City Oncology Associates - Clinic Note

Patient: Davis, Robert Charles ("Bob")
MRN: SYN031 **DOB:** 09/18/1962 (60 y/o M)
Date of Visit: September 5, 2023
Provider: Dr. Benjamin Carter, MD

Reason for Visit: Urgent follow-up to discuss recent restaging scans showing disease progression and plan next steps.

Active Problem: Stage IV Lung Adenocarcinoma, EGFR L858R mutation positive, PD-L1 negative (TPS 0%, CPS <5, IC 0), with known brain and bone metastases.

History: Mr. Davis was diagnosed in May 2022 after presenting with seizures and back pain. Brain MRI confirmed multiple enhancing lesions (largest L parietal 2cm), PET/CT showed RUL primary and extensive osseous mets (spine, ribs, pelvis). Biopsy confirmed adenocarcinoma; NGS identified EGFR L858R. He underwent SRS to brain lesions (May 25-27, 2022) and started Osimertinib 80 mg daily on June 2, 2022. He experienced an excellent initial response, with resolution of neurological symptoms, improvement in bone pain, and near-complete response on imaging within 3 months. He tolerated Osimertinib well, with only Grade 1 dry mouth and paronychia.

Interval History / Current Status: Patient reported increased fatigue and intermittent headaches starting about 3-4 weeks ago. He also noted some mild recurrence of mid-back pain, requiring occasional ibuprofen. Due to these symptoms, restaging scans were performed last week.

Recent Imaging (August 29, 2023):

- **Brain MRI w/wo Contrast:** Comparison to May 15, 2023. Stable appearance of previously treated SRS lesions. However, development of **new** leptomeningeal enhancement along the surface of the cerebral hemispheres and within the sulci, concerning for **carcinomatous meningitis**. No new parenchymal metastases.
- **CT Chest/Abdomen/Pelvis w/ Contrast:** Comparison to May 15, 2023. Slight increase in size of the primary RUL lesion (now 1.8 cm vs 1.5 cm). Subtle increase in conspicuity and FDG-avidity (on prior PET correlation) of several known thoracic spine bone metastases. No new distant metastases identified.

Objective:

- Vitals: T 37.0, BP 130/85, HR 80, SpO2 97%. ECOG PS 1 (due to fatigue/headache).
- Exam: A&O x 4. Mild photophobia reported. Neck supple, no nuchal rigidity. CN intact. Motor/Sensory grossly intact. No papilledema on fundoscopy. Lungs clear. Mild T-spine tenderness.

Assessment:

1. **Stage IV EGFR L858R Lung Adenocarcinoma:** Confirmed disease progression after approximately 15 months of first-line Osimertinib therapy. Progression manifested as new carcinomatous meningitis and subtle worsening of systemic (bone/lung) disease. This is consistent with acquired resistance to Osimertinib.

2. **Headache/Fatigue:** Likely attributable to leptomeningeal disease/CNS progression.
3. **Back Pain:** Mild, likely from bone metastasis progression.

Plan:

1. **Discontinue Osimertinib:** Effective immediately.
2. **Discussed Findings & Prognosis:** Had a detailed discussion with Mr. Davis and his wife regarding the scan findings, particularly the diagnosis of leptomeningeal metastasis (LMD), which carries a more guarded prognosis. Explained that Osimertinib is no longer effective.
3. **Second-Line Therapy:** Standard of care post-Osimertinib (without known targetable resistance mutation like C797S) is platinum-based chemotherapy.
    - **Chosen Regimen:** Carboplatin (AUC 5) + Pemetrexed (500 mg/m2) IV q3 weeks. Discussed rationale, potential benefits (systemic control, possible CNS penetration/palliation), and risks/side effects (myelosuppression, fatigue, nausea, neuropathy, renal monitoring).
    - **CNS Penetration:** Acknowledged that systemic chemotherapy has limited efficacy for established LMD, but may offer some palliation and potentially slow progression. Intrathecal chemotherapy is generally NOT recommended for lung cancer LMD due to limited benefit and high toxicity. WBRT is a consideration for palliation if symptoms worsen significantly, but deferring for now to assess response to systemic chemo first.
    - **Schedule:** Aim to start C1D1 next week, pending insurance verification.
    - **Pre-meds:** Instructed to start Folic Acid 1mg daily today. B12 injection with C1D1. Will receive standard chemo pre-meds.
4. **Symptom Management:**
    - **Headache/LMD:** Start Dexamethasone 4 mg PO BID for presumed inflammatory component/ICP management related to LMD. Assess response closely. Provide Rx. Discuss steroid side effects & GI prophylaxis (Pantoprazole).
    - **Pain:** Continue Ibuprofen PRN. Add Oxycodone 5 mg PO q6h PRN for breakthrough pain. Re-evaluate need for palliative RT to spine after initiating chemo.
5. **Monitoring:** Close clinical follow-up weekly for first 2 weeks after starting chemo. Labs prior to each cycle. Repeat Brain MRI and systemic CT scans after 2-3 cycles (~6-9 weeks), or sooner if clinically indicated.
6. **Follow-up:** Return next week for C1D1. Provided urgent contact information.

Benjamin Carter, MD
Medical Oncology
