

radiologist, breast surgeon, and breast pathologist.

- Patients with clinical or imaging findings that are discordant with core needle biopsy (CNB) histology (i.e. a benign pathology result that does not account for imaging findings that are suspicious for malignancy) should undergo excision. Consideration can be given to repeat biopsy if the initial biopsy procedure was felt to be inadequate.
- Selective excision for the remaining patients is recommended.
- The final decision to excise depends on shared decision making with the patient and includes the following:
 - careful clinical, imaging, and pathology concordance assessment with multidisciplinary input;
 - patient-specific estimates of the risk of upgrade to malignancy.
 - disclosure of operative and cosmetic risks; and
 - whether the patient can or will comply with follow-up.
- All patients should undergo comprehensive breast cancer risk assessment and be considered for risk reducing medication and high-risk screening as appropriate. The presence of a high-risk lesion is not an indication for genetic testing; however, all patients should be evaluated for personal or family history that would indicate that genetic evaluation is appropriate. Certain high-risk lesions such as lobular neoplasia and atypical ductal hyperplasia are associated with elevated lifetime breast cancer risk which is not mitigated by surgical excision. Management of breast cancer risk is beyond the scope of this resource guide and readers are encouraged to visit the [National Comprehensive Cancer Network \(NCCN\) Guidelines on Detection, Prevention and Risk Reduction](#) for more details.
- A summary of recommended surgical management for each high-risk lesion is presented in the table below. These recommendations assume that the pathology and imaging results are deemed concordant.

Summary of Surgical Management Recommendations for High-Risk Lesions of the Breast

Lesion	Recommendation ^a	Exceptions / Notes
ADH	Surgical excision	Patients who meet low-risk criteria can be considered for observation (see summary of data below)
Classic LCIS / ALH	No excision Observation with clinical and imaging follow-up ^{b,c}	Excision if other benign lesion with potential for upstaging is present or if not incidental (see summary of data below)
Non-classic LCIS (pleomorphic and florid)	Surgical excision to negative margins ^d	Similar for necrosis and other non-classical lesions

CCL without atypia	No excision Return to screening	
Pure FEA	No excision Observation with clinical and imaging follow-up ^{b,c}	Excision if extensive calcifications or not adequately sampled
Papilloma without atypia	No excision Observation with clinical and imaging follow-up ^{b,c}	Consider excision for symptomatic lesions
Papilloma with atypia	Surgical excision	
Complex sclerosing lesions (CSL)	No excision Observation with clinical and imaging follow-up ^{b,c}	Excision for CSL with atypia For CSL without atypia, consider excision if not adequately sampled or other concerning features
Mucocele-like lesions (MLL)	No excision Observation with clinical and imaging follow-up ^{b,c}	Surgical excision for MLL with atypia.
Desmoid tumors or fibromatosis	Observation with clinical and imaging follow up every 3-6 months ^c (breast imaging, MRI, CT as clinically indicated)	Excision for symptomatic lesions and those increasing in size (see summary of data below)
PASH	Clinical observation	Consider excision for symptomatic lesions

ADH, atypical ductal hyperplasia; ALH, atypical lobular hyperplasia; CCL, columnar cell lesion; CT, computed tomography; FEA, flat epithelial atypia; LCIS, lobular carcinoma in situ; MRI, magnetic resonance imaging; PASH, pseudoangiomatous stromal hyperplasia

^aRecommendation are for lesions for which radiologic pathologic concordance has been established

^bDiagnostic imaging at 6, 12, and 24 months to establish stability is recommended based on American College of Radiology guidelines (see “Indications for excision: discordance and the risk of pathology upgrading”)

^cStrongly consider excision for lesion progression during follow up

^dData on appropriate margin width for PLCIS is limited (see “Non classic LCIS”)

Summary of Data Reviewed
