Death notification

Patient ID: SYN196
Name: Johanna McDartmouth
DOB: 25 January 1966
Gender: Female

Course of Treatment

Following diagnosis on 04 November 2021 via liver biopsy, histopathological confirmation of adenocarcinoma of pulmonary origin was made. Immunohistochemical profile showed TTF-1+, Napsin A+, CK7+, with PD-L1 expression TPS <1% (22C3 pharmDx assay), indicating limited benefit from immune checkpoint inhibitors as monotherapy.

Comprehensive genomic profiling (FoundationOne CDx) revealed no targetable mutations (EGFR, ALK, ROS1, BRAF V600E, NTRK, MET exon 14 skipping – all negative). Tumor mutational burden (TMB) was low at 2.1 mut/Mb. No microsatellite instability was noted (MSI-stable).

The patient commenced first-line systemic therapy on 26 November 2021 with a triplet regimen of carboplatin (AUC 5), pemetrexed (500 mg/m^2), and pembrolizumab (200 mg flat dose every 3 weeks), in alignment with KEYNOTE-189 data, given the non-squamous histology.

Toxicity was manageable with intermittent Grade 1–2 nausea, fatigue, and transaminitis. One cycle was delayed due to elevated ALT/AST (peak ALT 119 U/L, AST 102 U/L). Pemetrexed-related cytopenia (Grade 2 neutropenia) was also noted intermittently but resolved with dose adjustments and G-CSF support.

After four cycles, radiographic evaluation via contrast-enhanced CT chest/abdomen/pelvis showed partial response per RECIST 1.1: hepatic lesions reduced in size by ~35%, and primary right upper lobe mass decreased from 4.8 cm to 2.9 cm.

Maintenance therapy with pemetrexed and pembrolizumab was continued. Unfortunately, after 14 months on therapy, surveillance imaging on 18 January 2023 showed progression in the liver with new satellite lesions and mild ascites. Brain MRI remained clear.

Liquid biopsy (Guardant360) reconfirmed wild-type status, no emerging resistance mutations. PD-L1 remained low, confirming ongoing immune-cold phenotype. Second-line systemic therapy was initiated with docetaxel plus ramucirumab in February 2023.

Throughout therapy, the patient was co-managed by hepatology for underlying NAFLD, and endocrinology due to poorly controlled type 2 diabetes mellitus (HbA1c ~8.5%). She was maintained on metformin 1000 mg BID and empagliflozin 10 mg daily.

Additionally, hypertension was well-controlled on amlodipine 5 mg daily. ECOG PS remained 1 until late in disease course.

The patient passed away peacefully on 18 April 2024, following progressive hepatic failure. Palliative care team was involved in the final weeks, ensuring excellent symptom control.

Discharge Plan / Recommendations:

- Family bereavement support coordinated through oncology social worker.
- DNA sample stored for potential future germline studies.
- Family informed of lack of hereditary mutations.

Physician: Dr. J. Mallory, MD, Medical Oncology
Date of Discharge Note: 18 April 2024
