

SUPPLEMENTARY MATERIAL

**HEMODYNAMICS, EXERCISE CAPACITY AND CLINICAL EVENTS IN
PULMONARY ARTERIAL HYPERTENSION**

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Supplementary Material Table S1. Potential effect modifier of Δ PAP, Δ PVR, Δ RAP and Δ CI with change in Tau^2 and statistical significance for each outcome.

	Δ PAP		Δ PVR		Δ CI		Δ RAP	
	Change in Tau^2	p Value	Change in Tau^2	p Value	Change in Tau^2	p Value	Change in Tau^2	p Value
Composite Outcome								
Year of publication	-0.29	0.78	0.71	0.49	-0.80	0.45	0.16	0.88
Women	-0.40	0.70	0.81	0.44	-0.86	0.42	0.00	1.0
Age	0.09	0.93	1.46	0.18	-1.74	0.12	0.63	0.55
White race	0.43	0.68	0.51	0.63	0.47	0.67	-0.50	0.64
Idiopathic and/or familiar and/or hereditary PAH	-0.28	0.78	1.48	0.17	-1.13	0.30	0.70	0.51
Connective disease PAH	-0.29	0.77	1.74	0.11	-1.19	0.27	0.68	0.51
Congenital heart disease PAH	-0.72	0.49	0.22	0.83	-0.30	0.77	0.08	0.94
Duration of follow-up	-0.36	0.73	0.72	0.49	-0.76	0.47	1.00	0.35
Functional class I	-0.51	0.62	0.95	0.36	-0.79	0.46	-0.01	0.99
Functional class II	-0.48	0.64	0.79	0.45	-0.83	0.43	0.74	0.48
Functional class III	-0.49	0.63	0.86	0.41	-0.85	0.42	0.84	0.43
Functional class IV	-0.55	0.59	0.45	0.66	-0.59	0.58	0.22	0.83
Detski Quality Score	-0.39	0.70	0.40	0.70	-0.48	0.65	-0.06	0.96
Δ6MWD	0.20	0.84	0.18	0.86	-1.15	0.30	1.08	0.33
Baseline PAP	-0.74	0.47	0.90	0.39	-1.40	0.20	0.30	0.77
ΔPAP	NA	NA	0.99	0.34	-0.77	0.47	0.30	0.77
Baseline PVR	-0.51	0.62	0.53	0.60	-0.56	0.59	0.50	0.63
ΔPVR	-0.48	0.64	NA	NA	-0.80	0.45	0.54	0.61
Baseline CI	-0.08	0.94	0.83	0.43	-0.77	0.47	0.56	0.59
ΔCI	-0.38	0.71	-0.62	0.56	NA	NA	0.68	0.52
Baseline RAP	-0.23	0.82	0.43	0.68	-0.57	0.58	0.20	0.85
ΔRAP	-0.17	0.87	0.41	0.69	-0.62	0.56	NA	NA

Studies with most favorable changes in hemodynamics	1.21	0.29	-0.90	0.43	1.02	0.41	1.52	0.22
All-cause death								
Year of publication	0.52	0.62	0.06	0.96	-0.04	0.97	0.11	0.92
Women	0.52	0.62	0.18	0.87	0.23	0.83	-0.21	0.84
Age	0.52	0.62	0.03	0.98	0.19	0.86	0.06	0.96
White race	0.72	0.51	0.62	0.57	-0.08	0.94	-0.07	0.95
Idiopathic and/or familiar and/or hereditary PAH	0.38	0.71	0.21	0.84	-0.00	1.00	0.07	0.94
Connective disease PAH	0.56	0.60	0.10	0.92	-0.08	0.94	0.10	0.93
Congenital heart disease PAH	-0.16	0.88	0.03	0.98	0.16	0.88	0.07	0.95
Duration of follow-up	0.77	0.47	-0.06	0.95	0.21	0.84	-0.03	0.98
Functional class I	-0.14	0.89	-0.12	0.91	0.11	0.92	0.11	0.91
Functional class II	0.56	0.59	0.18	0.86	0.08	0.94	0.23	0.83
Functional class III	0.55	0.60	0.12	0.91	0.15	0.89	0.14	0.89
Functional class IV	0.64	0.55	0.19	0.86	-0.13	0.90	0.17	0.87
Detski Quality Score	0.58	0.58	0.11	0.92	-0.13	0.90	0.24	0.82
Δ6MWD	0.73	0.50	-0.23	0.83	0.39	0.72	-0.21	0.85
Baseline PAP	0.57	0.59	-0.04	0.97	0.13	0.90	0.19	0.86
ΔPAP	NA	NA	-0.51	0.63	0.07	0.95	0.04	0.97
Baseline PVR	0.70	0.51	0.12	0.91	0.15	0.89	0.17	0.87
ΔPVR	0.74	0.49	NA	NA	0.32	0.77	0.05	0.96
Baseline CI	-0.20	0.85	0.02	0.98	0.12	0.91	0.17	0.87
ΔCI	-0.08	0.94	0.27	0.80	0.16	0.88	0.16	0.88
Baseline RAP	-0.10	0.93	0.15	0.89	-0.13	0.90	0.33	0.76
ΔRAP	-0.17	0.88	-0.02	0.98	0.23	0.83	NA	NA
Studies with most favorable changes in	0.66	0.55	-0.73	0.52	1.29	0.42	1.04	0.41

