

High Risk Breast Lesions: Still No Standard of Care

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INTRODUCTION:

It is still controversial how to treat many so-called "high risk" (HR) breast lesions, specifically lobular neoplasia (LN), benign solitary papillomas, radial scars (RS), and flat epithelial atypia (FEA). Underestimation rates of malignancy reported in the literature are inaccurate as most are based on retrospective studies with many limitations such as:

Patients used in studies are retrospectively selected from surgical pathology files.

Reasons for which patients are selected for surgery is often unknown.

Follow-up of patients who are not surgically excised is poor and often non-existent.

Lack of radiology-pathology concordance:

- ? Radiographic finding and how suspicious
- ? Clinical presentation, age of patient
- ? Proximity of cancer to high risk lesion
- ? Incidental carcinoma findings

Numbers of patients in many studies are small resulting in no statistical significance.

Comparisons between studies is difficult:

- Surgical follow-up only vs. Surgical follow-up + Imaging follow-up
- Imaging follow-up varied in length of time of follow-up

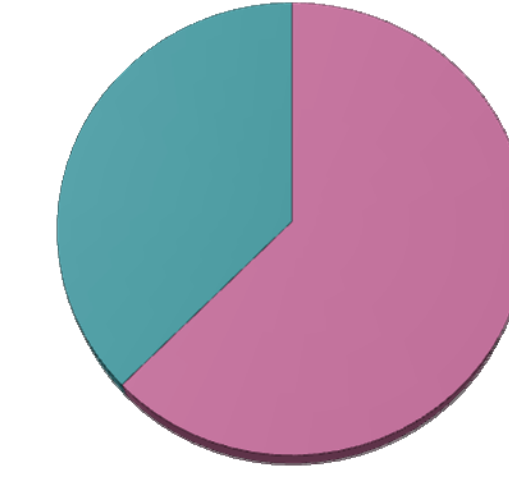
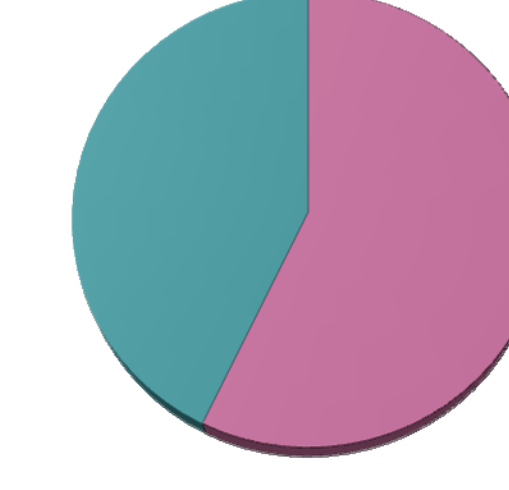
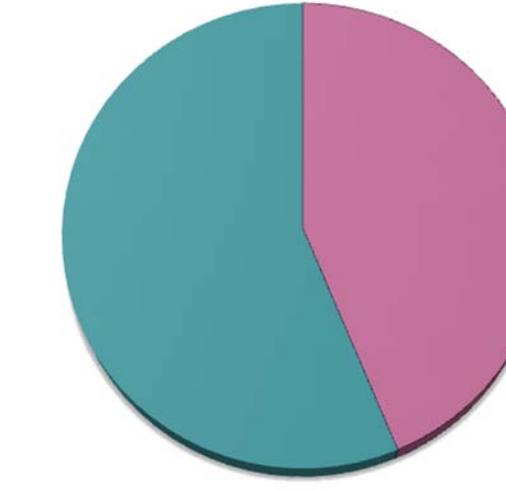
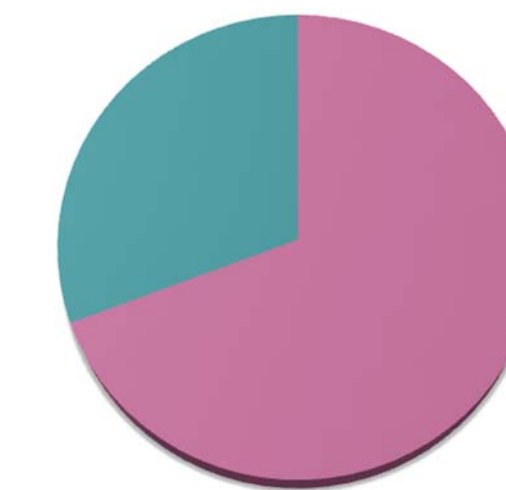
Differences in pathologists' definitions of certain high risk lesions.

CONCLUSION:

This lack of consensus in the literature and the resultant random recommendations for or against surgery means that some patients' cancers may be missed by not pursuing surgical biopsy or other patients may undergo unnecessary surgery. In summary, until there is a prospective, multi-institutional trial, we will never know the appropriate management for these patients and there is no standard of care.

UNDERESTIMATION RATES PER LESION TYPE (2004-2009)

Lobular Neoplasia	Papilloma	Radial Scar	FEA
Low Prev = 4 High Prev = 9	Low Prev = 9 High Prev = 7	Low Prev = 3 High Prev = 4	Low Prev = 3 High Prev = 5



Lobular Neoplasia	Papilloma	Radial Scar	FEA
<ul style="list-style-type: none"> 0% (0/12) [1] 0% (0/21) [2] 1% (1/87) [3] 2% (2/98) [4] 4% (1/25) [5] 4% (3/21) [6] 16% (1/6) [7] 19% (10/52) [8] 20% (7/35) [9] 23% (38/164) [10] 25% (5/20) [11] 37% (13/35) [12] 50% (9/18) [13] 	<ul style="list-style-type: none"> 0% (0/25) [14] 0% (0/67) [15] 0% (0/17) [16] 0% (0/63) [17] 0% (0/40) [18] 0% (0/35) [19] 0% (0/42) [20] 0% (0/19) [21] 2% (1/43) [22] 7% (4/56) [23] 9% (9/104) [24] 10% (7/71) [25] 10.5% (9/86) [26] 17% (20/117) [27] 19% (15/80) [28] 29% (7/24) [29] 	<ul style="list-style-type: none"> 0% (0/80) [30] 0% (0/27) [31] 0.7% (2/281) [32] 4% (5/125) [33] 8% (5/62) [34] 9% (1/11) [35] 22% (6/27) [36] 	<ul style="list-style-type: none"> 0% (0/41) [37] 0% (0/20) [38] 0% (0/20) [39] 14% (9/63) [40] 17% (2/12) [41] 17.5% (7/40) [42] 20% (3/15) [43] 21% (3/14) [44]

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