SUPPLEMENT MATERIAL

SUPPLEMENTAL TABLES

Supplemental Table 1. Frequency of right heart catheterization (RHC) studies by region according to U.S. Census boundaries.

Region	RHC Studies (N)	% of Cohort
Midwest	5126	23.6
Northeast	1971	9.1
South	9362	43.1
West	5268	24.3

Supplemental Table 2. Validation of hemodynamics.

Validation Method	N	25th Percentile	Median	75% Percentile
Δ reported vs. calculated PVR (W.U.)	21604	0.00	0.00	0.00
PASP–RVSP (mmHg)	21349	-2.00	0.00	2.00
mPAP reported–mPAP calculated (mmHg)	21648	.333	1.67	2.67

To assess the fidelity of hemodynamic data, the difference between reported and calculated mPAP and reported and calculated PVR was determined for subjects in the cohort. Additionally, the difference between pulmonary artery systolic pressure (PASP) and right ventricular systolic pressure (RVSP) was calculated and is summarized. mPAP, mean pulmonary artery pressure in mmHg; PVR, pulmonary vascular resistance in Wood units (W.U.).

SUPPLEMENTAL FIGURE LEGENDS

Supplemental Figure 1. Distribution of mean pulmonary artery pressure (mPAP) assessed by right heart catheterization for the study cohort. A histogram demonstrating the distribution of mPAP pressure among the cohort of 21,717 subjects from the VA CART database analyzed in this study. Bin width is 5 mmHg.

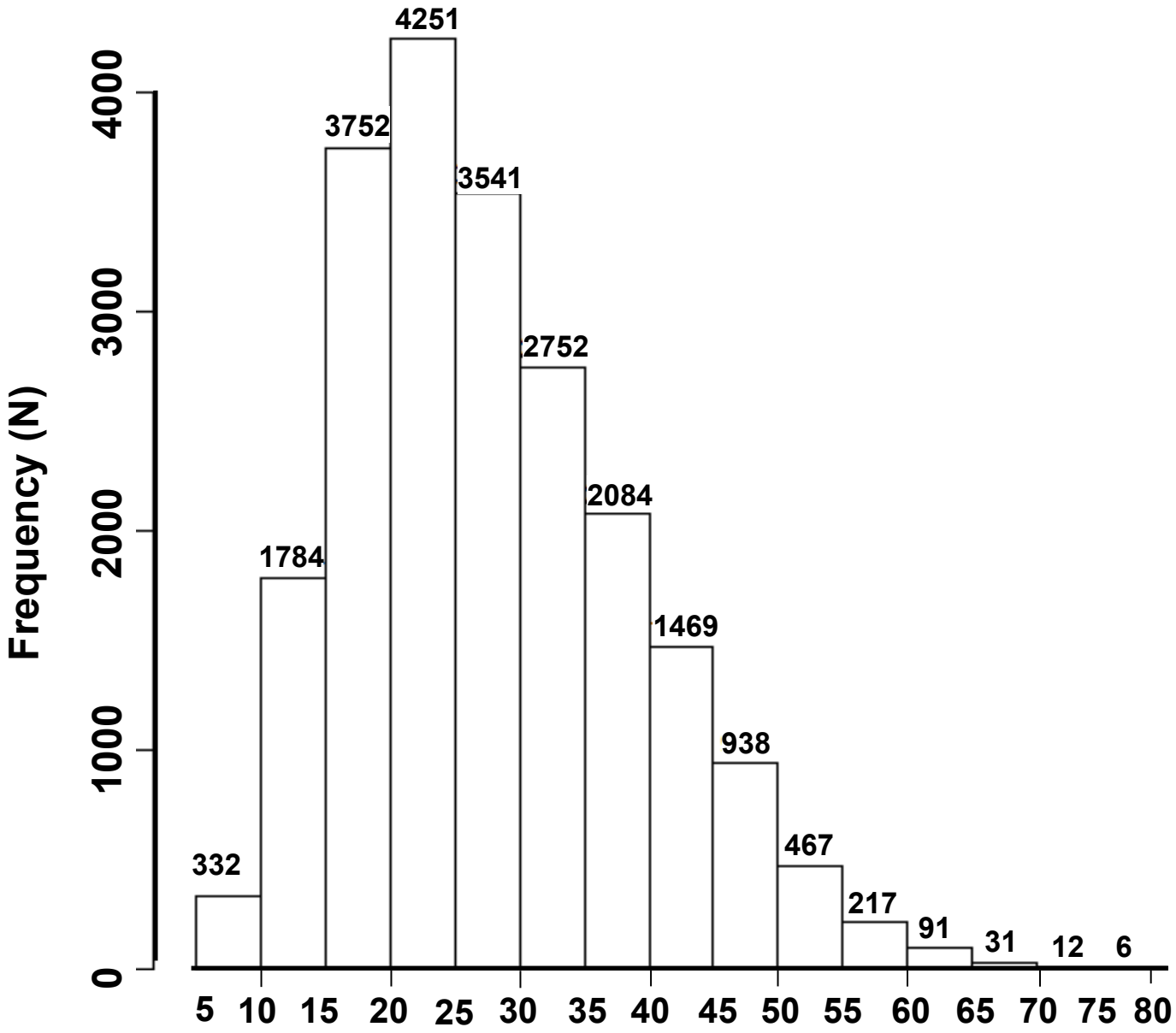
Supplemental Figure 2. The effect of a 1-mmHg unit increase in mean pulmonary artery pressure (mPAP) on hazard of mortality. At a particular mPAP level between 11-60 mmHg, this figure shows the relative change in hazard ratios associated with a 1-unit increase in mPAP (with 95% CI), and is calculated from the spline fit of mPAP in the adjusted model. An increase in relative change in hazard is observed beginning at approximately 15 mmHg, peaking in the range of approximately 19-24 mmHg, and decreases (but remains positive) at mPAP levels indicative of moderate or severe pulmonary hypertension.

