup>1</sup>, Gert van den Eynden<sup>2</sup>, and Karen Willard-Gallo<sup>1</sup>

1- Institut Jules Bordet, Belgium. 2-GZA Hospitals and CORE Antwerp University, Antwerp, Belgium.

# Define area for TILs evaluation

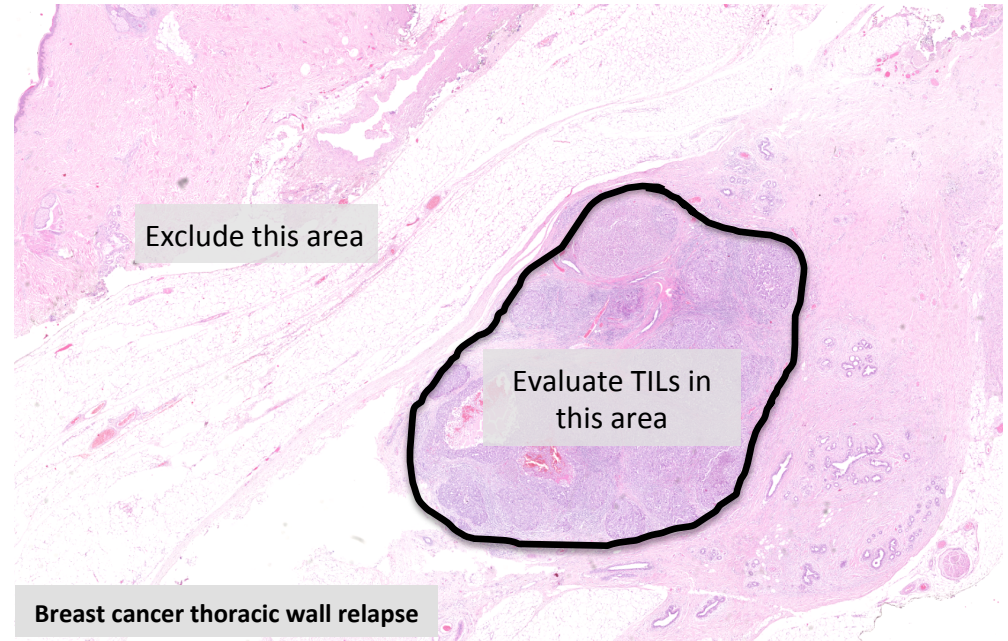
- TILs within the borders of the metastasis are evaluated
- The invasive edge of the metastasis is included in the evaluation, but not reported separately
- Immune infiltrates outside of the borders of the metastases (in the pre-existing tissue) are not included





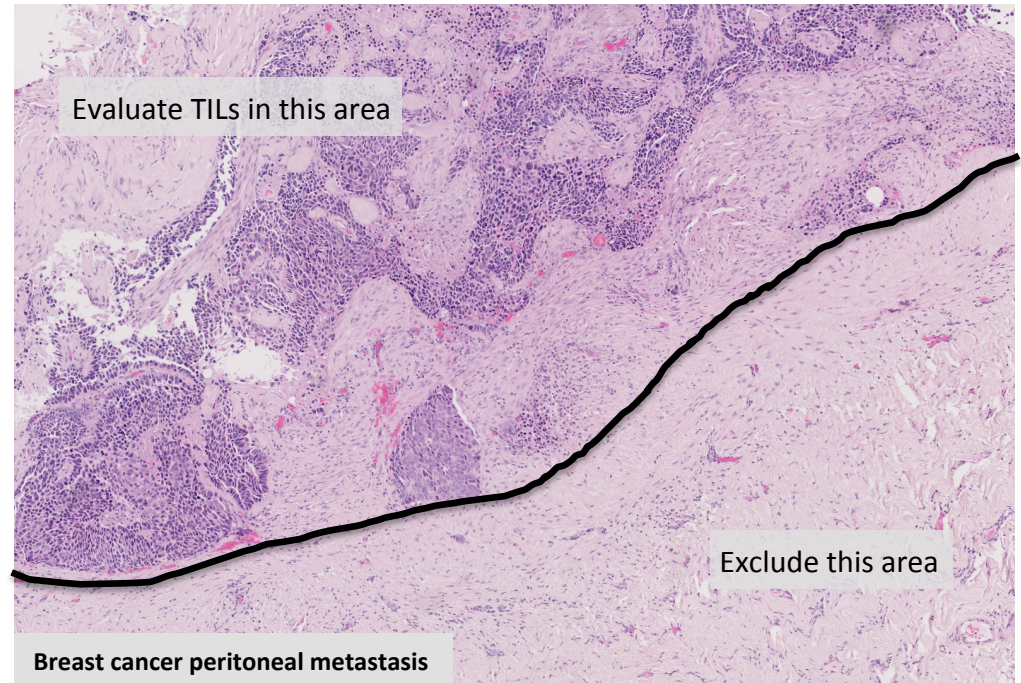
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- TILs within the borders of the metastasis are evaluated
- The invasive edge is included in the evaluation
- Immune infiltrates outside of the borders of the metastasis are not included
- In some metastases the tumor border can be sharply delineated