hemodynamics								
Hospitalization for PAH and/or lung or heart-lung transplantation								
Year of publication	-1.75	0.14	-0.96	0.39	0.88	0.47	-1.04	0.38
Women	0.18	0.86	0.42	0.69	-0.52	0.65	-0.46	0.68
Age	0.06	0.95	0.36	0.74	-0.17	0.88	-1.68	0.19
White race	0.63	0.56	-0.39	0.72	0.37	0.77	-0.55	0.63
Idiopathic and/or familiar and/or hereditary PAH	0.10	0.92	0.41	0.70	-0.76	0.53	-0.31	0.77
Connective disease PAH	0.69	0.53	0.64	0.57	-0.12	0.92	-0.12	0.91
Congenital heart disease PAH	-1.84	0.16	-0.09	0.93	-0.19	0.86	-0.29	0.79
Duration of follow-up	0.56	0.60	0.57	0.60	-0.61	0.59	0.39	0.73
Functional class I	-0.22	0.83	0.43	0.69	-0.75	0.53	-0.77	0.50
Functional class II	0.15	0.89	0.44	0.68	0.22	0.85	0.24	0.82
Functional class III	0.21	0.84	0.42	0.69	0.07	0.95	0.25	0.82
Functional class IV	0.03	0.97	0.55	0.61	0.38	0.74	-0.01	0.99
Detski Quality Score	-0.70	0.54	-0.27	0.80	-0.03	0.98	-0.30	0.78
Δ6MWD	-0.23	0.83	-0.25	0.81	0.97	0.51	0.13	0.91
Baseline PAP	-0.41	0.70	0.27	0.80	-0.78	0.52	-0.68	0.55
ΔPAP	NA	NA	0.26	0.81	-1.38	0.30	0.06	0.95
Baseline PVR	0.38	0.72	-0.25	0.81	-0.34	0.77	0.93	0.42
ΔPVR	-0.01	0.99	NA	NA	-1.19	0.35	0.57	0.63
Baseline CI	-0.19	0.86	0.22	0.85	-0.32	0.78	0.19	0.86
ΔCI	-1.27	0.33	-1.09	0.39	NA	NA	0.59	0.61
Baseline RAP	-0.66	0.55	-0.17	0.88	-0.01	0.99	0.51	0.65
ΔRAP	-0.69	0.54	0.31	0.78	-0.63	0.59	NA	NA
Studies with most favorable changes in hemodynamics	0.59	0.61	NA	NA	NA	NA	NA	NA
Initiation of PAH rescue therapy								

