Novedades ATA en cáncer de tiroides 2025
ATA 2025 updates in thyroid cancer

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ATA 2025 updates in thyroid cancer

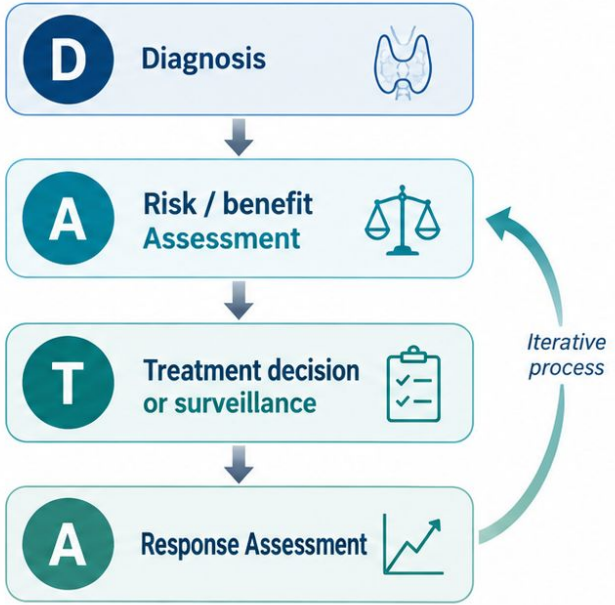
Focus on the clinical decision framework

2025 ATA Guidelines

1. Pathology & molecular classification
2. Genetic predisposition
3. Active surveillance
4. Surgery
5. Risk of recurrence
6. Response to initial therapy
7. Radioactive iodine
8. Long-term surveillance
9. Persistent / recurrent disease
10. RAIR DTC
11. Targeted therapies & survivorship

From recommendations to individualized decision-making

The DATA Framework



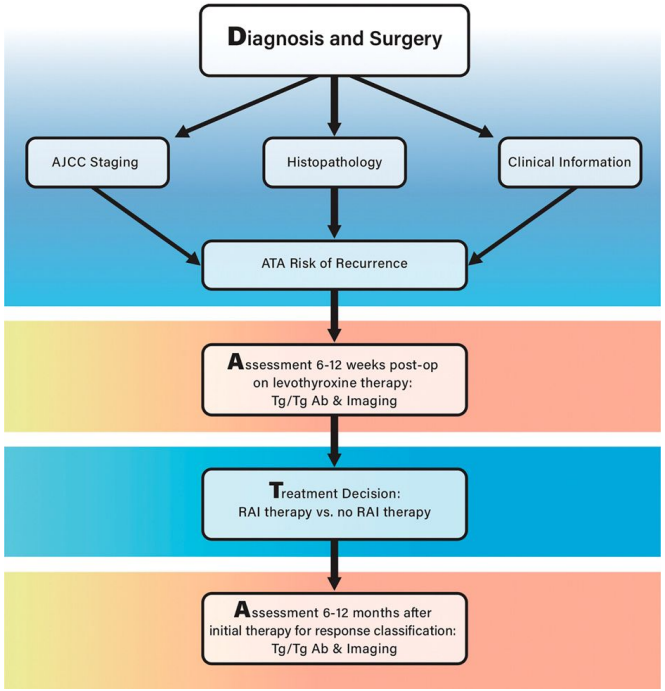
A clinical case from Real-World practice:
Dynamic risk stratification



Woman, 41 yrs old

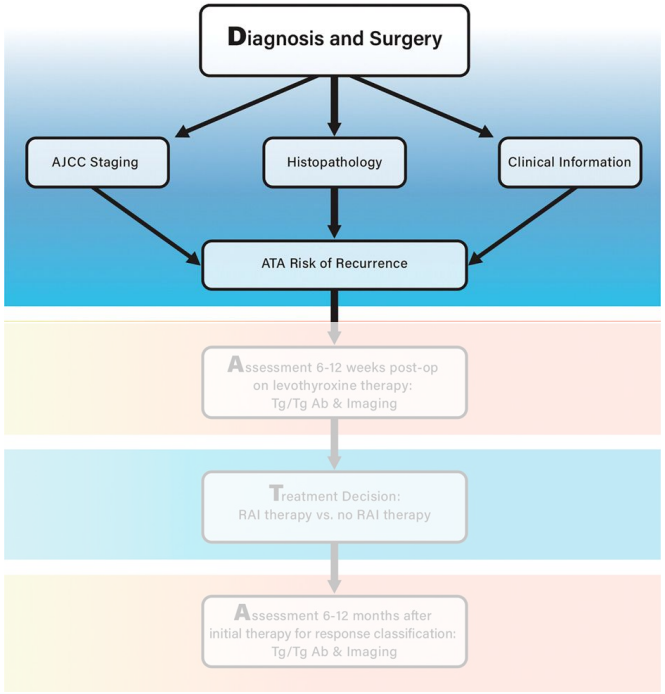
- Gynecological screening: single 1.8 cm intrathyroidal nodule in the right lobe (ATA ultrasound risk: high).
  Cytology: Bethesda Category VI
- **Total thyroidectomy**: Papillary thyroid carcinoma (PTC), infiltrative follicular variant, 1.7 cm, unilateral, multifocal (*additional foci millimetric*) [pT1bm, pNX – stage I AJCC/TNM, 8th Edition]

