ICD-O-3
Oligoastrocytoma 9382/3
Site: brain, parietal lobe C71.3
lw
10/4/12

Surgical Pathology Report

--- Clinical History ---
Brain tumor [239.6]. Medical history: Drug abuse cocaine type. Ethyl alcohol abuse. Benign essential hypertension.

ADDENDA:
Addendum added:
Addendum added:

---Final Pathologic Diagnosis---

A. Right parietal temporal brain biopsy:
- Low grade glioma. See comment.

B. Right parietal temporal mass excision:
- Low grade glioma (who grade II). See comment.

Comment: Though the tumor is composed predominantly of oligodendroglial elements, areas of nuclear pleomorphism with GFAP positivity raises the possibility of an astrocytic component. Assays for 1p and 19q are pending and a definite lineage will be rendered once the report is available.

All controls show appropriate reactivity.

The immunohistochemical and/or in situ hybridization tests reported here, except for those addressing HER-2/neu overexpression, have been developed and their performance characteristics determined by the Immunohistochemistry and Histology Core Facility laboratories in the Department of Pathology at and are not required to have nor do they have FDA approval.

Criteria	Yes	No
Diagnosis Discrepancy		
Primary Tumor Site Discrepancy		
HIPAA Discrepancy		
Prior Malignancy History		
Dual/Synchronous Primary Noted		
Case is (circle): QUALIFIED / DISQUALIFIED		
Reviewer Initials: LW Date Reviewed: 10/4/12		

lw 10/4/12

F,

---Addendum Report---

Addendum Status: Signed Out

Detection of 1p36 and 19q by LSIe 1p36/LSI 1q25 and LSI 19q13/19p13 Dual-Color Probe Sets
Pathology Core Facility, Molecular Diagnostic Laboratory

Case No Outside Case#:
Pathologist Patient Name:
Source of case Patient MRN:
Block used B4
Tissue fixation formalin-fixed tissue
Tissue source Brain
RESULTS
Ratio of 0.89 Cell count of 1p/1q: 142
Ratio of 0.70 Cell count of 19q/19p: 131
Interpretation of Results: A) 1p no loss; B) 19q loss
Interpretation of findings:
A) (negative) The majority of tumors cells displayed 2 to 3 control chromosome 1q25 signals and 2 to 3 chromosome 1p36 signals (locus of interest), and the ratio of 1p36/1q25 Ratio was >0.8. The results are consistent with no loss of the 1p36 locus of interest.
B) (positive) The majority of tumors cells displayed 2 control chromosome 19p13 signals and 1 chromosome 19q13 signals (locus of interest). The ratio of 19q13/19p13 is <0.8. The results are consistent with the loss of 1p36 locus of interest.
Number of Observers: 2
Test Interpreted By:
Comments
The resultant FISH section/slide is scanned by a trained licensed medical technologist and analyzed using a FDA-approved, validated semi-automated scanning imaging workstation and accompanying imaging analysis software The resultant FISH section/slide is then presented to the interpreting Pathologist, who will reviews the FISH results from and compares them to the results manually observed under an Olympus Fluorescence Microscope. Therefore the ratio is enumerated by computer-aided counting as well as manual counting.
Interpretation of Test
The ratio for probe set 1 is derived by dividing the total number of LSI 1p36 signals by the total number of LSI 1q25 signals in at least 20 interphase nuclei with nonoverlapping nuclei in the neoplastic glial cells. Cells with no signals or with signals of only one color are disregarded. The ratio for probe set 2 is derived by dividing the total number of LSI 19q13 signals by the total

F /

number of LSI 19p13 signals in at least 2 sets of 20 interphase nuclei with nonoverlapping nuclei in the neoplastic glial cells at two different areas of the sample. Cells with no signals or with signals of only one color are disregarded. References ranges for our laboratory for allelic loss versus no allelic loss were established by evaluating both probe sets in a series of 40 normal cases from 10 different organs. For both probe set 1 and 2 a ratio of less than 0.80 taken from at least 2 sets of 20 interphase nuclei at 2 different areas with nonoverlapping nuclei is consistent with allelic loss. FISH and H&&E stained slides have been reviewed by the interpreting pathologist.

Limitations

ANALYTE SPECIFIC REAGENT: The use of one or more reagents in the above tests is regulated as an analyte specific reagent (ASR). These tests were developed and their performance characteristics determined by the Pathology Core Facility of They have not been cleared by the US Food and Drug Administration. The FDA has determined that such clearance or approval is not necessary.

Addendum **Status: Signed Out**

A and B: Right parietal temporal region, excision

- Mixed oligoastrocytoma (WHO grade II).

Assays detect intact 1p and deletion of 19q loci.

---INTRAOPERATIVE CONSULTATION DIAGNOSIS:---

AF1. Right sided parietal temporal tumor (frozen section performed):
- Infiltrating glioma.

Note:

Examining pathologist:

---MICROSCOPIC:---
Sections reveal an infiltrating glial neoplasm composed of cells having mostly round to ovoid nuclei and scant cytoplasm. Mitotic figures are rare. Background slender vasculature is seen. In areas, the cells display nuclear pleomorphism and eosinophilic cytoplasm with processes. Immunostain for GFAP is positive in these areas and a Ki-67 stain shows a proliferation index of about 3%, by manual quantification.

F /

---SPECIMEN(S) RECEIVED:---

A: Neuropath, Brain, Bx
B: Neuropath Reg

---GROSS DESCRIPTION:---

The specimens are received in two properly labeled containers, one of which is submitted for frozen section with the patient' s name and accession number.

A. The specimen is designated "right sided parietal temporal tumor" and consists of two pieces of tissue 0.8 x 0.5 x 0.2 cm in aggregate. The specimen is entirely frozen. TE 1

Summary of Cassettes: AF1, remaining frozen section tissue resubmitted as received

B. The specimen is designated "right sided parietal temporal tumor" and consists of a 6.0 x 4.5 x 1.5 cm aggregate of pink-tan to white-tan soft tissue. The cut surfaces are yellow-tan and homogeneous. RS 6

Lab Use Only:

Gross description by: