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Supplementary Materials for

Dynamic load modulation predicts right heart tolerance of left ventricular cardiovascular assist in a porcine model of cardiogenic shock

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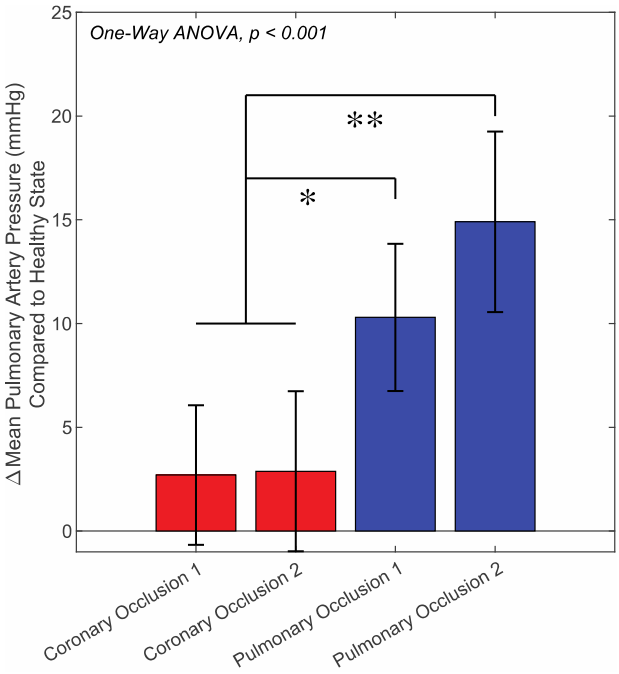
The PDF file includes:

Figs. S1 to S3

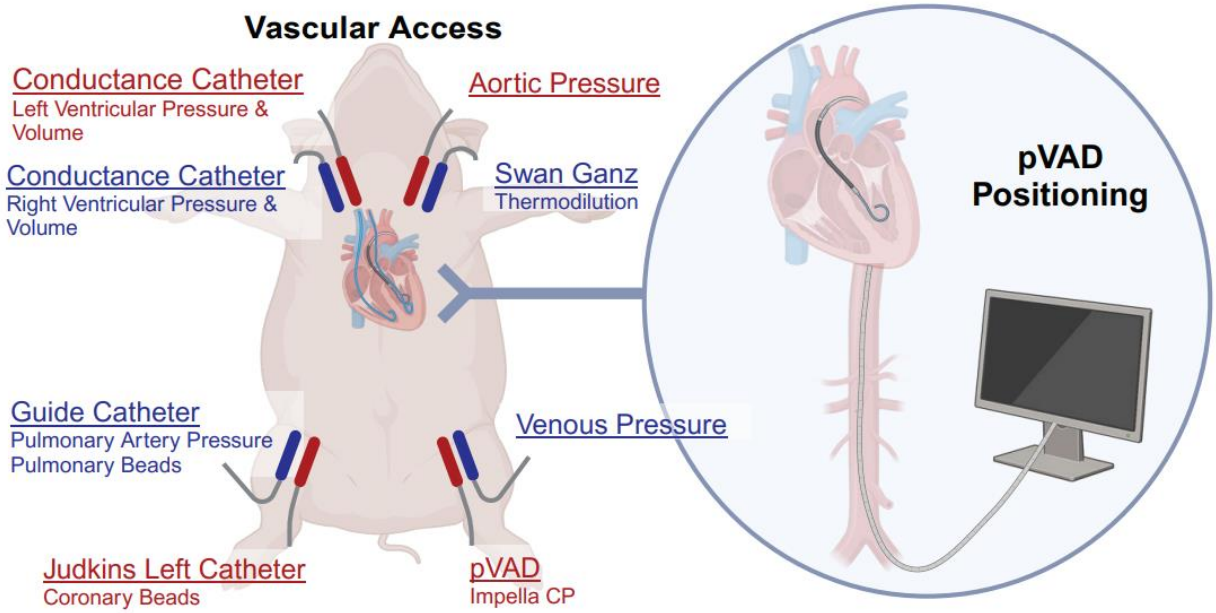
Other Supplementary Material for this manuscript includes the following:

Data file S1
MDAR Reproducibility Checklist



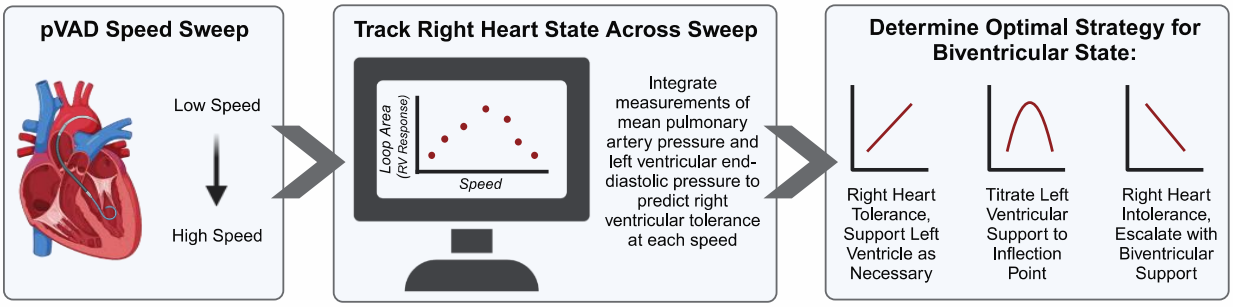
Supplemental Figure 1: Model Produces Graded Effects on Pulmonary Vascular Load

Pulmonary vascular load was progressively impacted by graded left ventricular ischemia (n=5), generating post-capillary strain, followed by graded pulmonary microembolization (n=4). Error bars indicate standard deviation. * $p < 0.05$ and ** $p<0.01$. Data were analyzed by one-way ANOVA with post-hoc Tukey honest significant difference test.



Supplemental Figure 2: Vascular Access and pVAD Positioning

Vascular access was obtained in the femoral arteries and veins, carotid arteries, and jugular veins of the animals. The pVAD is a catheter-mounted, transvalvular pump positioned across the aortic valve.



Supplemental Figure 3: Schema for Right Ventricular Evaluation in Clinical Practice

Right ventricular tolerance can be assessed using a pVAD speed sweep. The response is assessed using transpulmonary loop area, and three possible approaches for patient support can be taken based on the results.