ATA Guidelines
DATA Framework



Ringel MD, Sosa JA et al., Thyroid. 2025;35(8):841-985

ATA Guidelines
DATA Framework

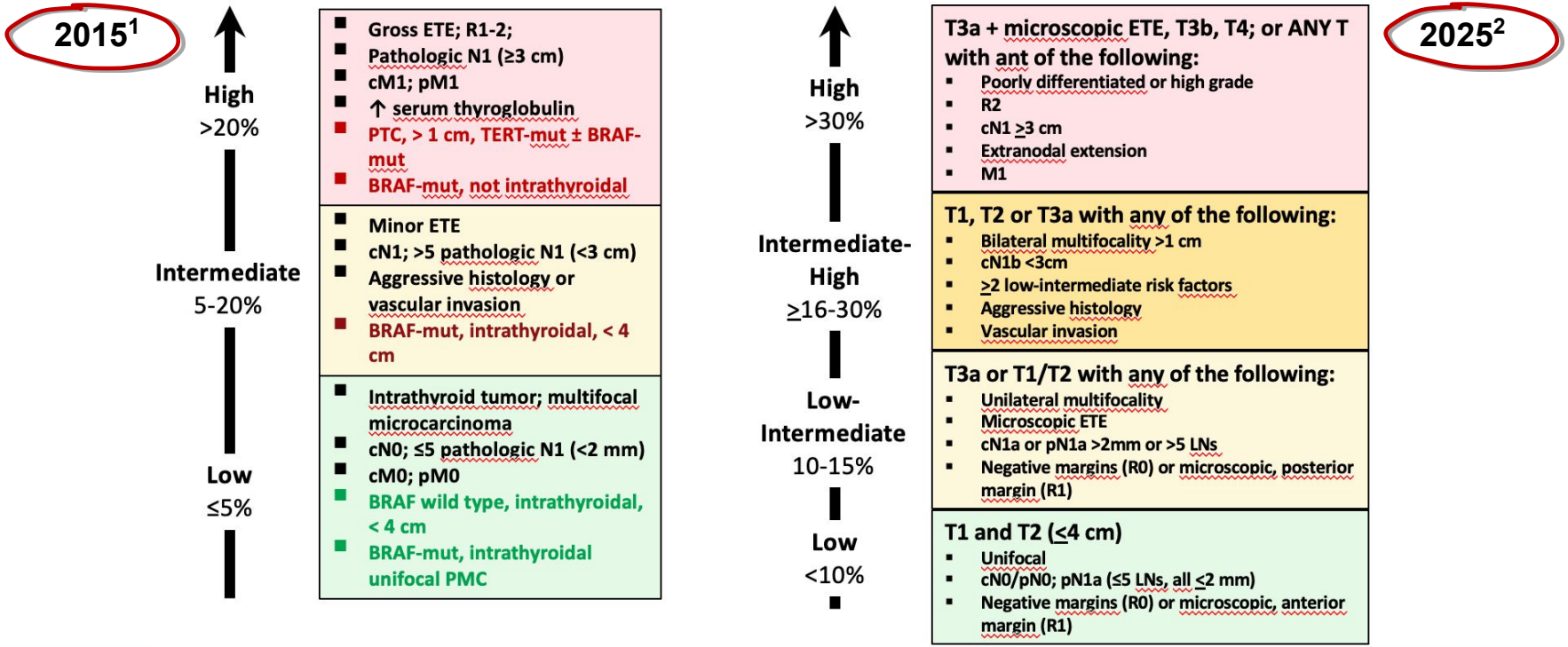


1 FIRST STEP

Ringel MD, Sosa JA et al., Thyroid. 2025;35(8):841-985

ATA Guidelines

ATA risk stratification



[1] Haugen BR et al., *Thyroid*. 2016;26(1):1-133.
[2] Ringel MD, Sosa JA et al., Thyroid. 2025;35(8):841-985

ATA Guidelines

ATA risk stratification and molecular profiling



The **Molecular profiling** of DTC specimen postoperatively is not routinely recommended. However, if such data have been obtained, they can be used to further estimate risks of recurrence derived from the 2025 ATA Risk Stratification System

[Conditional recommendation. Low certainty evidence]