Year of publication	0.10	0.92	0.73	0.48	-1.43	0.18	-0.02	0.98
Women	0.32	0.75	0.54	0.60	-0.87	0.40	-0.59	0.56
Age	0.65	0.53	0.81	0.43	-1.53	0.16	0.00	1.00
White race	0.72	0.49	0.63	0.55	-0.45	0.67	-1.81	0.12
Idiopathic and/or familial and/or hereditary PAH	0.46	0.65	1.28	0.22	-1.70	0.12	0.51	0.62
Connective disease PAH	0.08	0.94	1.25	0.24	-1.53	0.16	0.30	0.77
Congenital heart disease PAH	-0.44	0.67	0.07	0.95	-0.18	0.86	-0.33	0.75
Duration of follow-up	0.47	0.64	0.47	0.64	-0.96	0.36	0.46	0.66
Functional class I	0.06	0.95	0.88	0.39	-1.05	0.32	-0.02	0.98
Functional class II	0.22	0.83	0.66	0.52	-1.27	0.23	0.57	0.58
Functional class III	0.22	0.83	0.65	0.53	-1.21	0.25	0.64	0.54
Functional class IV	0.20	0.84	0.62	0.55	-1.08	0.31	0.04	0.96
Detski Quality Score	0.29	0.77	0.50	0.63	-0.89	0.39	-0.49	0.64
Δ6MWD	0.95	0.36	0.11	0.92	-0.72	0.49	0.83	0.43
Baseline PAP	-0.62	0.55	0.31	0.76	-0.82	0.43	-0.05	0.96
ΔPAP	NA	NA	0.53	0.60	-0.42	0.68	-0.07	0.95
Baseline PVR	0.39	0.70	-0.21	0.83	-0.91	0.39	0.23	0.82
ΔPVR	0.09	0.93	NA	NA	-0.57	0.59	-0.22	0.83
Baseline CI	0.20	0.85	0.55	0.59	-1.10	0.30	0.35	0.73
ΔCI	0.25	0.81	-0.36	0.72	NA	NA	-0.05	0.96
Baseline RAP	0.16	0.87	0.79	0.45	-1.58	0.15	0.30	0.77
ΔRAP	0.04	0.97	0.52	0.62	-0.90	0.39	NA	NA
Studies with most favorable changes in hemodynamics	NA	NA	NA	NA	NA	NA	NA	NA

