Discharge Letter: Patient SYN230

Patient name: Maria Bulgy **Patient ID:** SYN230
Date of Birth: 25 September 1971
Sex: Female
Diagnosis: Metastatic non-small cell lung cancer (NSCLC), MET exon 14 skipping mutation (**PD-L1 Status:** <1%)
D of Dx: 14 May 2023
Metastatic Sites: Bone **Current Treatment:** Tepotinib, commenced 05 June 2023

Dear Colleagues,

This letter serves to summarize the diagnostic course and ongoing management of the above patient, a 53-year-old woman with METex14-driven NSCLC, who continues on targeted systemic therapy with durable clinical benefit.

The patient's initial symptoms were non-specific musculoskeletal complaints centered in the lower thoracic spine and pelvis. Radiographic workup revealed destructive bone lesions with a primary mass in the left lower lobe. Sternal biopsy yielded poorly differentiated pulmonary adenocarcinoma with MET IHC positivity, and NGS confirmed a MET exon 14 skipping mutation. No co-mutations of relevance were identified.

Histological evaluation was notable for high-grade cytologic atypia, mitotic activity >20/10 HPF, and architectural heterogeneity (solid, trabecular). TTF-1 and CK7 were diffusely positive. p40, synaptophysin, and CDX2 were negative. PD-L1 TPS was undetectable. Molecular profiling also demonstrated a low tumor mutational burden and no microsatellite instability.

Following diagnosis, she was initiated on tepotinib (450 mg orally, once daily). Clinically, she improved markedly within 2 months—bone pain abated, functional mobility increased, and inflammatory markers normalized. Imaging confirmed partial metabolic and structural response.

Side effects have included low-grade edema (managed with diuretics), transient taste disturbance, and a slight increase in serum creatinine. No hepatotoxicity or pulmonary adverse events have occurred. The patient continues zoledronic acid monthly with adjunctive vitamin D and calcium.

She is independently mobile, ECOG performance status remains 1, and she has returned to part-time employment. Clinical reassessment in March 2025 showed stable disease.

Future plans include ongoing imaging at 3-month intervals, and molecular reassessment upon progression. If resistance arises, enrollment in a MET-targeted clinical trial is planned.

Yours sincerely,
Dr. L. Rosario
Medical Oncology, Lung Molecular Therapeutics
Date: 14 April 2025