Oncology Morbidity & Mortality Case Summary

CASE CONFERENCE SUMMARY

DATE: November 29, 2022
PATIENT ID: SYN131 **PATIENT NAME:** Molina, Hector **DATE OF BIRTH:** September 28, 1951
DATE OF DIAGNOSIS: February 22, 2021
DATE OF DEATH: September 15, 2022
PRESENTED BY: Dr. R. Greene (Oncology Fellow)
ATTENDING: Dr. K. Tanaka (Medical Oncology)

CASE SYNOPSIS:
This is a retrospective review of Mr. Molina, a 70-year-old male with Stage IV Lung Adenocarcinoma (WT, PD-L1 <1%) who experienced disease progression after first-line chemo-immunotherapy and subsequently died approximately 7 months after failing second-line chemotherapy, following a transition to hospice care.

ONCOLOGIC HISTORY:

- **Diagnosis (Feb 2021):** Presented with persistent cough, right-sided pleuritic chest pain, and 15-lb weight loss. Staging CT showed a 3.8 cm LUL mass, extensive R pleural thickening/nodularity with moderate effusion, and bilateral adrenal metastases (L 3cm, R 2.5cm). Brain MRI negative. Thoracentesis cytology confirmed Adenocarcinoma.
- **Molecular/PD-L1:** NGS panel on pleural fluid confirmed **Wild-Type** (EGFR/ALK/ROS1/BRAF/KRAS/MET/RET neg). PD-L1 IHC (22C3) **TPS 0%, CPS <5, IC 0**.
- **Comorbidities:** History of CAD s/p DES to LAD (2015, on Aspirin/Clopidogrel/Statin), Hypertension, GERD, Ex-smoker (45 pack-years, quit 2010). ECOG PS 1 at diagnosis.

TREATMENT COURSE:

1. **First-Line Therapy since March 16, 2021**
    - Regimen: **Carboplatin (AUC 5) + Pemetrexed (500 mg/m2) + Pembrolizumab (200 mg) IV q3 weeks.** (Standard 1L for non-squamous, PD-L1 <50%).
    - Course: Completed 4 cycles induction, transitioned to Pemetrexed/Pembrolizumab maintenance. Required therapeutic thoracentesis x2 early in treatment. Tolerated with Gr 1-2 fatigue, Gr 1 anemia.
    - Response: Initial Stable Disease with slight improvement in pleural thickening/adrenals.
    - Progression: Surveillance CT Nov 10, 2021 demonstrated significant worsening of pleural disease with enlarging nodules, re-accumulation of effusion, growth of adrenal mets, and several new small pulmonary nodules.
2. **Second-Line Therapy (Nov 29, 2021 – Feb 15, 2022):**

- Regimen: **Docetaxel 75 mg/m2 IV q3 weeks.** Ramucirumab discussed but declined by patient due to bleeding concerns (on DAPT).
- Course: Received 3 cycles. Experienced significant toxicity: Grade 3 neutropenia (despite dose reduction to 60mg/m2 after C1), Grade 2 peripheral neuropathy (painful), Grade 3 fatigue, alopecia. ECOG declined to 2-3.
- Response: Restaging CT after C3 (Feb 2022) showed **continued disease progression** with worsening pleural/adrenal/pulmonary disease and new small liver metastases. Docetaxel discontinued due to lack of efficacy and toxicity.

3. **Best Supportive Care / End-of-Life (Feb 2022 – Sept 2022):**
    - Further chemotherapy (e.g., Gemcitabine) discussed but declined by patient given poor tolerance to Docetaxel and declining PS. Focus shifted to palliation.
    - Managed supportively for worsening dyspnea (required indwelling pleural catheter placement Mar 2022, drained frequently), increasing pain (pleuritic, adrenal flank pain – required opioid titration to MS Contin + breakthrough hydromorphone), severe fatigue, anorexia, and cachexia.
    - Admitted to hospital briefly in July 2022 for pain crisis / delirium.
    - Enrolled in Home Hospice August 2022. Continued decline at home. Passed away peacefully Sept 15, 2022.

DISCUSSION POINTS / LEARNING ISSUES:

- Illustrates typical outcome for WT, PD-L1 negative NSCLC progressing after first-line chemo-IO, with median PFS often <1 year.
- Highlights challenges of second-line Docetaxel toxicity in this population, often limiting duration and benefit.
- Reinforces importance of early goals of care discussions, especially when transitioning to second-line therapy with limited efficacy expectations and significant toxicity potential.
- Appropriate transition to supportive care and hospice when further anti-cancer therapy determined futile or excessively burdensome.