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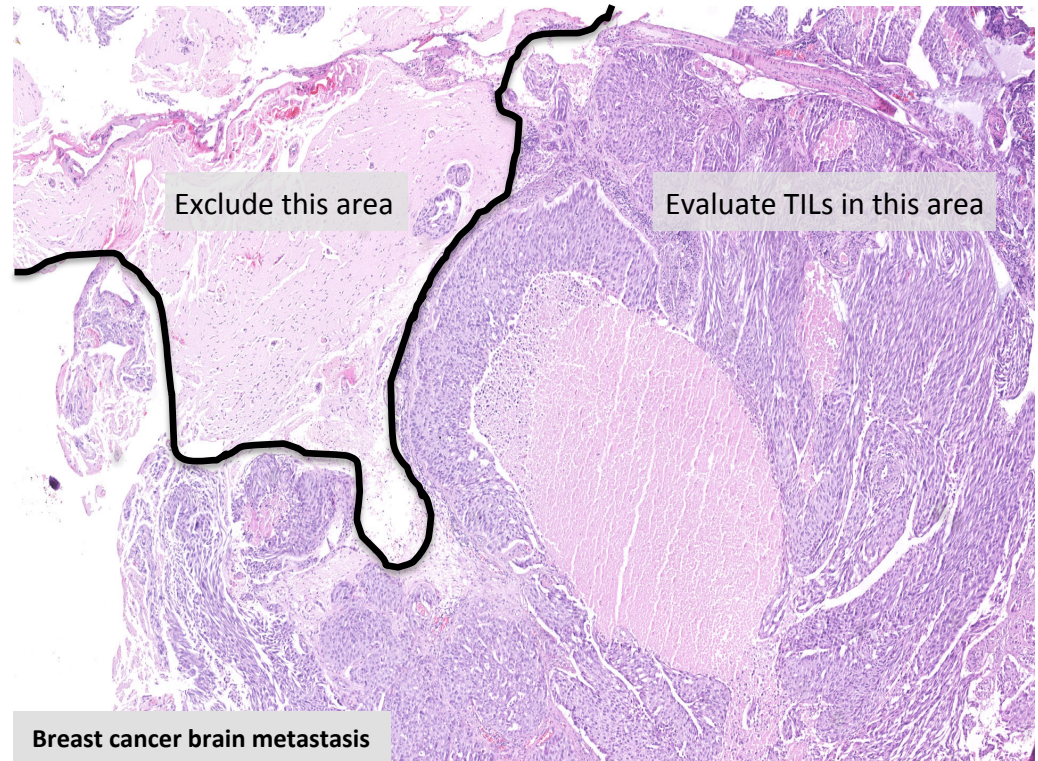
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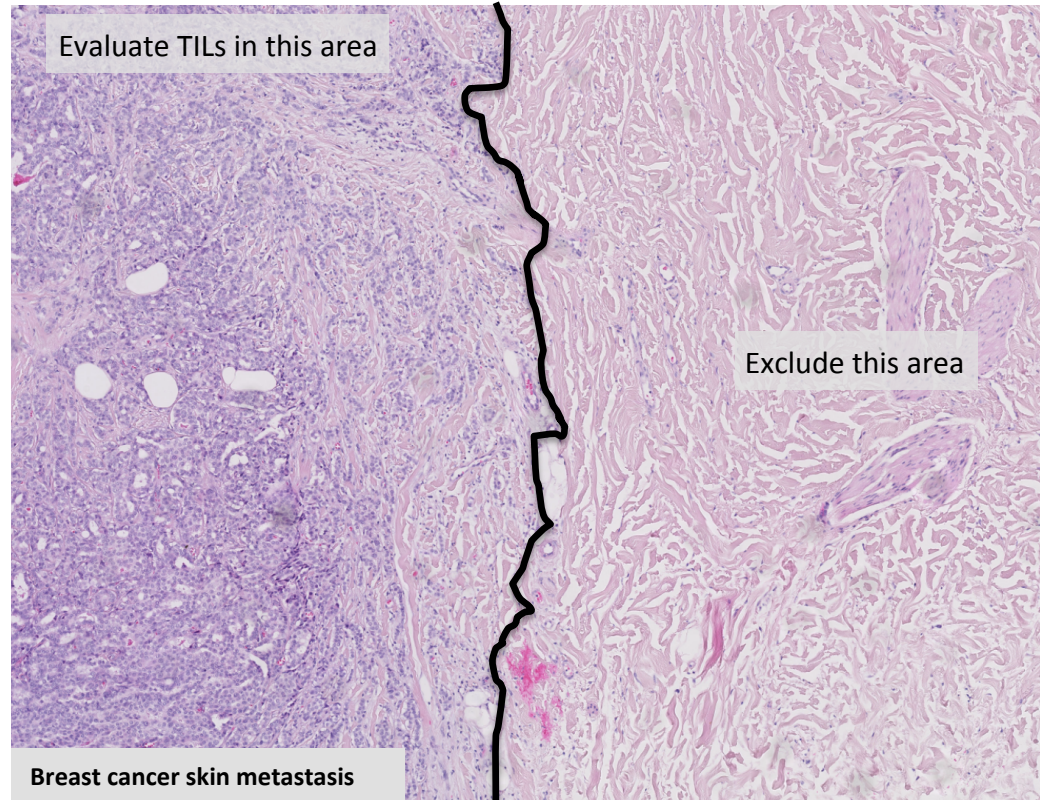
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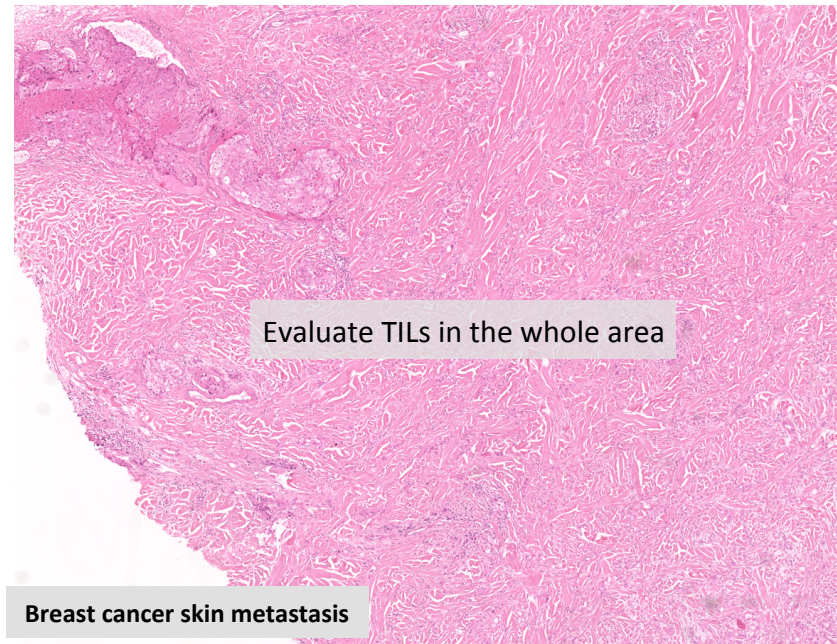
