**ACR TI-RADS**

**COMPOSITION** *(Choose 1)*
- Cystic or almost completely cystic: 0 points
- Spongiform: 0 points
- Mixed cystic and solid: 1 point
- Solid or almost completely solid: 2 points

**ECHOGENICITY** *(Choose 1)*
- Anechoic: 0 points
- Hyperechoic or isoechoic: 1 point
- Hypoechoic: 2 points
- Very hypoechoic: 3 points

**SHAPE** *(Choose 1)*
- Wider-than-tall: 0 points
- Taller-than-wide: 3 points

**MARGIN** *(Choose 1)*
- Smooth: 0 points
- Ill-defined: 0 points
- Lobulated or irregular: 2 points
- Extra-thyroidal extension: 3 points

**ECHOGENIC FOCI** *(Choose All That Apply)*
- None or large comet-tail artifacts: 0 points
- Macrocalcifications: 1 point
- Peripheral (rim) calcifications: 2 points
- Punctate echogenic foci: 3 points

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**Add Points From All Categories to Determine TI-RADS Level**

- 0 Points: TR1
  - Benign
  - No FNA
- 2 Points: TR2
  - Not Suspicious
  - No FNA
- 3 Points: TR3
  - Mildly Suspicious
  - FNA if ≥ 2.5 cm
  - Follow if ≥ 1.5 cm
- 4 to 6 Points: TR4
  - Moderately Suspicious
  - FNA if ≥ 1.5 cm
  - Follow if ≥ 1 cm
- 7 Points or More: TR5
  - Highly Suspicious
  - FNA if ≥ 1 cm
  - Follow if ≥ 0.5 cm

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**COMPOSITION**
- **Spongiform**: Composed predominantly (>50%) of small cystic spaces. Do not add further points for other categories.
- **Mixed cystic and solid**: Assign points for predominant solid component.
- **Assign 2 points if composition cannot be determined because of calcification.**

**ECHOGENICITY**
- **Anechoic**: Applies to cystic or almost completely cystic nodules.
- **Hyperechoic/isoechoic/hypoechoic**: Compared to adjacent parenchyma.
- **Very hypoechoic**: More hypoechoic than strap muscles.
- **Assign 1 point if echogenicity cannot be determined.**

**SHAPE**
- **Taller-than-wide**: Should be assessed on a transverse image with measurements parallel to sound beam for height and perpendicular to sound beam for width.
- **This can usually be assessed by visual inspection.**

**MARGIN**
- **Lobulated**: Protrusions into adjacent tissue.
- **Irregular**: Jagged, spiculated, or sharp angles.
- **Extra-thyroidal extension**: Obvious invasion = malignancy.
- **Assign 0 points if margin cannot be determined.**

**ECHOGENIC FOCI**
- **Large comet-tail artifacts**: V-shaped, >1 mm, in cystic components.
- **Macrocalcifications**: Cause acoustic shadowing.
- **Peripheral**: Complete or incomplete along margin.
- **Punctate echogenic foci**: May have small comet-tail artifacts.

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*Refer to discussion of papillary microcarcinomas for 5-9 mm TR5 nodules.*

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