Background
Cardiac metastases have been found in up to 9.1% of autopsies of patients with advanced cancer (1). The most common primary malignancies associated with cardiac metastasis reported in the literature are lymphomas, melanoma, breast cancer, and lung neoplasms (2-4).

Case Description
• An 84-year-old male with mitral valve prolapse/mitral regurgitation, and a 40-pack-year smoking history, is diagnosed with non-small cell lung cancer.

Discussion
Definitive diagnosis with tissue examination (e.g. biopsy or surgical specimen) often too risky in elderly patients with comorbidity. Echocardiography alone limited by poor acoustic window in certain patients, no tissue characterization, and operator-dependence (5).

Conclusion
Intra-cardiac FDG avidity does not necessarily indicate metastatic involvement. Pseudo-progression and false positives should be considered in PET-CT. Multimodal imaging including CMRI allows for optimal evaluation FDG-avidity. Definitive diagnosis through surgical pathology or endomyocardial biopsy is not always available or feasible.

References