Accession # ___________________ Name _____________________ Age ________

**NEUROBLASTIC TUMORS**

Initial surgery (diagnosis) Relapse Other (specify): ____________________

Primary Metastasis Unknown

Site:

Specimen collected: Before treatment (chemotherapy or radiation) After treatment

Tumor:

<table>
<thead>
<tr>
<th>Type*</th>
<th>Ganglioneuroma (Schwannian stroma-dominant)</th>
<th>maturing</th>
<th>mature</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ganglioneuroblastoma, intermixed (Schwannian stroma-rich)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Neuroblastoma (Schwannian stroma-poor)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ganglioneuroblastoma, nodular (composite, Schwannian stroma-rich/stroma-dominant and stroma-poor)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For neuroblastoma and ganglioneuroblastoma, nodular only*:

<table>
<thead>
<tr>
<th>Grade of neuroblastic differentiation:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undifferentiated</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mitotic-karyorrhectic index:</th>
</tr>
</thead>
<tbody>
<tr>
<td>low</td>
</tr>
</tbody>
</table>

Prognostic evaluation*: Favorable histology Unfavorable histology

Calcification: Present Absent

For specimens collected after treatment only:

<table>
<thead>
<tr>
<th>No treatment effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment effect with ____ % necrosis</td>
</tr>
</tbody>
</table>

Margins: Cannot be assessed Negative for tumor Positive for tumor

Location of positive margin: ______________________________

Lymph Nodes: Not examined

<table>
<thead>
<tr>
<th>Adherent</th>
<th>Number positive/number examined _____</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regional Ipsilateral</td>
<td>Number positive/number examined _____</td>
</tr>
<tr>
<td>Regional Contralateral</td>
<td>Number positive/number examined _____</td>
</tr>
<tr>
<td>Distant</td>
<td>Number positive/number examined _____</td>
</tr>
</tbody>
</table>

*Not applicable to specimens collected after treatment.
**Ganglioneuroma**
Maturing: mixture of completely and incompletely mature ganglion cells
Mature: completely mature ganglion cells always covered with satellite cells

**Grade of neuroblastic differentiation**
Undifferentiated: No neuropil, no differentiating neuroblasts (difficult to diagnose on H&E)
Poorly differentiated: < 5% differentiating neuroblasts
Differentiating: > 5% differentiating neuroblasts

**Mitotic-karyorrhectic index**
Low: <2% (<100/5,000 cells)
Intermediate: 2-4% (100-200/5,000 cells)
High: >4% (>200/5,000 cells)

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**International Neuroblastoma Pathology Classification**

- **Ganglioneuroma (Schwannian stroma-dominant)**
  - Maturing subtype
  - Mature subtype
  - FH

- **Ganglioneuroblastoma, Intermixed (Schwannian stroma-rich)**
  - FH

- **Ganglioneuroblastoma, Nodular (composite, Schwannian stroma-rich/ stroma-dominant and stroma-poor)**
  - UH/FH*

- **Neuroblastoma (Schwannian stroma-poor)**
  - Undifferentiated subtype
  - Poorly differentiated subtype
  - Differentiating subtype

- **Schwannian Development**
  - Grossly visible Nodule(s)
  - ≤50%
  - >50%

- **Variant forms**

- Microscopic Neuroblastic foci

- Mitotic & karyorrhectic cells
  - ≥200/5,000 cells
  - 100-200/5,000 cells
  - <100/5,000 cells

- Any age
  - ≥1.5 yr
  - <1.5 yr

- UH

- FH

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FH: favorable histology
UH: unfavorable histology
*For variant forms and prognostic evaluation of “Ganglioneuroblastoma, Nodular”, see CANCER 2003;98:2274-81.