PAH: pulmonary arterial hypertension

PVR: pulmonary vascular resistance

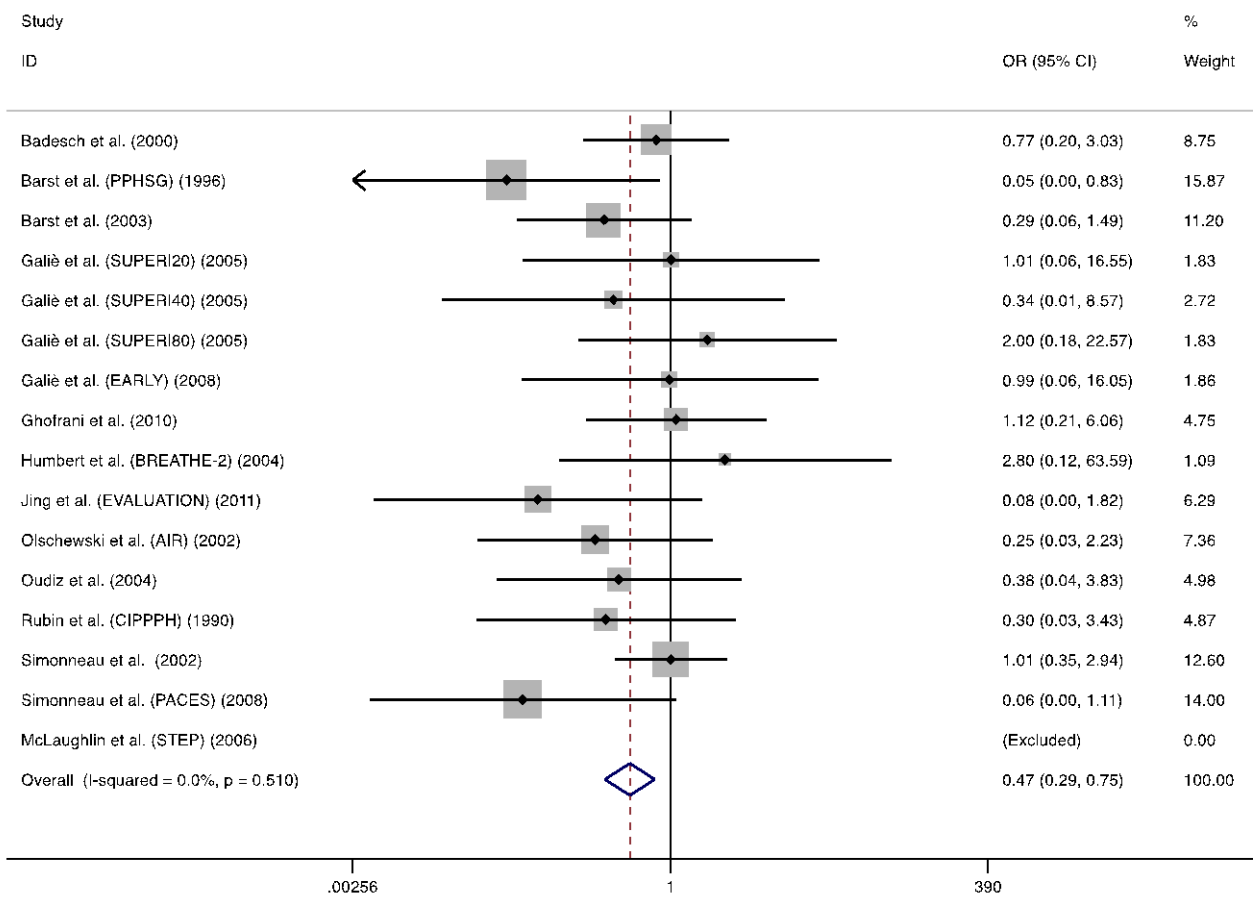
PAP: pulmonary artery pressure

CI: cardiac index

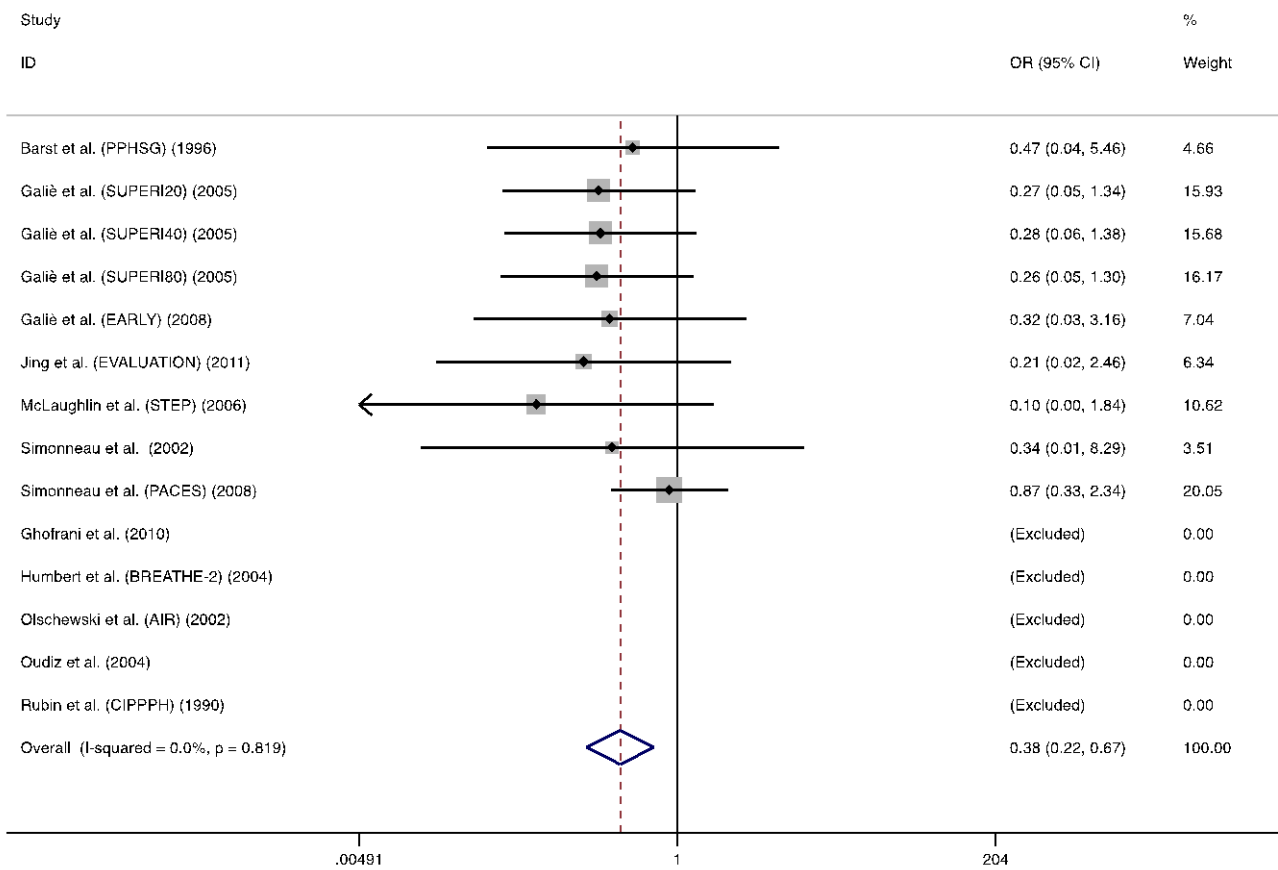
