University Cancer Center – Thoracic Oncology Clinic
New Patient Consultation & First Treatment Visit Note

DOB: 05/31/1956 **Patient:** Foster, Michael David **MRN:** SYN053

Date of Visit: December 20, 2022
Provider: Evelyn Reed, MD, PhD

CHIEF COMPLAINT: Newly diagnosed Stage IV ALK-positive Lung Adenocarcinoma – Establish care and initiate first-line therapy.

HISTORY OF PRESENT ILLNESS:
Mr. Foster is a 66-year-old gentleman referred by his pulmonologist, Dr. Abrams. He presented to Dr. Abrams in early November 2022 with a 2-month history of progressive right-sided chest pain (pleuritic in nature) and shortness of breath on exertion. He also noted intermittent dull pain in his left hip. Chest X-ray showed a large right pleural effusion.

DIAGNOSTIC WORKUP (Performed prior to visit, records reviewed):

- **Thoracentesis (Nov 15, 2022):** 1.8 L serosanguinous fluid removed. Cytology confirmed **Adenocarcinoma**.
- **CT Chest/Abd/Pelvis w/ contrast (Nov 21, 2022):** Large right pleural effusion with associated diffuse nodular pleural thickening. No discrete pulmonary parenchymal mass identified. Several sclerotic lesions noted in the thoracic spine (T8, T10) and left iliac bone suspicious for metastases. No other sites of disease.
- **PET/CT (Nov 24, 2022):** Intense FDG uptake corresponding to the diffuse right pleural thickening (SUVmax 12.1) and the osseous lesions noted on CT (SUVmax 8.5-10.2). Confirmed likely sites of malignancy. No primary lung lesion clearly identified.
- **Brain MRI w/wo contrast (Nov 26, 2022):** Negative for intracranial metastases.
- **Pathology Review & Molecular Testing (Pleural Fluid Cell Block):**
    - Confirmed Adenocarcinoma, TTF-1 positive.
    - Immunohistochemistry (FISH): **Positive for ALK Gene Rearrangement.**
    - NGS Panel: Confirmed **EML4-ALK variant 3a/b**. Other drivers negative.
    - PD-L1 IHC (22C3): **TPS 10%, CPS 15, IC Score 1/+**. (Noted, but not relevant for treatment choice).

SUMMARY: Stage IV Lung Adenocarcinoma (Tx N0 M1c – Pleura, Bone), ALK-rearrangement positive (EML4-ALK v3).

PAST MEDICAL HISTORY:

- Hypertension (on Losartan)
- Type 2 Diabetes Mellitus (Diet controlled, A1c 6.1%)
- Hyperlipidemia (on Atorvastatin)
- Never-smoker

SOCIAL HISTORY: Retired engineer. Married, supportive wife present today. Active lifestyle prior to symptoms.

MEDICATIONS (Home): Losartan 50mg daily, Atorvastatin 20mg daily.

REVIEW OF SYSTEMS: Positive for R chest ache (intermittent, 4/10), mild exertional dyspnea (improved post-thoracentesis but still present), L hip ache (mild, 3/10). Denies cough, fever, weight loss.

OBJECTIVE:

- Vitals: T 37.0, BP 130/78, HR 72, SpO2 97% RA. ECOG PS 1.
- Exam: Alert, well-developed male. Lungs: Decreased breath sounds R base, dullness to percussion lower half R chest (re-accumulating effusion suspected). Cor: RRR. Ext: No edema. Mild tenderness over L SI joint.

ASSESSMENT:
Mr. Foster has newly diagnosed Stage IV ALK-positive Lung Adenocarcinoma with pleural and bone metastases. His performance status is good (ECOG 1).

PLAN:

1. **First-Line Systemic Therapy:**
    - Standard of care for ALK-positive NSCLC is a next-generation ALK tyrosine kinase inhibitor (TKI). Alectinib is preferred due to high efficacy (including CNS activity) and favorable toxicity profile compared to older agents.
    - **Initiate Alectinib (Alecensa) 600 mg PO BID.** Prescription provided today. Extensive patient education given regarding administration, side effects (myalgia, constipation, edema, LFT elevation, photosensitivity, bradycardia, rare ILD), adherence, and clinic contacts. Starter pack provided. Target start date: Today or tomorrow (pending immediate pharmacy fill/insurance).
2. **Management of Pleural Effusion:** Given evidence of re-accumulation and ongoing mild dyspnea, will refer for repeat therapeutic thoracentesis this week. Expect Alectinib to help control effusion long-term, but may need 1-2 taps initially. Discussed possibility of indwelling pleural catheter (IPC) if effusions recur frequently despite TKI, but will defer for now.
3. **Management of Bone Metastases:** Recommend starting bone-modifying agent to reduce skeletal-related events. Plan for **Denosumab (Xgeva) 120 mg SC injection monthly.** First dose to be scheduled after dental clearance obtained (referral to dentist placed today). Recommend starting Calcium 1200mg / Vitamin D 800 IU daily supplement. Alectinib should also help control bone pain; continue OTC analgesics PRN for now.
4. **Monitoring:**
    - Clinic follow-up in 1 week for toxicity check. Then q2-3 weeks initially.
    - Labs: Baseline CBC, CMP (incl LFTs), CPK, Magnesium obtained today. Repeat labs in 1-2 weeks, then monthly (focus on LFTs, CPK).

    - Imaging: First restaging CT Chest/Abd/Pelvis in ~8 weeks. Repeat Brain MRI surveillance q6 months.
5. **Supportive Care:** Provide prescriptions for PRN anti-emetic (Ondansetron) and anti-diarrheal (Loperamide), though less likely needed with Alectinib initially.

PROGNOSIS: Discussed prognosis with patient and wife. Explained that while incurable, ALK-positive lung cancer is highly treatable with targeted therapy like Alectinib, often providing years of disease control and good quality of life.

FOLLOW-UP: Clinic visit in 1 week. Thoracentesis referral placed. Dental referral placed.

_____ M.D., PhD.
Evelyn Reed, MD, PhD (Electronically Signed)
Thoracic Medical Oncology

FOLLOW UP: December 29, 2022: taking alectinib, no side effects.

FOLLOW UP: February 21, 2023: new prescription for alectinib, still good tolerability, no sign of progression.