

Ki-67 proliferation index (Core)

Significant evidence has accumulated that adrenal cortical carcinoma is a proliferation-driven neoplasm¹⁻⁴ and the Ki-67 proliferation index, as determined by immunohistochemistry using the Mib-1 antibody,⁵ is an important independent prognostic factor.⁶⁻⁹ Assessment of the Ki-67 proliferation index should be performed on the area of tumour with the highest mitotic counts (i.e., highest grade component) or 'hot spots'. Determining the Ki-67 proliferation index should be performed by image analysis when available or manual counting if necessary.¹⁰ Although estimating the Ki-67 by simple inspection ('eyeballing') is generally not recommended it has been shown to have some prognostic significance and may be used when image analysis and manual counting is not possible.¹¹

Grading individual tumours based on Ki-67 proliferation index is not fully established, but some centres use a 3-class system based on the following cut-offs: $\leq 15\%$ (low grade), $15\text{--}30\%$ (intermediate grade), and $>30\%$ (high grade).¹² Until there is consensus on Ki-67 cut-offs for individual grades, the absolute Ki-67 proliferative index should be recorded.

References

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