

Mammographic Analysis of Breast Masses

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Mass

- **Space-occupying lesion, seen in two different projections**
- **Convex-outward contour**
- **Denser in center than at periphery**

Interpretation of Masses

Size

- **Size of a mass does not predict benign vs. malignant etiology**

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- **Size does affect the clinical management of a mass**

- **How small is too small to prompt biopsy ?**

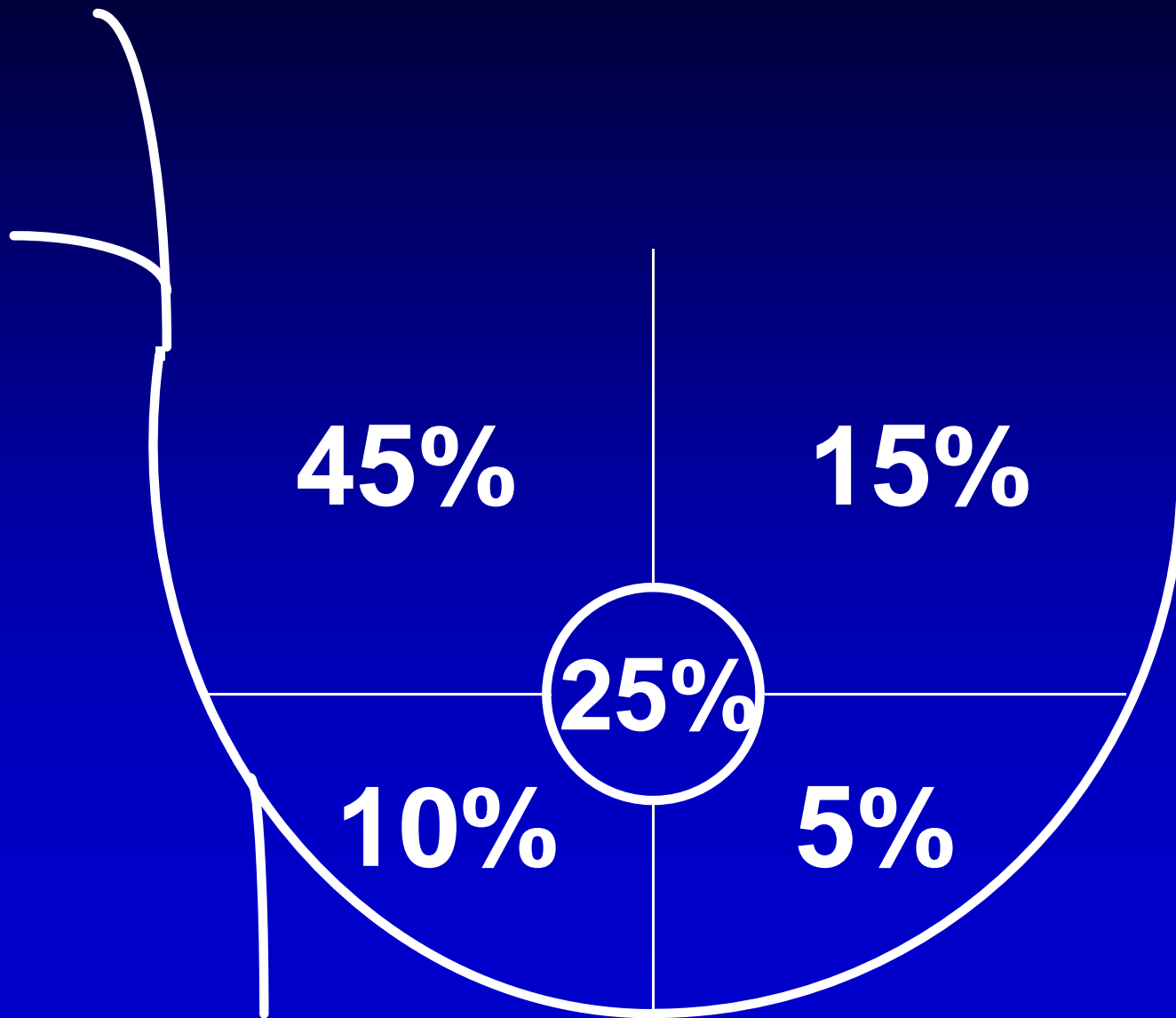
- **How small is too small to prompt biopsy ?**
- **How large is so large as to make biopsy inevitable ?**

