Discharge Note

Patient Name: Sabine Meyer **Medical Record Number:** SYN222
Date of Birth: 1972-07-01
Gender: Female

Admission Date: N/A (Routine Follow-up Note)
Discharge Date / Date of Note: 2023-10-12

Attending Physician: Dr. Benjamin Carter, MD (Medical Oncology)

Discharge Diagnoses:

1. Metastatic Non-Small Cell Lung Cancer (NSCLC), Adenocarcinoma subtype, presumed lung primary (peripheral nodule). Stage IVB (cTxNxM1b) diagnosed in March 2023.
    - Activating Mutation: EGFR Exon 21 L858R substitution.
    - PD-L1 Tumor Proportion Score (TPS): 0% (Negative)
    - Metastatic site: Multiple Bones (spine, ribs, pelvis).
    - Excellent response to first-line targeted therapy.
2. Mild Normocytic Anemia, likely secondary to malignancy (improving).
3. History of GERD.

Reason for Evaluation / Summary of Clinical Course:
Ms. Meyer is a 51-year-old female, lifetime never-smoker, who presented in February 2023 with several weeks of worsening mid-back and right hip pain, initially attributed to musculoskeletal strain. Lack of improvement led to further investigation. A CT chest/abdomen/pelvis performed on 2023-03-02 revealed multiple sclerotic and lytic bone lesions in the thoracic spine (T6, T8), lumbar spine (L3), multiple ribs, and right iliac crest, highly suspicious for metastases. A small (1.2 cm) irregular nodule was noted in the left upper lobe periphery, presumed primary. No other sites of visceral or nodal metastatic disease were identified.

Given the high suspicion for malignancy, particularly adenocarcinoma in a never-smoker, liquid biopsy (circulating tumor DNA analysis) was sent alongside planning for a bone biopsy. The Guardant360 ctDNA test returned positive on 2023-03-15, identifying an EGFR Exon 21 L858R mutation. PD-L1 testing via IHC on a subsequent limited bone biopsy sample (Iliac crest, 2023-03-20) confirmed adenocarcinoma consistent with lung primary (TTF-1+) and showed PD-L1 TPS 0%.

Based on the identification of the sensitizing EGFR L858R mutation, Ms. Meyer was initiated on first-line targeted therapy with Osimertinib 80 mg orally once daily, starting 2023-03-24.

Pertinent Laboratory Data (Selected Trends):

- **Baseline (Mar 2023):** WBC 7.8, Hgb 10.9 g/dL, Plt 290k. Calcium 9.8 mg/dL. Creatinine 0.7 mg/dL, ALT 35 U/L, AST 40 U/L, Alk Phos 280 U/L (elevated). CEA 45.6 ng/mL.
- **Recent (Oct 2023):** WBC 6.5, Hgb 12.1 g/dL (improved), Plt 255k. Calcium 9.5 mg/dL. Creatinine 0.7 mg/dL, ALT 28 U/L, AST 30 U/L, Alk Phos 110 U/L (normalized). CEA 5.2

ng/mL (near normalization). LFTs monitored monthly, stable. QTc interval stable on ECG monitoring.

Pertinent Imaging / Pathology Findings:

- **Pathology (Iliac Bone Biopsy 2023-03-20):** Metastatic Adenocarcinoma, TTF-1 positive. PD-L1 IHC 22C3: TPS 0%.
- **Molecular (ctDNA 2023-03-15):** EGFR Exon 21 L858R mutation detected. No other targetable alterations found.
- **Baseline PET/CT (2023-03-05):** Hypermetabolic lytic/sclerotic lesions T6, T8, L3, multiple ribs, R iliac crest (SUVmax up to 12.5). Hypermetabolic 1.2 cm LUL nodule (SUVmax 6.8). No other FDG-avid disease.
- **Restaging CT Chest/Abdo/Pelvis (2023-09-28):** Significant response. Near complete resolution of FDG avidity on comparison PET/CT (not formally performed this interval but comparison to prior PET). CT shows interval sclerosis/healing of prior lytic bone lesions. T6, T8, L3 lesions show significant infill. R iliac crest lesion stable sclerotic appearance. LUL nodule stable at 1.1 cm, decreased density. No new lesions. RECIST v1.1 Partial Response, nearing Complete Response radiographically in bone (acknowledging difficulty of bone RECIST).

Hospital Course / Treatment Summary (Outpatient Context):
Ms. Meyer has been on Osimertinib 80 mg daily. She has tolerated the medication exceptionally well. Initial Grade 1 diarrhea resolved within the first month with dietary modification and occasional loperamide use. She reports occasional Grade 1 dry skin managed with emollients. No significant rash, stomatitis, paronychia, or cardiotoxicity has occurred. Her initial debilitating back and hip pain resolved completely within 4-6 weeks of starting Osimertinib. She maintains an excellent performance status (ECOG 0) and has returned to part-time work.

Her laboratory markers have shown significant improvement, with near normalization of her baseline elevated Alkaline Phosphatase and CEA, and resolution of her mild anemia. Regular monitoring of LFTs and QTc interval has been unremarkable.

Recent imaging confirms an ongoing, deep partial response to therapy. She remains progression-free on first-line treatment. Today's visit was for routine clinical assessment, review of recent stable labs and excellent imaging results, and medication refill. We reinforced the importance of adherence to daily Osimertinib, potential side effects to monitor for (interstitial lung disease symptoms, cardiac issues, ongoing skin/GI effects), and the plan for continued surveillance.

Condition at Discharge: Excellent. ECOG PS 0. Tolerating Osimertinib well with ongoing significant response.

Discharge Medications:

- Osimertinib 80 mg orally once daily. Continue.
- Omeprazole 20 mg daily (GERD)
- Calcium/Vitamin D supplement daily (standard bone health)

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- Loperamide 2 mg capsules - Take 1-2 capsules PRN loose stools (rarely needed now)
- Cetaphil moisturizing cream PRN dry skin

Discharge Instructions / Follow-Up Plan:

1. Continue Osimertinib 80 mg daily without interruption unless instructed otherwise.
2. Report any new or worsening cough, shortness of breath, skin rash, severe diarrhea, mouth sores, or swelling immediately.
3. Follow up with Dr. Carter in Oncology clinic in 3 months for routine evaluation.
4. Repeat labs (CBC, CMP) in 3 months prior to visit.
5. Repeat staging CT Chest/Abdomen/Pelvis in approximately 3-4 months, sooner if clinically indicated.
6. Continue routine age-appropriate health screening as advised by PCP.

Diet: Regular diet.
Activity: No restrictions.

Prognosis: Favorable in the medium term given the presence of an EGFR sensitizing mutation and excellent response to first-line Osimertinib. Duration of response can be prolonged but eventual resistance is expected.

Electronically Signed By:
Dr. Benjamin Carter, MD
Date/Time: 2023-10-12 11:45