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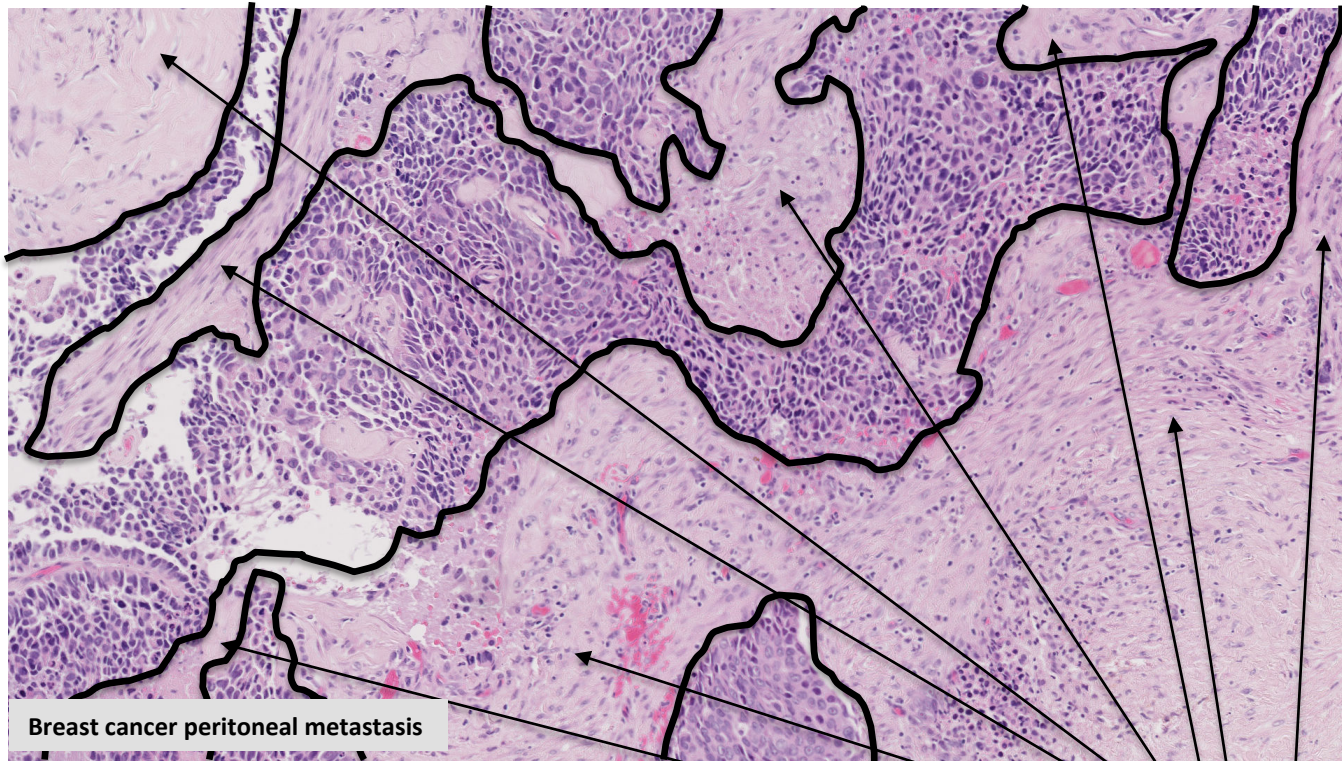
- TILs within the borders of the metastasis are evaluated
- Due to the extremely infiltrative ('lobular-like') growth pattern of some metastases, with only minimal disturbance of the pre-existing skin histology, the tumor border is difficult to discern.





