

Mitotic activity (Core)

The mitotic status should be reported in every thyroid carcinoma since it is an essential defining criterion for poorly differentiated thyroid carcinomas (PDTc) regardless of the definition used for this entity.^{1,2} The vast majority of thyroid carcinomas have a very low mitotic rate and a mitotic count is required only in those cases with elevated mitotic activity (≥ 3 mitoses/2 mm²). Mitotic count should be performed in the area of highest mitotic activity in 10 consecutive high power fields (HPFs).^{3,4} The Ki-67 proliferation rate has been shown to correlate with outcome.^{5,6} It has not been utilized in the commonly used definitions of poorly differentiated thyroid carcinomas and thus is not a required element. It can however guide the pathologist to the area of highest mitotic activity.

References

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