

Utility of Breast MRI in Localized Invasive Breast Cancer

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Background

Breast MRI is used inconsistently across the country as part of the workup for localized invasive breast cancer.

The National Comprehensive Cancer Network (NCCN) guidelines for localized, invasive, noninflammatory, nonmetastatic breast cancer describe that breast MRI is “optional” with “special considerations for mammographically occult tumors.”

Preoperative MRI in patients with invasive lobular carcinoma has been proven to better characterize size and allow for more accurate detection of multifocal disease.

MRI in this subgroup has been shown to alter surgical treatment and decrease re-excision rates. The NCCN footnote further describes that MRIs may be useful to detect occult axillary and internal mammary nodal disease.

MRI has been used at Saint Francis Cancer Center universally in the workup and management of invasive localized breast cancer.

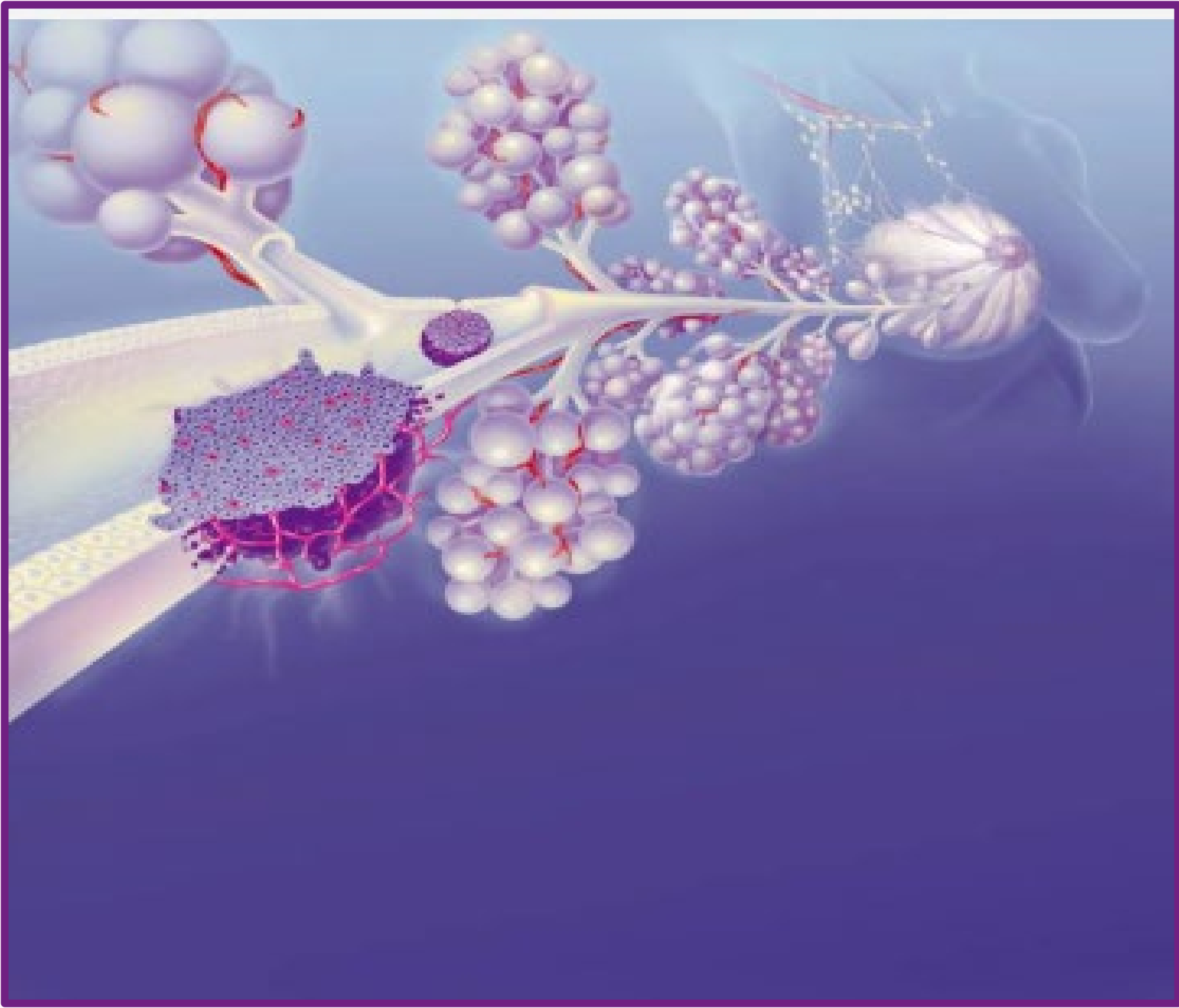
Defining the usefulness of MRI in these patients treated for invasive localized breast cancer will define the benefit and implications of using breast MRI in this cohort.