ATA Guidelines

ATA risk stratification and molecular profiling

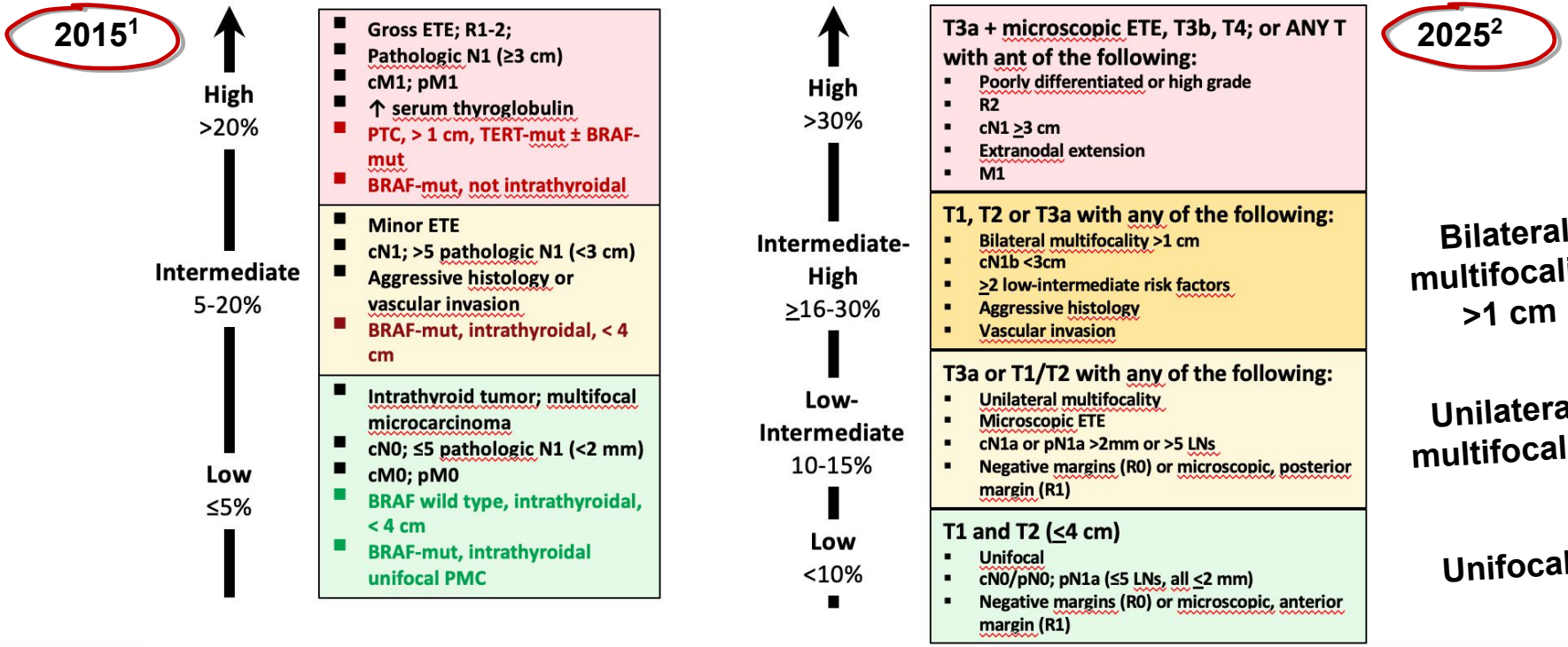


Papillary Carcinoma	**Mutations:** ■ *BRAFV600E* ■ *RAS* ■ *BRAF (Non V600E)* **Fusions:** ■ *BRAF, RET, ALK, NTRK 1/3* **Other:** ■ *1q* gain, *22q* loss	**Mutations:** ■ *TERT* promoter *(C228T/C250T)* ■ *TP53, RBM10, CDKN2B, PIK3CA, PLEKSH1p, AKT1* **Other:** ■ *CDKN2A* and *CDKN2B* loss ■ Increased APOBEC activity ■ Global DNA hypomethylation

Ringel MD, Sosa JA et al., Thyroid. 2025;35(8):841-985

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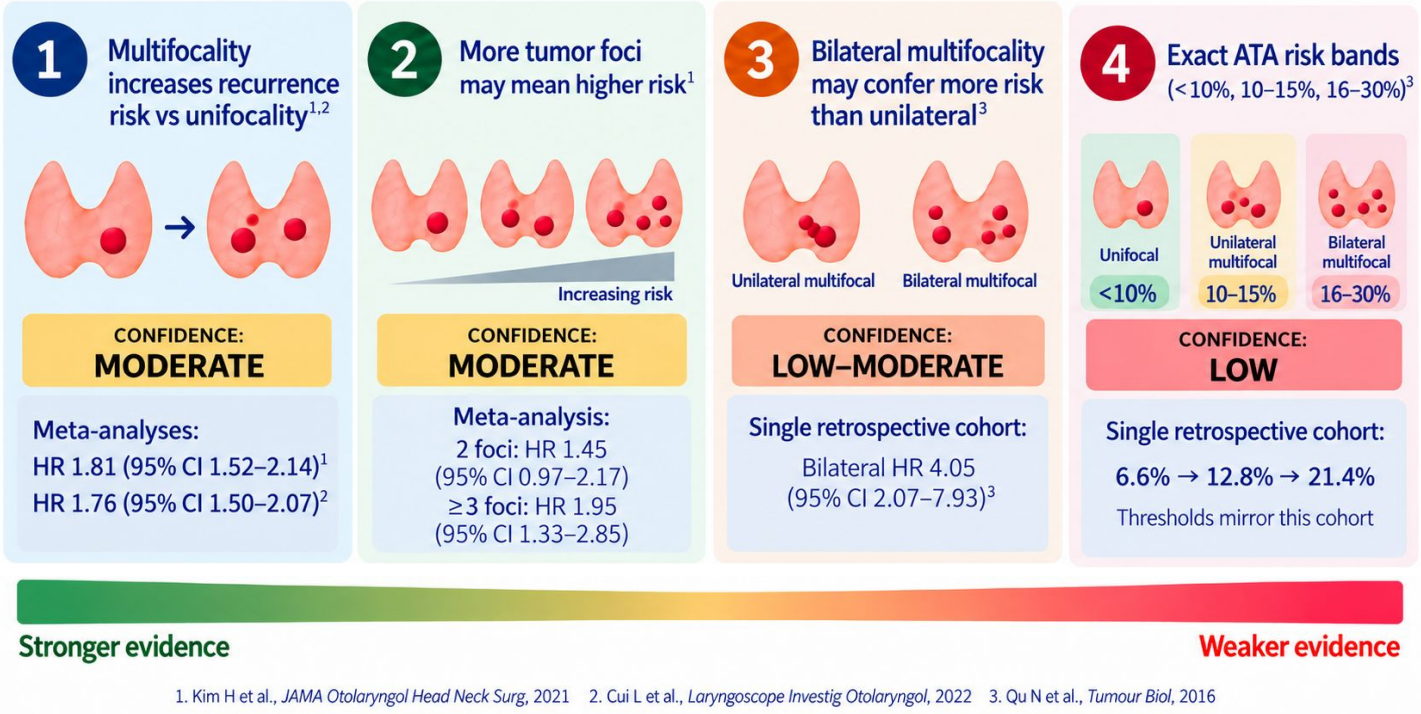
ATA risk stratification



[1] Haugen BR et al., *Thyroid*. 2016;26(1):1-133.
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ATA Guidelines

