## Tumors of Neural Tissue of the Skin

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## Immunohistochemical Staining Patterns

| Disease | S100 | EMA |
| :--- | :--- | :--- |
| Neurofibroma |  |  |
| Neurilemmoma |  |  |
| Perineurioma |  |  |
| Palisaded and <br> encapsulated <br> neuroma |  |  |
| Glandular <br> schwannoma |  |  |

## Answers

$\left.\begin{array}{|l|c|c|}\hline \text { Disease } & \text { S100 } & \text { EMA } \\ \hline \text { Neurofibroma } & + & \\ \hline \text { Neurilemmoma } & + & + \\ \hline \text { Perineurioma } & + \text { rare } & + \\ \hline \begin{array}{l}\text { Palisaded and } \\ \text { encapsulated } \\ \text { neuroma }\end{array} & + & + \text { (surrounding } \\ \text { nests) }\end{array}\right)$

## Small round blue cell tumors include:

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


## 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 architectur
- 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 <br> fibroma |  |

## Answers

| Disease | Synonym |
| :--- | :--- |
| Schwannoma | Neurilemmoma |
| Nerve sheath myxoma | Neurothekeoma |
| Neurofibrosarcoma | Malignant peripheral nerve <br> sheath tumor, malignant <br> schwannoma |
| Storiform perineurial cell <br> fibroma | Perineurioma |

