

	Term Controls (reference)	Preterm	Preterm	
			No BPD	BPD
Forced flows and volumes (Spirometry)				
N successful	48	131	52	79
FEV ₁ Z-score	0.04 (0.90)	-0.72 (1.13)*	-0.21 (0.99)	-1.06 (1.09)*#
FEV ₁ /FVC Z-score	-0.27 (0.92)	-1.25 (1.01)*	-1.02 (0.93)*	-1.41 (1.04)*
FEF ₂₅₋₇₅ Z-score	-0.42 (0.90)	-1.46 (1.11)*	-1.06 (1.02)*	-1.75 (1.08)*#
FVC Z-score	0.17 (0.95)	0.13 (1.04)	0.43 (0.86)	-0.07 (1.11)#
Lung volume and ventilation distribution (Multiple Breath Washout)				
N successful	50	140	55	85
LCI	6.14 (0.58)	6.33 (0.82)	6.38 (0.85)	6.30 (0.79)
FRC Z-score	-0.09 (0.96)	0.42 (1.32)*	0.54 (1.33)*	0.33 (1.31)
TLC Z-score	-0.16 (0.85)	-0.05 (1.02)	0.18 (0.93)	-0.20 (1.05)
RV Z-score	-0.45 (1.10)	-0.16 (1.23)	-0.11 (1.13)	-0.20 (1.34)
FRC/TLC (%)	50.36 (6.65)	52.80 (7.49)*	52.05 (6.58)	53.30 (8.04)
RV/TLC (%)	21.29 (6.18)	22.79 (7.02)	22.42 (6.30)	23.03 (7.48)
Gas Exchange (DLCO)				
N successful	38	74	39	35
DL _{CO} Z-score	0.10 (0.97)	0.28 (1.27)	0.34 (1.34)	0.21 (1.19)
V _A Z-score	-0.72 (1.16)	-0.50 (1.33)	-0.57 (1.46)	-0.39 (1.20)
K _{CO} Z-score	-0.56 (0.86)	-0.57 (0.98)	-0.44 (1.05)	-0.72 (0.89)
Respiratory system mechanics (FOT)				
N successful	31	132	61	71
Rrs ₈ Z-score	0.00 (0.94)	0.33 (1.04)	0.31 (1.11)	0.34 (0.98)
Xrs ₈ Z-score	0.14 (0.53)	-0.43 (0.99)*	-0.25 (0.96)	-0.58 (1.00)*
AX Z-score	-0.44 (0.85)	0.29 (1.15)*	0.08 (1.19)	0.48 (1.09)*
Fres Z-score	-0.18 (1.26)	0.64 (1.23)*	0.38 (1.44)	0.87 (1.11)*

Supplementary Table 1.

	Univariate Analysis				Multivariate Analysis				
	B	p-value	95% CI Lower	95% CI Upper	B	p-value	95% CI Lower	95% CI Upper	Model R ²
FEV1 z-score									0.169
Gestational Age (w)	0.103	0.007	0.029	0.178	0.105	0.008	0.028	0.182	
Birth weight z-score	0.330	0.002	0.122	0.539	0.336	0.002	0.124	0.548	
IMV residual (d)	-0.007	0.344	-0.021	0.007					
O2 residual (d)	-0.008	0.037	-0.015	0.000	-0.004	0.327	-0.011	0.004	
CPAP residual (d)	-0.019	0.093	-0.041	0.003					
Surfactant residual	-0.187	0.121	-0.425	0.050					
Antenatal Steroids	-0.076	0.784	-0.621	-0.469					
Sepsis	-0.524	0.009	-0.945	-0.139	-0.258	0.223	-0.674	0.159	
FVC z-score									0.124
Gestational Age (w)	0.080	0.031	0.007	0.152	0.098	0.006	0.028	0.169	
Birth weight z-score	0.297	0.004	0.096	0.498	0.340	0.001	0.142	0.538	
IMV residual (d)	-0.011	0.105	-0.024	0.002					
O2 residual (d)	-0.004	0.243	-0.012	0.003					
CPAP residual (d)	-0.020	0.062	-0.048	0.001					
Surfactant residual	-0.148	0.204	-0.378	0.081					
Antenatal Steroids	0.243	0.362	-0.283	0.768					
Sepsis	-0.231	0.251	-0.628	0.166					
FEV1/FVC z-score									0.050
Gestational Age (w)	0.027	0.451	-0.044	0.098					
Birth weight z-score	0.049	0.632	-0.152	0.249					
IMV residual (d)	0.005	0.485	-0.008	0.018					
O2 residual (d)	-0.006	0.119	-0.013	0.001					
CPAP residual (d)	0.004	0.707	-0.017	0.025					
Surfactant residual	-0.041	0.719	-0.264	0.182					
Antenatal Steroids	-0.615	0.015	-1.111	-0.120	-0.615	0.015	-1.111	-0.120	
Sepsis	-0.262	0.176	-0.644	0.120					
FEF25-75 z-score									0.070
Gestational Age (w)	0.063	0.106	-0.014	0.140					
Birth weight z-score	0.193	0.080	-0.023	0.410					
IMV residual (d)	-0.001	0.926	-0.015	0.014					
O2 residual (d)	-0.009	0.018	-0.017	-0.002	-0.0088	0.040	-0.016	-0.000	
CPAP residual (d)	-0.006	0.578	-0.029	0.016					
Surfactant residual	-0.101	0.413	-0.344	0.142					
Antenatal Steroids	-0.461	0.099	-1.010	0.088					
Sepsis	-0.441	0.037	-0.854	-0.028	-0.365	0.084	-0.778	0.049	

