Neurotropism

Reason/Evidentiary Support:

Neurotropism is identified by the presence of melanoma cells around nerve sheaths (perineural invasion) or within nerves (intraneural invasion).\textsuperscript{1,3} Occasionally, the tumour itself may form neuroid structures (termed ‘neural transformation’; this is also regarded as neurotropism).\textsuperscript{1,4,6} It is recommended that pathologists be cautious not to overinterpret the presence of melanoma cells around nerves in the main tumor mass (which often represents “entrapment” of nerves in the expanding tumor) as neurotropism.

Infiltration along nerve sheaths (or occasionally within the endoneurium) may be associated with an increased local recurrence rate (local persistence).\textsuperscript{7} Neurotropism is common in desmoplastic melanoma (desmoplastic neurotropic melanoma), but may occur in other forms of melanoma.\textsuperscript{3,8-10} The presence of neurotropism is associated with increased risk of local recurrence and may, in some cases, be treated by wider excision margins and/or adjuvant radiotherapy.

References: