

**FINAL DIAGNOSIS**

GIANT CELL GLIOBLASTOMA (WHO IV)

**SYNOPTIC REPORT**

BRAIN/SPINAL CORD: Biopsy/Resection: Primary neoplasms not metastatic tumors

1) History of Previous Tumor/Familial Syndrome  
 - Known (GBM)

2) Specimen Type/Procedure  
 - Resection

3) Specimen Handling  
 - Squash/smear/touch preparation  
 - Frozen section  
 - Unfrozen for routine permanent paraffin sections  
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4) Specimen Size  
 - The Greatest dimension: 2.0 cm  
 - Additional dimensions: 1.0 cm (for fragmented tissue, an aggregate size may be given)

5) Laterality  
 - /Not applicable

6) Tumor Site  
 - Brain, other

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\*Cerebellum

\*Cerebellopontine angle

6) Histologic Type and Grade (applicable World Health Organization [WHO] classification and grade)

Astrocytic Tumors

- Glioblastoma (WHO grade IV) Specify:

\*Giant cell glioblastoma (WHO grade IV)

*Glioblastoma  
 high-grade glioma*

*Cerebellum*

## SYNOPTIC REPORT

(Continued)

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- 7) Histologic Grade (WHO histologic grade)
  - WHO grade IV
- 9) Ancillary Studies
  - Immunohistochemistry (GFAP Ki67)

## MEDICAL HISTORY

### DOCTOR'S NAME:

PRE-OP DX: RIGHT CEREBELLAR GLIOBLASTOMA MULTIFORME

POST-OP DX: PENDING PATHOLOGY

PROCEDURE: CRANIOTOMY

HISTORY: 9 YO W/ H/O GMB S/P RESECTION IN  
BLURRED VISION AND UNSTEADY GAIT

RETURNED W/

## TISSUES

- A. CEREBELLUM, NOS - CEREBELLAR TUMOR, B. CEREBELLUM, NOS - CEREBELLAR TUMOR,  
C. CEREBELLUM, NOS - CEREBELLAR TUMOR, D. CEREBELLUM, NOS - CEREBELLAR TUMOR

## GROSS DESCRIPTION

A. The specimen is received fresh in a container labeled with the patient's name, medical record number \_\_\_\_\_ and designated "cerebellar brain tumor".

It consists of a 2.0 x 1.5 x 0.4 cm aggregate of tan-pink to tan-red gelatinous soft tissue. A portion is submitted for frozen section evaluation. A squash prep is performed. The frozen section remnant is submitted in cassette FSA. The remainder of the specimen is entirely submitted in cassette A.

B. The specimen is received fresh in a container labeled with the patient's name, medical record number \_\_\_\_\_ and designated "cerebellar brain tumor".

It consists of a 1.0 x 0.7 x 0.3 cm aggregate of pink-tan red-tan irregular soft tissue. The specimen is entirely submitted in cassette B.

C. The specimen is received fresh in a container labeled with the patient's name, medical record number \_\_\_\_\_ and designated "cerebellar tumor". It consists of a 0.9 x 0.8 x 0.3 cm aggregate of pink-tan to red-tan irregular soft tissue. The specimen is entirely submitted in cassette C.

D. The specimen is received fresh in a container labeled with the patient's name, medical record number \_\_\_\_\_ and designated "cerebellar tumor". It consists of a 1.5 x 1.5 x 0.4 cm aggregate of pink-tan to red tan gelatinous soft tissue fragments. The specimen is entirely submitted cassette D.

Blood and tissue are received from the CBTTTC study.

## FROZEN SECTION DIAGNOSIS

GLIOBLASTOMA MULTIFORME

## MICROSCOPIC DESCRIPTION

This highly malignant and polymorphic tumor infiltrates cerebellar cortex. The markedly cellular tumor shows striking cytologic pleomorphism and anaplasia, from sheets of smaller cells with hyperchromatic oval nuclei to numerous bizarre and very large uni- or multi-nucleated cells containing irregular basophilic masses of chromatin or exploded mitoses. Necrosis including pseudo-palisading necrosis is present, intense vascular endothelial proliferation also with arcades of glomeruloid vessels and vascular thrombi.

GFAP: Many tumor cells 4+, but the giant cells are often negative

Ki67: high with focally 40%, and strong positivity of the irregular nuclear masses.

CD163: Numerous macrophages are detected

Signed \_\_\_\_\_ (signature on file) \_\_\_\_\_