SUPPLEMENTARY MATERIAL

Supplementary Table 1. Survival Profile and Adjusted Risk for Mortality According to Estimated Right Ventricular Systolic Pressure Levels excluding patients with just AVA<1.5cm^2 (n = 12770).

	Normal eRVSP (<30mmHg) n = 1478	**Borderline PHT (eRVSP 30.00-39.99) N = 4214**	**Mild PHT (eRVSP 40.00-49.99) N = 3964**	**Moderate PHT (eRSVP 50.00 - 59.99) N = 1781**	**Severe PHT (eRVSP >60) N = 1333**
All-Cause Mortality N (%) HR (95% CI)	467 (31.6) Reference	1898 (45.0) HR 1.09 (1.02 - 1.20)	2200 (55.5) HR 1.28 (1.16-1.42)	1168 (65.6) HR 1.81 (1.62–2.01)	1054 (79.1) HR 2.81 (2.52–3.14)
Cardiovascular mortality	168 (11.4) Reference	728 (17.3) HR 0.83 (0.70-0.98)	888 (22.4) HR 0.94 (0.80-1.11)	493 (27.7) HR 1.30 (1.09-1.55)	535 (40.1) HR 2.21 (1.86–2.64)

Cox Regression Analyses for total cohort (n = 12770) adjusted for age and sex. Values are n (%) or n/M (%), unless otherwise indicated. CI = confidence interval; eRVSP = estimated right ventricular systolic pressure; HR = hazard ratio; PHT = pulmonary hypertension.

Supplementary Table 2. Survival Profile and Adjusted Risk for Mortality According to Estimated Right Ventricular Systolic Pressure Levels in patients with *moderate* aortic stenosis (n = 10 085)

	Normal eRVSP (<30mmHg) n = 1526	**Borderline PHT (eRVSP 30.00-39.99) N = 3540**	**Mild PHT (eRVSP 40.00-49.99) N = 2962**	**Moderate PHT (eRSVP 50.00 - 59.99) N = 1195**	**Severe PHT (eRVSP >60) N = 862**
All-Cause Mortality N (%) HR (95% CI)	363 (23.8) Reference	1311 (37.0) HR 1.13 (1.01-1.27)	1484 (50.1) HR 1.45 (1.29-1.63)	741 (62.0) HR 2.00 (1.76–2.27)	625 (72.5) HR 3.28 (2.87-3.73)
Cardiovascular mortality	110 (7.2) Reference	439 (12.4) HR 0.82 (0.66-1.01)	508 (17.2) HR 0.91 (0.74-1.12)	282 (23.6) HR 1.29 (1.03-1.61)	263 (30.5) HR 2.01 (1.61–2.52)

Cox Regression Analyses for moderate aortic stenosis adjusted for age and sex. Values are n (%) or n/M (%), unless otherwise indicated. CI = confidence interval; eRVSP = estimated right ventricular systolic pressure; HR = hazard ratio; PHT = pulmonary hypertension.

Supplementary Table 3. Survival Profile and Adjusted Risk for Mortality According to Estimated Right Ventricular Systolic Pressure Levels in patients with *severe* aortic stenosis (n = 4895)

	Normal eRVSP (<30mmHg) n = 523	**Borderline PHT (eRVSP 30.00-39.99) N = 1545**	**Mild PHT (eRVSP 40.00-49.99) N = 1418**	**Moderate PHT (eRSVP 50.00 - 59.99) N = 761**	**Severe PHT (eRVSP >60) N = 648**
All-Cause Mortality N (%) HR (95% CI)	181 (34.6) Reference	790 (51.1) HR 1.15 (0.98 - 1.35)	887 (62.6) HR 1.32 (1.13-1.55)	541 (71.1) HR 1.88 (1.59–2.23)	523 (80.7) HR 2.51 (2.12–2.98)
Cardiovascular mortality	76 (14.5) Reference	318 (20.6) HR 0.87 (0.67-1.11)	407 (28.7) HR 0.98 (0.76-1.25)	256 (33.6) HR 1.37 (1.06-1.77)	279 (43.0) HR 2.02 (1.56–2.61)

Cox Regression Analyses for severe aortic stenosis adjusted for age and sex. Values are n (%) or n/M (%), unless otherwise indicated. CI = confidence interval; eRVSP = estimated right ventricular systolic pressure; HR = hazard ratio; PHT = pulmonary hypertension.

