Proliferative fraction (Core)

Mitotic count and/or Ki-67 proliferation index is now widely utilized in risk stratification for other neuroendocrine tumours. A high proliferative fraction based on either mitoses¹ or Ki-67² is a reported risk factor for development of metastases for phaeochromocytoma and paraganglioma.

Mitotic count should be performed in a minimum area of 2 mm², which is equivalent to approximately 10 high power fields (HPFs) in many microscopes. There is currently no standard approach to scoring a Ki-67 labelling index in phaeochromocytoma and paraganglioma and this has been emphasised. On the basis of established methodology for other neuroendocrine tumours,³ it is recommended that the Ki-67 index should be reported as percentage of positive tumour cells per 40x field HPF (0.2 mm²) in area of highest nuclear labelling.^{2,4} Counts should ideally be based on manual counts of printed images or appropriately validated automated image analysis; visual estimates have proven less accurate for multiple tumour types.³

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