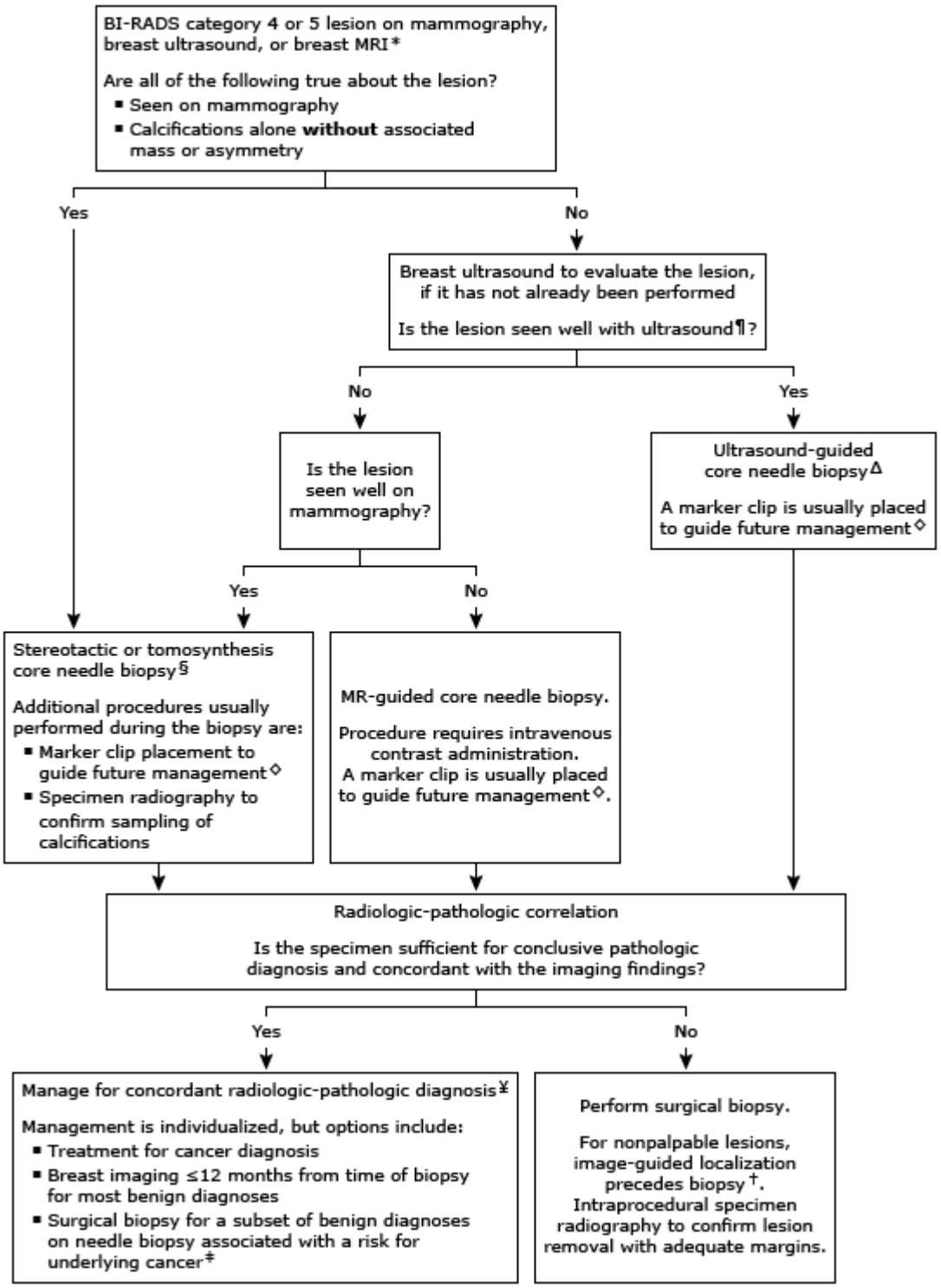
Diagnostic biopsy of breast lesions seen on imaging



BI-RADS: Breast Imaging-Reporting and Data System; MRI: magnetic resonance imaging; MR: magnetic resonance; FNA: fine needle aspiration; 3D: three-dimensional.

* Breast abnormalities seen on imaging (ie, mammography, ultrasound, or MRI) are classified into BI-RADS categories based on their likelihood of cancer. BI-RADS categories are described elsewhere in UpToDate (refer to topic on breast biopsy). Palpable breast lesions should undergo imaging evaluation with mammography and/or ultrasound to assess the BI-RADS category before biopsy.

¶ To ensure that the correct tissue is targeted for biopsy, ultrasound findings should be correlated with the imaging modality on which the abnormality was originally detected or, for palpable lesions, with the physical exam.

Δ FNA with intraprocedural cytopathology, if the necessary expertise is available, is an option for rapid confirmation of a suspected malignant diagnosis. However, core needle biopsy following FNA is necessary if the FNA is inconclusive or does not contain sufficient tissue for treatment planning. Refer to the UpToDate topic on breast biopsy for further discussion of FNA.

◇ For a malignant lesion, the clip guides localization for resection or marks a mass treated with neoadjuvant chemotherapy. For a benign lesion, a clip indicates a site of prior biopsy, thereby preventing redundant workup.

§ Stereotactic biopsy is used for most lesions best seen on mammography. Tomosynthesis-guided biopsy is an option for lesions only seen on tomosynthesis, also known as "3D mammography," and for lesions amenable to stereotactic biopsy.

¥ Refer to other UpToDate topics for further discussion of management options. For each case, management recommendations should be formulated from radiologic-pathologic correlation and documented in the patient's medical record.

‡ Some benign entities (ie, atypical ductal hyperplasia, lobular neoplasia with atypia, papilloma, complex sclerosing adenosis, or radial scar) are associated with malignancy and may warrant rebiopsy. Their management is discussed elsewhere in UpToDate in topics on high-risk benign breast lesions.

† Localization is performed using the imaging modality on which the lesion is best seen. Wire and other localization techniques are described in the UpToDate topic on techniques to reduce positive margins in breast-conserving surgery.

Graphic 121089 Version 3.0