Supplementary Table 2: Neonatal factors influencing forced flows and volumes in preterm children

	Univariate Analysis				Multivariate Analysis				
	B	p-value	95% CI Lower	95% CI Upper	B	p-value	95% CI Lower	95% CI Upper	Model R ²
LCI									0.037
Gestational Age (w)	0.036	0.179	-0.017	0.089					
Birth weight z-score	-0.044	0.568	-0.194	0.107					
IMV residual (d)	-0.005	0.350	-0.014	0.005					
O2 residual (d)	-0.001	0.591	-0.007	0.004					
CPAP residual (d)	0.000	0.966	-0.015	0.016					
Surfactant residual	0.190	0.025	0.024	0.355	0.190	0.025	0.024	0.355	
Antenatal Steroids	0.020	0.918	-0.362	0.402					
Sepsis	0.128	0.384	-0.161	0.417					
FRC z-score									
Gestational Age (w)	0.024	0.582	-0.062	0.111					
Birth weight z-score	-0.090	0.467	-0.334	0.153					
IMV residual (d)	-0.001	0.905	-0.017	0.015					
O2 residual (d)	0.001	0.781	-0.007	0.010					
CPAP residual (d)	0.009	0.479	-0.016	0.034					
Surfactant residual	0.041	0.767	-0.231	0.313					
Antenatal Steroids	-0.267	0.392	-0.883	0.349					
Sepsis	0.281	0.236	-0.186	0.747					
TLC z-score									
Gestational Age (w)	0.046	0.173	-0.021	0.113					
Birth weight z-score	0.102	0.280	-0.084	0.289					
IMV residual (d)	-0.004	0.492	-0.017	0.008					
O2 residual (d)	-0.002	0.466	-0.009	0.004					
CPAP residual (d)	-0.010	0.305	-0.030	0.009					
Surfactant residual	0.050	0.639	-0.161	0.262					
Antenatal Steroids	0.024	0.920	-0.456	0.504					
Sepsis	0.100	0.589	-0.264	0.464					
RV z-score									
Gestational Age (w)	0.000	0.995	-0.084	0.084					
Birth weight z-score	-0.226	0.058	-0.459	0.008					
IMV residual (d)	-0.001	0.904	-0.016	0.014					
O2 residual (d)	0.001	0.724	-0.007	0.010					
CPAP residual (d)	0.008	0.492	-0.016	0.033					
Surfactant residual	0.119	0.374	-0.144	0.381					
Antenatal Steroids	-0.334	0.269	-0.929	0.261					
Sepsis	0.411	0.071	-0.036	0.859					