Confidence in focality-based risk estimates

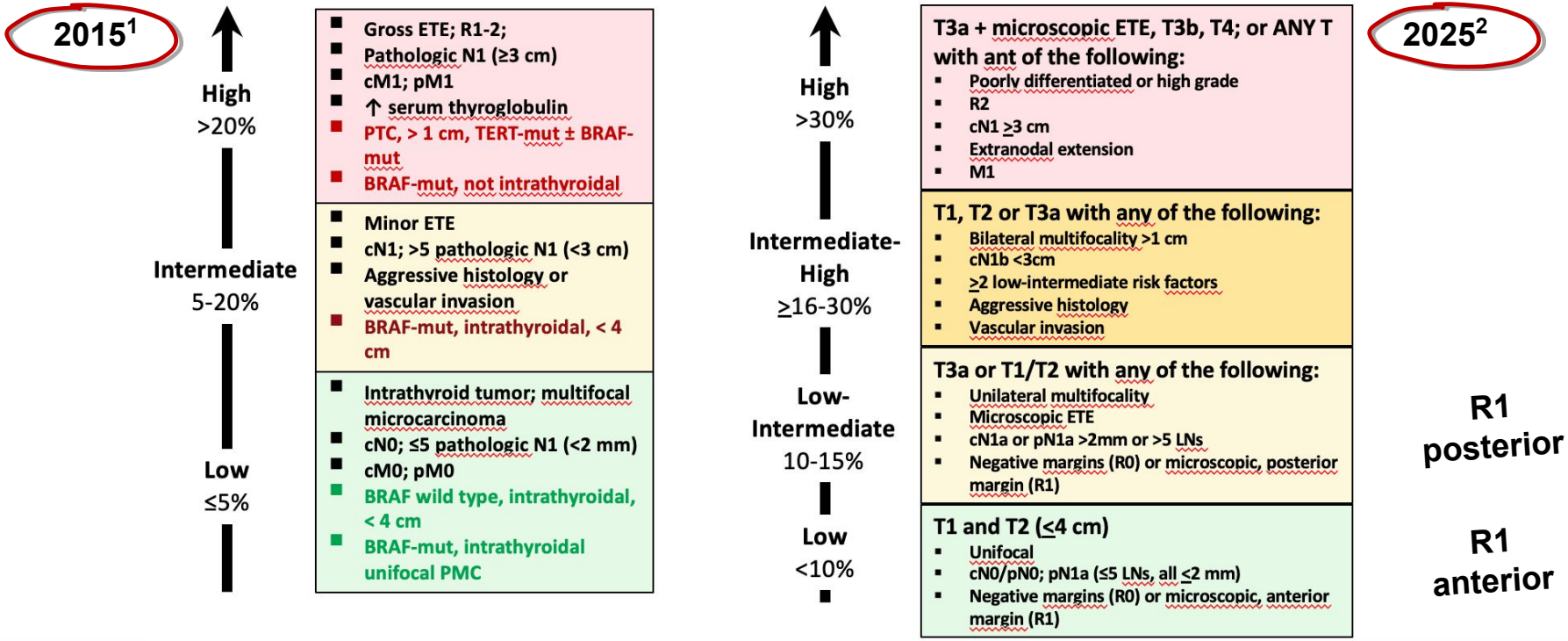


1. Kim H et al., *JAMA Otolaryngol Head Neck Surg*, 2021 2. Cui L et al., *Laryngoscope Investig Otolaryngol*, 2022 3. Qu N et al., *Tumour Biol*, 2016

Ringel MD, Sosa JA et al., Thyroid. 2025;35(8):841-985

ATA Guidelines

ATA risk stratification

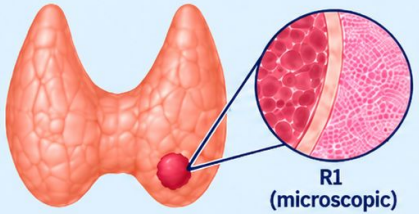


[1] Haugen BR et al., *Thyroid*. 2016;26(1):1-133.
[2] Ringel MD, Sosa JA et al., Thyroid. 2025;35(8):841-985

ATA Guidelines

Confidence in R1 margin-based risk estimates

1 Microscopic R1 and recurrence[1,2]



CONFIDENCE: LOW

Meta-analysis + multivariable cohort:

- Risk difference 0% (95% CI 0–1%) [1]
- Adjusted HR 2.38 (95% CI 0.65–8.74), NS [2]

2 Posterior R1 > anterior R1[3]

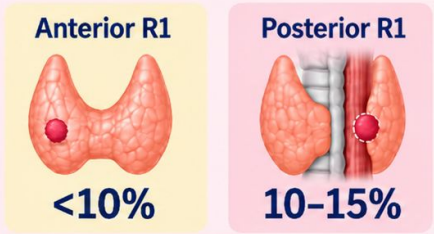


CONFIDENCE: LOW

Single retrospective cohort:

- Recurrence: 3.6% vs 11.6% [3]
- Posterior R1 HR 22.95 (95% CI 4.33–121.70) [3]
- n=638

3 Exact ATA risk bands[3]



CONFIDENCE: LOW

Single retrospective cohort:

- 3.6% → 11.6% [3]
- Thresholds mirror this cohort

Stronger evidence — Weaker evidence

1. Sanabria A et al., *Eur J Surg Oncol*, 2019
2. Wang LY et al., *Thyroid*, 2015
3. Lang BH et al., *J Surg Oncol*, 2016

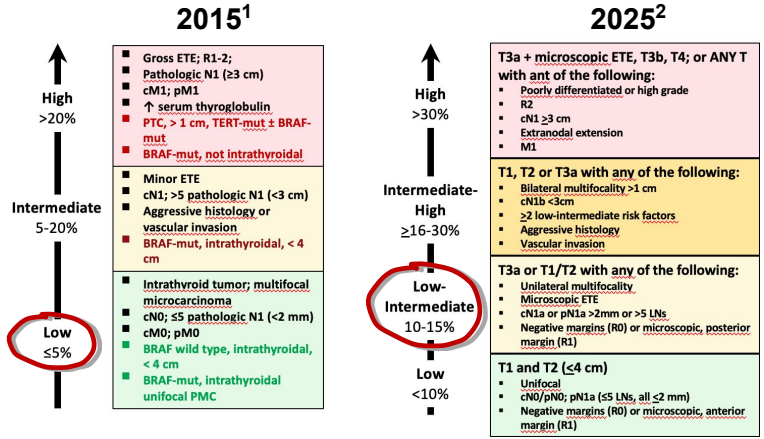
Ringel MD, Sosa JA et al., Thyroid. 2025;35(8):841-985

