HOSPITAL DISCHARGE SUMMARY

Patient: Frank Davis **| MRN:** SYN200**| DOB:** 1950-04-01
Admission Date: 2021-06-08 **| Discharge Date:** 2021-06-15 (Deceased)
Attending Physician(s): Dr. Leslie Chen, MD (Pulm/CCM); Consulting: Dr. B. Miller (Onc), Dr. R. Gupta (Pall Care)

ADMITTING DIAGNOSES:

1. Acute Hypoxic Respiratory Failure.
2. Progressive Stage IV Squamous Cell Lung Carcinoma.
3. Hepatic Failure secondary to extensive metastases.
4. Cancer Cachexia.
5. Severe Malnutrition.

DISCHARGE DIAGNOSES (Final Diagnoses):

1. Cardiopulmonary Arrest secondary to Acute Hypoxic Respiratory Failure in the setting of End-Stage Metastatic Squamous Cell Lung Carcinoma.
2. Extensive Pulmonary and Hepatic Metastases.
3. Hepatic Encephalopathy.
4. Cancer Cachexia with severe protein-calorie malnutrition.
5. Chronic Obstructive Pulmonary Disease (COPD) - Severe.
6. Coronary Artery Disease (s/p CABG 2005).
7. Type 2 Diabetes Mellitus (poorly controlled).

SUMMARY OF HOSPITAL COURSE:
Mr. Davis was a 71-year-old male with a significant smoking history (60+ pack-years, quit 2019) and multiple comorbidities including severe COPD, CAD s/p CABG, and T2DM, who was diagnosed with Stage IV Squamous Cell Lung Carcinoma in April 2020. He initially presented with fatigue, cough, and unintentional weight loss. Staging PET/CT (April 2020) revealed a large cavitary mass in the right upper lobe, extensive bilateral pulmonary nodules/lymphangitic spread, multiple large hepatic metastases, and FDG-avid mediastinal lymph nodes. Bronchoscopy with biopsy confirmed the diagnosis.

Pertinent Pathology/Molecular Data (RUL Biopsy, 2020-04-22):

- **Morphology:** Invasive Squamous Cell Carcinoma, poorly differentiated, showing nests and sheets of cells with intercellular bridges (focally) and keratinization. Extensive necrosis noted.
- **Immunohistochemistry:** Positive for p40, CK5/6. Negative for TTF-1, Napsin A.
- **Molecular:** NGS panel negative for EGFR, ALK, ROS1, BRAF, MET, RET, NTRK, KRAS mutations.
- **PD-L1 IHC (22C3):** TPS = 0%.

Given the histology and PD-L1 status, he initiated first-line chemotherapy with Carboplatin (AUC 5) and Paclitaxel (175 mg/m^2) every 3 weeks, starting 2020-05-11. He completed 4 cycles with significant toxicity, including Grade 3 neutropenia (requiring G-CSF support), Grade 2 neuropathy, and worsening fatigue. Restaging scans in early November 2020 after 4 cycles showed disease progression with enlargement of liver metastases and worsening lymphangitic spread.

He started second-line therapy with single-agent Gemcitabine (1000 mg/m^2 days 1, 8) in November 2020. He tolerated this slightly better initially but developed increasing fatigue and anorexia. Restaging scans in February 2021 after 3 cycles showed further progression in the liver and lungs, with development of malignant ascites. Gemcitabine was discontinued.

Given his declining performance status (ECOG 3), significant symptom burden (dyspnea, fatigue, anorexia), and limited benefit from prior therapies, he elected for best supportive care. Hospice was discussed but he initially declined formal enrollment, opting for symptom management via outpatient oncology.

Over the ensuing months (March-May 2021), he experienced accelerating decline with progressive cachexia, worsening dyspnea requiring home oxygen (3L NC), increasing abdominal distension, and intermittent confusion.

Current Admission (2021-06-08):
He presented to the ED via EMS with acute worsening of shortness of breath and altered mental status. Found to be hypoxic (SpO2 78% on 5L O2), tachypneic (RR 35), tachycardic (HR 115), hypotensive (BP 90/50). Exam notable for cachexia, jaundice, significant respiratory distress with accessory muscle use, decreased breath sounds bilaterally, tense ascites, asterixis, and disorientation.

- **Initial Labs:** ABG (on HFNC 60L/80%): pH 7.25, pCO2 58, pO2 55. WBC 12.5, Hgb 8.1, Plt 95. Na 128, K 5.1, BUN 65, Cr 1.8 (baseline 1.2). AST 310, ALT 250, Alk Phos 1200, Total Bili 18.5, Direct Bili 11.0, Albumin 1.9. INR 2.1, Ammonia 145. Lactate 4.2. BNP 750.
- **Imaging:** CXR showed diffuse reticulonodular opacities, prominent vascular congestion, no focal consolidation. CT Chest (non-contrast) showed extensive lymphangitic carcinomatosis, innumerable bilateral nodules, large cavitary primary RUL lesion, no PE. CT Abdomen showed massive hepatomegaly with near-total replacement by metastatic disease, large volume ascites.
- **Management:** Admitted to MICU. Required intubation and mechanical ventilation due to refractory hypoxemia and impending respiratory arrest. Treated for presumptive hepatic encephalopathy with Lactulose and Rifaximin. Received IV fluids, vasopressors (norepinephrine) for shock, broad-spectrum antibiotics (later de-escalated as no clear infection source identified), blood product transfusions (PRBCs, FFP). Therapeutic paracentesis performed (4L removed, cytology confirmed squamous carcinoma). Oncology and Palliative Care consulted. After initial stabilization attempts, goals of care were revisited extensively with family (wife, son) given the grim prognosis, irreversible multi-organ failure due to cancer progression.

Patient lacked decision-making capacity. Family ultimately agreed with medical team recommendation for transition to comfort measures, aligning with prior discussions regarding patient's wishes. Terminal extubation performed on 2021-06-15. Patient passed away peacefully shortly thereafter with family at bedside.

Autopsy: Declined.
Condition on Discharge: Deceased.

Physician Signature:

Dr. Leslie Chen, MD