FRC/TLC									0.070
Gestational Age (w)	-0.348	0.163	-0.838	0.143					
Birth weight z-score	-1.428	0.042	-2.802	-0.054	-1.091	0.120	-2.469	0.087	
IMV residual (d)	0.017	0.702	-0.073	0.108					
O2 residual (d)	0.029	0.246	-0.020	0.078					
CPAP residual (d)	0.196	0.006	0.056	0.335	0.173	0.017	0.032	0.315	
Surfactant residual	-0.118	0.881	-1.672	1.436					
Antenatal Steroids	-2.199	0.217	-5.702	1.304					
Sepsis	2.451	0.069	-0.191	5.092					
RV/TLC									0.071
Gestational Age (w)	-0.245	0.300	-0.712	0.221					
Birth weight z-score	-1.923	0.004	-3.204	-0.641	-1.832	0.005	-3.106	-0.557	
IMV residual (d)	0.012	0.783	-0.074	0.097					
O2 residual (d)	0.017	0.472	-0.030	0.063					
CPAP residual (d)	0.123	0.072	-0.011	0.257					
Surfactant residual	0.555	0.457	-0.917	2.026					
Antenatal Steroids	-2.573	0.127	-5.886	0.740					
Sepsis	2.514	0.049	0.015	5.013	2.240	0.072	-0.203	4.683	

Supplementary Table 3: Neonatal factors influencing lung volume outcomes in preterm children

	Univariate Analysis				Multivariate Analysis				
	B	p-value	95% CI Lower	95% CI Upper	B	p-value	95% CI Lower	95% CI Upper	Model R ²
DLCO z-score									0.071
Gestational Age (w)	0.008	0.894	-0.01.08	0.123					
Birth weight z-score	-0.196	0.230	-0.520	0.127					
IMV residual (d)	-0.017	0.109	-0.038	0.004					
O2 residual (d)	0.002	0.756	-0.010	0.013					
CPAP residual (d)	0.038	0.022	0.006	0.070	0.038	0.022	0.006	0.070	
Surfactant residual	-0.053	0.771	-0.418	0.311					
Antenatal Steroids	0.332	0.416	-0.477	1.140					
Sepsis	0.274	0.383	-0.349	0.896					
VA z-score									0.056
Gestational Age (w)	-0.010	0.872	-0.132	0.112					
Birth weight z-score	-0.345	0.043	-0.681	-0.012	-0.345	0.043	-0.681	-0.012	
IMV residual (d)	-0.013	0.240	-0.035	0.009					
O2 residual (d)	0.009	0.149	-0.003	0.021					
CPAP residual (d)	0.032	0.071	-0.003	0.066					
Surfactant residual	-0.037	0.849	-0.421	0.348					
Antenatal Steroids	0.367	0.393	-0.485	1.220					
Sepsis	0.312	0.346	-0.344	0.966					
KCO z-score									
Gestational Age (w)	0.010	0.829	-0.080	0.099					
Birth weight z-score	0.099	0.437	-0.153	0.350					
IMV residual (d)	-0.008	0.314	-0.024	0.008					
O2 residual (d)	-0.007	0.120	-0.016	0.002					
CPAP residual (d)	0.014	0.276	-0.012	0.040					
Surfactant residual	0.001	0.995	-0.282	0.283					
Antenatal Steroids	0.050	0.875	-0.579	0.679					
Sepsis	0.064	0.792	-0.420	0.548					

Supplementary Table 4: Neonatal factors influencing gas exchange properties of the lung in preterm children