A clinical case from Real-World practice:
Dynamic risk stratification



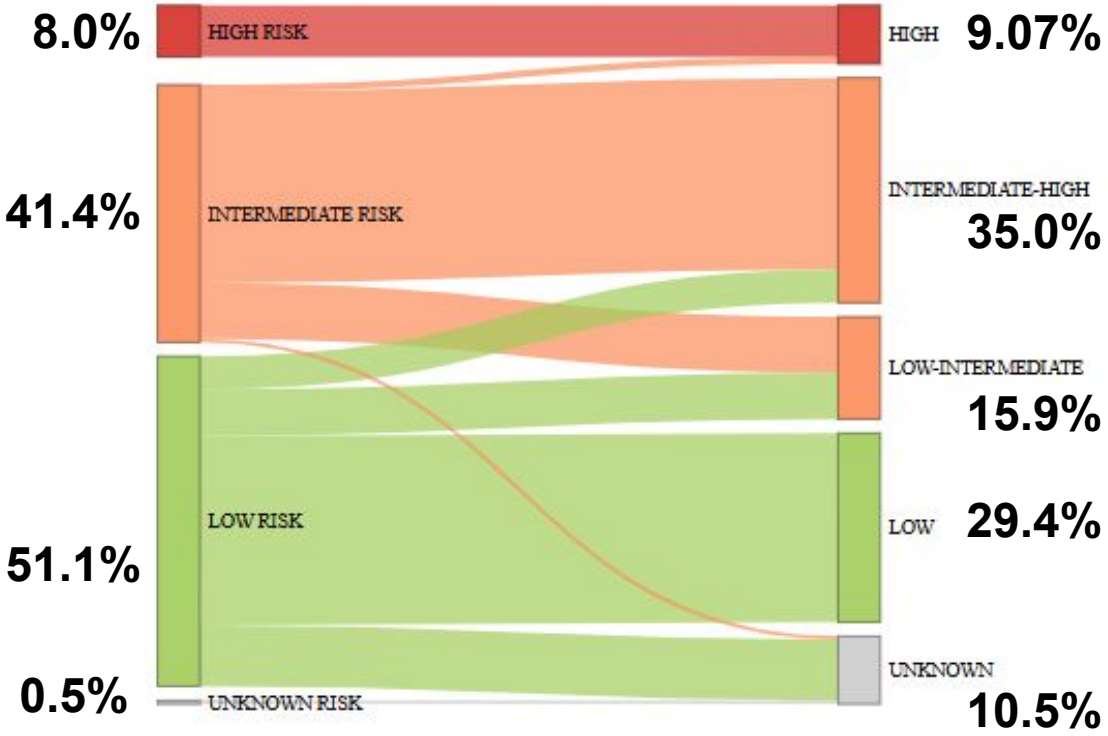
Woman, 41 yrs old
(PTC infiltrative FV, pT1bm, pNx)

- **ATA risk stratification**
  - **2015**[1]: Low risk (≲5%)
  - **2025**[2]: Low-Intermediate (10-15%)



[1] Haugen BR et al., *Thyroid*. 2016;26(1):1-133.
[2] Ringel MD, Sosa JA et al., Thyroid. 2025;35(8):841-985

