

# Tumors of Neural Tissue of the Skin

Paul K. Shitabata, M.D.

Director of Dermatopathology

Harbor-UCLA Dermatology

# Immunohistochemical Staining Patterns

Disease	S100	EMA
Neurofibroma		
Neurilemmoma		
Perineurioma		
Palisaded and encapsulated neuroma		
Glandular schwannoma		

# Answers

Disease	S100	EMA
Neurofibroma	+	
Neurilemmoma	+	
Perineurioma	+ rare	+
Palisaded and encapsulated neuroma		+
Glandular schwannoma	+	

# Small round blue cell tumors include:

- Ewing's sarcoma
- Extra-renal rhabdoid tumor
- Askin's tumor
- Neuroblastoma
- Neurilemmoma
- Merkel cell carcinoma

May have more than one answer

# Answers

- Ewing's sarcoma
- Askin's tumor
- Neuroblastoma
- Merkel cell carcinoma

# Histopathological characteristics for a malignant granular cell tumor:

- PAS positive granules
- Perineural spread
- Infiltration into skeletal muscle
- Plexiform architecture
- S100 positivity

# Answers

- None

In actuality, none of the features are unequivocal indicators of malignancy. Even rare mitotic figures are acceptable. At times, the only way one may be sure of malignant behavior is documented evidence of metastasis. Additional parameters include marked cytologic pleomorphism and large clinical size. Malignant tumors may lose positivity for S100.

# Synonyms

Disease	Synonym
Schwannoma	
Nerve sheath myxoma	
Neurofibrosarcoma	
Storiform perineurial cell fibroma	

# Answers

Disease	Synonym
Schwannoma	Neurilemmoma
Nerve sheath myxoma	Neurothekeoma
Neurofibrosarcoma	Malignant peripheral nerve sheath tumor, malignant schwannoma
Storiform perineurial cell fibroma	Perineurioma