	Univariate Analysis				Multivariate Analysis				
	B	p-value	95% CI Lower	95% CI Upper	B	p-value	95% CI Lower	95% CI Upper	Model R ²
Rrs8 z-score									0.034
Gestational Age (w)	0.028	0.429	-0.042	0.098					
Birth weight z-score	-0.025	0.803	-0.223	0.173					
IMV residual (d)	0.005	0.458	-0.008	0.018					
O2 residual (d)	0.003	0.416	-0.004	0.010					
CPAP residual (d)	-0.022	0.033	-0.042	-0.002	-0.022	0.033	-0.042	-0.002	
Surfactant residual	-0.014	0.897	-0.234	0.205					
Antenatal Steroids	-0.063	0.801	-0.559	0.432					
Sepsis	-0.105	0.584	-0.483	0.273					
Xrs8 z-score									
Gestational Age (w)	0.031	0.366	-0.036	0.097					
Birth weight z-score	0.078	0.416	-0.111	0.266					
IMV residual (d)	-0.003	0.681	-0.015	0.010					
O2 residual (d)	-0.006	0.070	-0.013	0.001					
CPAP residual (d)	0.011	0.280	-0.009	0.030					
Surfactant residual	-0.073	0.490	-0.282	0.136					
Antenatal Steroids	-0.030	0.901	-0.503	0.443					
Sepsis	-0.295	0.105	-0.653	0.063					
AX z-score									0.034
Gestational Age (w)	-0.036	0.363	-0.115	0.042					
Birth weight z-score	-0.077	0.495	-0.298	0.145					
IMV residual (d)	0.004	0.546	-0.010	0.019					
O2 residual (d)	0.009	0.035	0.001	0.018	0.009	0.035	0.001	0.018	
CPAP residual (d)	-0.009	0.421	-0.033	0.014					
Surfactant residual	0.035	0.776	-0.211	0.282					
Antenatal Steroids	0.085	0.763	-0.472	0.642					
Sepsis	0.341	0.112	-0.080	0.763					
fres z-score									0.031
Gestational Age (w)	-0.046	0.299	-0.134	0.042					
Birth weight z-score	-0.141	0.264	-0.389	0.107					
IMV residual (d)	0.006	0.492	-0.010	0.022					
O2 residual (d)	0.010	0.045	0.000	0.019	0.010	0.045	0.000	0.019	
CPAP residual (d)	-0.009	0.477	-0.035	0.017					
Surfactant residual	-0.049	0.728	-0.325	0.228					
Antenatal Steroids	0.175	0.579	-0.449	0.800					
Sepsis	0.338	0.160	-0.136	0.812					

Supplementary Table 5: Neonatal factors influencing respiratory system mechanics in preterm children

	Univariate Analysis				Multivariate Analysis				
	B	p-value	95% CI Lower	95% CI Upper	B	p-value	95% CI Lower	95% CI Upper	Model R ²
Linear/Triangular Opacities									0.225
Gestational Age (w)	-0.347	<0.001	-0.474	-0.220	-0.330	<0.001	-0.463	-0.196	
Birth weight z-score	0.003	0.988	-0.395	0.401					
IMV residual (d)	0.030	0.020	0.005	0.055	0.029	0.015	0.006	0.052	
O2 residual (d)	0.011	0.107	-0.003	0.025					
CPAP residual (d)	-0.023	0.255	-0.064	0.017					
Surfactant residual	-0.221	0.325	-0.662	0.221					
Antenatal Steroids	0.171	0.738	-0.838	1.179					
Sepsis	1.008	0.008	0.266	1.750	0.270	0.466	-0.460	0.999	
Hypoattenuation (Inspiration)									0.039
Gestational Age (w)	-0.113	0.023	-0.211	-0.016	-0.113	0.023	-0.211	-0.016	
Birth weight z-score	0.094	0.507	-0.186	0.375					
IMV residual (d)	0.017	0.063	-0.001	0.034					
O2 residual (d)	0.006	0.204	-0.003	0.016					
CPAP residual (d)	-0.011	0.463	-0.039	0.018					
Surfactant residual	0.142	0.369	-0.170	0.454					
Antenatal Steroids	-0.231	0.522	-0.942	0.480					
Sepsis	0.431	0.112	-0.102	0.964					
Hypoattenuation (expiration)									
Gestational Age (w)	-0.106	0.088	-0.228	0.016					
Birth weight z-score	0.260	0.139	-0.086	0.605					
IMV residual (d)	0.011	0.317	-0.011	0.033					
O2 residual (d)	-0.006	0.312	-0.018	0.006					
CPAP residual (d)	0.003	0.883	-0.033	0.038					
Surfactant residual	-0.011	0.957	-0.398	0.377					
Antenatal Steroids	0.215	0.630	-0.667	1.097					
Sepsis	0.082	0.808	-0.585	0.749					
Bronchiectasis									0.035
Gestational Age (w)	0.003	0.923	-0.058	0.064					
Birth weight z-score	0.189	0.032	0.017	0.362	0.189	0.032	0.017	0.362	
IMV residual (d)	0.000	0.995	-0.110	0.110					
O2 residual (d)	-0.004	0.212	-0.010	0.002					
CPAP residual (d)	-0.001	0.953	-0.019	0.017					

