Name: Veronica Albertson (Patient ID: SYN190), born September 22, 1964

Clinical Summary:

The patient initially presented with back pain, night sweats, and mild fatigue. CT chest revealed a 4.1 cm spiculated mass in the right upper lobe with ipsilateral hilar adenopathy. CT abdomen demonstrated a 2.2 cm right adrenal lesion. Bone scan and MRI spine showed lytic involvement of T11 and the right iliac crest.

Histologic evaluation from CT-guided lung biopsy revealed **moderately differentiated adenocarcinoma**, with acinar and lepidic features. Mucin was minimal. IHC staining was strongly positive for **TTF-1**, **CK7**, and **Napsin A**, and negative for p40 and p63, excluding squamous morphology. There was no evidence of neuroendocrine differentiation.

Comprehensive NGS (Tempus XT) returned negative for any actionable mutations. Tumor mutational burden (TMB) was low-to-intermediate at 6.2 mut/Mb. PD-L1 IHC was high at **TPS 85%**, with diffuse membranous staining in >80% of tumor cells.

Current Treatment Course:

Diagnosis: Stage IVB NSCLC – Lung Adenocarcinoma
Date of Diagnosis: October 28, 2023

She was started on **pembrolizumab monotherapy** on November 19, 2023. After 3 cycles, she reported improved energy, reduced pain (especially in the iliac crest), and modest weight gain.

Imaging after cycle 4 (February 2024) revealed:

- Decrease in RUL tumor size from 4.1 cm to 2.4 cm
- Adrenal lesion shrank from 2.2 to 1.2 cm
- No new lesions
- MRI spine showed reduced marrow edema at T11, consistent with treatment response

Bone-directed therapy with **denosumab 120 mg SC monthly** was initiated in February 2024.

Adverse Effects and Labs:

So far, treatment has been well tolerated. No immune-related adverse events have occurred. Routine labs show stable hematologic and hepatic function.

Lab	Nov 2023	Feb 2024	Apr 2024
Hb	12.4	12.1	11.9 g/dL
ALP	146	132	128 U/L
AST/ALT	28/25	26/21	24/20
Calcium	9.2	9.4	9.1 mg/dL

Assessment and Plan:

This is a **wild-type, high PD-L1 NSCLC**, currently responding well to pembrolizumab monotherapy. She will continue therapy with imaging surveillance every 9 weeks. Given good tolerability, we anticipate completing 2 years of therapy if no progression occurs.

Prepared by: Oncology NP – Immunotherapy Clinic
Supervising MD: [Name Redacted]
Date: 14 April 2025