

## University Cancer Center - Thoracic Oncology Program

### SUBJECTIVE ASSESSMENT / INTERVAL HISTORY:

Mr. Dinarello returns for his routine comprehensive follow-up, still on first-line therapy with Alectinib for Stage IV ALK-positive Lung Adenocarcinoma. He reports feeling remarkably well and leads a completely normal, active life. He retired from his professorship shortly after diagnosis but remains intellectually engaged (writing, guest lectures) and physically active (daily long walks, travels frequently). He is entirely asymptomatic from his underlying malignancy.

### Review of ALK-Targeted Therapy (Alectinib 600mg BID since Aug 3, 2020):

- **Adherence:** Reports meticulous adherence, taking doses consistently with breakfast and dinner. Has not missed doses unintentionally.
- **Tolerability:** Long-term tolerance remains outstanding with only minimal, stable chronic Grade 1 side effects:
  - *Myalgia:* Experiences very infrequent (<1x/month), mild, transient muscle aches (usually thighs), lasting hours to a day, not limiting activity, requires no treatment. CPK levels remain normal.
  - *Constipation:* Mild baseline tendency, requires occasional use of Miralax (~1-2 times/week) for optimal regularity (BM q1-2 days). No significant issues.
  - *Fatigue:* Denies fatigue beyond what he considers normal for age/activity level. ECOG 0.
  - *Other:* No peripheral edema, LFT abnormalities (consistently normal), visual disturbances (annual eye exams stable), photosensitivity, significant weight changes, cognitive issues, or symptoms of ILD/bradycardia.

### ONCOLOGIC HISTORY SUMMARY:

- **Diagnosis:** July 11, 2020 (Age 63). Presented with new onset complex partial seizures with secondary generalization.
- **Staging:** Brain MRI (July 2020) showed multiple enhancing lesions (largest 2.1 cm L temporal, several smaller); CT C/A/P showed 2.5 cm LUL primary, mediastinal nodes, extensive bilateral pulmonary nodules ('miliary' pattern initially described).
- **Pathology (LUL Biopsy via Bronchoscopy):** Adenocarcinoma.
  - **Histology:** Poorly differentiated adenocarcinoma arranged in predominantly **solid sheets** with focal cribriform features. Tumor cells were medium-sized with high nuclear-to-cytoplasmic ratios, irregular nuclear contours, open chromatin, and frequent mitoses. Signet ring cells were noted focally (~10%). Minimal gland formation.
  - **IHC:** Positive for TTF-1, CK7; Negative for Napsin-A (can be neg in solid patterns), P40. Consistent with lung primary.

- **Molecular/PD-L1:** FISH confirmed **ALK rearrangement**. NGS identified **EML4-ALK variant 1**. PD-L1 (22C3): **TPS 10%, CPS 15, IC 1/+**.
- **Initial Treatment:** SRS to 5 brain lesions (July 2020). Started Alectinib 600mg BID Aug 3, 2020. Started Zoledronic Acid q3 months (later spaced) as bone mets suspected clinically though not definitively seen on initial CT/PET (precautionary).

**RESPONSE TO THERAPY:** Achieved rapid intracranial complete response post-SRS/Alectinib initiation. Systemic disease showed profound partial response by 3-6 months (near resolution LUL primary, resolution of pulmonary nodules). Has maintained durable near-complete systemic response and complete intracranial response for over 2.5 years.

**PAST MEDICAL HISTORY:** Mild Hypertension (well-controlled on Lisinopril), BPH (on Tamsulosin). Former light smoker (<10 pack-years, quit >30 yrs ago).

**CURRENT MEDICATIONS:** Alectinib, Lisinopril, Tamsulosin, Miralax PRN, Calcium/Vit D, Zoledronic Acid q6 months.

**OBJECTIVE ASSESSMENT:**

- *Vitals:* T 36.9, BP 124/72, HR 60, SpO2 98%. Wt stable. ECOG PS 0.
- *Exam:* Healthy appearing, mentally sharp gentleman. Exam entirely unremarkable. Neuro exam non-focal.
- *Labs (Today):* CBC WNL (Hgb 14.8). CMP WNL (LFTs normal, Cr 1.0). CPK 120 (WNL). Mg 2.3. Calcium 9.7. TSH normal.
- *Imaging (CT C/A/P + Brain MRI w/wo contrast, Nov 1, 2023):*
  - Compared to May 2023 and multiple priors.
  - **CT:** Stable near-complete response. Minimal residual scarring LUL. Pulmonary nodules remain resolved. Mediastinal nodes normal. No evidence of bone lesions or other mets.
  - **Brain MRI:** Stable post-SRS changes. No evidence of active or new intracranial metastases. Complete response maintained.

**INTEGRATED ASSESSMENT:**

1. **Stage IV ALK-Positive Lung Adenocarcinoma:** Patient continues in a remarkable, durable (>33 months) near-complete systemic and complete intracranial response to first-line Alectinib therapy. This represents an outstanding long-term outcome.
2. **Alectinib Tolerability:** Therapy remains exceptionally well-tolerated with only minimal, stable Grade 1 chronic toxicities (constipation, myalgia) that do not impact quality of life.

**PLAN & ANTICIPATORY GUIDANCE:**

1. **Continue Alectinib 600 mg PO BID Indefinitely:** Reaffirmed plan to continue therapy as long as it remains effective and well-tolerated. Patient highly motivated to continue. Provided refills.
2. **Continue Supportive Care:** Miralax PRN, Ca/D daily.
3. **Bone Health:** Continue Zoledronic Acid 4 mg IV infusion **every 6 months**. Next dose due ~Jan 2024. Continue routine dental care.
4. **Long-Term Monitoring Strategy:** Given prolonged stability and CR/nCR:
  - o *Labs:* Continue labs (CBC, CMP, LFTs, CPK, Mg) every 6 months.
  - o *Imaging:* Continue surveillance imaging (CT C/A/P + Brain MRI) **every 6 months**. Next scans due approx May 2024.
5. **Patient Education:** Discussed the excellent prognosis while on effective therapy but reinforced the nature of metastatic disease requiring lifelong monitoring. Briefly reviewed potential late toxicities or emergence of resistance, though risk seems lower given duration of response. Advised to report any new/worsening symptoms promptly.
6. **Follow-up:** Schedule routine follow-up visit (telehealth acceptable) in 6 months, after next surveillance imaging and labs.

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

**PATIENT:** Dinarello, Robert Anthony Jr.  
**PATIENT ID:** SYN213  
**DATE OF BIRTH:** January 13, 1957  
**DATE OF ENCOUNTER:** November 15, 2023  
**PROVIDER:** Evelyn Reed, MD, PhD