RAP: right atrial pressure

NA: not available

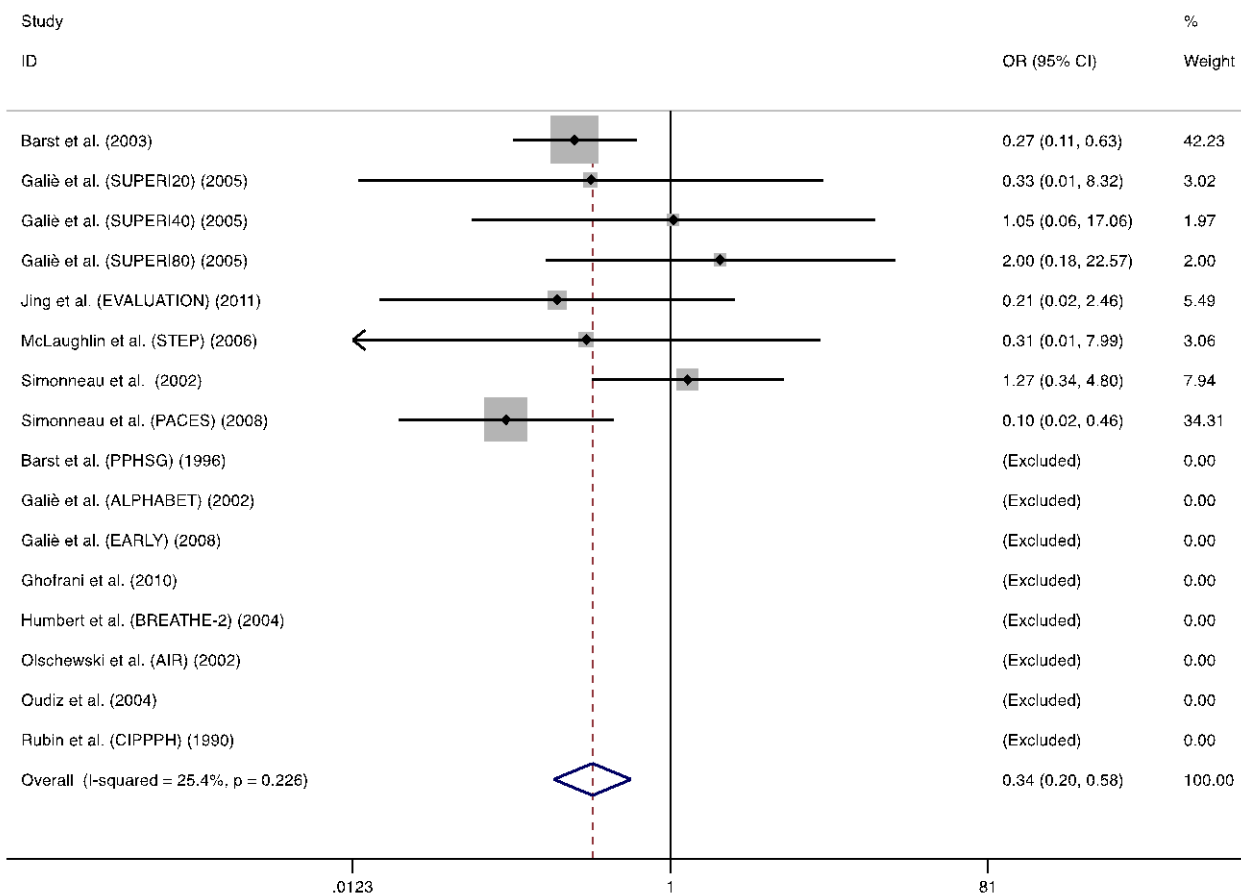
Supplementary Material Figure S1. OR estimate of all-cause death in active treatment groups compared with control groups.



