

## Results of Re-Excision for Inadequate Margins Following Partial Mastectomy for Carcinoma of the Breast

Aaron D. Bleznak MD, FACS  
*Lehigh Valley Health Network*

Christine W. Du MD  
*Lehigh Valley Health Network, Christine\_W.Du@lvhn.org*

Samuel Steerman MD  
*Lehigh Valley Health Network*

Elizabeth Dellers MD  
*Lehigh Valley Health Network, Elizabeth.Dellers@lvhn.org*

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# RESULTS OF RE-EXCISION FOR INADEQUATE MARGINS FOLLOWING PARTIAL MASTECTOMY FOR CARCINOMA OF THE BREAST

Aaron Bleznak, MD, FACS; Christine Du, MD; Samuel Steerman, MD; Elizabeth Dellers, MD  
Lehigh Valley Health Network, Allentown, Pennsylvania

## Objective:

To examine the incidence of residual disease in re-excisional surgical specimens after breast conserving therapy (i.e. lumpectomy) necessitating a second operation for positive and/or close margins. According to the literature (Singh, 2010) , between 20-60% of patients treated with lumpectomy undergo a second operation (either repeat lumpectomy or mastectomy) because of inadequate margins. The frequency of re-excision varies because of individual institutional definitions of what constitutes an acceptable margin, with most centers preferring 1-3 mm as opposed to the NSABP historical definition of no cancer cells on ink. (Singletary, 2002) Many patients who undergo a second operation have no residual disease. (Frazier, 1989) Historically, our cancer program at Lehigh Valley Health Network has required 2-3 mm margins free of both invasive and noninvasive breast cancer and this is annually reviewed and stated in our Breast Cancer Treatment Guidelines. However, in specific circumstances and after multidisciplinary review we accept less than 2 mm margins, particularly if the margin is negative and there is minimal disease (usually DCIS) within 1-2 mm of a single margin only. Our intent in this review was to determine if we should redefine close and negative margins and if we could identify those patients who do not have residual disease and do not need a second operation by using margin distance to stratify risk of residual disease.

## Method:

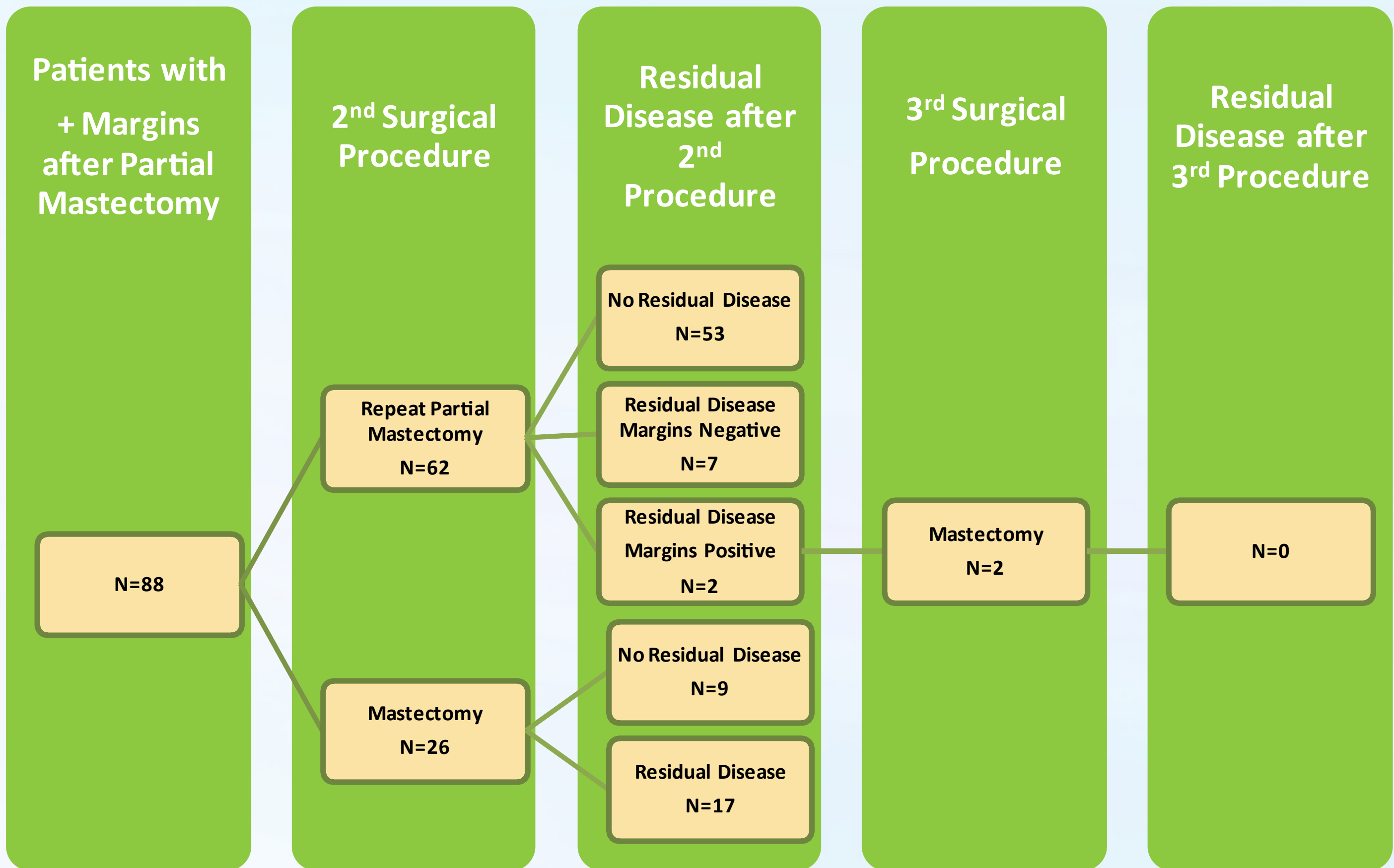
Retrospective, single institution chart review of 95 patients who underwent a second operation for positive and/or close margins from 2008-2009. Of those, 88 had sufficient information in the pathology report to ascertain the distance of the invasive or noninvasive carcinoma from the margins. Patients were considered to have residual disease only if the re-excision specimen contained invasive or noninvasive cancer; atypical hyperplasia and lobular neoplasia (LCIS) were considered benign. Data collected included the histologic subtype of cancer, distance of tumor from the margin(s) of the initial specimen and the presence of residual disease in the re-excision specimen. Pathologic evaluation was performed by two breast pathologists.

## Results:

Table 1. Findings at Re-excision

Margin	Total Number of Patients	Number of Patients with Residual Disease on Re-excision	Percentage of Patients with Residual Disease on Re-excision
Invasive tumor at margin	19	4	21%
DCIS at margin	21	7	33%
Tumor <1mm from margin	34	10	29%
Tumor 1-2mm from margin	8	2	25%
Tumor >2mm from margin	6	1	17%

Figure 1. Results of Re-excisions by Surgical Procedure



## Conclusion:

In this 2 year retrospective review, re-excisional specimens revealed residual cancer in 21-33% of cases with margins that were involved or negative but < 2 mm. This study is limited by a lack of power, absence of information on the extent of disease at the closest margin, and probable selection bias.

## References:

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