

# Feasibility of Lumpectomy in Large DCIS



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Joanne Edquilang, M.D., Yeram Park, Jacqueline Tsai, M.D., Irene Wapnir, M.D.

Department of Surgery, Stanford University School of Medicine, Stanford Cancer Institute, Stanford, CA

## Introduction

- The diagnosis and management of large ductal carcinoma in situ (L-DCIS) remains a clinical challenge. Determining feasibility of breast conservation depends on the ability to estimate extent of disease.
- This study assessed characteristics of a cohort of patients with L-DCIS, as well as the reliability of preoperative MRI in predicting size of tumor.

## Methods

- We retrospectively identified patients with DCIS diagnosed on core biopsy.
- Our study population was classified according to histopathological tumor size wherein L-DCIS is defined as 4 cm or larger and small DCIS (S-DCIS) is less than 4 cm.

## Results

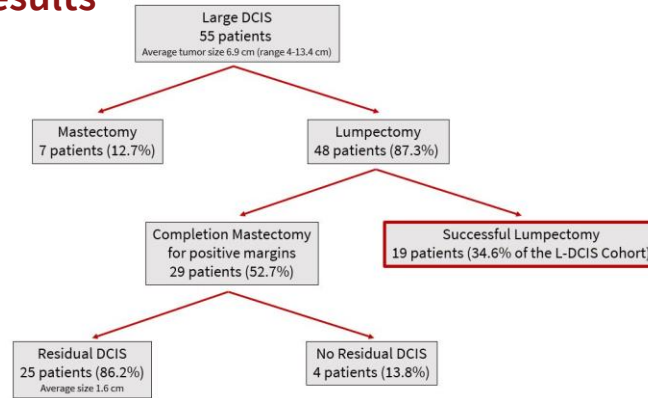


Figure 1. Surgical Management of L-DCIS

- A total of 270 patients diagnosed with DCIS on core biopsy were ascertained, 55 of which had tumors 4 cm or larger.
- Upstaging to invasive disease occurred in 36.4% for L-DCIS versus 15.3% for the S-DCIS cohort.
- There was no difference in average tumor size for L-DCIS who successfully underwent lumpectomy versus mastectomy, 6.95 cm (range 4 – 8.7 cm) versus 6.99 cm (range 4.3 – 13.4 cm), respectively.

## Conclusions

- Lumpectomy surgery was successful in 34.6% of L-DCIS cohort. However, no difference in tumor size was observed between patients who underwent lumpectomy versus mastectomy.
- MRI findings did not correlate well with histopathological tumor size. Upstaging to invasion was higher in the L-DCIS than S-DCIS cohort.
- Other factors such as cosmesis, location of tumor and breast size may influence lumpectomy feasibility in L-DCIS.

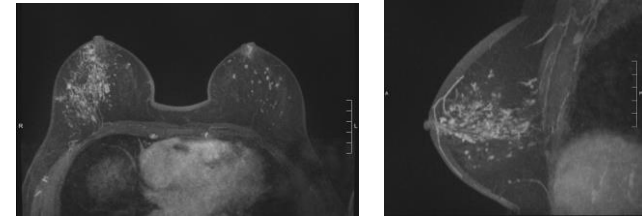


Figure 2. MRI showing large area of segmental clumped non-mass enhancement in the the right breast corresponding to biopsy-proven DCIS.

- Preoperative breast MRI was performed in 24 women (43.6%) in L-DCIS, with 16.7% demonstrating a mass and 83.3% showing non-mass enhancement.
- MRI accurately estimated tumor size to within 1 cm in only 12.5% of patients. MRI underestimated size in 50% of patients, by a mean of 3.6 cm. Conversely, tumor size was overestimated by a mean of 2.7cm in 37.5% of patients, and 80% of these were ultimately treated by mastectomy.