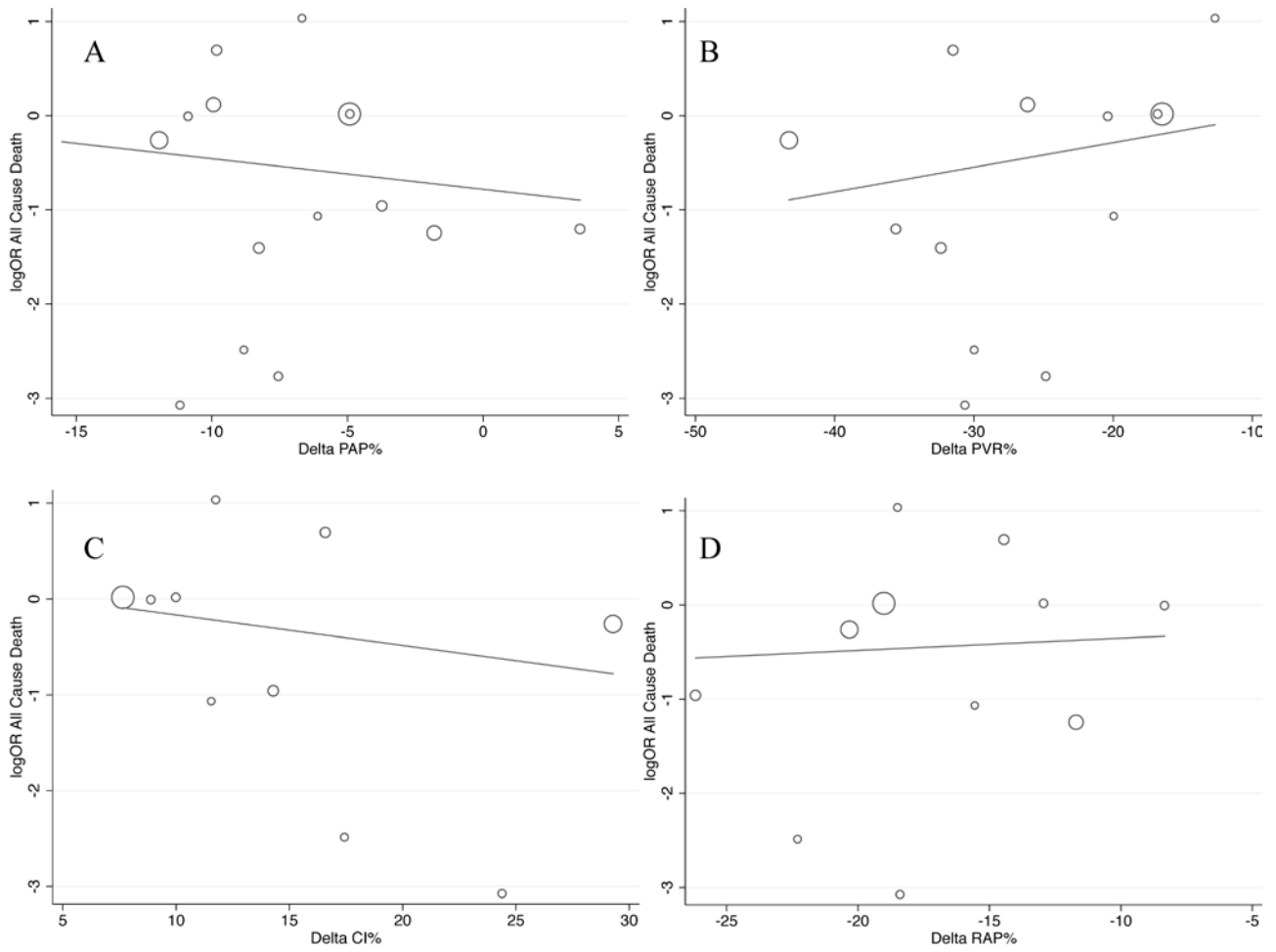
Supplementary Material Figure S2. OR estimate of hospitalization for PAH and/or lung or heart-lung transplantation in active treatment groups compared with control groups.



Supplementary Material Figure S3. OR estimate of initiation of PAH rescue therapy in active treatment groups compared with control groups.



Supplementary Material Figure S4. Meta-regression between all-cause death and Δ PAP (A), Δ PVR (B), Δ CI (C), and Δ RAP (D).