# Define area for TILs evaluation

Include TILs evaluation in (desmoplastic) stroma of the metastasis

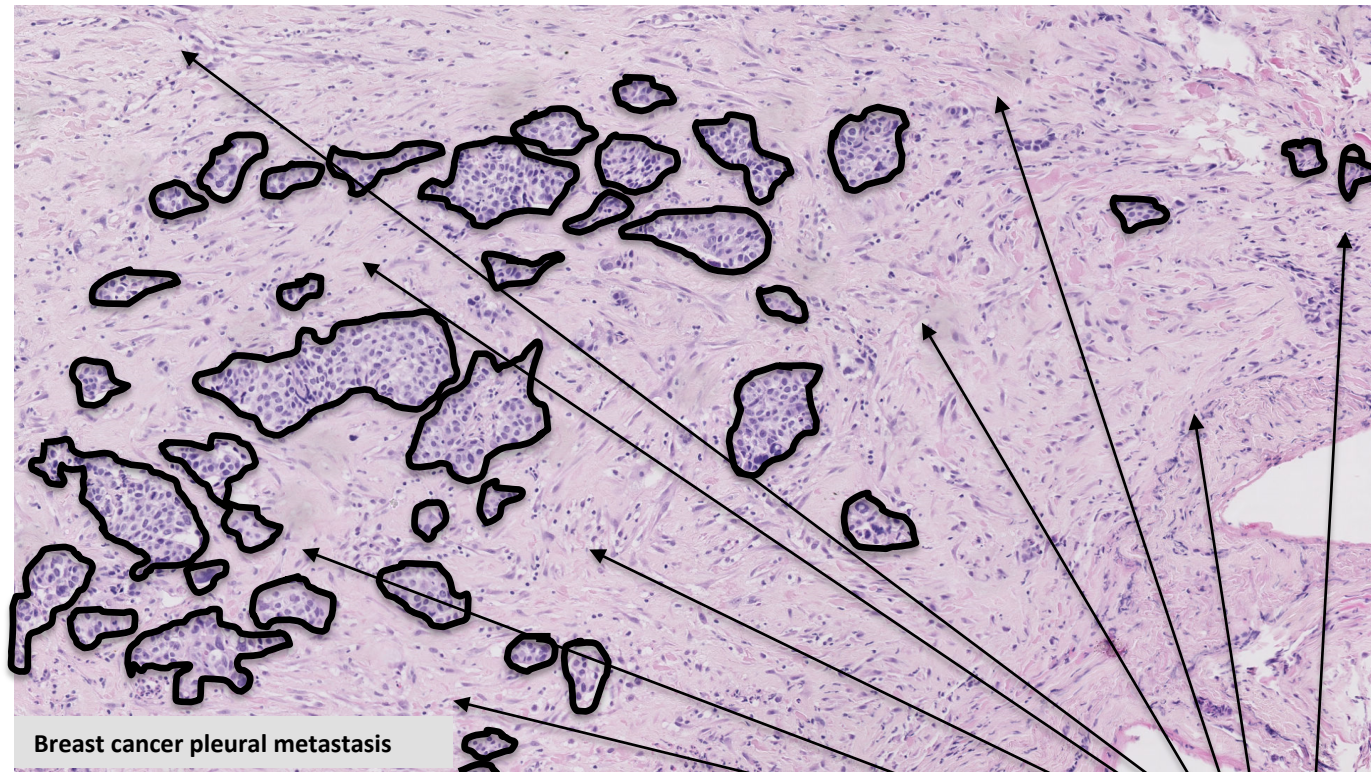


Breast cancer peritoneal metastasis

Include TILs in this area  
= stromal TILs

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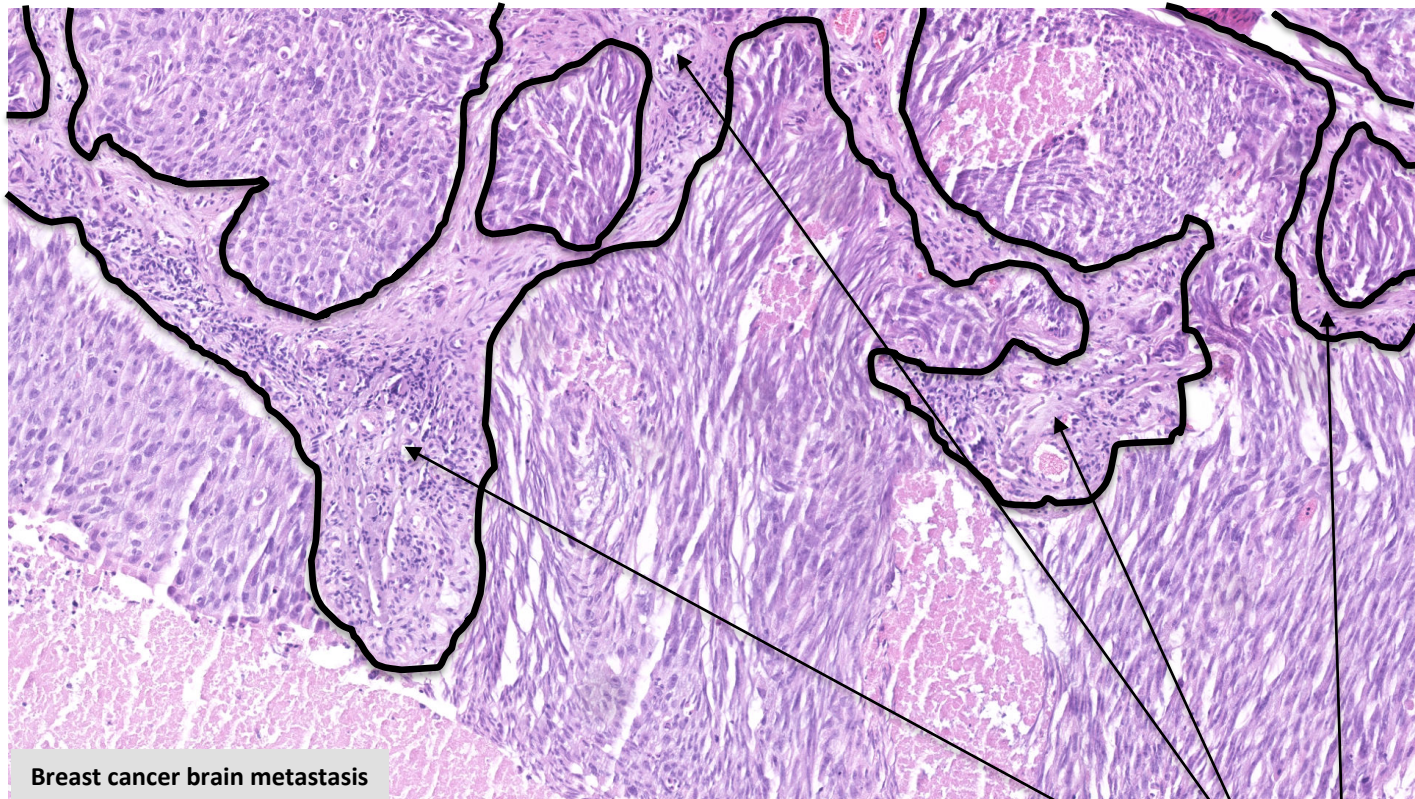
Breast cancer pleural metastasis