Surfactant residual	0.025	0.785	-0.156	0.206					
Antenatal Steroids	0.280	0.277	-0.193	0.668					
Sepsis	-0.119	0.507	-0.473	0.235					
Peribronchial thickening									
Gestational Age (w)	-0.003	0.957	-0.115	0.109					
Birth weight z-score	0.015	0.926	-0.305	0.335					
IMV residual (d)	0.011	0.279	-0.009	0.031					
O2 residual (d)	0.003	0.631	-0.008	0.014					
CPAP residual (d)	-0.019	0.249	-0.052	0.014					
Surfactant residual	-0.024	0.890	-0.371	0.322					
Antenatal Steroids	0.039	0.923	-0.755	0.832					
Sepsis	0.217	0.507	-0.428	0.862					
Collapse/Consolidation									0.075
Gestational Age (w)	-0.020	0.066	-0.041	0.001					
Birth weight z-score	-0.006	0.841	-0.068	0.056					
IMV residual (d)	0.001	0.458	-0.002	0.005					
O2 residual (d)	0.002	0.037	0.000	0.004	0.002	0.092	0.000	0.004	
CPAP residual (d)	-0.003	0.422	-0.009	0.004					
Surfactant residual	-0.024	0.479	-0.091	0.043					
Antenatal Steroids	0.088	0.249	-0.062	0.238					
Sepsis	0.157	0.007	0.044	0.270	0.140	0.017	0.025	0.254	
Total CT Score									0.127
Gestational Age (w)	-0.640	0.001	-0.998	-0.282	-0.642	<0.001	-0.994	-0.291	
Birth weight z-score	0.750	0.177	-0.343	1.843					
IMV residual (d)	0.078	0.022	0.011	0.144	0.078	0.016	0.015	0.142	
O2 residual (d)	0.015	0.428	-0.022	0.051					
CPAP residual (d)	-0.067	0.226	-0.177	0.042					
Surfactant residual	-0.151	0.800	-1.327	1.026					
Antenatal Steroids	0.868	0.508	-1.728	3.454					
Sepsis	1.8751	0.109	-0.398	3.899					

Supplementary Table 6: Neonatal factors influencing chest CT outcomes in children born preterm

	Univariate Analysis				Multivariate Analysis				
	B	p-value	95% CI Lower	95% CI Upper	B	p-value	95% CI Lower	95% CI Upper	Model R ²
FEV1 z-score									0.068
Subpleural opacities	-0.140	0.007	-0.241	-0.039	-0.140	0.007	-0.241	-0.039	
Hypoattenuation- Insp	-0.090	0.185	-0.223	0.044					
Hypoattenuation- Exp	0.012	0.829	-0.102	0.127					
Bronchiectasis	0.158	0.156	-0.067	0.377					
Peribronchial thickening	-0.102	0.114	-0.229	0.025					
Collapse/Consolidation	-0.450	0.157	-1.076	0.177					
Total CT score	-0.034	0.075	-0.071	0.004					
FVC z-score									
Subpleural opacities	-0.092	0.060	-0.187	0.004					
Hypoattenuation- Insp	0.030	0.638	-0.097	0.157					
Hypoattenuation- Exp	0.004	0.935	-0.099	0.108					
Bronchiectasis	0.003	0.979	-0.218	0.224					
Peribronchial thickening	-0.17	0.780	-0.138	0.104					
Collapse/Consolidation	-0.347	0.259	-0.955	0.260					
Total CT score	-0.016	0.381	-0.051	0.020					
FEV1/FVC z-score									0.104
Subpleural opacities	-0.099	0.054	-0.199	0.002					
Hypoattenuation- Insp	-0.165	0.013	-0.295	-0.036	-0.138	0.038	-0.268	-0.008	
Hypoattenuation- Exp	-0.048	0.383	-0.156	0.061					
Bronchiectasis	0.120	0.303	-0.110	0.351					
Peribronchial thickening	-0.151	0.017	-0.274	-0.028	-0.124	0.050	-0.247	0.000	
Collapse/Consolidation	-0.444	0.179	-1.094	0.207					
Total CT score	-0.045	0.015	-0.081	-0.009					
FEF25-75 z-score									0.135
Subpleural opacities	-0.159	0.003	-0.264	-0.054	-0.118	0.050	-0.245	-0.000	
Hypoattenuation- Insp	-0.164	0.022	-0.304	-0.024	-0.061	0.442	-0.217	0.095	
Hypoattenuation- Exp	-0.046	0.432	-0.163	0.070					
Bronchiectasis	0.085	0.499	-0.164	0.335					
Peribronchial thickening	-0.167	0.014	-0.299	-0.350	-0.130	0.050	-0.261	0.002	
Collapse/Consolidation	-0.636	0.072	-1.331	0.058					
Total CT score	--0.026	0.004	-0.095	-0.018					

Supplementary Table 7: The impact of chest CT abnormalities on forced expiratory flows and volumes (spirometry outcomes).