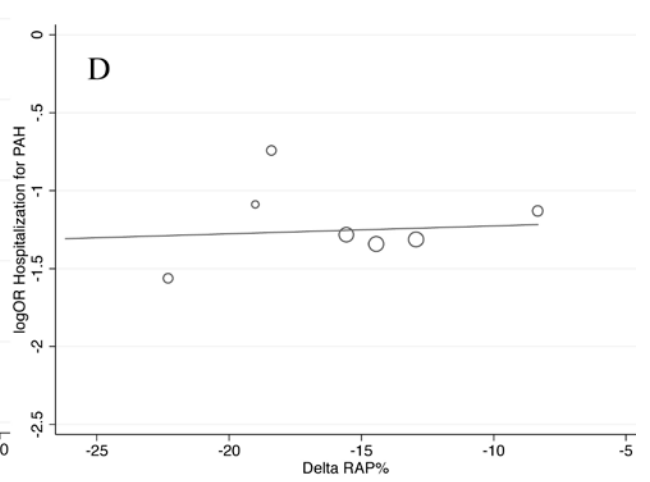
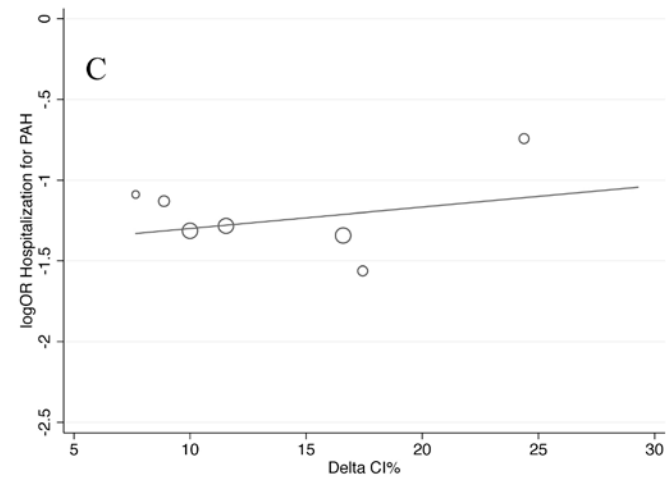
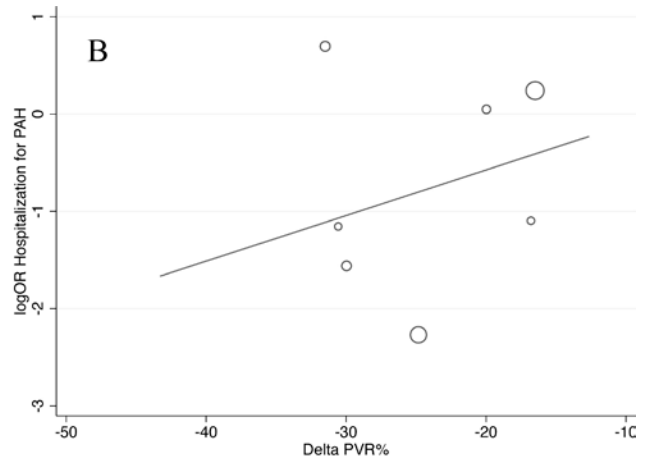
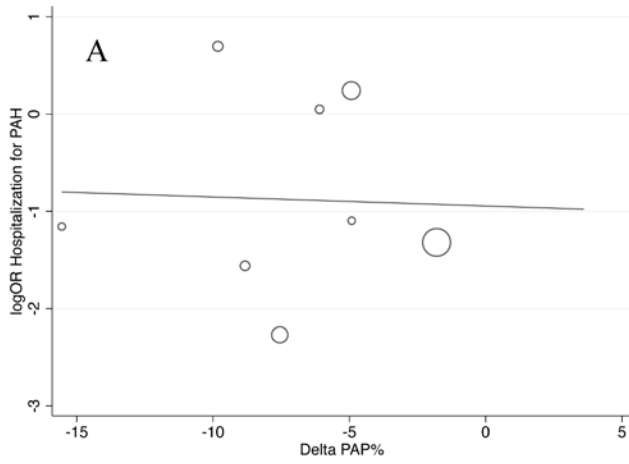
PVR: pulmonary vascular resistance

CI: cardiac index

PAP: pulmonary artery pressure

RAP: right atrial pressure

Supplementary Material Figure S5. Meta-regression between hospitalization for PAH and/or lung or heart-lung transplantation and Δ PAP (A), Δ PVR (B), Δ CI (C) and Δ RAP (D).