Include TILs in this area  
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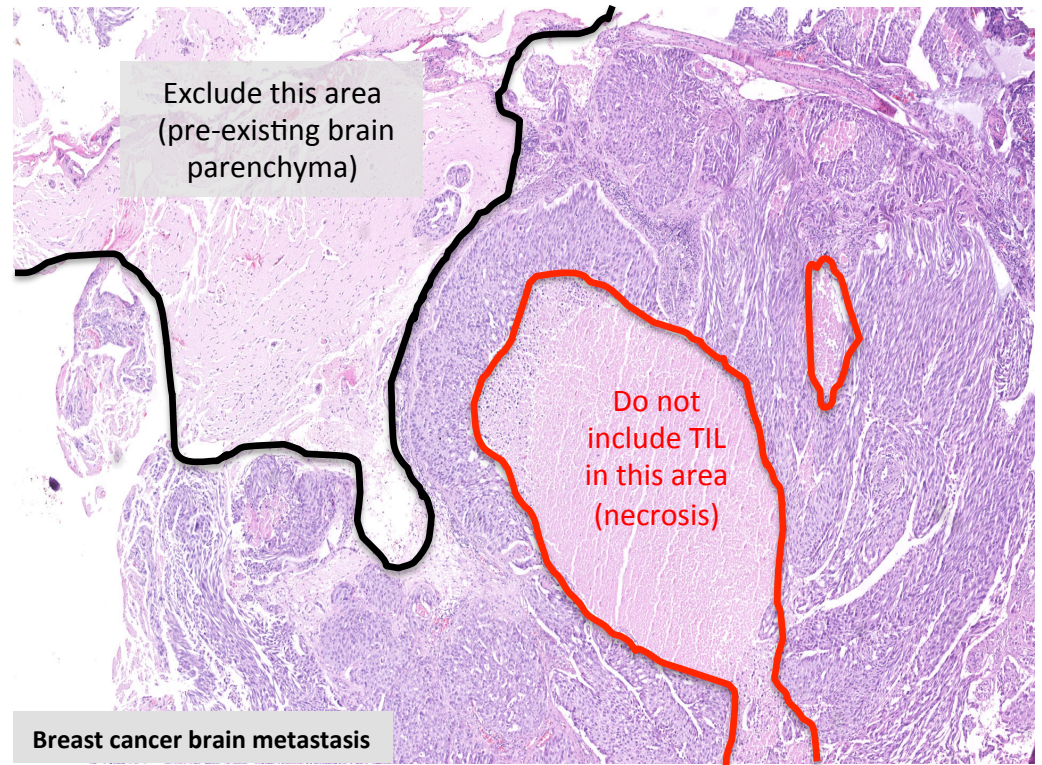


