

**Table S1** Effect of rapid fluid loading on hemodynamic determinations (only including patients with PAWP  $\leq 15$  mmHg)

Variables	Baseline (n=140)	Fluid loading (n=140)	Mean difference (95% CI)	P value
Systolic BP (mmHg)	143±26	143±25	0.2 (-2.6, 3.0)	>0.89 <sup>†</sup>
Diastolic BP (mmHg)	74±12	75±12	0.2 (-1.2, 1.6)	0.76 <sup>†</sup>
Heart rate (bpm)	76±15	75±13	-1.1 (-2.3, -0.1)	0.07 <sup>†</sup>
RAP (mmHg)	5±3	10±4	4.5 (3.9, 5.0)	<0.001 <sup>†</sup>
Systolic PAP (mmHg)	35±13	43±13	8.0 (7.1, 8.9)	<0.001 <sup>†</sup>
Mean PAP (mmHg)	24±9	32±8	7.5 (6.7, 8.2)	<0.001 <sup>†</sup>
Diastolic PAP (mmHg)	17±8	23±6	5.9 (5.1, 6.7)	<0.001 <sup>†</sup>
PAWP (mmHg)	10±3	17±5	7.4 (6.8, 7.9)	<0.001 <sup>†</sup>
RAP/PAWP	0.54±0.29	0.57±0.24	0.04 (-0.01, 0.09)	0.14 <sup>†</sup>
TPG (mmHg)	13 [9, 19]	13 [9, 19]	0.2 (-0.3, 0.8)	0.37 <sup>‡</sup>
DPG (mmHg)	5 [2, 10]	4 [2, 8]	-1.5 (-2.3, -0.7)	<0.001 <sup>‡</sup>
PAPi	3.4 [2.0, 5.5]	2.0 [1.4, 3.1]	-2.3 (-3.2, -1.5)	<0.001 <sup>‡</sup>
CO thermo (L/min)	5.9±2.0	6.6±2.2	0.7 (0.5, 0.8)	<0.001 <sup>†</sup>
CI thermo (L/min/m <sup>2</sup> )	3.0±0.9	3.4±1.0	0.3 (0.3, 0.4)	<0.001 <sup>†</sup>
SVI (mL/min/m <sup>2</sup> )	41.4±11.8	45.6±12.7	4.2 (2.8, 5.7)	<0.001 <sup>†</sup>
PAWP/CO (WU)	1.8±0.9	2.9±1.4	1.1 (1.0, 1.3)	<0.001 <sup>†</sup>
PVR (WU)	2.2 [1.5, 3.5]	2.1 [1.4, 3.5]	-0.2 (-0.4, 0.0)	0.001 <sup>‡</sup>
SVR (dynes·seconds/cm <sup>5</sup> )	1,382±514	1,198±459	-185 (-226, 143)	<0.001 <sup>†</sup>
PAC (mL/mmHg)	4.5 [3.1, 6.6]	4.4 [3.0, 6.7]	-0.4 (-1.5, 0.7)	0.62 <sup>‡</sup>
SAC (mL/mmHg)	1.2 [0.9, 1.6]	1.3 [0.9, 1.7]	0.1 (0.1, 0.2)	<0.001 <sup>‡</sup>
pEA (mmHg/mL)	0.4 [0.3, 0.6]	0.5 [0.3, 0.7]	0.04 (0.02, 0.07)	<0.001 <sup>‡</sup>
sEA (mmHg/mL)	1.6 [1.3, 2.2]	1.5 [1.2, 1.9]	-0.2 (-0.3, -0.1)	<0.001 <sup>‡</sup>

Data are presented as mean  $\pm$  SD or median [IQR] if not otherwise specified. <sup>†</sup>, paired *t*-test; <sup>‡</sup>, Wilcoxon signed-rank test. PAWP, pulmonary artery wedge pressure; 95% CI, 95% confidence interval; BP, blood pressure; bpm, beats per minute; RAP, right atrial pressure; PAP, pulmonary arterial pressure; PAWP, pulmonary artery wedge pressure; TPG, transpulmonary gradient; DPG, diastolic pulmonary gradient; PAPi, pulmonary artery pulsatility index; CO, cardiac output; thermo, thermodilution; CI, cardiac index; SVI, stroke volume index; WU, Wood units; PVR, pulmonary vascular resistance; SVR, systemic vascular resistance; PAC, pulmonary arterial compliance; SAC, systemic arterial compliance; pEA, pulmonary effective arterial elastance; sEA, systemic effective arterial elastance; SD, standard deviation; IQR, interquartile range.