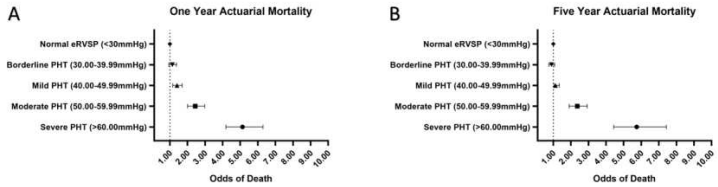
Supplementary Table 4. Survival Profile and Adjusted Risk for Mortality According to decile distribution of Estimated Right Ventricular Systolic Pressure Levels (n = 14980)

eRSVP decile distribution (mmHg)	**All Fatal Events (n= 14980) HR (95% CI), p value**
0.00 – 28.00	Reference
28.01 – 32.00	1.03 (0.90-1.18)
32.01 – 35.00	1.00 (0.88-1.14)
35.01 – 38.00	1.19 (1.04-1.35)
38.01 – 40.69	1.20 (1.06-1.36)
40.70 – 43.64	1.28 (1.14-1.45)
43.65 – 46.48	1.37 (1.21-1.55)
46.49 – 50.96	1.53 (1.34-1.73)
50.97 – 60.00	2.07 (1.84-2.33)
60.01 – 136.97	2.86 (2.54-3.21)

Analyses adjusted for age, sex and mean aortic valve gradient. eRVSP = estimated right ventricular systolic pressure; HR = hazard ratio; CI = confidence interval.

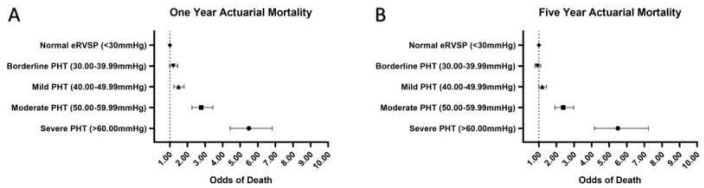
Supplementary Figures.

Supplementary Figure 1. One and Five Year Actuarial Mortality excluding patients solely included based on AVA <1.5cm^2



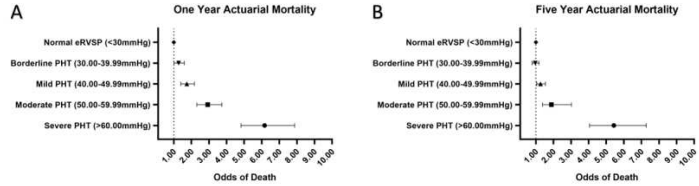
Legend: Actuarial all-cause mortality using logistic regression, adjusted for age and sex, excluding patients solely based on AVA <1.5cm^2 showing increased odds of death as pulmonary pressures increase. PHT = pulmonary hypertension. eRVSP = estimated right ventricular systolic pressure.

Supplementary Figure 2. One and Five Year Actuarial Mortality, excluding patients with ≥ moderate mitral regurgitation and/or ≥ moderate aortic regurgitation



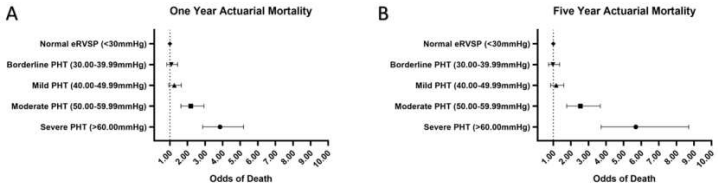
Legend: Actuarial all-cause mortality using logistic regression, adjusted for age, sex and mean aortic valve gradient, for patients without ≥ moderate mitral regurgitation and/or ≥ moderate aortic regurgitation showing increased odds of death as pulmonary pressures increase. PHT = pulmonary hypertension. eRVSP = estimated right ventricular systolic pressure.

Supplementary Figure 3. One and Five Year Actuarial Mortality for Moderate Aortic Stenosis Cohort



Legend: Actuarial all-cause mortality using logistic regression, adjusted for age and sex, for patients with moderate aortic stenosis showing increased odds of death as pulmonary pressures increase. PHT = pulmonary hypertension. eRVSP = estimated right ventricular systolic pressure.

Supplementary Figure 4. One and Five Year Actuarial Mortality for Severe Aortic Stenosis Cohort



Legend: Actuarial all-cause mortality using logistic regression, adjusted for age and sex, for patients with severe aortic stenosis showing increased odds of death as pulmonary pressures increase. PHT = pulmonary hypertension. eRVSP = right ventricular systolic pressure.