**Patient**: Martin Gallagher (DOB 1956-01-10)  
**MRN**: 589742  
**Admission**: 2024-02-19 | **Discharge**: 2024-02-24  
**Physicians**: Dr. S. Blackwell (Hematology/Oncology), Dr. T. Reid (Nephrology)

**Discharge diagnosis: TLS after Obinutuzumab for CLL**

**1. Oncological Diagnosis**

* **Primary**: CLL, Binet Stage B (Diagnosed January 5, 2024)
* **Immunophenotype**: CD5+, CD19+, CD20+(dim), CD23+, CD200+, lambda light chain restriction, CD38-, ZAP-70-
* **Genetic/Molecular**: Deletion 13q14 (55%), IGHV mutated (92.6% homology), TP53 negative
* **Risk Assessment**: CLL-IPI Score 4 (high risk)
* **Disease Burden at Treatment Initiation**:
  + WBC: 96.8 × 10^9/L with 85% lymphocytes (ALC 82.3 × 10^9/L)
  + Multiple enlarged lymph nodes (largest 3.8 cm, left axilla)
  + Splenomegaly (2 cm below costal margin)
  + β2-microglobulin: 3.6 mg/L, LDH: 280 U/L

**2. Current Treatment**

* **Regimen**: Obinutuzumab + Venetoclax (first-line)
* **Treatment Administered**:
  + Obinutuzumab 100 mg IV (2/16/24, Day 1)
  + Obinutuzumab 900 mg IV (2/17/24, Day 2)
  + Obinutuzumab 1000 mg IV (2/23/24, Day 8) - during hospitalization
* **TLS Prophylaxis Prior to Admission**:
  + Allopurinol 300 mg PO daily
  + IV hydration during infusions
  + Laboratory monitoring

**3. Current Admission**

* **Reason**: Laboratory TLS on Day 4 post-obinutuzumab initiation
* **Presentation**: Mild fatigue, decreased appetite
* **Laboratory Abnormalities at Admission**:
  + Hyperkalemia (K+ 5.8 mEq/L)
  + Hyperphosphatemia (phosphorus 5.4 mg/dL)
  + Elevated uric acid (7.6 mg/dL)
  + Mild AKI (creatinine 1.4 mg/dL from baseline 1.0)
* **Management**:
  + IV hydration with normal saline at 150 mL/hr
  + Rasburicase 7.5 mg IV on 2024-02-19
  + Sodium bicarbonate supplementation
  + Sevelamer for hyperphosphatemia
  + Continuous cardiac monitoring
* **Response**: Progressive improvement in laboratory parameters:
  + Day 1: K+ 5.8, P 5.4, UA 7.6, Cr 1.4
  + Day 3 (discharge): K+ 4.6, P 3.7, UA 5.4, Cr 1.1

**4. Comorbidities**

* Hypertension (2012)
* Type 2 Diabetes Mellitus (2018, diet-controlled, HbA1c 6.7%)
* Hyperlipidemia
* GERD
* No allergies

**5. Discharge Medications**

* Allopurinol 300 mg PO daily
* Sevelamer 800 mg PO BID
* Valacyclovir 500 mg PO BID
* Trimethoprim-sulfamethoxazole 960 mg PO daily on M/W/F
* Amlodipine 5 mg PO daily
* Atorvastatin 20 mg PO daily at bedtime
* Pantoprazole 40 mg PO daily
* Acetaminophen 650 mg PO Q6H PRN

**6. Follow-up Plan**

* **Laboratory Monitoring**: CBC, CMP, LDH, uric acid, phosphorus 3× weekly
* **Scheduled Admissions**:
  + Inpatient admission on 3/1/24 for Cycle 1, Day 15 obinutuzumab
* **Appointments**:
  + Dr. S. Blackwell (Oncology): 2/29/24
  + Dr. T. Reid (Nephrology): 2/29/24
* **Treatment Plan Modifications**:
  + Enhanced TLS prophylaxis for future obinutuzumab doses:
    - Inpatient administration
    - IV hydration (150 mL/hr for 12h before and 24h after)
    - Maintain allopurinol 300 mg daily
    - More frequent laboratory monitoring (q8h for 48h)
  + Venetoclax initiation (Day 22):
    - Consider more gradual ramp-up
    - Inpatient monitoring for first dose of each escalation

**7. Laboratory Values (Admission → Day 2 → Discharge)**

* WBC: 48.5 → 45.2 → 41.8 × 10^9/L
* Lymphocytes: 42.2 → 39.3 → 36.4 × 10^9/L
* Creatinine: 1.4 → 1.2 → 1.1 mg/dL
* eGFR: 52 → 62 → 68 mL/min/1.73m²
* Potassium: 5.8 → 5.2 → 4.6 mEq/L
* Phosphorus: 5.4 → 4.8 → 3.7 mg/dL
* Uric Acid: 7.6 → 0.2 → 4.4 mg/dL
* LDH: 320 → 295 → 270 U/L

**Electronically Signed By**:  
Dr. S. Blackwell (Hematology/Oncology) - 2024-02-24 14:15  
Dr. T. Reid (Nephrology) - 2024-02-24 13:30