This research will contribute to the effort to standardize and optimize the treatment of invasive localized breast cancer across the country.

Aims

This project aims to identify the way in which MRI contributes to the accuracy of preoperative assessment of clinical stage in invasive localized breast cancer.

It will also explore the role that MRI has in detecting multifocal disease or an otherwise additional occult malignancy in the ipsilateral breast in invasive localized breast cancer and the role of MRI in detecting disease in the contralateral breast in invasive localized breast cancer.



Infiltrating Adenocarcinoma. Photo by: BSIP/Education Images/Universal Images Group via Getty Images

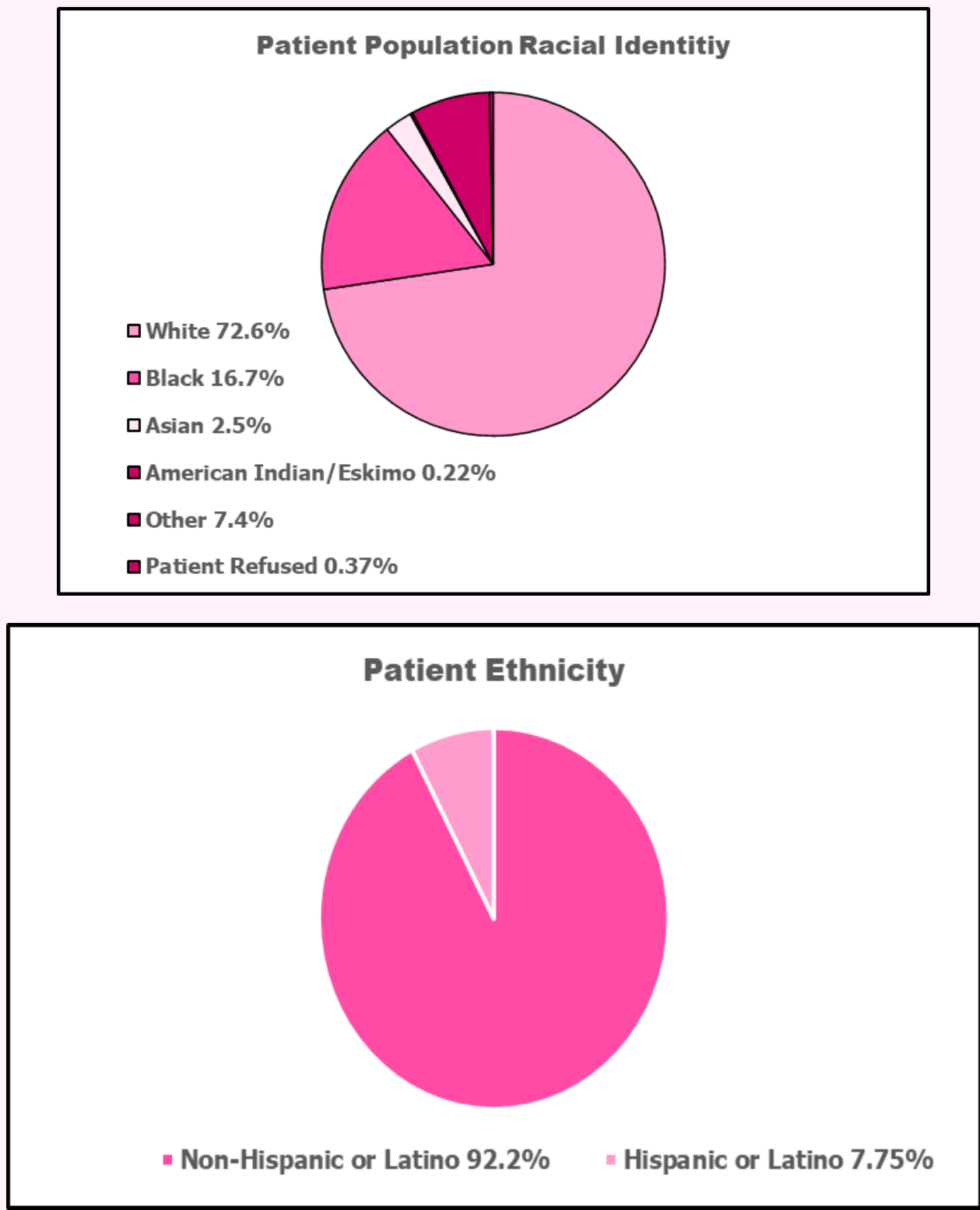
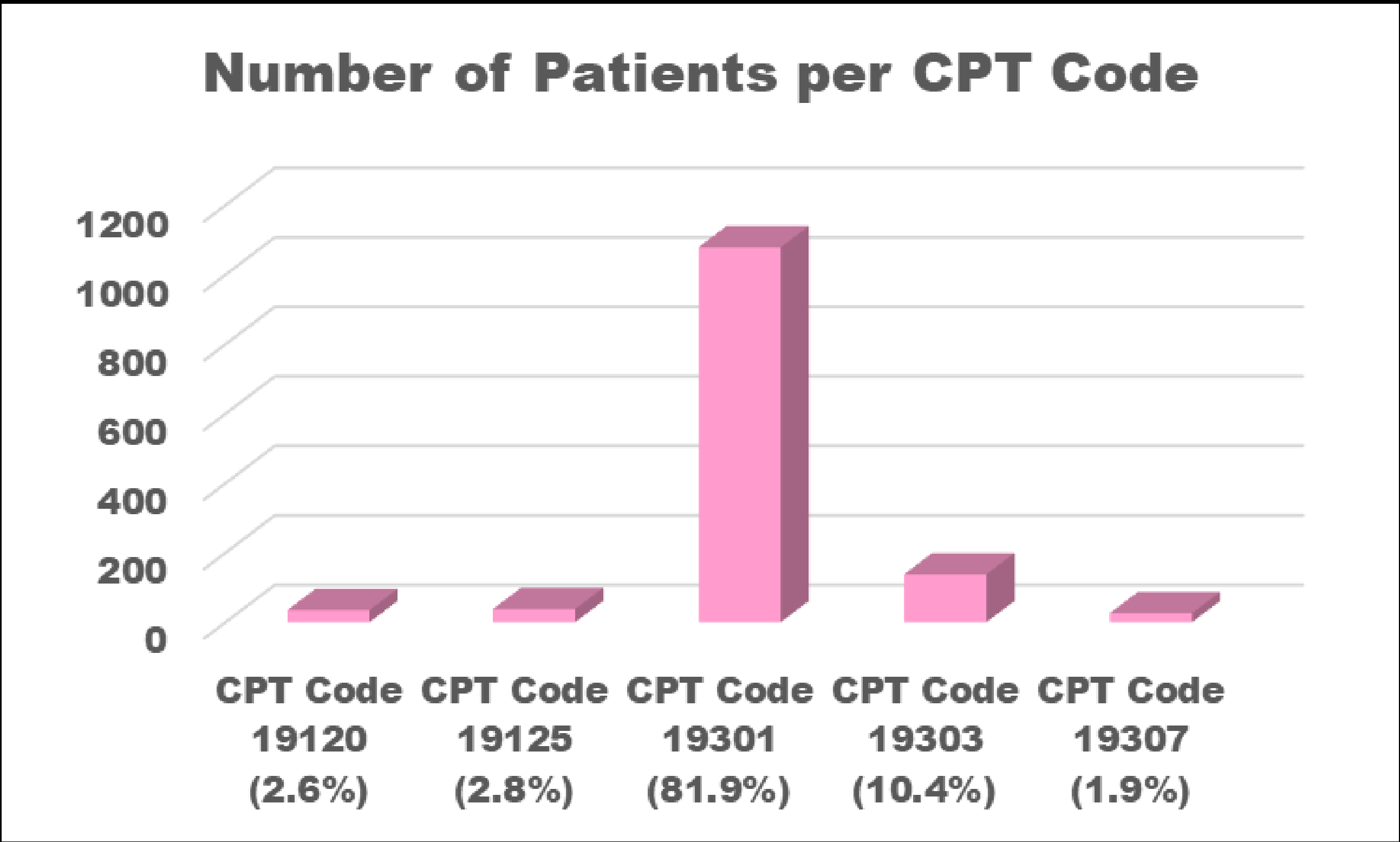
Methods

This is a retrospective study using data collected by chart review and a Cancer Registry query of patients who fulfill inclusion criteria that were admitted to Saint Francis Hospital between January 1, 2014, to January 1, 2024.

This study is now open and collecting data.



Demographics



CPT code 19120 describes the open excision of one or more benign or malignant breast lesions, including cysts, fibroadenomas, aberrant breast tissue, or nipple/areolar lesions.

