University Cancer Center - Thoracic Oncology Clinic Note

Patient: Sullivan, Brenda Marie MRN: SYN042 DOB: 09/03/1967 F

Date of Visit: August 21, 2023

Provider: Dr. Evelyn Reed, MD, PhD

SUBJECTIVE:

Ms. Sullivan presents for Cycle 8, Day 1 of Carboplatin/Pemetrexed/Pembrolizumab. She reports feeling "quite good" overall. No significant fatigue beyond the usual day or two post-chemo 'dip'. Denies cough, chest pain, shortness of breath, hemoptysis. Appetite is good, weight stable. No nausea, vomiting, diarrhea, or constipation. Reports mild intermittent headaches, unchanged from baseline prior to diagnosis, managed effectively with OTC Excedrin. No focal neurological deficits, seizures, or visual changes. No rash, myalgias, or arthralgias. Energy levels sufficient to manage daily activities and part-time work from home. Compliant with Folic Acid and B12 schedule.

ONCOLOGIC HISTORY:

- Dx: Stage IV Lung Adenocarcinoma (Feb 8, 2023). Presented with seizure secondary to brain metastases.
- Staging: Brain MRI (Feb 2023) showed 2 enhancing lesions (R frontal 1.5cm, L parietal 0.8cm) with edema. CT C/A/P showed 2.2cm LLL primary, mediastinal nodes, multiple bilateral pulmonary nodules.
- Treatment History: Underwent SRS to brain metastases Feb 15-16, 2023. Started systemic therapy C1D1 Carbo (AUC 5)/Pem (500mg/m2)/Pembro (200mg) on March 2, 2023. Completed 4 cycles induction, now on Cycle 8 (maintenance Pem/Pembro started after C4). On Dexamethasone taper post-SRS, completed in April 2023.
- Pathology/Molecular (LLL biopsy Feb 10, 2023): Adenocarcinoma. NGS identified **KRAS G12C mutation**. EGFR/ALK/ROS1/BRAF/etc negative. PD-L1 (IHC 22C3): **TPS 30%**, **CPS 40**, **IC Score 1**/+.

PAST MEDICAL HISTORY:

- Migraine headaches (history since teens)
- Hypothyroidism (on Synthroid)
- Non-smoker

MEDICATIONS:

- Pemetrexed/Pembrolizumab Maintenance (Today is C8D1)
- Levothyroxine 125 mcg PO Daily
- Folic Acid 1 mg PO Daily
- Vitamin D3 2000 IU PO Daily
- Excedrin Migraine PRN headache
- Ondansetron 8 mg PO TID PRN nausea x 3 days post-chemo

OBJECTIVE:

- Vitals: T 36.9, BP 115/70, HR 65, SpO2 99% RA. Wt 72 kg. ECOG PS 0.
- Exam: Alert, well-appearing female. Neuro: CN intact, 5/5 strength, no focal deficits. Lungs: Clear. Cor: RRR. Skin: No rash.

- Labs (Today, Pre-Chemo): CBC: WBC 7.1 (ANC 4.5), Hgb 12.9, Plt 295k. CMP: Cr 0.6, LFTs WNL. TSH 1.8 (WNL).
- Recent Imaging:
 - Brain MRI w/wo contrast (July 28, 2023): Stable post-SRS changes in R frontal and L parietal lobes, consistent with treatment effect. No new or recurrent intracranial metastases. Edema resolved.
 - CT Chest/Abd/Pelvis w/ contrast (July 28, 2023): Continued partial response compared to baseline and stable compared to prior scan (May 2023). LLL primary lesion decreased to 1.1 cm. Mediastinal nodes regressed. Pulmonary nodules smaller/stable. No new sites of disease.

ASSESSMENT:

1. Stage IV KRAS G12C mutant, PD-L1 positive (30%) Lung

Adenocarcinoma: Patient continues to demonstrate an excellent response to first-line Carboplatin/Pemetrexed/Pembrolizumab (now in maintenance phase), with ongoing partial response systemically and stable control of brain metastases post-SRS. Tolerating therapy very well with minimal toxicity. Currently after ~5.5 months of therapy.

- 2. **Hypothyroidism:** Euthyroid on current dose.
- 3. Migraines: Stable, infrequent.

PLAN:

- 1. **Administer Therapy:** Proceed with Cycle 8, Day 1 Maintenance: Pemetrexed 500 mg/m2 IV, Pembrolizumab 200 mg IV. Standard pre-meds (Dexamethasone, Ondansetron). Received B12 injection today.
- 2. **Monitoring:** Continue Folic Acid daily. Labs prior to next cycle. Monitor for potential immune-related adverse events (thyroid, pneumonitis, colitis, etc.) none apparent currently.
- 3. **Surveillance:** Next restaging scans (CT C/A/P + Brain MRI) in approx. 3 months (prior to Cycle 12, ~Oct/Nov 2023).
- 4. **Future Planning:** Briefly reinforced that should progression eventually occur, targeted therapy against KRAS G12C (e.g., Sotorasib, Adagrasib) would be the likely next step.
- 5. Follow-up: Return in 3 weeks for C9D1. Patient has clinic contact info for any issues.

	M.D., PhD.
Evelyn Reed, MD, PhD ((Electronically Signed)