	Univariate Analysis				Multivariate Analysis				
	B	p-value	95% CI Lower	95% CI Upper	B	p-value	95% CI Lower	95% CI Upper	Model R ²
LCI									
Subpleural opacities	-0.052	0.139	-0.121	0.017					
Hypoattenuation- Insp	0.031	0.531	-0.067	0.130					
Hypoattenuation- Exp	0.004	0.923	-0.074	0.081					
Bronchiectasis	-0.127	0.085	-0.271	0.018					
Peribronchial thickening	-0.078	0.069	-0.161	0.006					
Collapse/Consolidation	-0.159	0.490	-0.615	0.296					
Total CT score	-0.016	0.226	-0.041	0.010					
FRC z-score									
Subpleural opacities	0.313	0.375	-0.383	1.009					
Hypoattenuation- Insp	-0.451	0.363	-1.429	0.527					
Hypoattenuation- Exp	-0.473	0.224	-1.239	0.293					
Bronchiectasis	1.086	0.139	-0.357	2.529					
Peribronchial thickening	0.410	0.337	-0.433	1.253					
Collapse/Consolidation	-1.586	0.490	-6.127	2.955					
Total CT score	0.020	0.877	-0.235	0.275					
TLC z-score									0.043
Subpleural opacities	0.020	0.659	-0.506	0.162					
Hypoattenuation- Insp	0.044	0.491	-0.082	0.169					
Hypoattenuation- Exp	-0.020	0.693	-0.118	0.079					
Bronchiectasis	0.202	0.030	0.020	0.384	0.202	0.030	0.020	0.384	
Peribronchial thickening	0.081	0.140	-0.027	0.188					
Collapse/Consolidation	-0.270	0.348	-0.838	0.298					
Total CT score	0.015	0.356	-0.017	0.048					
RV z-score									0.085
Subpleural opacities	0.067	0.244	-0.047	0.182					
Hypoattenuation- Insp	-0.027	0.748	-0.194	0.139					
Hypoattenuation- Exp	-0.093	0.141	-0.218	0.031					
Bronchiectasis	0.166	0.164	-0.069	0.402					
Peribronchial thickening	0.060	0.388	-0.078	0.198					
Collapse/Consolidation	-1.156	0.002	-1.892	-0.420	-1.156	0.002	-1.892	-0.420	
Total CT score	0.002	0.928	-0.040	0.044					
FRC/TLC									
Subpleural opacities	0.313	0.375	-0.383	1.009					
Hypoattenuation- Insp	-0.451	0.363	-1.429	0.527					
Hypoattenuation- Exp	-0.473	0.224	-1.239	0.293					
Bronchiectasis	1.086	0.139	-0.357	2.529					

Peribronchial thickening	0.410	0.337	-0.433	1.253					
Collapse/Consolidation	-1.586	0.490	-6.127	2.955					
Total CT score	0.020	0.877	-0.235	0.275					
RV/TLC									0.088
Subpleural opacities	0.422	0.202	-0.231	1.075					
Hypoattenuation- Insp	-0.283	0.558	-1.235	0.670					
Hypoattenuation- Exp	-0.614	0.090	-1.326	0.098					
Bronchiectasis	0.675	0.325	-0.680	2.030					
Peribronchial thickening	0.153	0.703	-0.639	0.945					
Collapse/Consolidation	-6.779	0.002	-10.991	-2.566	-6.779	0.002	-10.991	-2.566	
Total CT score	-0.024	0.847	-0.265	0.218					

Supplementary Table 8: The impact of chest CT abnormalities on measures of lung volume and ventilation inhomogeneity.