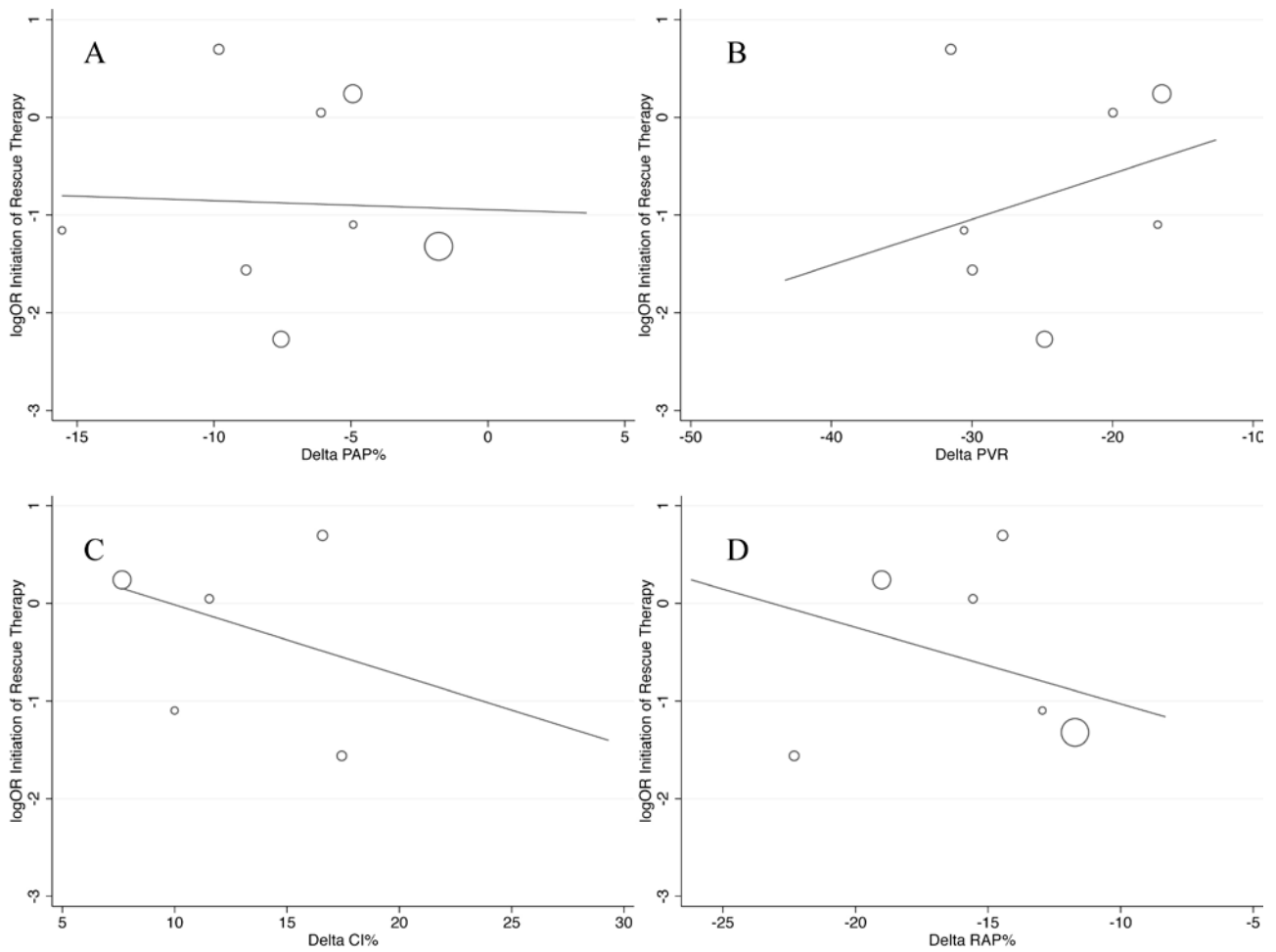
PVR: pulmonary vascular resistance

CI: cardiac index

PAP: pulmonary artery pressure

RAP: right atrial pressure

Supplementary Material Figure S6. Meta-regression between initiation of PAH rescue therapy and Δ PAP (A), Δ PVR (B), Δ CI (C) and Δ RAP (D).



PVR: pulmonary vascular resistance

CI: cardiac index

PAP: pulmonary artery pressure

RAP: right atrial pressure