Supplemental Figure 3. Forest plot of adjusted mortality hazard ratio stratified by mean pulmonary artery pressure (mPAP) increment. The hazard ratio for mortality is presented for the study cohort stratified by mPAP sextile. Data are expressed as the hazard ratio (95% CI) relative to the lowest sextile (mPAP 5-18 mmHg) for all-cause mortality.

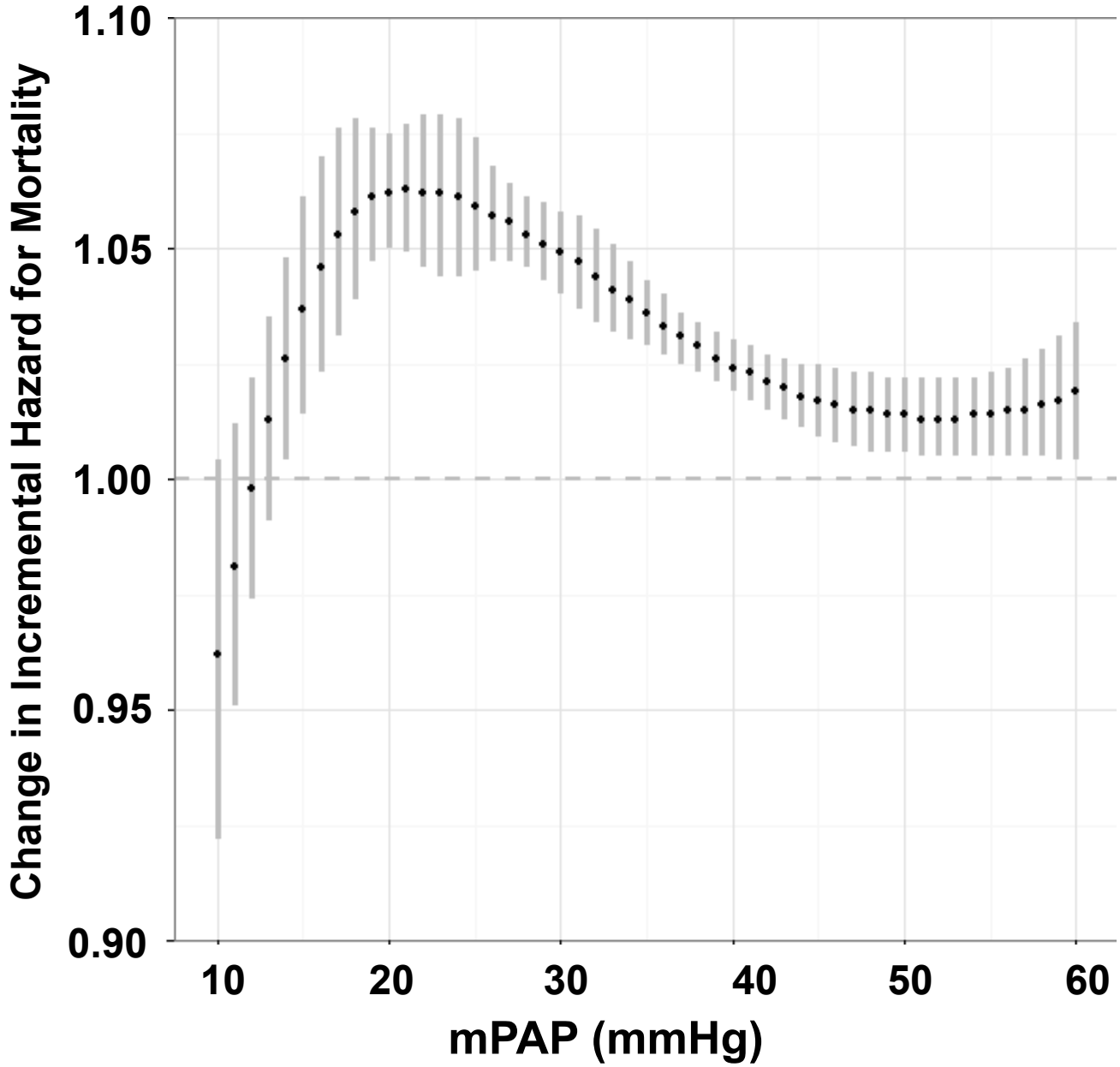
Supplemental Figure 4. Time-to-event plots for unadjusted all-cause mortality among patients from the study cohort stratified by mean pulmonary artery pressure

(mPAP) sextile. Survival curves based on a Kaplan–Meier analysis of the unadjusted probability of survival stratified by mPAP sextile are shown. Censoring begins at approximately one year post-procedure and is indicated by the thick portion on the curves.

