**Patient**: Michael Westfield  
**MRN**: 583921  
**DOB**: 1980-02-01 (45 years)  
**Admission**: 2025-03-18 | **Discharge**: 2025-03-23  
**Physicians**: Dr. V. Bennett (Medical Oncology), Dr. P. Sharma (Thoracic Surgery), Dr. R. Patel (Interventional Radiology)

**DISCHARGE DIAGNOSIS**

Stage IV Malignant Melanoma (BRAF V600E mutation positive) with Disease Progression on First-Line BRAF/MEK Inhibitor Therapy, New Large Pulmonary Metastasis

**DETAILED DIAGNOSIS**

* **Primary**: Malignant Melanoma, Stage IV (AJCC 8th Edition)
* **Diagnosed**: 2024-06-20
* **Primary Site**: Left upper back
* **Initial Pathology**:
  + Malignant melanoma, superficial spreading type with nodular component
  + Breslow thickness: 3.6 mm, Clark level: IV
  + Ulceration: Present
  + Mitotic rate: 5 mitoses/mm²
  + Lymphovascular invasion: Present
  + Tumor-infiltrating lymphocytes: Non-brisk
  + Margins: Clear (closest margin 0.8 cm)
* **Staging** (2024-08-15):
  + Two pulmonary nodules (largest 1.2 cm RUL)
  + One liver metastasis (segment VII, 2.1 cm)
  + MRI brain: No intracranial metastases
  + LDH at diagnosis: 358 U/L
  + AJCC Staging: Stage IV (pT3b pN2a M1c)
* **Molecular Testing**:
  + BRAF V600E mutation: Positive (allele frequency 38%)
  + NRAS and C-KIT mutations: Negative
  + PD-L1 expression: 20%
  + Tumor mutational burden: Intermediate (10 mutations/Mb)
  + Microsatellite status: Stable

**CURRENT TREATMENT**

**Current Disease Status**:

* Progressive disease on first-line BRAF/MEK inhibitor therapy after initial partial response
* CT chest (2025-03-15): New large right lower lobe pulmonary metastasis (6.4 cm) causing partial bronchial obstruction and post-obstructive pneumonitis
* CT abdomen/pelvis: Previously noted liver metastasis stable (2.0 cm)
* MRI brain: No intracranial metastases
* LDH: 380 U/L (increased from baseline 220 U/L)
* CT-guided biopsy of lung metastasis (2025-03-19): Confirmed metastatic melanoma, no new actionable mutations

**New Treatment Plan**:

* Discontinue BRAF/MEK inhibitor therapy due to progression
* Transition to second-line immunotherapy: combination ipilimumab and nivolumab
* Nivolumab 3 mg/kg IV + Ipilimumab 1 mg/kg IV every 3 weeks for 4 cycles
* Followed by Nivolumab 480 mg IV every 4 weeks maintenance
* First dose scheduled for 2025-03-25

**PREVIOUS TREATMENT HISTORY**

**Surgical Management**:

* Wide local excision of primary melanoma with 2-cm margins (2024-07-10)
* Left axillary sentinel lymph node biopsy (2024-07-10)
* Complete left axillary lymph node dissection (2024-07-31)

**Systemic Therapy**:

* First-line: Encorafenib 450 mg PO daily and Binimetinib 45 mg PO twice daily (started 2024-09-01)
* Dose modifications: Binimetinib reduced to 30 mg BID (2024-11-15) due to Grade 2 retinopathy
* Toxicities: Grade 2 retinopathy (improved to Grade 1 after dose reduction), Grade 1-2 fatigue, Grade 1 arthralgia, Grade 1 photosensitivity
* Initial response: Partial response (2024-11-30), continued on second restaging (2025-01-15)

**COMORBIDITIES**

* Psoriasis (diagnosed 2010, well-controlled on topical therapy)
* Asthma (mild, intermittent)
* Recurrent herpes zoster (last episode 2023-12)
* Migraine headaches (with aura, 2-3 episodes monthly)
* Vitamin D deficiency
* History of depression (managed with escitalopram)

**HOSPITAL COURSE**

45-year-old male with stage IV BRAF V600E-mutated melanoma admitted for evaluation of a new 6.4 cm right lower lobe pulmonary metastasis causing partial bronchial obstruction with post-obstructive pneumonitis.