Breast cancer brain metastasis

Include TILs in this area  
= stromal TILs

# Define area for TILs evaluation

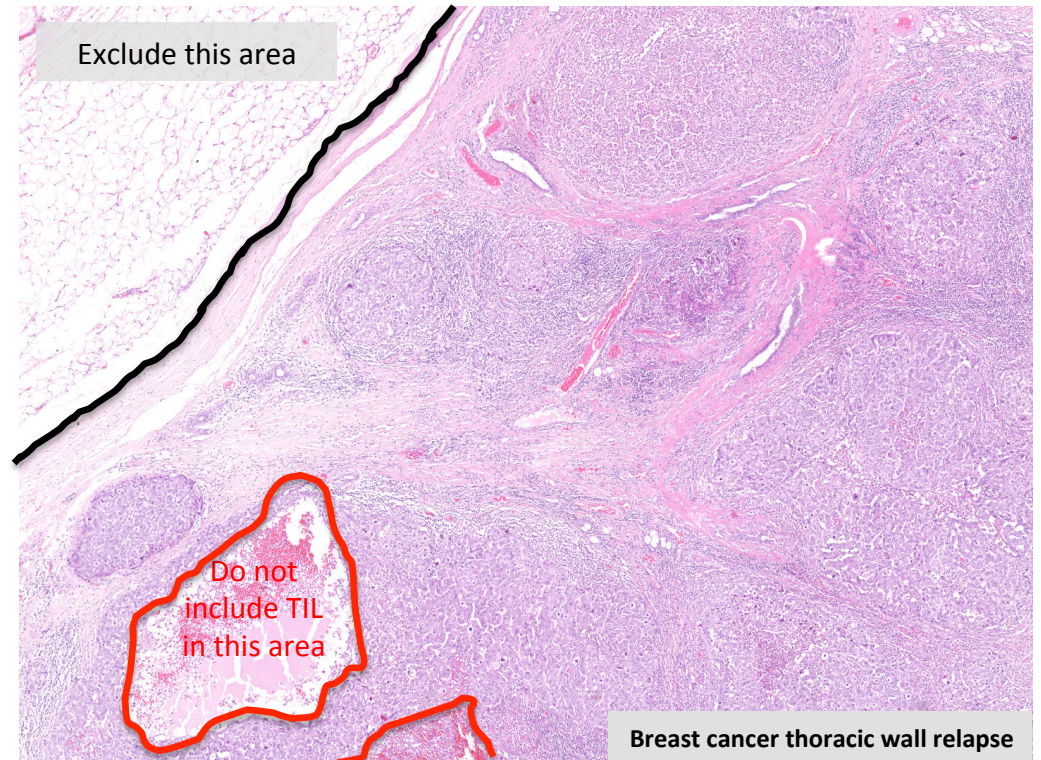
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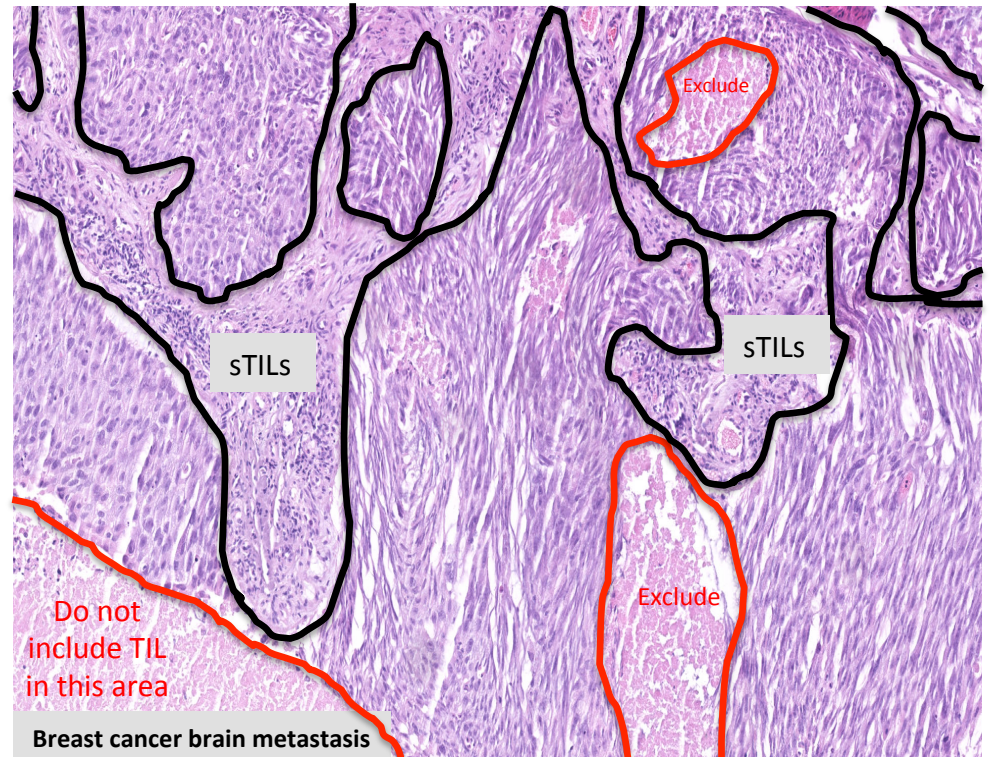
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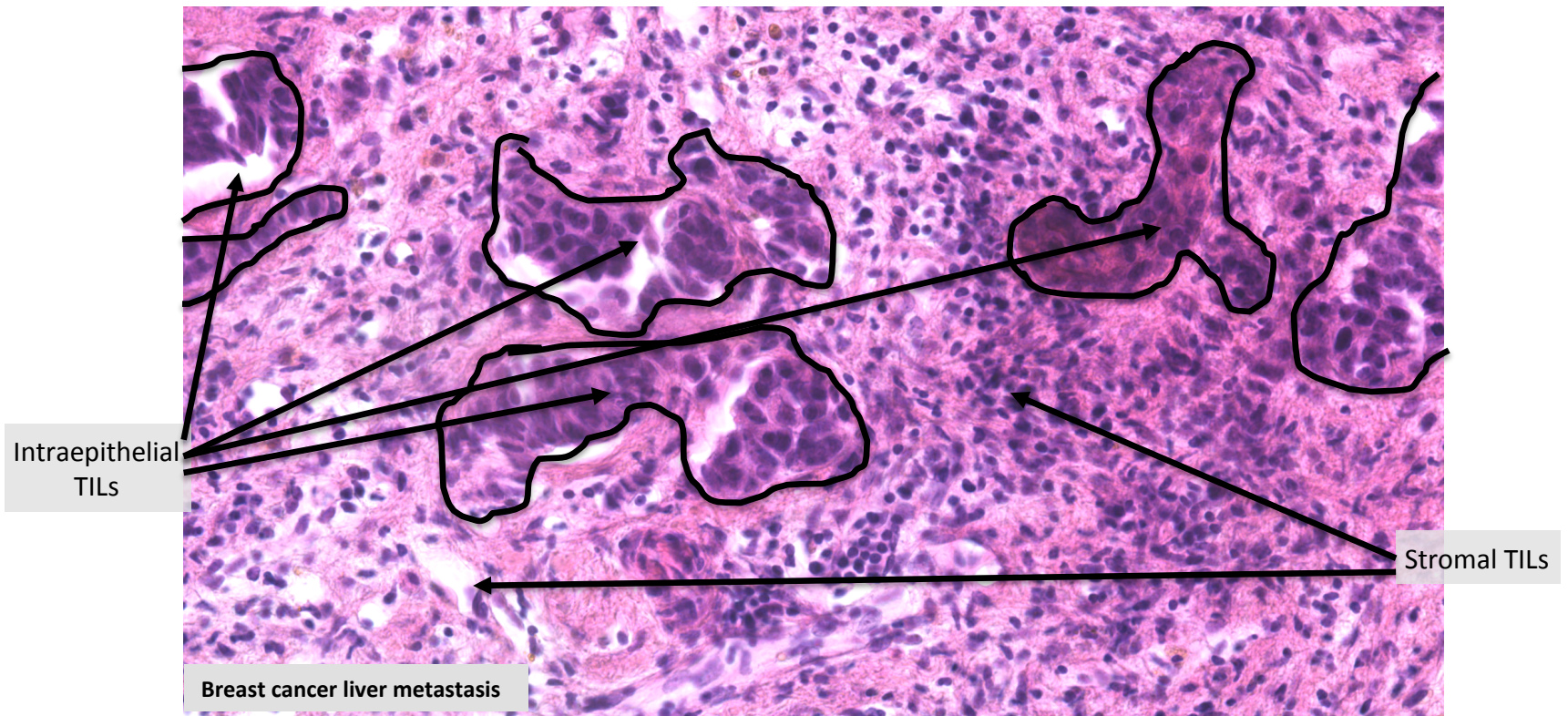