	Univariate Analysis				Multivariate Analysis				
	B	p-value	95% CI Lower	95% CI Upper	B	p-value	95% CI Lower	95% CI Upper	Model R ²
DLCO z-score									
Subpleural opacities	-0.069	0.359	-0.218	0.080					
Hypoattenuation- Insp	-0.139	0.181	-0.344	0.066					
Hypoattenuation- Exp	-0.020	0.804	-0.177	0.137					
Bronchiectasis	0.167	0.247	-0.119	0.452					
Peribronchial thickening	0.082	0.353	-0.093	0.256					
Collapse/Consolidation	0.382	0.424	-0.568	1.333					
Total CT score	-0.013	0.621	-0.066	0.040					
VA z-score									
Subpleural opacities	0.079	0.299	-0.072	0.231					
Hypoattenuation- Insp	0.106	0.316	-0.104	0.316					
Hypoattenuation- Exp	0.037	0.642	-0.122	0.197					
Bronchiectasis	0.088	0.552	-0.205	0.380					
Peribronchial thickening	-0.003	0.971	-0.182	0.176					
Collapse/Consolidation	0.838	0.082	-0.109	1.785					
Total CT score	0.022	0.405	-0.031	0.076					
KCO z-score									0.223
Subpleural opacities	-0.167	0.005	-0.281	-0.052	-0.090	0.144	-0.212	0.032	
Hypoattenuation- Insp	-0.288	<0.001	-0.440	-0.135	-0.233	0.009	-0.406	-0.061	
Hypoattenuation- Exp	-0.074	0.249	-0.201	0.053					
Bronchiectasis	0.098	0.405	-0.136	0.333					
Peribronchial thickening	0.094	0.190	-0.048	0.235					
Collapse/Consolidation	-0.407	0.297	-1.179	0.366					
Total CT score	-0.042	0.047	-0.084	-0.001					

Supplementary Table 9: The impact of chest CT abnormalities on measures of gas exchange.

	Univariate Analysis				Multivariate Analysis				
	B	p-value	95% CI Lower	95% CI Upper	B	p-value	95% CI Lower	95% CI Upper	Model R ²
Rrs8 z-score									
Subpleural opacities	-0.020	0.716	-0.128	0.088					
Hypoattenuation- Insp	-0.062	0.488	-0.237	0.114					
Hypoattenuation- Exp	0.005	0.929	-0.116	0.127					
Bronchiectasis	-0.045	0.657	-0.244	0.154					
Peribronchial thickening	0.083	0.182	-0.040	0.206					
Collapse/Consolidation	0.052	0.892	-0.711	0.816					
Total CT score	0.006	0.766	-0.037	0.050					
Xrs8 z-score									
Subpleural opacities	-0.038	0.468	-0.142	0.066					
Hypoattenuation- Insp	-0.042	0.620	-0.211	0.127					
Hypoattenuation- Exp	-0.025	0.675	-0.142	0.092					
Bronchiectasis	0.126	0.189	-0.063	0.316					
Peribronchial thickening	-0.073	0.225	-0.191	0.045					
Collapse/Consolidation	-0.243	0.511	-0.974	0.488					
Total CT score	-0.019	0.365	-0.060	0.022					
AX z-score									
Subpleural opacities	0.063	0.286	-0.053	0.179					
Hypoattenuation- Insp	0.048	0.612	-0.140	0.236					
Hypoattenuation- Exp	0.074	0.262	-0.056	0.203					
Bronchiectasis	-0.160	0.135	-0.370	0.050					
Peribronchial thickening	-0.005	0.937	-0.141	0.131					
Collapse/Consolidation	0.421	0.315	-0.397	1.221					
Total CT score	0.022	0.353	-0.024	0.067					
Fres z-score									
Subpleural opacities	0.107	0.110	-0.024	0.238					
Hypoattenuation- Insp	-0.015	0.890	-0.229	0.199					
Hypoattenuation- Exp	0.088	0.237	-0.059	0.236					
Bronchiectasis	-0.142	0.244	-0.382	0.098					
Peribronchial thickening	0.028	0.719	-0.127	0.183					
Collapse/Consolidation	0.405	0.387	-0.520	1.330					
Total CT score	0.033	0.214	-0.019	0.085					

Supplementary Table 10: The impact of chest CT abnormalities on measures of respiratory system mechanics (Forced Oscillation Technique)