Presented with increasing dyspnea, non-productive cough, and right-sided chest discomfort. Laboratory studies showed elevated inflammatory markers (CRP 4.2 mg/dL) and increased LDH (380 U/L).

Started on empiric antibiotics (ceftriaxone and azithromycin) for possible superimposed pneumonia. CT-guided biopsy confirmed metastatic melanoma. Thoracic surgery consultation determined surgical resection was not appropriate.

Given disease progression after approximately 6 months on BRAF/MEK inhibitors, decision made to discontinue encorafenib/binimetinib and transition to immunotherapy with ipilimumab/nivolumab. Discussed risks of immune checkpoint inhibitors with patient's autoimmune comorbidity (psoriasis).

Respiratory symptoms improved during hospitalization, with oxygen saturation improving to 97% on room air. Discharged on oral antibiotics with instructions to discontinue BRAF/MEK inhibitors immediately.

**DISCHARGE MEDICATIONS**

* Amoxicillin-Clavulanate 875 mg/125 mg PO twice daily for 7 days
* Albuterol inhaler 2 puffs Q4-6H PRN wheezing/shortness of breath
* Escitalopram 10 mg PO daily
* Calcipotriene/betamethasone ointment apply to psoriatic plaques once daily PRN
* Sumatriptan 50 mg PO at onset of migraine, may repeat once after 2 hours if needed
* Vitamin D3 2000 IU PO daily
* Acetaminophen 650 mg PO Q6H PRN pain/fever
* Valacyclovir 500 mg PO daily (prophylaxis for recurrent herpes zoster)

**Medications Discontinued**:

* Encorafenib 450 mg PO once daily
* Binimetinib 30 mg PO twice daily

**FOLLOW-UP PLAN**

**Medical Oncology**:

* Dr. V. Bennett on 2025-03-25 for initiation of ipilimumab/nivolumab
* Nivolumab 3 mg/kg IV + ipilimumab 1 mg/kg IV every 3 weeks for 4 cycles, then nivolumab 480 mg IV every 4 weeks
* Baseline labs before immunotherapy: CBC, CMP, TSH, free T4, cortisol, and ACTH
* Education provided regarding immune-related adverse events with special attention to psoriasis exacerbation

**Pulmonology**:

* Dr. A. Fischer in 1 week (2025-03-31)
* Pulmonary function tests scheduled for 2025-03-31
* Repeat chest CT in 8 weeks to assess response

**Dermatology**:

* Dr. J. Morris in 2 weeks (2025-04-05)
* Baseline full skin examination prior to immunotherapy
* Monitoring for psoriasis flare and immune-related dermatologic adverse events

**Monitoring and Surveillance**:

* MRI brain every 12 weeks
* CT chest/abdomen/pelvis every 9 weeks for first 6 months, then every 12 weeks
* LDH and CMP prior to each immunotherapy infusion

**Patient Education**:

* Respiratory symptom monitoring
* Signs of psoriasis flare requiring attention
* Education on potential immune-related adverse events
* Recognition of early signs of immune-related adverse events
* When to seek immediate medical attention

**KEY LAB VALUES**

|  |  |  |  |
| --- | --- | --- | --- |
| **Parameter** | **Admission** | **Discharge** | **Reference** |
| WBC | 11.5 | 8.8 | 4.0-11.0 ×10^9/L |
| Hemoglobin | 13.8 | 13.5 | 13.5-17.5 g/dL |
| Platelets | 290 | 275 | 150-400 ×10^9/L |
| Creatinine | 0.9 | 0.8 | 0.7-1.2 mg/dL |
| AST | 38 | 35 | 10-40 U/L |
| ALT | 42 | 38 | 10-55 U/L |
| LDH | 380 | 365 | 125-220 U/L |
| CRP | 4.2 | 1.8 | <0.5 mg/dL |

**Electronically Signed**:  
Dr. V. Bennett (Medical Oncology)  
Dr. P. Sharma (Thoracic Surgery)  
Dr. R. Patel (Interventional Radiology)  
Date: 2025-03-23