

NOTE FROM 28/11/2023

Patient Information:

- **Name:** Elise Rowena Chambers
- **Patient ID:** SYN066
- **DOB:** 06/03/1968
- **Date of Diagnosis:** 15/12/2022
- **Primary Diagnosis:** Advanced NSCLC with KRAS G12D mutation and adrenal/pleural metastasis

Molecular Profile:

- **Driver Mutation:** KRAS G12D (confirmed via NGS, allele frequency 41%)
- **PD-L1 Status:** TPS <1%, CPS 4, IC 1+ (SP263 assay)

Treatment Course:

- **1L:** Carboplatin (AUC 5) + Pemetrexed (500 mg/m²) + Pembrolizumab (200 mg q3w)
 - 09/01/2023 – 31/10/2023

Clinical Course: Mrs. Chambers was initially evaluated for worsening shortness of breath and persistent left flank discomfort. CT thorax/abdomen revealed a 4.8 cm left upper lobe mass, left adrenal enlargement (2.5 cm), and thickening of the ipsilateral pleura with minimal effusion. Core biopsy from the pulmonary lesion confirmed adenocarcinoma, KRAS G12D-mutant.

Due to low PD-L1 and absence of targetable mutations, standard platinum-doublet chemotherapy with pembrolizumab was initiated. After 3 cycles, she reported significant symptom relief. Imaging at 9 weeks showed partial reduction in primary mass (by 32%) and stable adrenal lesion.

By month 6, pleural effusion reaccumulated, requiring VATS talc pleurodesis. Cytology was positive for malignant cells. Despite this, systemic disease control persisted until 31st October, when imaging revealed new contralateral nodular pleural involvement.

Toxicity Profile:

- Grade 1 fatigue
- Grade 2 anemia (transfusion not required)
- No immune-related adverse events

Comorbidities:

- Chronic migraine with aura (on propranolol)
- GERD (on esomeprazole)
- Mild renal insufficiency (baseline Cr 1.3 mg/dL)

Current Status: Transitioned to 2L docetaxel; pending response assessment. ctDNA monitoring underway to evaluate for potential KRAS G12C subclonal emergence.

Plan:

- Continue 2L therapy with early response scan at 6 weeks
 - Consider clinical trial for KRAS non-G12C inhibitors if available
 - Monitor for symptomatic recurrence of pleural effusion
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