




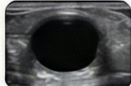

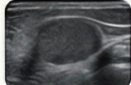
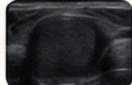
ACR TI-RADS™: Standardized Risk Stratification for Thyroid Nodules

The Point-Based Scoring System


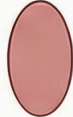
Category 1: Composition (1)

-  Cystic or completely spongiform (0 pts)
-  Mixed cystic and solid (1 pt)
-  Solid or almost completely solid (2 pts)

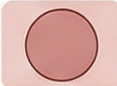



Category 2: Echogenicity (2)

-  Anechoic (0 pts)
-  Hyperechoic or isoechoic (1 pt)
-  Hypoechoic (2 pts)
-  Very hypoechoic (3 pts)

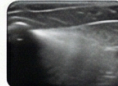



Category 3: Shape (3)

-  Wider-than-tall (0 pts)
-  Taller-than-wide (3 pts)

Category 4: Margin (4)

-  Smooth (0 pts)
-  Ill-defined (0 pts)
-  Lobulated or irregular (2 pts)
-  Extra-thyroidal extension (3 pts)

Category 5: Echogenic Foci (5)

-  None or large comet-tail artifacts (0 pts)
-  Macrocalcifications (1 pt)
-  Peripheral/Rim calcifications (2 pts)
-  Punctate echogenic foci (3 pts)

A Cumulative Approach: Points are assigned across five categories; the total sum determines the TI-RADS (TR) level.

*Note: Points in this section are additive.

Risk Levels and Malignancy Rates

TR1: Benign (0 Points)	TR2: Not Suspicious (2 Points)	TR3: Mildly Suspicious (3 Points)	TR4: Moderately Suspicious (4–6 Points)	TR5: Highly Suspicious (≥7 Points)
<0.3% Malignancy Risk	<1.5% Malignancy Risk	~4.8% Malignancy Risk	~9.1% Malignancy Risk	~35% Malignancy Risk

Management Thresholds

TR Level	FNA (Biopsy) Threshold	Follow-up US Threshold
TR1 (Benign)	No FNA	No Follow-up
TR2 (Not Suspicious)	No FNA	No Follow-up
TR3 (Mildly Suspicious)	≥ 2.5 cm	≥ 1.5 cm
TR4 (Moderately Suspicious)	≥ 1.5 cm	≥ 1.0 cm
TR5 (Highly Suspicious)	≥ 1.0 cm	≥ 0.5 cm



Interactive TI-RADS Calculator
by Rad At Hand at
<https://RadAtHand.com/tirads>

ACR Tessler FN, Middleton WD, Grant EG, et al. ACR Thyroid Imaging, Reporting and Data System (TI-RADS): White Paper of the ACR TI-RADS Committee. J Am Coll Radiol. 2017 May;14(5):587–595
Malignancy risks from: Hoang JK, Middleton WD, Tessler FN. Update on ACR TI-RADS: Successes, Challenges, and Future Directions, From the AJR Special Series on Radiology Reporting and Data Systems. AJR Am J Roentgenol. 2021 Mar;216(3):570–578.