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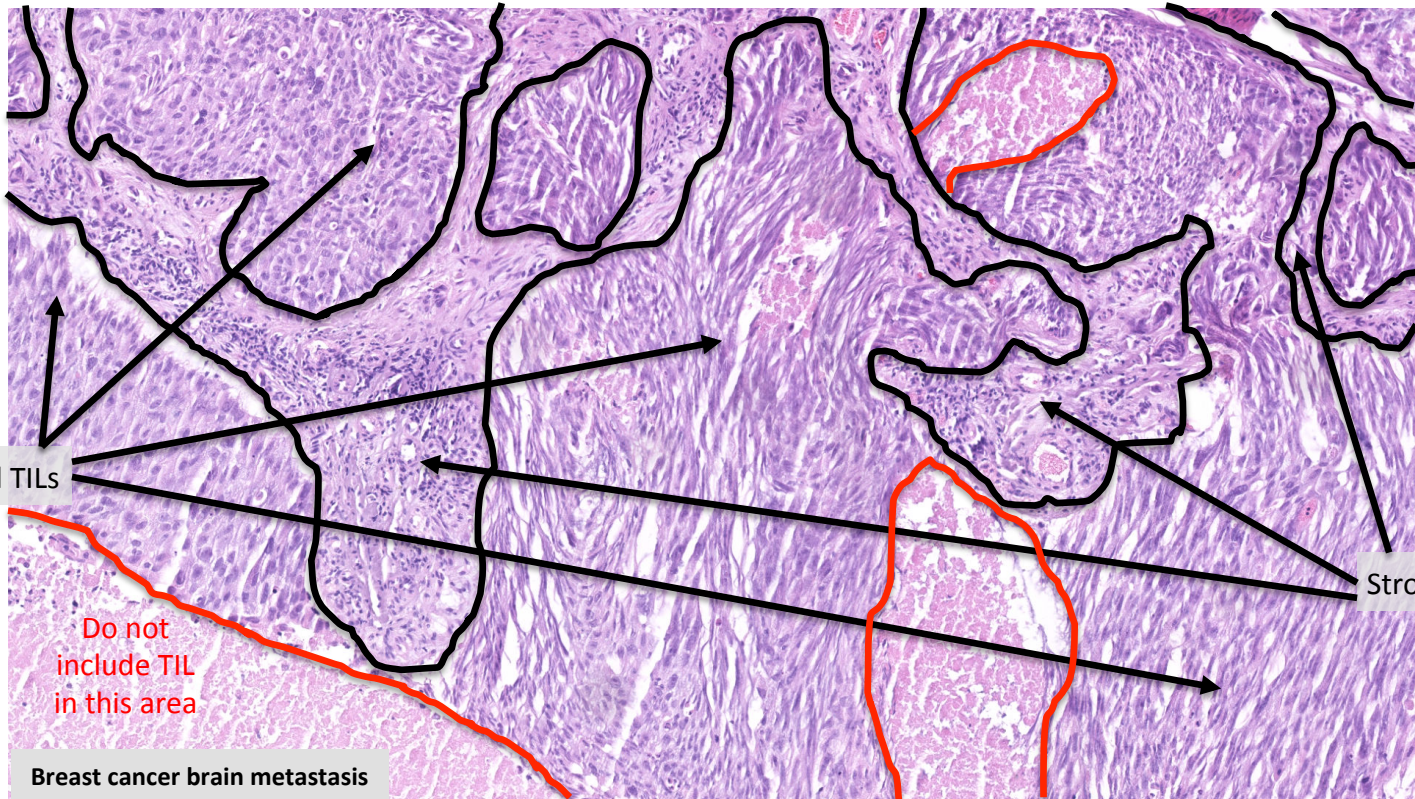


