

DISCHARGE SUMMARY

PRIMARY DIAGNOSIS: Stage IV non-small cell lung adenocarcinoma with NTRK fusion, metastatic to liver

SECONDARY DIAGNOSES:

1. Acute cholangitis secondary to biliary obstruction from liver metastases
 2. Biliary stent placement (4/3/2025)
 3. Autoimmune thyroiditis
 4. Fibromyalgia
 5. Migraine with aura
 6. Depression
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HISTORY OF PRESENT ILLNESS: Ms. Taylor is a 58-year-old female with NTRK fusion-positive NSCLC diagnosed in March 2022, on larotrectinib since April 2022 with excellent response. She presented to the emergency department with 3 days of fever, right upper quadrant pain, nausea, and jaundice. Laboratory studies revealed markedly elevated liver function tests with direct hyperbilirubinemia. CT abdomen showed biliary dilation due to compression from a 2.1 cm metastatic lesion at the porta hepatis, concerning for obstructive cholangitis.

DETAILED ONCOLOGIC HISTORY:

Date of Diagnosis: March 21, 2022

Presenting Symptoms: Persistent right-sided chest discomfort, dyspnea on exertion, and unexplained weight loss of 15 pounds over 2 months.

Diagnostic Studies:

- CT Chest/Abdomen/Pelvis (03/14/2022): 3.8 cm right middle lobe mass with ipsilateral hilar lymphadenopathy. Multiple hypodense liver lesions (largest 3.2 cm in segment VI).
- PET/CT (03/16/2022): Hypermetabolic right middle lobe mass (SUVmax 12.8) with hilar nodes (SUVmax 6.4) and multiple liver lesions (SUVmax 8.2-14.6).
- CT-guided biopsy of right middle lobe mass (03/18/2022): Non-small cell lung adenocarcinoma, moderately differentiated.
- Brain MRI (03/19/2022): Negative for intracranial metastases.
- Liver biopsy (03/21/2022): Metastatic adenocarcinoma consistent with lung primary.

Molecular Testing:

- **NTRK Fusion:** Positive (TPM3-NTRK1)

- **EGFR, ALK, ROS1, BRAF, MET, RET, KRAS:** All negative
- **PD-L1 (22C3 assay):** TPS 60%, CPS 70%, IC 15%
- **Next-Generation Sequencing:** TPM3-NTRK1 fusion, CDKN2A loss, TP53 mutation (R273H)

Treatment History:

- First-line therapy: Larotrectinib 100mg PO BID
 - Start date: April 12, 2022
 - Current status: Ongoing with excellent and sustained response
 - Best response: Partial response (85% reduction in primary tumor size, 70-90% reduction in liver metastases)
 - Notable adverse events: Grade 1 fatigue, Grade 1 dizziness, Grade 2 transaminitis (resolved with dose reduction)

Prior Dose Modifications:

- Temporary interruption in August 2022 for Grade 2 transaminitis
- Dose reduction to 75mg BID in August 2022 upon resumption
- Returned to full dose 100mg BID in November 2022 after liver function normalization

Previous Imaging Response:

- CT Chest/Abdomen/Pelvis (01/15/2025): Primary right middle lobe mass decreased to 0.6 cm (previously 0.7 cm). Most liver metastases no longer visible with only two remaining lesions (1.8 cm in segment VI and 2.1 cm near porta hepatis).
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PAST MEDICAL HISTORY:

1. Autoimmune thyroiditis (diagnosed 2015)
2. Fibromyalgia (diagnosed 2010)
3. Migraine with aura (diagnosed 2005)
4. Depression (diagnosed 2012)
5. Irritable bowel syndrome
6. Gastroesophageal reflux disease
7. Osteopenia
8. Never-smoker

PAST SURGICAL HISTORY:

1. Laparoscopic cholecystectomy (2010)
2. Cesarean section (1995)
3. Tonsillectomy (childhood)

HOME MEDICATIONS:

1. Larotrectinib 100mg PO BID
2. Levothyroxine 112mcg PO daily
3. Duloxetine 60mg PO daily

4. Sumatriptan 50mg PO PRN for migraine
5. Omeprazole 20mg PO daily
6. Calcium carbonate 600mg + Vitamin D 400 IU PO BID
7. Vitamin D3 2000 IU PO daily
8. Melatonin 3mg PO qhs PRN for insomnia
9. Acetaminophen 650mg PO q6h PRN for pain

ALLERGIES: Codeine (nausea, vomiting) Sulfa drugs (rash) Latex (contact dermatitis)

SOCIAL HISTORY: Never-smoker. Works as a high school art teacher. Married with two adult children. No alcohol use. No recreational drug use.

FAMILY HISTORY: Mother: Breast cancer at age 62 (survivor) Father: Coronary artery disease Sister: Hypothyroidism Maternal aunt: Colorectal cancer at age 70

HOSPITAL COURSE:

Ms. Taylor was admitted with clinical and laboratory findings consistent with acute cholangitis secondary to biliary obstruction from a metastatic liver lesion. She was started on broad-spectrum antibiotics (piperacillin-tazobactam) and intravenous hydration. Blood cultures were obtained prior to antibiotic initiation.

MRCP confirmed biliary dilation due to extrinsic compression from a liver metastasis near the porta hepatis. The patient underwent ERCP with successful placement of a plastic biliary stent on 4/3/2025, resulting in immediate biliary decompression and clinical improvement.

Larotrectinib was temporarily held during the acute illness and resumed on 4/5/2025 once liver function tests began to improve. Infectious disease consultation recommended continuing antibiotics for a total of 10 days, with transition to oral therapy upon discharge.

The patient became afebrile within 24 hours of biliary decompression and antibiotic therapy. Right upper quadrant pain resolved, and jaundice progressively improved. Liver function tests showed steady improvement following successful biliary drainage.

Oncology consultation confirmed that the biliary obstruction was due to the location of a known, previously documented liver metastasis rather than disease progression. The affected lesion had actually decreased in size from 2.4 cm to 2.1 cm on recent imaging but was positioned in a way that compromised the biliary tree. Continued therapy with larotrectinib was recommended given the patient's excellent and ongoing response.

LABORATORY DATA:

On Admission (4/2/2025):

- WBC: $14.8 \times 10^9/L$ (elevated)
- Hemoglobin: 11.6 g/dL
- Platelets: $286 \times 10^9/L$

- Total bilirubin: 7.2 mg/dL (elevated)
- Direct bilirubin: 5.8 mg/dL (elevated)
- Alkaline phosphatase: 486 U/L (elevated)
- AST: 124 U/L (elevated)
- ALT: 186 U/L (elevated)
- GGT: 428 U/L (elevated)
- Lipase: 42 U/L (normal)
- BUN: 14 mg/dL
- Creatinine: 0.8 mg/dL
- Sodium: 134 mmol/L
- Potassium: 3.9 mmol/L
- Chloride: 100 mmol/L
- CO₂: 25 mmol/L
- Glucose: T

PATIENT INFORMATION:

- **NAME:** Victoria Taylor
- **GENDER:** Female
- **MRN:** SYN084
- **DOB:** June 19, 1966
- **ADMISSION DATE:** April 2, 2025
- **DISCHARGE DATE:** April 7, 2025
- **ATTENDING PHYSICIAN:** Dr. Alexandra Martinez, MD