

**Table S1** Radiological Characteristics of Squamous Lung Carcinoma Patients with Malignant Pleural Effusions

CT or PET Scan Radiological Features	Squamous Cell Pleural Cytology Negative (N=23)	Squamous Cell Pleural Cytology Positive (N=6)	P value for difference*
Size of effusion,** median (IQR)	25 (25-50)	25 (25-25)	0.48
Unilateral effusion, N (%)	22 (95.6)	5 (83.3)	0.37
Size of largest mass/nodule, cm, median (IQR)	4 (0.75-5)	4.6 (4-6.2)	0.86
Location of mass/nodule n (%)			0.76
Peripheral 1/3 <sup>rd</sup>	13 (56.5%)	5 (83.3%)	
Central 2/3 <sup>rd</sup>	8 (34.7%)	1 (16.6%)	
No mass/nodule	2 (8.7%)	0	
Mediastinal lymphadenopathy present, n (%)	16 (69.5%)	6 (100%)	0.28
Pleural nodules present on CT scan, n (%)	11 (47.8%)	5 (83.3%)	0.18
FDG-avid pleural nodules, n (%)	7 (30.4%)	2 (33.3%)	1.00
FDG-avid pleural enhancement, n (%)	6 (26.1%)	2 (33.3%)	1.00

\* P-value for difference between continuous or categorical variables using *t*-test or Fisher's Exact Test, respectively. \*\*Size of effusion, as percentage of hemithorax occupied on upright, posteroanterior chest X-ray.