ITCO data

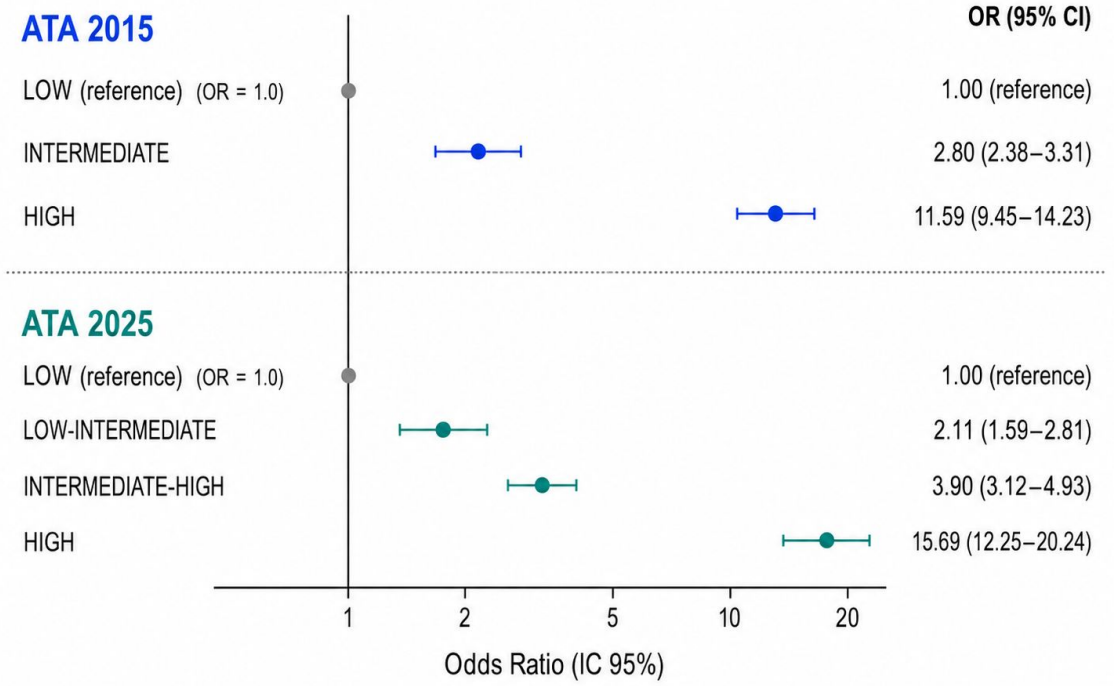


Patients' reclassification according to the updated ATA Classification

ITCO database. Unpublished data - last access: Apr-2026

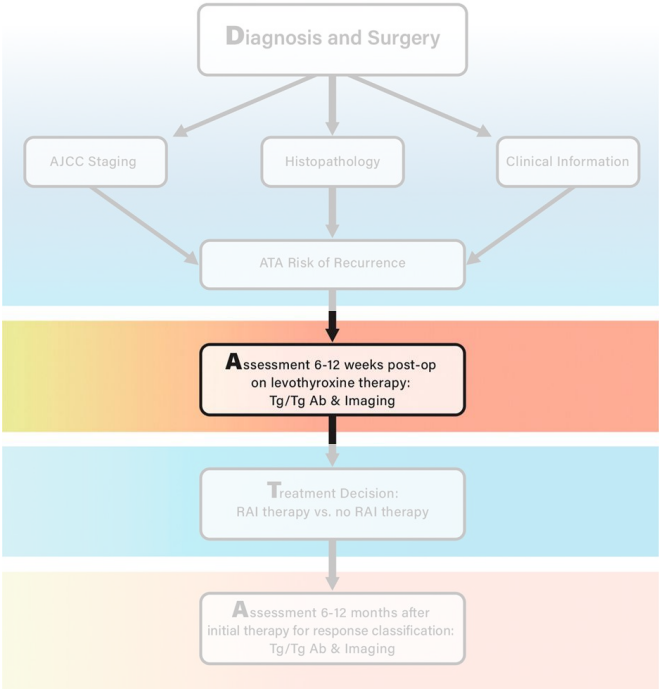
ITCO data

Odds Ratios across ATA 2015 & 2025 risk Classifications



ITCO database. Unpublished data - last access: Apr-2026

ATA Guidelines
DATA Framework



2 SECOND STEP

Ringel MD, Sosa JA et al., Thyroid. 2025;35(8):841-985

ATA Guidelines
Risk of recurrence



The combination of the following **are recommended** to determine the risk of structural disease persistence/recurrence (locoregionally and/or distantly):

- 2025 ATA Risk Stratification System
- AJCC staging system
- **Postoperative imaging**
- **Serum Tg and TgAb testing (if appropriate)**

[Strong recommendation. Moderate certainty evidence]

A clinical case from Real-World practice:
Dynamic risk stratification



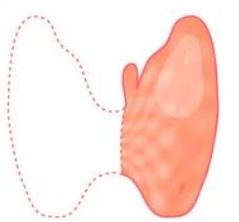
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- ATA risk stratification
  - **2015**[1]: Low risk (≲5%)
  - **2025**[2]: Low-Intermediate (10-15%)
- **Post-operative staging (3 months)**
  - **Neck ultrasound:** negative
  - **Tg: 1.1 ng/ml** (undetectable TgAbs)
  - TSH 0.9 mUI/L
  - **2025 ATA response to therapy**[2]: **??????**

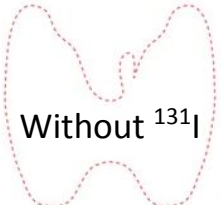
[1] Haugen BR et al., *Thyroid*. 2016;26(1):1-133.
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ATA Guidelines

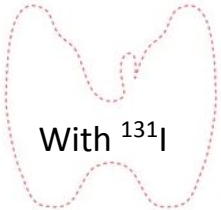
Excellent response to therapy



- Negative imaging



- Tg <2.5 ng/ml with undetectable Tg antibodies
- Negative imaging

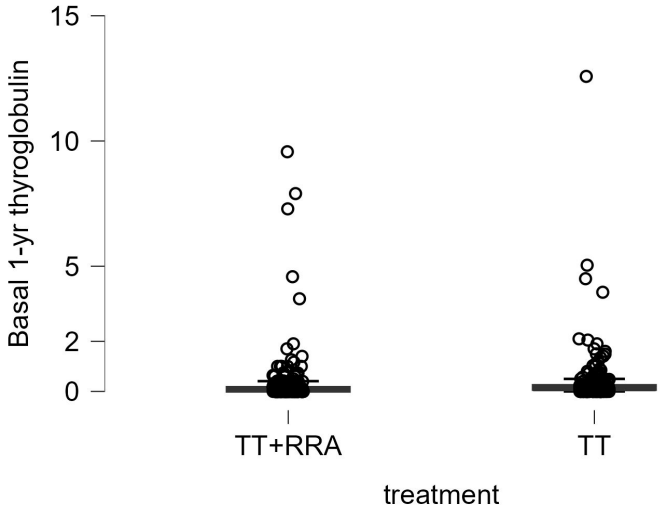


- Tg <0.2 ng/ml with undetectable Tg antibodies
- Negative imaging

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ITCO data

Data-driven Tg cutoffs



1-yr serum Tg value distribution in patients with low or intermediate risk of recurrence, showing **no evidence of structural disease during the first 5 years of follow-up**

	TT+RRA	TT alone
Patients	n=292	n=252
Median	0.1 ng/mL	0.11 ng/mL
Maximum	3.7 ng/mL	18.0 ng/mL
97th percentile	**0.84 ng/mL**	**1.97 ng/mL**

PPV (95% CI):
47.1% (23-72.2%)

NPV (95% CI):
95.9% (93-97.9%)

PPV (95% CI):
11.1% (10.3-48.2%)

NPV (95% CI):
98% (95.4-99.4%)

Grani G, et al. J Clin Endocrinol Metab 2025 Apr 22;110(5):e1377-e1384.

