

Table 4: Adjusted analysis of DLCO vs. SCD clinical outcomes

Clinical Outcome	Adjusted linear regression analyses		
	Regression coefficient	95% CI	p-value
DLCO vs. SCD crises:			
Measured DLCO	-0.075	-0.120 to -0.030	0.002
Estimated DLCO (XGBoost)	-0.084	-0.134 to -0.033	0.002
Estimated DLCO (mixed-model)	-0.102	-0.170 to -0.034	0.004
DLCO vs. TRVJ:			
Measured DLCO	-0.009	-0.017 to -0.001	0.029
Estimated DLCO (XGBoost)	-0.009	-0.017 to -0.001	0.038
Estimated DLCO (mixed-model)	-0.014	-0.025 to -0.003	0.014
DLCO vs. nocturnal hypoxia:			
Measured DLCO	0.005	-0.002 to 0.012	0.137
Estimated DLCO (XGBoost)	0.006	-0.002 to 0.013	0.121
Estimated DLCO (mixed-model)	0.013	0.001 to 0.125	0.031

Linear regression analyses demonstrating a significant association between DLCO (measured and estimated) with outcome measures of SCD, except nocturnal hypoxia. Regression models were adjusted for age and sex. Hemoglobin adjusted DLCO (%) was included in the study analyses. SCD crises were defined as the number of lifetime events (vaso-occlusive crisis and acute chest syndrome that required hospitalization). TRJV (m/s) was considered as a marker of pulmonary hypertension. Nocturnal hypoxia was defined as the percent of total sleep time spent with SpO2 <90%. P-values <0.05 were considered significant.