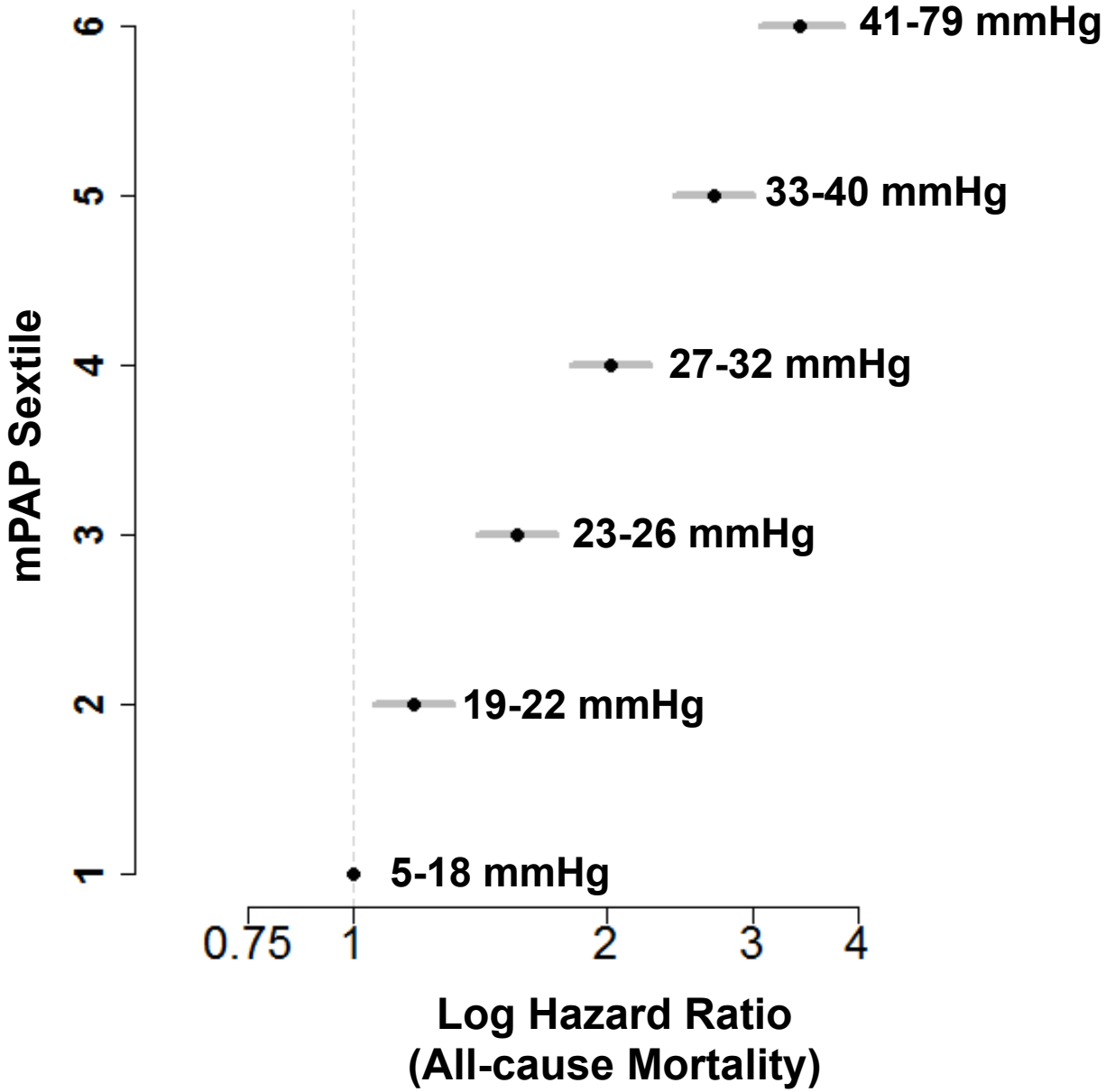
Supplemental Figure 5. Time-to-event plots for unadjusted hospitalization-free survival among patients from the study cohort stratified by mean pulmonary artery pressure (mPAP) sextile. Survival curves based on a Kaplan–Meier analysis of the unadjusted probability of hospitalization-free survival stratified by mPAP sextile are shown. Censoring begins at approximately one year post-procedure and is indicated by the thick portion on the curves.



