River City Oncology Specialists – New Patient Consultation Report

Initial Oncology Consult Note

IDENTIFICATION:

- **PATIENT NAME:** Filsh, Alicia
- **DATE OF BIRTH:** May 30, 1971
- **PATIENT ID:** SYN214

DATE OF CONSULT:

- **DATE OF CONSULTATION:** September 26, 2022
- **CONSULTING PHYSICIAN:** Benjamin Carter, MD
- **REFERRING PHYSICIAN:** Dr. Helen Mirren (Rheumatology)

REASON FOR CONSULTATION: New diagnosis of suspected Stage IV Non-Small Cell Lung Cancer metastatic to bone (Date of diagnosis: Sept 5, 2022). Evaluation for confirmation of diagnosis, staging finalization, molecular/PD-L1 testing review, and discussion of first-line treatment recommendations.

HISTORY OF PRESENT ILLNESS:
Ms. Filsh is a 51-year-old female with a history of well-controlled Rheumatoid Arthritis (RA) who presented to her Rheumatologist (Dr. Mirren) approximately 1 month ago with new onset, persistent, moderately severe right hip and lower back pain, unresponsive to usual NSAIDs or short course of low-dose prednisone prescribed by Dr. Mirren for presumed RA flare vs degenerative changes. The pain limited her ability to walk long distances and sleep comfortably. Due to persistence and atypical nature of the pain for her RA, Dr. Mirren ordered imaging.

DIAGNOSTIC WORKUP (Records Reviewed):

- **Pelvis X-ray (Aug 28, 2022):** Showed subtle lucency in the right superior pubic ramus and possible sclerosis in the L5 vertebral body. Recommended further imaging.
- **MRI Lumbar Spine & Pelvis w/wo Contrast (Sept 5, 2022):** Revealed multiple abnormal marrow-replacing lesions with associated enhancement involving the L5 vertebral body, sacrum, right ilium, right superior pubic ramus, and right proximal femur. Findings highly suspicious for osseous metastatic disease. Mild multilevel degenerative changes also noted. No cord compression.
- **CT Chest/Abdomen/Pelvis w/ Contrast (Staging, Sept 12, 2022):**
    - *Chest:* Identified a 2.8 cm irregular, spiculated mass in the superior segment of the right lower lobe, highly suspicious for primary malignancy. Several small (<6mm) bilateral pulmonary nodules. Mild right hilar and subcarinal lymphadenopathy (nodes up to 1.4 cm short axis).
    - *Abdomen/Pelvis:* Confirmed osseous lesions seen on MRI. No definite hepatic, adrenal, or other visceral metastases.
- **PET/CT (Sept 15, 2022):**
    - Intense FDG uptake within the RLL primary mass (SUVmax 11.5).

    - Moderate-to-intense uptake in right hilar and subcarinal lymph nodes (SUVmax 6.8).
    - Intense uptake corresponding to all osseous lesions identified on MRI/CT (SUVmax range 7.5-13.0).
    - No other suspicious foci identified.
- **Brain MRI w/wo Contrast (Sept 16, 2022):** Negative for intracranial metastases.
- **CT-Guided Biopsy of Right Iliac Crest Lesion (Sept 19, 2022):**
    - **Preliminary Pathology Report (Sept 22, 2022):** Positive for **Metastatic Carcinoma**. Morphologic features favoring Adenocarcinoma vs Poorly Differentiated Carcinoma. IHC pending for definitive classification and primary site confirmation.
    - **Final Pathology Report & Ancillary Studies (Report Date Sept 25, 2022):**
        - **Histology:** Biopsy shows bone infiltrated by sheets and poorly formed glands of pleomorphic malignant cells with moderate cytoplasm, large irregular nuclei, and prominent nucleoli. Scattered single cell infiltration noted. Mitotic figures frequent.
        - **IHC:** Tumor cells strongly positive for Pan-Cytokeratin, Cytokeratin 7 (CK7), and **TTF-1** (diffuse, strong nuclear staining). Negative for Napsin-A, P40, CK20, GATA-3, ER, PR, Mammaglobin. Profile definitively confirms **Metastatic Adenocarcinoma of Lung Origin**.
        - **Molecular Profiling (NGS via Tempus xT on bone biopsy): Wild-Type** for EGFR, ALK, ROS1, BRAF, KRAS, MET, RET, NTRK. TMB 6 mut/Mb (Low-Intermediate). MSS.
        - **PD-L1 IHC (22C3 pharmDx): TPS 65%, CPS 70, IC Score 2/+**.

SUMMARY OF DIAGNOSIS: Stage IVB (cT2aN2M1b - Bone) Lung Adenocarcinoma, Wild-Type, PD-L1 High (TPS 65%).

