

Table S1 Spearman correlation coefficients of different fractions of intrapulmonary vessel volume with RHC measurements in patients with PH

Subgroup of study sample	Lung volume fraction	mPAP	P value	PAWP	P value	PVR	P value
All PH patients	Whole lung	0.07	0.53	-0.12	0.31	0.14	0.25
	80% peel lung	0.03	0.81	-0.12	0.30	0.11	0.34
	50% peel lung	0.01	0.92	-0.13	0.27	0.14	0.25
	20% peel lung	-0.07	0.57	-0.20	0.10	0.11	0.36
	80% core lung	0.09	0.46	-0.10	0.39	0.13	0.26
	50% core lung	0.12	0.30	-0.07	0.55	0.14	0.24
	20% core lung	0.14	0.23	-0.03	0.83	0.15	0.22
Postcapillary PH	Whole lung	0.58	0.003	0.38	0.07	0.29	0.17
	80% peel lung	0.54	0.007	0.37	0.08	0.22	0.30
	50% peel lung	0.34	0.10	0.22	0.30	0.10	0.64
	20% peel lung	0.05	0.82	-0.07	0.74	0.10	0.63
	80% core lung	0.57	0.003	0.40	0.05	0.28	0.19
	50% core lung	0.71	<0.001	0.35	0.09	0.45	0.029
	20% core lung	0.58	0.003	0.29	0.17	0.44	0.03
Precapillary PH	Whole lung	-0.08	0.58	-0.06	0.66	-0.06	0.67
	80% peel lung	-0.13	0.37	-0.10	0.49	-0.08	0.60
	50% peel lung	-0.06	0.69	-0.06	0.69	0.01	0.96
	20% peel lung	-0.04	0.80	-0.24	0.10	0.04	0.81
	80% core lung	-0.08	0.61	-0.05	0.74	-0.06	0.68
	50% core lung	-0.11	0.47	-0.02	0.87	-0.09	0.53
	20% core lung	-0.08	0.59	0.06	0.70	-0.09	0.55

RHC, right heart catheter; PH, pulmonary hypertension; mPAP, mean pulmonary arterial pressure; PAWP, pulmonary arterial wedge pressure; PVR, pulmonary vascular resistance.

Table S2 Multivariable linear regression analysis in patients with PH groups 1, 2 or 4 for the explanation of changes in BSA-corrected 50% core lung vessel volume by mPAP, CO and PH group

Models	Variables	Estimate	Standard error	P value	Adjusted r ²
Model 1	Intercept	40.326	10.815	<0.001***	0.030
	mPAP	0.374	0.165	0.027*	
	CO	1.418	1.446	0.33	
	PH group 2	-2.389	4.625	0.61	
	PH group 4	-2.436	5.220	0.64	
Model 2	Intercept	57.457	8.033	<0.001***	-0.043
	mPAP	-	-	-	
	CO	0.885	1.479	0.55	
	PH group 2	-1.937	4.792	0.69	
	PH group 4	-1.806	5.406	0.74	
Model 3	Intercept	38.679	10.268	<0.001***	0.059
	mPAP	0.368	0.162	0.027*	
	CO	1.473	1.421	0.30	
	PH group 2	-	-	-	
	PH group 4	-	-	-	
Model 4	Intercept	48.261	7.174	<0.001***	0.031
	mPAP	0.347	0.162	0.037*	
	CO	-	-	-	
	PH group 2	-2.654	4.616	0.57	
	PH group 4	-2.729	5.210	0.60	
Model 5	Intercept	55.979	7.153	<0.001***	-0.010
	mPAP	-	-	-	
	CO	0.934	1.451	0.52	
	PH group 2	-	-	-	
	PH group 4	-	-	-	
Model 6	Intercept	61.772	3.511	<0.001***	-0.031
	mPAP	-	-	-	
	CO	-	-	-	
	PH group 2	-2.128	4.754	0.66	
	PH group 4	-2.022	5.363	0.71	
Model 7	Intercept	46.765	6.685	<0.001***	0.058
	mPAP	0.340	0.160	0.037*	
	CO	-	-	-	
	PH group 2	-	-	-	
	PH group 4	-	-	-	

Model 1: full model including mPAP, CO and PH groups 1 (base case), 2 and 4 as covariables for the explanation of 50% core lung vessel volume. Model 2: inclusion of only CO and PH group as covariables. Model 3: inclusion of only mPAP and CO as covariables. Model 4: inclusion of only mPAP and PH group as covariables. Models 5–7: Univariate analyses of CO, PH group or mPAP for the explanation of 50% core lung vessel volume. Classification of patients to PH groups 1, 2 and 4 was based on the diagnosis in the patients' records. *, P value <0.05; ***, P value <0.001. PH, pulmonary hypertension; BSA, body surface area; mPAP, mean pulmonary arterial pressure; CO, cardiac output.