A clinical case from Real-World practice:
Dynamic risk stratification



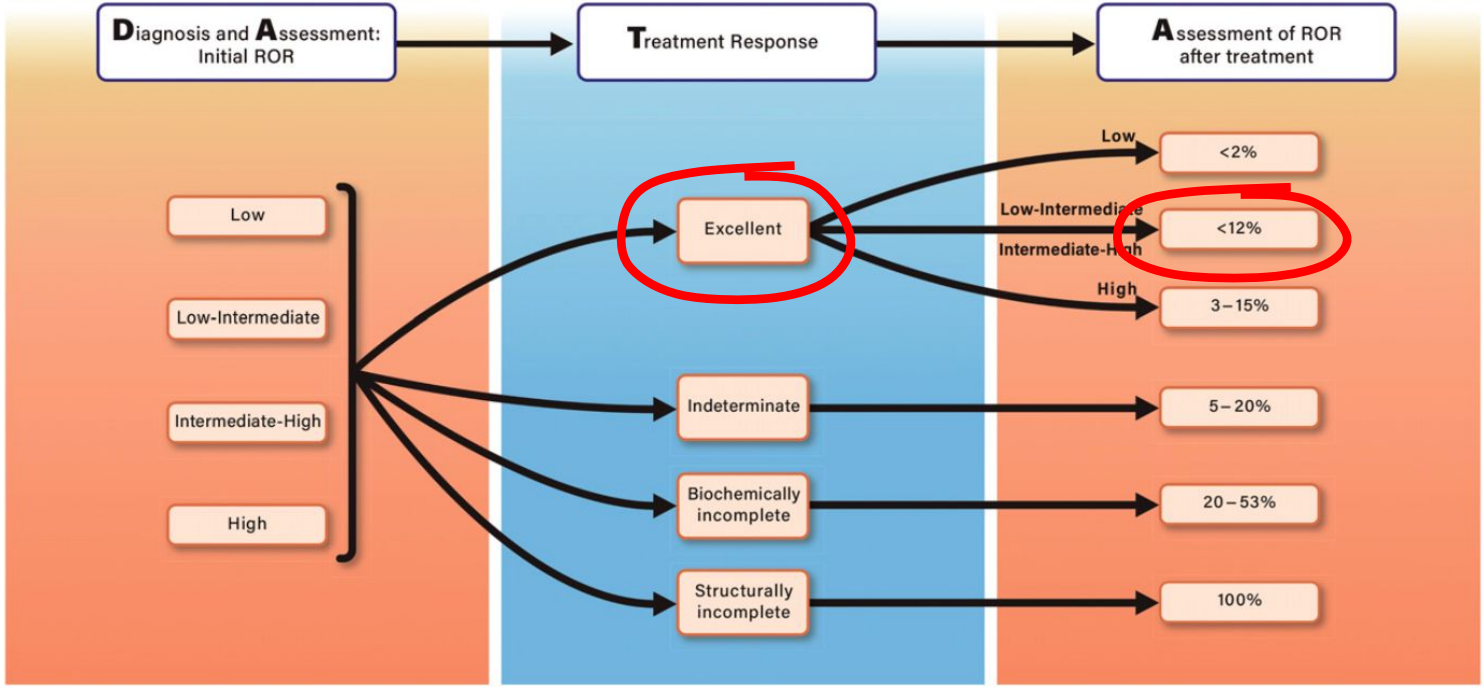
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- **ATA risk stratification**
  - **2015**[1]: Low risk (≲5%)
  - **2025**[2]: Low-Intermediate (10-15%)
- **Post-operative staging (3 months)**
  - **Neck ultrasound:** negative
  - **Tg: 1.1 ng/ml** (undetectable TgAbs)
  - TSH 0.9 mUI/L
  - **2025 ATA response to therapy**[2]: excellent (*Tg <2.5 ng/ml with undetectable TgAbs, negative neck US*)

[1] Haugen BR et al., *Thyroid*. 2016;26(1):1-133.
[2] Ringel MD, Sosa JA et al., Thyroid. 2025;35(8):841-985

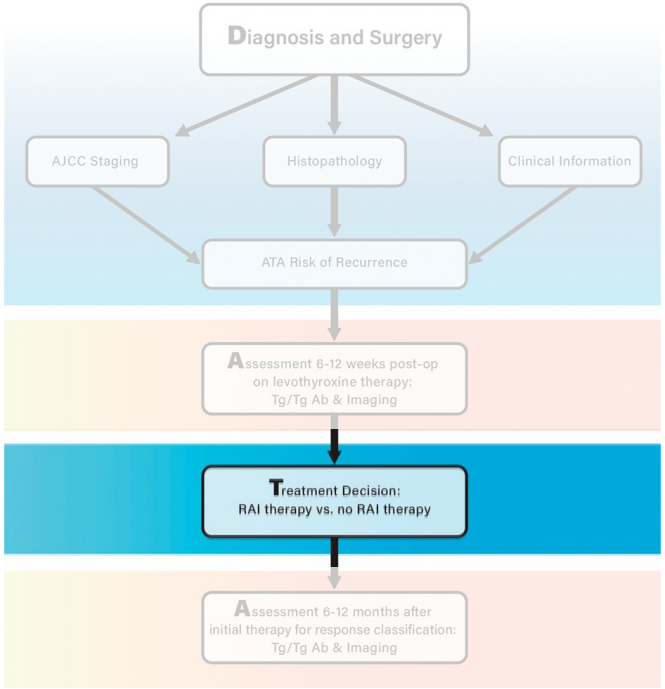
ATA Guidelines

Dynamic risk stratification



Ringel MD, Sosa JA et al., Thyroid. 2025;35(8):841-985

ATA Guidelines
DATA Framework



3 THIRD STEP

A clinical case from Real-World practice:
Dynamic risk stratification



Woman, 41 yrs old
(PTC infiltrative FV, pT1bm, pNx)

- **ATA risk stratification**
  - **2015**[1]: Low risk (≲5%)
  - **2025**[2]: Low-Intermediate (10-15%)
- **Response to therapy (3 months)**
  - **Excellent** (ATA 2025)[2]
- **Decision on radioiodine administration:** not administered

[1] Haugen BR et al., *Thyroid*. 2016;26(1):1-133.
[2] Ringel MD, Sosa JA et al., Thyroid. 2025;35(8):841-985

ATA Guidelines

RAI in Low-Risk Thyroid Cancer Patients



ATA 2025

Remnant ablation is **not routinely** recommended after total thyroidectomy for ATA **low-risk** DTC.