Interpretation of Masses

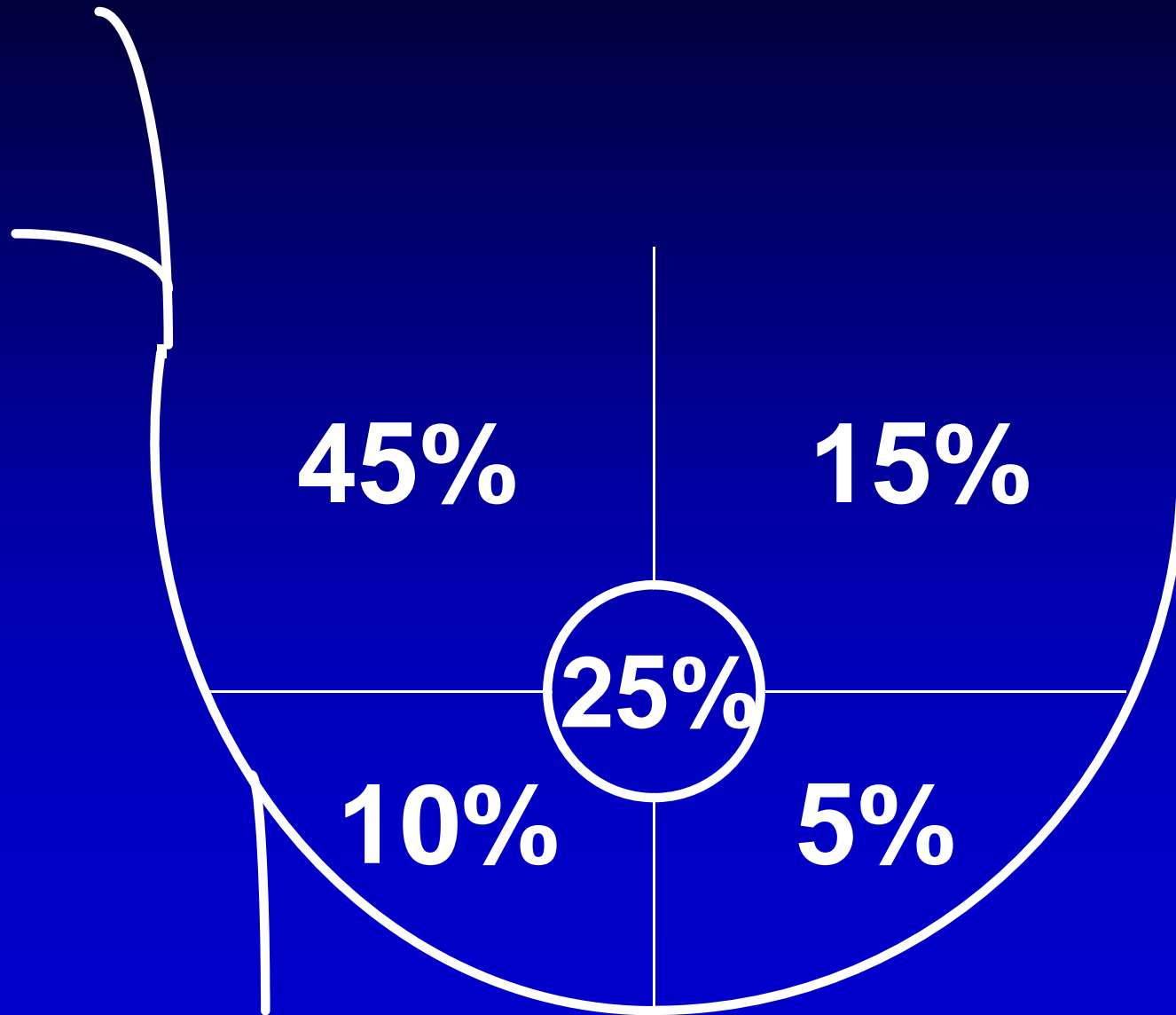
Size

Location

Distribution of Breast Carcinomas



Distribution of Benign Breast Lesions



- **Quadrant location does not predict benign vs. malignant etiology**

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- **A mass within the skin cannot be a primary breast carcinoma**

Interpretation of Masses

Size

Location

Density

Density of Masses

- **Fat density masses**
- **Mixed density masses**
- **Fibroglandular density masses**
 - **High density**
 - **Equal density (isodense)**
 - **Low density**

Interpretation of Masses

Size

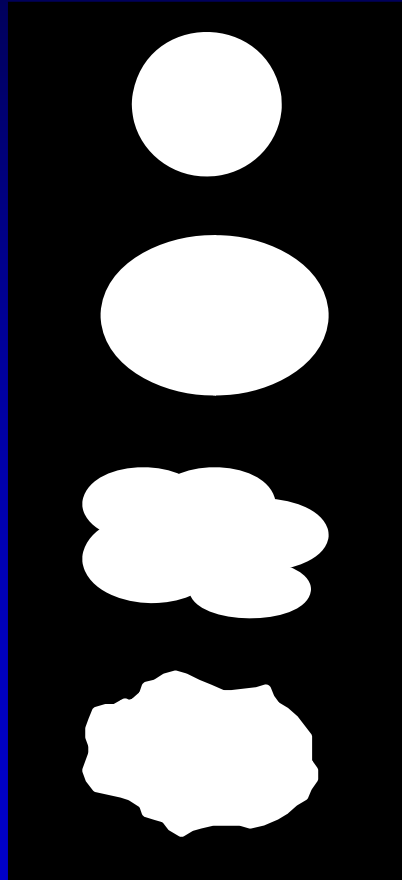
Location

Density

Shape

Margins

Descriptors of Shape



Round

Oval

Lobular

Irregular

Descriptors of Margins



Circumscribed (well defined)



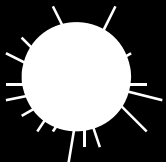
Microlobulated



Obscured



Indistinct (poorly defined)



Spiculated

Interpretation of Masses

Size

Location

Density

Shape

Margins

Interval change

Interval Change - Masses

- **Newly apparent mass**
- **Interval enlargement of mass**
- **Borders more lobular or indistinct**
- **Appearance of calcifications**

Management Strategies - Masses

- **Identify typically benign masses**
- **Ultrasound for cysts and some IMLNs**
- **Biopsy vs. follow-up for solid masses**

Interpretation of Masses

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Interval change

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US diagnostic criteria