CPT code 19125 is for the open excision of a single breast lesion identified by a pre-operative radiological marker, such as a wire or clip, where the primary goal is the complete removal of the lesion without specific attention to extensive margin control.

CPT code 19301 is for a partial mastectomy, also known as a lumpectomy, tylectomy, or segmentectomy, which involves excising a breast lesion with surrounding tissue to obtain adequate surgical margins.

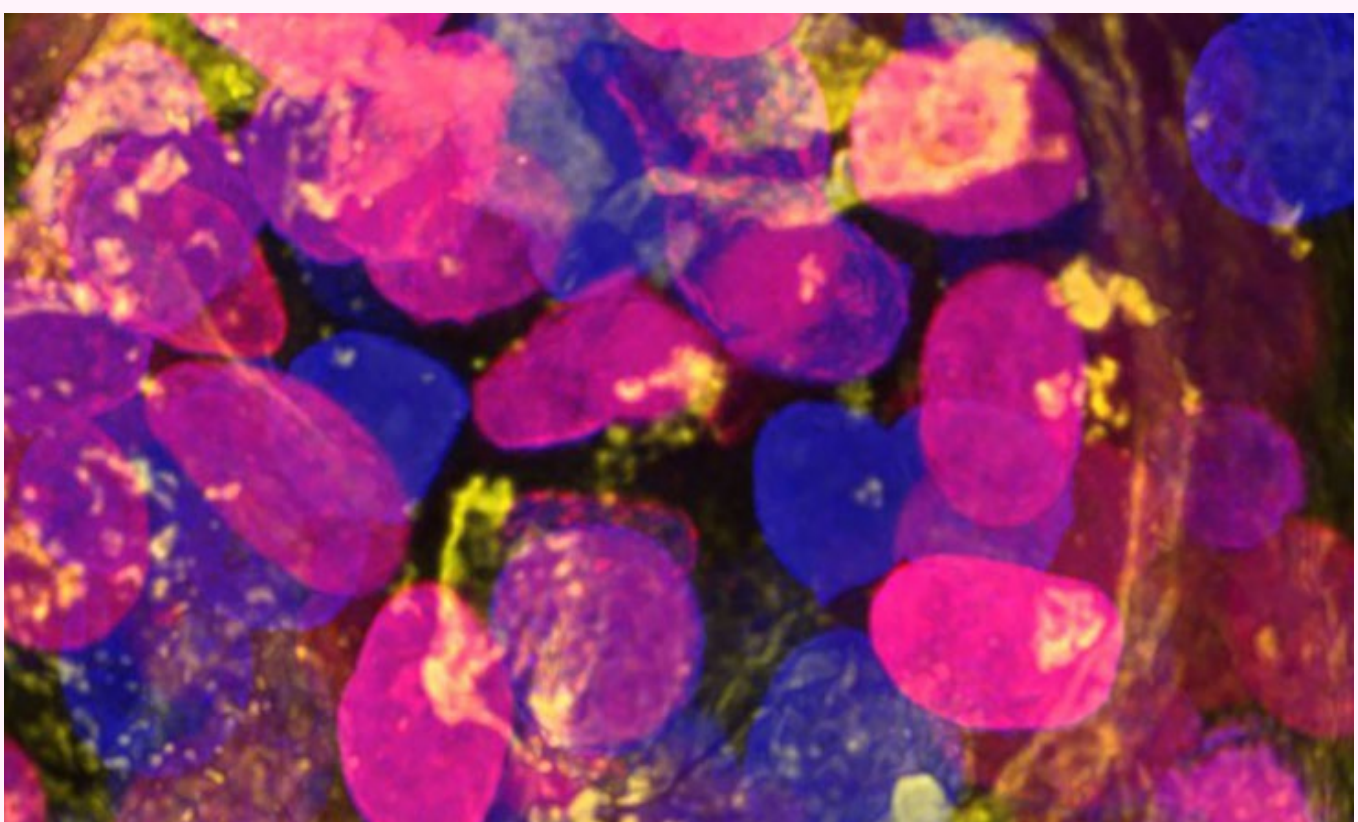
CPT code 19303 describes a simple, complete mastectomy, used for removing the entire breast tissue, often for the treatment or prevention of breast cancer or for transgender top surgery

CPT code 19307 describes a mastectomy, modified radical, including axillary lymph nodes, with or without pectoralis minor muscle, but excluding pectoralis major muscle. This procedure involves the surgical removal of the entire breast, as well as the lymph nodes in the armpit area (axilla), and can also include the pectoralis minor muscle, though not the larger pectoralis major muscle

Acknowledgements

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Google search: Cancer cells, breast cancer.