Department of Pathology and Laboratory Medicine

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Laboratory Director: Mahui B. Amin, M.D.

CLIA # 05D0541033

Patient:

Hospital No: Date of Birth: . Age/Sex: Pathologist: Serguei I. Bannykh, M.D. ssistant: Michael T Schmidt, D.O. Date of Procedure: 10/11/2012

Date Received: 10/11/2012

Accession Number

Ordering M.D.: CHIRAG G PATIL Copies To:

PHILLIP LEVINE

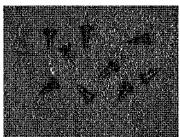
Location: 8-NE

SURGICAL PATHOLOGY REPORT

DIAGNOSIS:

A. BRAIN, RIGHT FRONTAL, CORE BIOPSY:

- Cortex and white matter involved by persistent/recurrent glioma, consistent with history of glioblastoma multiforme, WHO grade IV
- B. BRAIN, RIGHT FRONTAL, DEEP RESECTION CAVITY, CORE BIOPSY:
 - White matter involved by moderately cellular glioma, consistent with history of glioblastoma multiforme, WHO grade IV
- C. SKULL, SURGICAL HARDWARE REMOVAL
 - Explanted hardware (screws), gross only



GROSS APPEARANCE PART C

HISTORY: GBM

MICROSCOPIC FINDINGS:

Sections on part A disclose cortex and white matter containing numerous reactive cells, including astrocytes, macrophages/microglia, T-cells, including cytotoxic T-cells, as well as numerous persistent glioma cells accounting to approximately 40% to 50% of total cellularity, based on p53 immunostain. Density of tumor cells on part B is lower and less reactive cells are also identified.

IMMUNOHISTOCHEMISTRY:

Study / Antibody Block Result				
P53	A2	Up to 40% of cellularity is due to persistent glioma		
IDH1 R132H mutant	A2	Positive in tumor cells		
GFAP	A2	Highlights reactive gliosis and tumor cells		

CEDARS SINAI MEDICAL CENTER.

PATIENT:

CD3	A2	Clusters of T-cells are seen, accounting up to 5% of total cellularity
CD20	A2	Negative
CD163	A2	Numerous macrophages/ microglia seen, accounting for 50% of total cellularity
TIA	A2	Small clusters of cytotoxic T-cells seen, accounting for 2% of total cellularity

^{*}These IHC studies were interpreted in conjunction with appropriate positive and negative controls which demonstrated the expected positive and negative reactivity.

A, BRAIN TUMOR RIGHT FRONTAL FROZEN SECTION

designated "brain tumor enhancing nodule R frontal", and received fresh Labeled for intraoperative consultation is a fragment of pale tan soft tissue measuring approximately 1.0 cm in greatest dimension. A touch prep is performed and half the tissue is submitted for frozen section, and further submitted for permanent sections. The remaining tissue is submitted for permanent sections only.

A1. Frozen section remnant of FSA1 - 1

A2. Remaining tissue - 1

B. DEEP RESECTION CAVITY FROZEN SECTION

designated "deep resection cavity", and received fresh for intraoperative Labeled ' consultation are multiple fragments of pale pink-white soft tissue measuring 1.2 cm in aggregate dimensions. A touch prep is performed and half of the tissue is submitted for frozen section, and further submitted for permanent sections. The remaining tissue is submitted for permanent sections only.

B1. Frozen section remnant - multiple

B2. Remaining tissue - multiple

C. HARDWARE

Patient name/label:

Received:

Unfixed

Total pieces:

Multiple

Metallic component(s):

Screws

Synthetic components:

None

Not identified Bone/soft tissue:

The specimen is for gross examination only. A gross photograph is taken.

Gross dictated by Shawn Maclary, P.A. (ASCP):plh/J#2187169 10/11/2012

INTRAOPERATIVE CONSULTATION:

OPERATIVE CALL

OPERATIVE CALL (FROZEN)

FSA/TPA. BRAIN, RIGHT FRONTAL, "ENHANCING NODULE", EXCISION:

Involved by glioma

(Dr. Serguei Bannykh/Dr. Michael Schmidt)

FSB/TPB. BRAIN, "DEEP RESECTION CAVITY", EXCISION:

Involved by glioma

(Dr. Serguei Bannykh/Dr. Michael Schmidt)

dc/10/15/2012/J#2189118

I have personally examined the specimen, interpreted the results, reviewed the report and signed it electronically. Serguei I. Bannykh, M.D. Electronically signed 10/15/2012 2:05:22PM

If this report includes immunohistochemical test results, please note the following: Numerous immunohistochemical tests were developed and their performance characteristics determined by Cedars-Sinal Medical Center Department of Pathology and Laboratory Medicine. Those immunohistochemical tests have not been cleared or approved by the U.S. Food and Drug Administration (FDA), and FDA approval is not required.