

DISCHARGE SUMMARY

PATIENT ID: SYN026

NAME: Sarah Johnson

DOB: 24-Jan-1964

ADMISSION DATE: 15-Apr-2025 - 22-Apr-2025

ATTENDING PHYSICIAN: Dr. Miranda Chen

PRIMARY DIAGNOSIS: Stage IV Non-Small Cell Lung Cancer (NSCLC) with bone and brain metastases

SECONDARY DIAGNOSES:

1. Hypertension
2. Type 2 Diabetes Mellitus
3. Osteoarthritis
4. Hypothyroidism

HISTORY OF PRESENT ILLNESS

Ms. Johnson is a 61-year-old female with ALK-positive metastatic NSCLC diagnosed in April 2021. She initially presented with persistent cough, right-sided chest pain, and unexplained weight loss of 15 pounds over 3 months. Diagnostic imaging revealed a 4.2 cm right upper lobe mass with multiple bone metastases (primarily affecting thoracic spine, right femur, and left humerus) and three brain metastases (largest measuring 1.8 cm in the right frontal lobe). Biopsy confirmed adenocarcinoma with ALK rearrangement. PDL1 testing revealed TPS <1% (0%). She has been on alectinib 600mg BID since May 2021 with excellent response.

Current admission was precipitated by increasing headaches over the past 2 weeks, accompanied by mild confusion and one episode of vomiting. Imaging revealed mild peritumoral edema around the previously treated brain lesions.

DIAGNOSTIC PROCEDURES

Brain MRI (17-Apr-2025):

- Previously identified lesions in right frontal lobe (0.5 cm, reduced from 1.8 cm), left parietal lobe (0.3 cm, reduced from 0.9 cm), and right cerebellum (0.2 cm, reduced from 0.7 cm)
- Increased peritumoral edema around right frontal lesion
- No new lesions identified

CT Chest/Abdomen/Pelvis with contrast (16-Apr-2025):

- Right upper lobe primary tumor decreased to 1.1 cm (previously 4.2 cm)
- Stable bone metastases with sclerotic changes indicating treatment response
- No new metastatic sites
- No hepatic or adrenal involvement
- Incidental 1.2 cm benign-appearing renal cyst in left kidney

Laboratory Studies:

- Complete Blood Count:
 - WBC: $4.2 \times 10^9/L$ (normal: 4.5-11.0)
 - Hemoglobin: 11.2 g/dL (normal: 12.0-16.0)
 - Platelets: $143 \times 10^9/L$ (normal: 150-450)
- Comprehensive Metabolic Panel:
 - Sodium: 139 mmol/L (normal: 135-145)
 - Potassium: 4.1 mmol/L (normal: 3.5-5.0)
 - Creatinine: 0.9 mg/dL (normal: 0.6-1.1)
 - ALT: 52 U/L (normal: 7-35) - mildly elevated
 - AST: 48 U/L (normal: 10-40) - mildly elevated
 - Total bilirubin: 0.8 mg/dL (normal: 0.1-1.2)
- Thyroid studies:
 - TSH: 5.2 mIU/L (normal: 0.4-4.0) - mildly elevated
 - Free T4: 0.8 ng/dL (normal: 0.8-1.8)
- HbA1c: 7.3% (normal: <5.7%, diabetic: >6.5%)

HOSPITAL COURSE

Ms. Johnson was admitted due to neurological symptoms related to peritumoral edema around her brain metastases. She was started on dexamethasone 4mg IV q6h with rapid improvement of symptoms. Alectinib was continued at the standard dose of 600mg BID throughout hospitalization.

Neurosurgery was consulted, but no surgical intervention was recommended given the small size of the residual lesions and good response to corticosteroids. Radiation oncology evaluated the patient and recommended against additional stereotactic radiosurgery at this time given the small size of residual lesions and ongoing response to alectinib.

Her diabetic control was temporarily affected by steroid therapy, requiring adjustment of her insulin regimen. Levothyroxine dose was increased from 75mcg to 88mcg daily due to elevated TSH.

Throughout hospitalization, patient remained hemodynamically stable with gradual improvement in neurological symptoms. By discharge, her headaches had resolved, and she demonstrated no focal neurological deficits.

MEDICATIONS ON DISCHARGE

1. Alectinib (Alecensa) 600mg PO BID
2. Dexamethasone 4mg PO BID with tapering schedule: 4mg BID for 3 days, then 2mg BID for 3 days, then 2mg daily for 3 days, then discontinue
3. Omeprazole 40mg PO daily (while on dexamethasone)
4. Lisinopril 20mg PO daily
5. Metformin 1000mg PO BID
6. Insulin glargine 26 units SC at bedtime
7. Insulin lispro sliding scale (temporarily increased due to steroid therapy)
8. Levothyroxine 88mcg PO daily
9. Calcium carbonate 600mg + Vitamin D 400 IU PO BID

10. Zoledronic acid 4mg IV every 3 months (next dose due 15-Jul-2025)

FOLLOW-UP PLANS

1. Oncology clinic appointment with Dr. Chen in 2 weeks (06-May-2025)
2. Brain MRI in 8 weeks
3. CT chest/abdomen/pelvis in 12 weeks
4. Endocrinology follow-up for diabetes management in 4 weeks
5. Bone density scan (DEXA) scheduled for 13-May-2025

CURRENT DISEASE STATUS

Patient continues to show an excellent response to targeted therapy with alectinib. Primary tumor has reduced in size by approximately 74%, and brain metastases have decreased by approximately 70-80%. No new metastatic lesions have been identified since initiation of therapy. Overall disease status is classified as partial response with ongoing benefit from current treatment.

RECOMMENDATIONS

1. Continue alectinib 600mg BID without interruption
2. Complete dexamethasone taper as prescribed
3. Monitor for neurological symptoms; return to emergency department for any new-onset seizures, severe headaches, or focal neurological deficits
4. Monitor blood glucose closely during steroid taper and adjust insulin as needed
5. Continue zoledronic acid for bone metastases
6. Maintain regular thyroid function testing every 3 months due to recent dose adjustment
7. Consider genetic counseling for family members due to ALK-positive status

PROGNOSIS

With continued response to alectinib and absence of disease progression over the last 4 years, prognosis remains favorable for continued disease control. ALK-positive NSCLC patients on targeted therapy have demonstrated prolonged progression-free survival compared to conventional chemotherapy. Median overall survival for ALK-positive patients on newer generation ALK inhibitors like alectinib frequently exceeds 5 years. Given Ms. Johnson's excellent clinical response and tolerability of treatment, we anticipate continued disease control with current management.

Dr. Miranda Chen, MD, PhD
Medical Oncology
Cancer Institute Medical Center
License #: MC11578
Date: 22-Apr-2025