[redacted] **path report**

Microscopic

Sections demonstrate a glial neoplasm that diffusely infiltrates both gray and white matter. The tumor cells consistently have intermediate-sized round nuclei and variably prominent, classic perinuclear halos. Microcystic myxoid change is seen in some regions but most of the tumor is solid. There is extensive infiltration but in many areas confluent hypercellularity is seen. Atypia is moderate. Despite this, mitotic figures are rare with only three seen in more than 100 high power fields. Both the frozen section and slides also demonstrate focal microvascular proliferation but this is not a widespread feature.

MIB-1 immunohistochemistry is performed on blocks. In the preponderant areas of tumor that lack significant numbers of mitoses, MIB-1 immunoreactivity is highly variable on a regional basis. The majority of areas demonstrates a labeling index of <1%. A significant minority show greater proliferative activity with a labeling index of up to 8.6%. In the regions with greater atypia and mitotic activity, a labeling index of 8.85 is seen diffuse. Overall, these findings are consistent with the diagnosis of anaplastic oligodendroglioma but suggests that this present in a background of low grade oligodendroglioma.

Final Diagnosis:

Right parietal brain tumor biopsy and resection:
Consistent with anaplastic oligodendroglioma in predominant background of low grade oligodendroglioma
MIB-1 labeling index = <1% - 8.8%