Discharge Summary

Patient: Philipp Gardner, DOB: 13-Nov-1952 (MRN SYN159)

Initial Diagnosis: April 25, 2022

Primary Site: Non-Small Cell Lung Cancer – Adenocarcinoma **Staging**: cT3N2M1c (Contralateral lung, Bone, Liver involvement)

Mutation Status: KRAS G12D (Detected)
PD-L1 Expression: TPS 22%, CPS 25, IC 1+

1. Referral and Initial Presentation

This 69-year-old retired logistics coordinator presented to his primary care physician in early 2022 with persistent fatigue, unintentional weight loss (~6 kg), and left hip pain. Chest radiography revealed a left hilar mass. CT thorax confirmed a 5.1 cm lesion in the left lower lobe with mediastinal lymphadenopathy and multiple subcentimeter hepatic lesions. Subsequent bone scan demonstrated increased uptake in the left iliac crest and T12 vertebra.

A CT-guided core biopsy of the pulmonary lesion confirmed poorly differentiated adenocarcinoma. Immunohistochemistry was positive for TTF-1 and Napsin A. Molecular testing detected **KRAS G12D**. The tumor exhibited **PD-L1 TPS of 22%**.

2. Systemic Treatment Overview

In May 2022, he began triplet first-line therapy with carboplatin, pemetrexed, and pembrolizumab. The initial response was favorable, with partial radiographic regression by cycle 4 and improvement in performance status (ECOG improved from 2 to 1). However, by March 2023, restaging scans revealed new hepatic lesions and re-enlargement of mediastinal nodes—indicative of progressive disease.

Therapy was transitioned to docetaxel with ramucirumab in second-line, which he tolerated poorly, with cumulative fatigue, neutropenia (Grade 3), and progressive hepatic dysfunction (bilirubin peak 3.4 mg/dL). Despite dose reductions, his disease progressed biochemically and radiographically.

3. Supportive Measures & Final Months

Palliative radiation was delivered to the left iliac bone (30 Gy in 10 fractions) in April 2023, yielding some analysesic benefit. He was also treated with zoledronic acid

monthly but developed osteonecrosis of the jaw (ONJ), requiring dental extraction and cessation of therapy.

Pain was eventually managed with a long-acting opioid regimen (morphine SR 45 mg BID) and adjunctive neuropathic agents (gabapentin). He declined further cytotoxic therapy after June 2023 and transitioned to hospice in January 2024.

4. Past Medical History

- Coronary artery disease (MI 2014, stented RCA)
- Type 2 Diabetes Mellitus (HbA1c 7.3%)
- Stage 2 CKD (Cr 1.4–1.6 mg/dL)
- GERD
- Former smoker: 45 pack-years, quit in 2010
- Hypertension, controlled on amlodipine 10 mg daily

5. Imaging Chronology Summary

Date	Imaging	Findings
05/2022	Baseline PET-CT	LLL mass 5.1 cm, bilateral mediastinal nodes, liver lesions (≤1.3 cm), T12 & iliac bone uptake
09/2022	CT CAP	Tumor reduced to 2.6 cm, hepatic lesions not visible
03/2023	CT CAP	New 1.7 cm segment VI hepatic lesion, mediastinal progression
07/2023	Bone scan	Stable osseous disease
12/2023	CT abdomen	Progressive liver disease, increasing ascites

6. Laboratory Trends (Selected Values)

Test	May 2022	Mar 2023	Jan 2024
Hemoglobin	11.6 g/dL	10.2 g/dL	8.4 g/dL
Platelets	210 K/uL	134 K/uL	98 K/uL
AST/ALT	24/27 U/L	78/91 U/L	114/138 U/L
Bilirubin	0.8 mg/dL	2.1 mg/dL	3.4 mg/dL
ALP	102 U/L	211 U/L	324 U/L

7. Summary and Prognostic Review

Despite lack of actionable mutations, the patient achieved nearly 1 year of disease control with triplet therapy. He experienced a typical resistance pattern for KRAS G12D NSCLC. On 10th of January 2024, he ultimately succumbed to progressive

hepatic failure secondary to metastatic burden. He spent his final days at home under hospice care, supported by his daughter and spouse.

Final Documentation

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