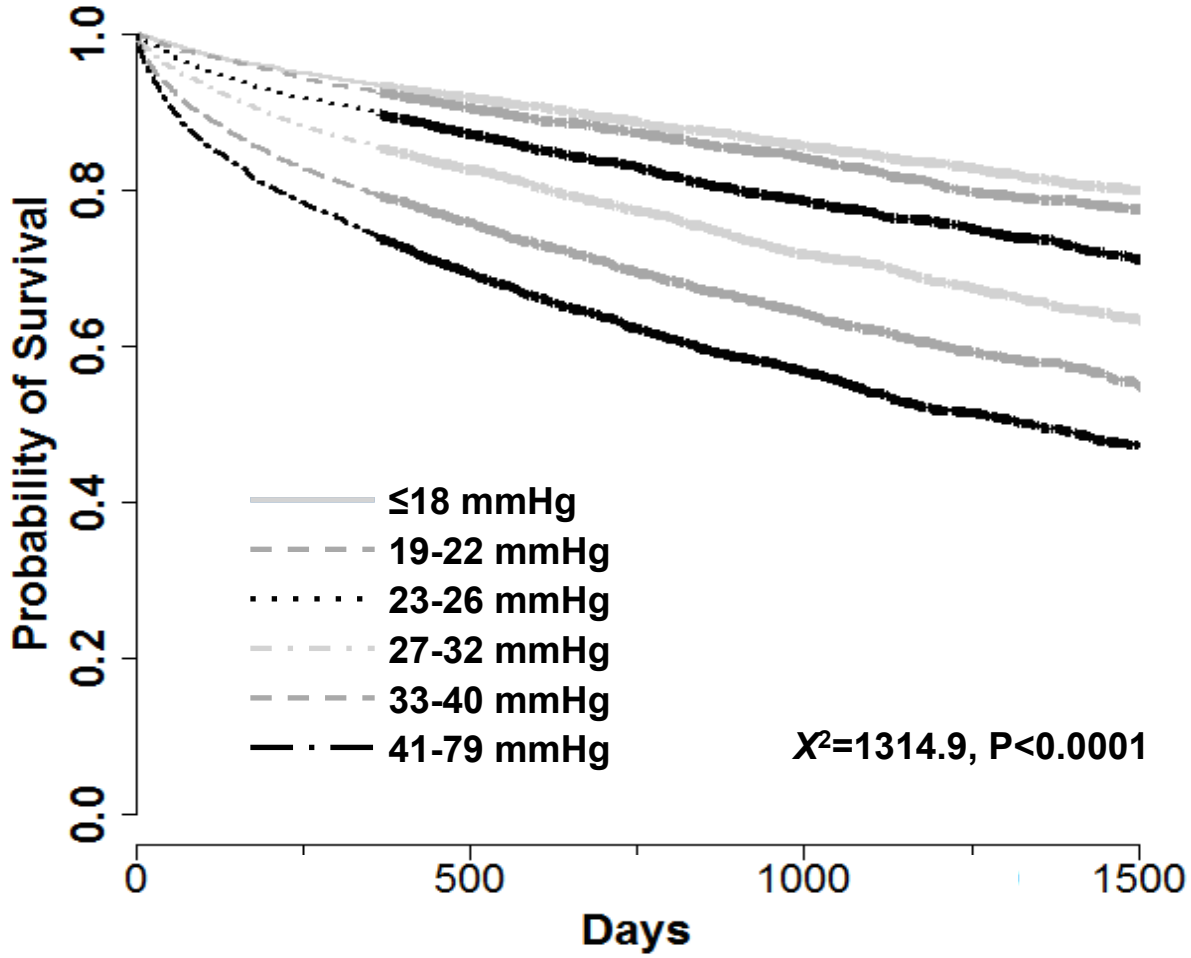
Supplemental Figure 1



Supplemental Figure 2

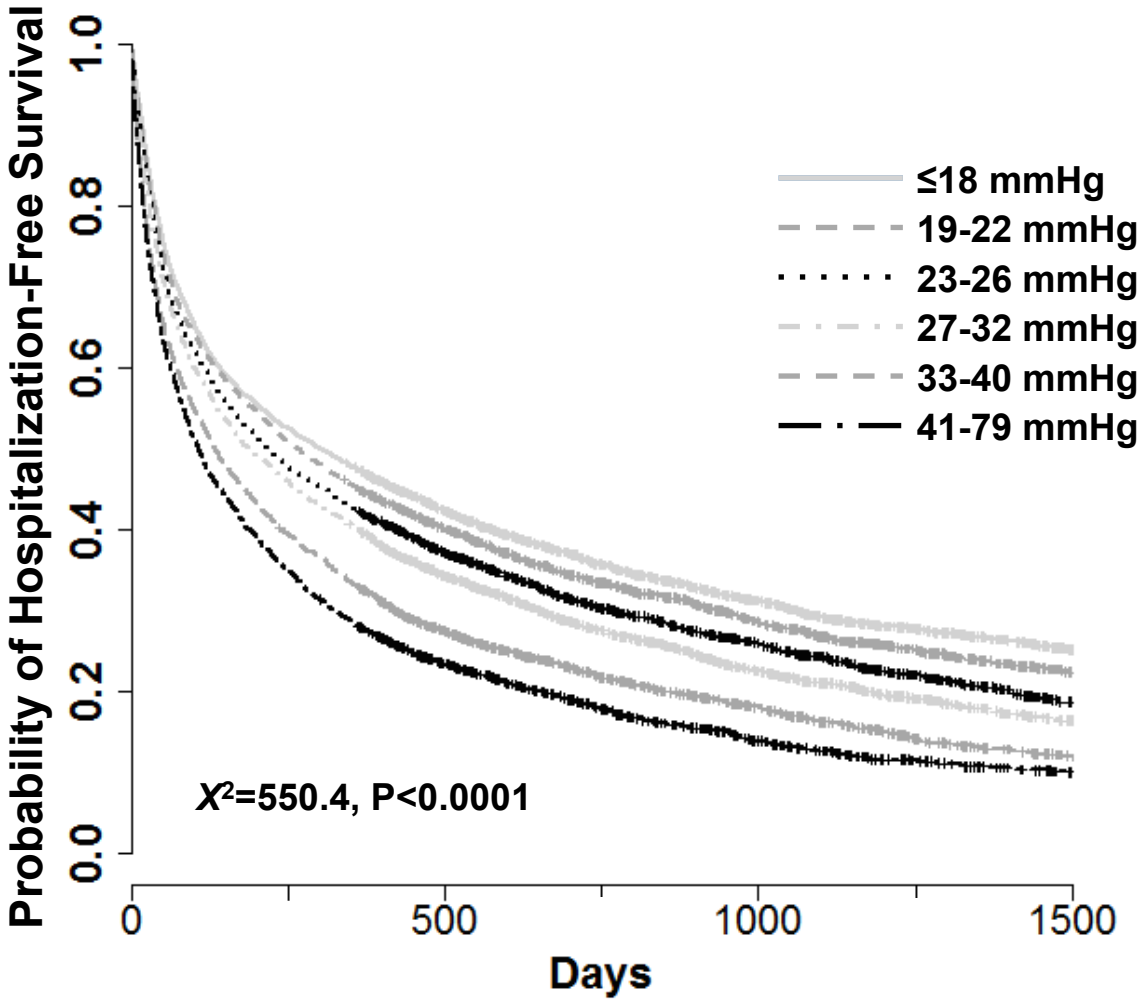


Supplemental Figure 3



No. at risk				
≤18 mmHg	4207	3545	2189	1001
19-22 mmHg	3374	2800	1717	812
23-27 mmHg	3292	2643	1565	717
28-32 mmHg	3974	3015	1710	765
33-40 mmHg	3649	2536	1413	633
41-90 mmHg	3231	2042	1080	476

Supplemental Figure 4



No. at risk				
≤18 mmHg	4207	1619	777	297
19-22 mmHg	3374	1238	594	229
23-27 mmHg	3292	1129	519	179
28-32 mmHg	3974	1238	510	182
33-40 mmHg	3649	918	406	141
41-90 mmHg	3231	683	260	98

Supplemental Figure 5