[Strong recommendation. High certainty evidence]



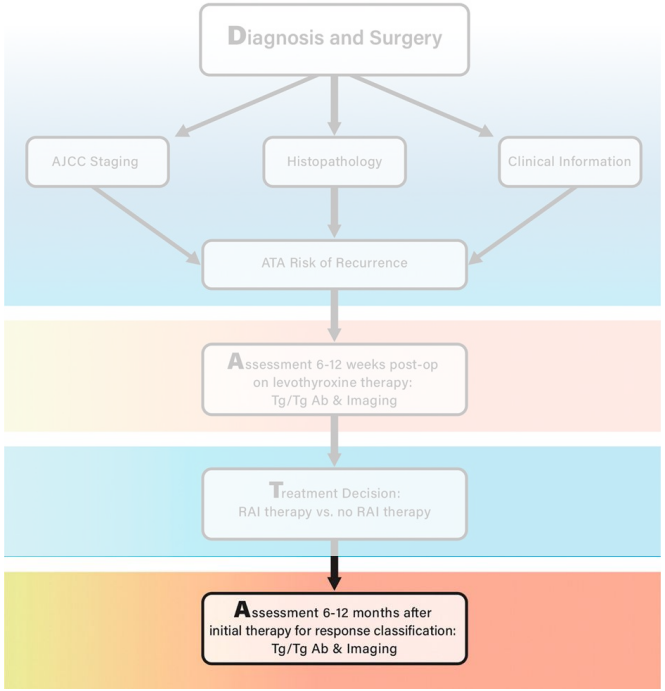
ATA 2025

RAI adiuvant therapy **may be** considered in ATA **intermediate-risk** of recurrent DTC.

[Conditional recommendation. Low certainty evidence]

Ringel MD, Sosa JA et al., Thyroid. 2025;35(8):841-985

ATA Guidelines
DATA Framework



4 FOURTH STEP

Ringel MD, Sosa JA et al., Thyroid. 2025;35(8):841-985

A clinical case from Real-World practice:
Dynamic risk stratification



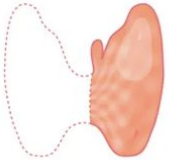
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- **ATA risk stratification**
  - **2015**[1]: Low risk (≲5%)
  - **2025**[2]: Low-Intermediate (10-15%)
- **Response to therapy (3 months)**
  - **Excellent** (ATA 2025)[2]
- **Decision on radioiodine administration:** not administered
- **Response to therapy (12 months)**
  - **Excellent** (ATA 2025)[2]

[1] Haugen BR et al., *Thyroid*. 2016;26(1):1-133.
[2] Ringel MD, Sosa JA et al., Thyroid. 2025;35(8):841-985

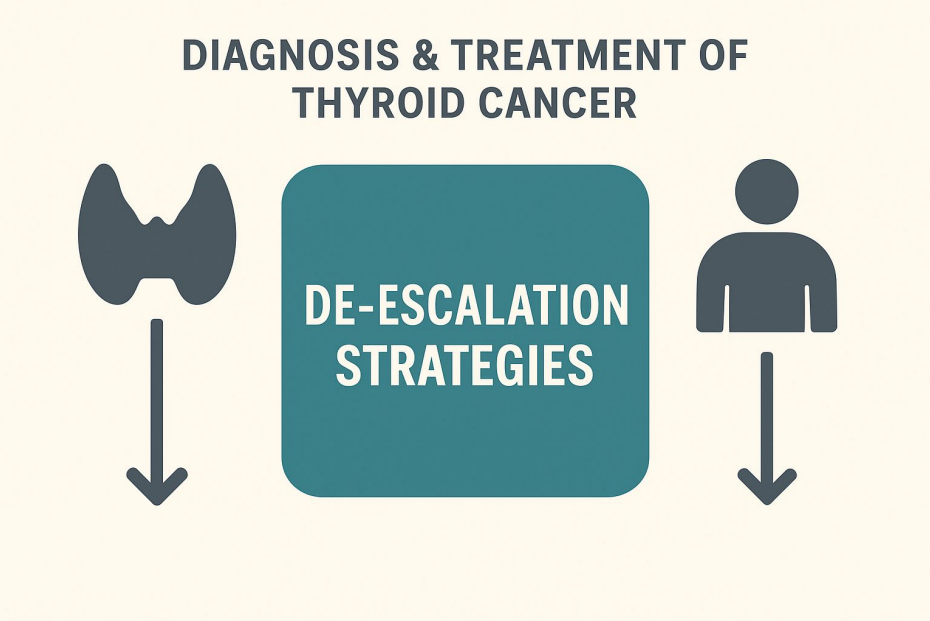
ATA Guidelines

Excellent response to therapy: *long term follow-up*

	Tg: frequency	Neck US: frequency	Duration of follow-up
	None. One assessment post-operatively	Every 1-3 years (*nodules in the remaining lobe should be monitored according to Nodule GLs recommendations*)	Neck US: 5-8 years, then discontinue
	Once a year	Every 1-3 years	Neck US: 5-8 years, then discontinue Tg: 10-15 years, then discontinue
	Once a year	Every 1-3 years	Neck US: 5-8 years, then discontinue Tg: 10-15 years, then discontinue

Ringel MD, Sosa JA et al., Thyroid. 2025;35(8):841-985

Conclusions



- Current guidelines increasingly support a personalized, risk-adapted approach to thyroid cancer management, with a clear trend toward treatment and follow-up de-escalation
- Several grey areas remain, particularly regarding the optimal extent of initial treatment, and the long-term safety of less intensive strategies