PAST MEDICAL HISTORY:

- Rheumatoid Arthritis (diagnosed ~10 years ago, previously well-controlled on Hydroxychloroquine + occasional NSAIDs; currently off HCQ pending cancer treatment decisions).
- Osteopenia
- No history of smoking (Never-smoker)

SOCIAL HISTORY: Works as a university administrator. Married, supportive spouse. Two teenage children. Active lifestyle prior to onset of pain.

MEDICATIONS PRIOR TO ONCOLOGY CARE:

- Hydroxychloroquine (Plaquenil) 200 mg BID (*Held by Rheumatology ~2 weeks ago*)
- Ibuprofen 600 mg PO TID PRN pain
- Calcium/Vitamin D Supplement

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REVIEW OF SYSTEMS: Primary complaint is R hip/low back pain (currently 6/10 on Ibuprofen). Fatigue moderate (5/10). Denies cough, SOB, chest pain, weight loss, fever, neurological symptoms.

OBJECTIVE:

- *Vitals:* T 37.2, BP 120/70, HR 78, SpO2 98%. ECOG PS 1 (limited by pain).
- *Exam:* Alert female, appears stated age, in mild discomfort. Lungs clear. Cor RRR. Abd soft. Tenderness over R SI joint, R greater trochanter, L5 spinous process. Straight leg raise negative. Gait slightly antalgic favoring right side. No synovitis on joint exam.

ASSESSMENT:
Ms. Fislh is a 51-year-old never-smoker with newly diagnosed Stage IV Lung Adenocarcinoma, Wild-Type, with high PD-L1 expression (TPS 65%), metastatic solely to bone at present. She is symptomatic from bone pain but maintains good performance status (ECOG 1).

PLAN:

1. **First-Line Systemic Therapy:**
    - Based on NCCN guidelines for metastatic NSCLC with high PD-L1 expression (TPS ≥50%) and WT molecular status, **single-agent Pembrolizumab (Keytruda) immunotherapy** is the preferred first-line treatment. Data from KEYNOTE-024 and KEYNOTE-042 demonstrate superior efficacy and better tolerability compared to chemotherapy in this population.
    - **Recommendation:** Initiate **Pembrolizumab 200 mg IV every 3 weeks.** Discussed rationale, potential for durable response, mechanism of action, schedule, and potential immune-related adverse events (irAEs) in detail (skin, GI, endocrine, pulmonary, hepatic, etc.) and importance of reporting symptoms promptly. Patient understands and agrees.
    - **Start Date today**
2. **Management of Bone Metastases & Pain:**
    - **Palliative Radiation Oncology Consultation:** STAT consult requested today for evaluation for palliative External Beam Radiation Therapy (EBRT) to the most symptomatic bone sites (R hip/pelvis, L5) for rapid pain relief.
    - **Bone Modifying Agent:** Initiate **Denosumab (Xgeva) 120 mg SC monthly** to reduce risk of skeletal-related events (SREs). First dose to be given after mandatory dental clearance obtained (urgent referral placed). Start **Calcium 1200mg / Vitamin D 800-1000 IU daily**.
    - **Analgesia:** Continue Ibuprofen PRN for now. Prescribe **Oxycodone 5 mg PO q6h PRN** for breakthrough pain pending effects of RT and Pembrolizumab. Counsel on opioid side effects, constipation management (start Senna-S/Miralax preemptively).
3. **Rheumatoid Arthritis Management:** Liaise with Dr. Mirren (Rheumatology). Advised patient that Pembrolizumab *can* sometimes flare underlying autoimmune conditions, though often RA remains controlled. Recommend holding Hydroxychloroquine for now, monitor RA symptoms closely. Manage flares symptomatically initially (NSAIDs, low dose

prednisone if needed briefly) in coordination with Rheumatology. HCQ can potentially be resumed later if RA flares and irAEs are not apparent, but requires careful consideration.

4. **Monitoring:**
    - Labs: Baseline CBC, CMP, TSH, Cortisol AM obtained today. Repeat labs (CBC, CMP, TSH) prior to each Pembrolizumab infusion.
    - Imaging: First restaging CT Chest/Abdomen/Pelvis +/- Bone Scan in ~8-12 weeks after starting Pembrolizumab. Brain MRI surveillance q6 months.
    - Clinical: Close monitoring for irAEs at each visit.
5. **Follow-up:** Clinic nurse to coordinate insurance auth, Rad Onc consult, dental clearance, and C1D1 scheduling. Return to clinic prior to C2. Provide extensive patient education materials on Pembrolizumab and contact info.

_____ M.D.
Benjamin Carter, MD (Electronically Signed)