**Table S2** Hemodynamic determinations based on pretest probability of PH-LHD (only including patients with PAWP  $\leq 15$  mmHg)

Features	High probability of PH-LHD	Intermediate probability of PH-LHD	Low probability of PH-LHD	P (ANOVA, Chi-square)
Age (years)	>70	60–70	<60	–
Number	45	46	49	–
$\Delta$ PAWP (mmHg)	8.2 $\pm$ 3.5	7.5 $\pm$ 2.7	6.5 $\pm$ 3.8	0.06
$\Delta$ PAWP/CO (WU)	1.5 $\pm$ 1.0	1.1 $\pm$ 0.8	0.8 $\pm$ 0.6	<0.001
RAP/PAWP with fluids	0.58 $\pm$ 0.31	0.59 $\pm$ 0.20	0.55 $\pm$ 0.20	0.75
PAWP >18 mmHg with fluids (n=140)	21/45 [47]	19/46 [41]	14/49 [29]	0.18
Cardiovascular risk factors <sup>†</sup>	>2	1–2	0	–
Number	32	92	16	–
$\Delta$ PAWP (mmHg)	7.2 $\pm$ 3.3	7.6 $\pm$ 3.5	6.3 $\pm$ 3.5	0.34
$\Delta$ PAWP/CO (WU)	1.1 $\pm$ 0.9	1.2 $\pm$ 0.9	0.9 $\pm$ 0.8	0.44
RAP/PAWP with fluids	0.60 $\pm$ 0.28	0.55 $\pm$ 0.22	0.66 $\pm$ 0.22	0.17
PAWP >18 mmHg with fluids (n=140)	17/32 [53]	34/92 [37]	3/16 [19]	0.06
LA enlargement (LAVi, mL/m <sup>2</sup> )	>34	28–34	<28	–
Number <sup>‡</sup>	42	27	58	–
$\Delta$ PAWP (mmHg)	7.3 $\pm$ 3.5	7.0 $\pm$ 3.7	7.3 $\pm$ 3.4	0.93
$\Delta$ PAWP/CO (WU)	1.0 $\pm$ 0.6	1.4 $\pm$ 1.4	1.1 $\pm$ 0.7	0.16
RAP/PAWP with fluids	0.53 $\pm$ 0.23	0.62 $\pm$ 0.21	0.58 $\pm$ 0.27	0.32
PAWP >18 mmHg with fluids (n=127)	19/42 [45]	13/27 [48]	20/58 [35]	0.39
MR severity	Moderate, 2+	Mild, 1+	None	–
Number	6	71	60	–
$\Delta$ PAWP (mmHg)	9.2 $\pm$ 3.8	7.2 $\pm$ 3.6	7.3 $\pm$ 3.3	0.42
$\Delta$ PAWP/CO (WU)	1.6 $\pm$ 0.9	1.2 $\pm$ 1.0	1.0 $\pm$ 0.7	0.30
RAP/PAWP with fluids	0.60 $\pm$ 0.14	0.63 $\pm$ 0.24	0.49 $\pm$ 0.22	0.004
PAWP >18 mmHg with fluids (n=137)	2/6 [33]	37/71 [52]	14/60 [23]	0.003
LV diastolic dysfunction	Grade II	Grade I	None	–
Number <sup>§</sup>	20	54	33	–
$\Delta$ PAWP (mmHg)	6.8 $\pm$ 3.5	7.5 $\pm$ 3.2	7.0 $\pm$ 3.6	0.64
$\Delta$ PAWP/CO (WU)	1.2 $\pm$ 1.3	1.1 $\pm$ 0.7	1.1 $\pm$ 0.8	0.82
RAP/PAWP with fluids	0.55 $\pm$ 0.22	0.57 $\pm$ 0.22	0.57 $\pm$ 0.24	0.93
PAWP >18 mmHg with fluids (n=107)	11/20 [55]	20/54 [37]	11/33 [33]	0.26
LV mass index <sup>¶</sup>	Moderate/severe	Mild	Normal	–
Number <sup>#</sup>	11	13	81	–
$\Delta$ PAWP (mmHg)	7.3 $\pm$ 2.9	10.3 $\pm$ 3.1	7.0 $\pm$ 3.3	0.004
$\Delta$ PAWP/CO (WU)	0.9 $\pm$ 0.6	1.8 $\pm$ 1.3	1.1 $\pm$ 0.9	0.02
RAP/PAWP with fluids	0.48 $\pm$ 0.15	0.59 $\pm$ 0.11	0.60 $\pm$ 0.25	0.31
PAWP >18 mmHg with fluids (n=105)	6/11 [55]	9/13 [69]	31/81 [38]	0.09

Variable cutoffs were based on Vachiéry *et al.* (5) and Lang *et al.* (13). Data are presented as mean  $\pm$  SD or n/total [%]. <sup>†</sup>, including diabetes mellitus, hyperlipidemia, obesity (BMI  $\geq 30$  kg/m<sup>2</sup>) and arterial hypertension; <sup>‡</sup>, available in 127 patients; <sup>§</sup>, reported in 107 patients; <sup>¶</sup>, normal:  $\leq 95$  for female and  $\leq 115$  g/m<sup>2</sup> for males, mild: 96–108 g/m<sup>2</sup> for females and 116–131 g/m<sup>2</sup> for males, moderate to severe  $\geq 109$  g/m<sup>2</sup> for females and  $\geq 132$  g/m<sup>2</sup> for males; <sup>#</sup>, reported in 105 patients. PH-LHD, pulmonary hypertension due to left heart disease; PAWP, pulmonary artery wedge pressure; ANOVA, analysis of variance; CO, cardiac output; RAP, right atrial pressure; WU, Wood units; LA, left atrial; LAVi, left atrial volume index; MR, mitral regurgitation; LV, left ventricular. SD, standard deviation; BMI, body mass index.