December 20, 2023

Diagnosis: Stage IV Non-Small Cell Lung Cancer (NSCLC) with BRAF V600E mutation, minimal PD-L1 expression (TPS <1%, CPS 0, IC 0). Date of Initial Diagnosis: November 2, 2022

Clinical Summary: The female patient initially presented with severe, recurrent headaches, dizziness, visual disturbances, and progressive left-sided limb weakness over approximately six weeks, accompanied by significant weight loss (10 lbs) and generalized bone pain. Initial evaluation included a comprehensive neurological assessment and brain MRI, revealing multiple enhancing intracranial metastatic lesions, the largest measuring 2.8 cm in the right temporal lobe. Additional imaging with whole-body PET-CT confirmed widespread skeletal involvement including vertebral, pelvic, and femoral metastases with marked metabolic activity. Primary lesion detected in the right middle lung lobe (3.5 cm), confirmed via CT-guided biopsy as adenocarcinoma. Molecular profiling demonstrated a BRAF V600E mutation. Immunohistochemistry for PD-L1 revealed negligible expression.

Treatment Course: Commenced targeted therapy with Dabrafenib (150 mg twice daily) and Trametinib (2 mg daily) starting November 24, 2022. The treatment regimen provided rapid symptomatic relief, notably reducing headache severity, improving neurological function, and alleviating bone pain. Initial follow-up imaging at two months post-initiation demonstrated considerable regression in brain metastases, with the largest lesion reduced to 1.2 cm, and stabilization of skeletal disease.

During treatment, patient experienced mild manageable side effects including pyrexia, transient rash, and mild nausea, managed successfully with symptomatic and supportive interventions including short-term antipyretics, topical corticosteroids, and anti-emetics.

Current Status: Ongoing clinical response to Dabrafenib and Trametinib is maintained. Recent brain MRI confirms sustained intracranial disease control without new lesions. Skeletal lesions remain stable, and patient’s neurological function and mobility are substantially improved. Routine laboratory assessments demonstrate mild transient elevations in liver enzymes, successfully managed without interruption of therapy.

Follow-up Plan: Continue Dabrafenib and Trametinib with vigilant clinical monitoring. Scheduled MRI and PET-CT every three to four months to evaluate for intracranial progression or development of new metastases. Potential stereotactic radiosurgery considered for symptomatic or progressive CNS lesions. Regular neurologic assessments and bone health evaluations to continue, along with supportive interventions to optimize quality of life.

Patient ID: SYN094 (Simone Wells)
DOB: 1975-05-28