

# Topic Models on MIBI Triple Negative Breast Cancer

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# Research Question

Aim to better characterize the tumor microenvironment(TME):

- ▶ Does the organization of defined regions within a tissue correlate with the type of immune cells that are within those regions?
- ▶ Are there any interactions between specified cell types within the tissues, and does this change with disease context?
- ▶ Can this information inform further experimentation to elucidate the mechanism of action that have been shown to correlate with a clinical outcome?

# Our Goal

To answer the research questions, the desired methodologies would:

- ▶ Able to help in organize larger collections of complex organization and functional attributes of a tissue specimen
- ▶ Able to offer insights on the composition and structure of a tissue or tumor and find relations of different composition to patients outcome

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