# Determine the localization of inflammatory infiltrate



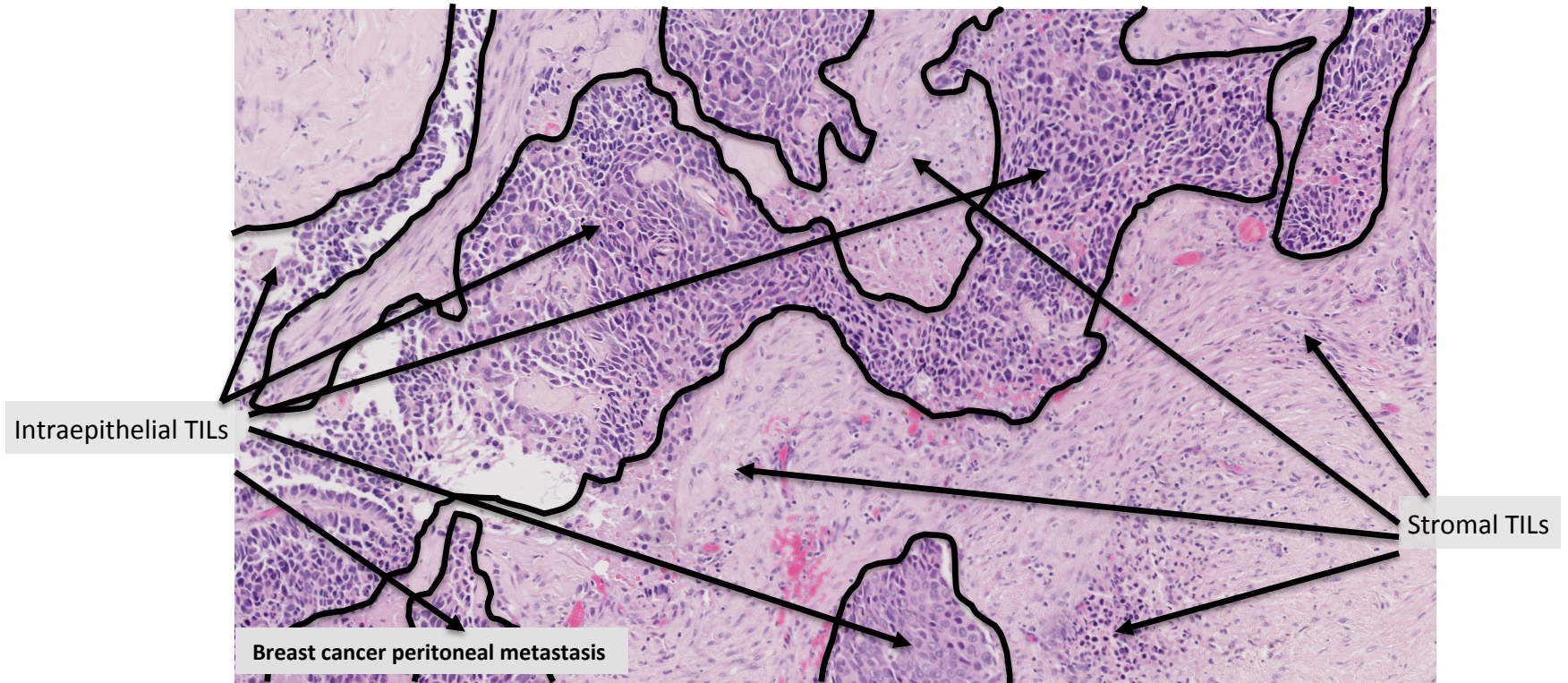


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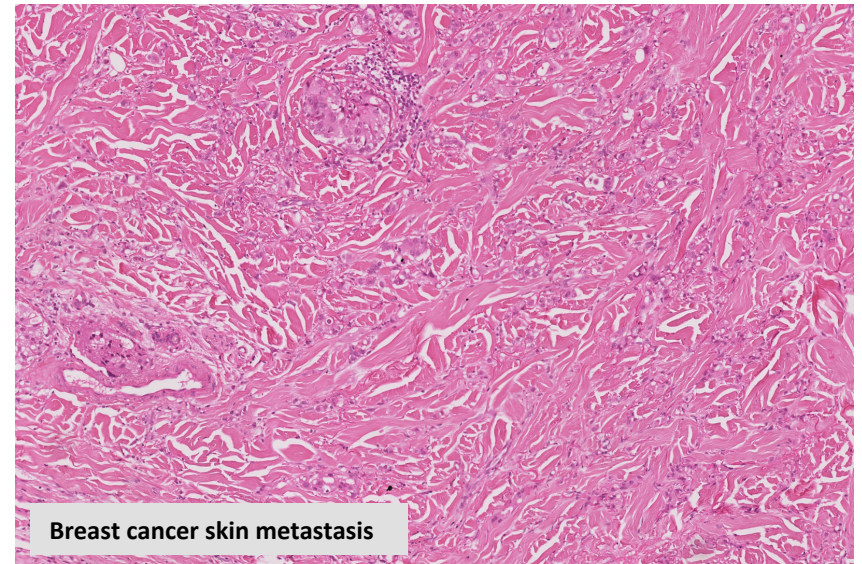
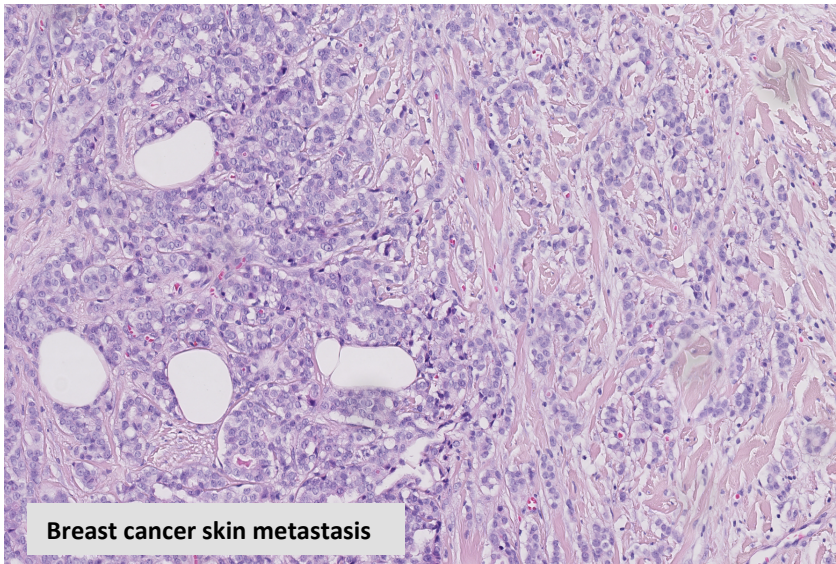


# Determine the localization of inflammatory infiltrate



# Determine the localization of inflammatory infiltrate

In some metastasis, distinguishing between stromal and intratumoral TILs is very difficult, due to the infiltrative growth pattern. It can be even a challenge to distinguish between epithelial tumor cells and TILs





# Determine type of inflammatory infiltrate

Do not include granulocytic infiltrate in areas of tumor necrosis

Include only mononuclear infiltrate (lymphocytes & plasma cells)

