Formal Hospital Discharge Letter

Patient ID: SYN236 DOB: 13 August 1960 Name: Anne Damos

Discharge Date: 14 April 2025

Attending Physician: Dr. Eva Lin, MD – Thoracic Oncology

Subject: Discharge Summary – Ms. Damos

Diagnosis: Stage IV Non-Small Cell Lung Carcinoma (Adenocarcinoma, PD-L1 ≥50%,

Wild-Type genotype) with adrenal and skeletal metastases

First-Line Treatment: Pembrolizumab monotherapy (initiated 11 February 2022)

Duration on Therapy: 26+ months (ongoing)

Sites of Disease:

• Primary: Left upper lobe (initially 4.1×3.5 cm)

• Metastatic: Bilateral adrenal glands (right > left), thoracic spine (T7–T9), right iliac crest

1. Clinical History

Ms. Damos presented in January 2022 with three months of progressive lumbar pain, reduced appetite, and 7-kg weight loss. No smoking history, environmental exposures, or prior malignancy. Chest CT identified a left upper lobe lesion with adrenal thickening; PET-CT confirmed hypermetabolic uptake in both adrenals and osseous foci. MRI spine showed T7 vertebral body collapse with epidural extension but no cord compression.

2. Pathology and Molecular Workup

- **Biopsy**: CT-guided core biopsy of the LUL lesion
- **Histology**: Adenocarcinoma, solid-predominant with foci of acinar pattern
- IHC:
 - o TTF-1: Positive
 - o CK7: Positive
 - o Napsin A: Positive
 - o p40, CDX2, Synaptophysin: Negative
- Proliferation: Ki-67 ~38%
- **PD-L1**: TPS 80% via 22C3 clone
- NGS (2022):
 - o EGFR: Wild-type
 - o ALK, ROS1, RET: Negative
 - o KRAS, MET, BRAF, HER2: Negative
 - TMB: Low (3.1 mut/Mb)

3. Therapy and Treatment Course

Pembrolizumab 200 mg Q3W initiated Feb 2022, later transitioned to 400 mg Q6W as per protocol. Early toxicity included mild transaminitis (Grade 2, ALT 94, AST 82), transient hyperglycemia, and skin rash—resolved without corticosteroids.

- Palliative RT: T7–T9 vertebral body (30 Gy in 10 fractions, April 2022)
- **Bisphosphonates**: Zoledronic acid, later switched to denosumab Q6M (since Feb 2023)
- Imaging response:
 - o May 2022 CT: 35% tumor shrinkage (lung), partial adrenal response
 - o Nov 2022 MRI spine: Resolution of epidural signal
 - o PET-CT Feb 2023: Complete metabolic response
 - Latest (Mar 2025 CT): No measurable disease; adrenal glands structurally stable

4. Laboratory Data – Most Recent (April 2025)

Test	Value	Reference Range
WBC	$6.2 \times 10^{9}/L$	4.0-10.0
Hemoglobin	n 12.9 g/dL	12.0–15.5
Platelets	$221 \times 10^9/L$	150-400
Creatinine	0.82 mg/dL	0.6–1.1
ALT	19 U/L	<35
AST	23 U/L	<35
ALP	81 U/L	30–120
TSH	1.42 μIU/mI	. 0.4-4.0
Calcium	9.2 mg/dL	8.6–10.2
Albumin	4.3 g/dL	3.5-5.0

5. Functional and Social Status

- ECOG 1
- 6MWT: 420 m
- BMI: 23.1
- Lives independently, travels regularly
- Mild neuropathy in lower limbs (likely bone metastasis sequelae)

6. Plan

- Continue pembrolizumab Q6W
- CT chest/abdomen/pelvis Q3 months
- Bone scan Q12 months
- Repeat TSH and liver enzymes Q12 weeks
- Plan repeat biopsy only if progression suspected
- Not a candidate for trial at this stage due to ongoing deep response

Physician Signature:

Dr. Eva Lin, MD Thoracic Oncology, Department of Oncology General University Hospital **Discharge Finalized**: 14 April 2025