

# Hemodynamic parameters predict outcome in PH-HFpEF

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(HealthDay)—The hemodynamic parameters transpulmonary gradient,

pulmonary vascular resistance, and diastolic pulmonary gradient are associated with mortality and cardiac hospitalization in pulmonary hypertension (PH) in patients with heart failure with preserved ejection fraction (HFpEF), according to a study published online March 14 in *JAMA Cardiology*.

Rebecca R. Vanderpool, Ph.D., from the Pittsburgh Heart, Lung, Blood and Vascular Medicine Institute, and colleagues examined the hemodynamic characteristics and outcomes of PH-HFpEF in participants who had a right heart catheterization. Hemodynamic catheterization data were linked to the clinical data repository for all inpatient and outpatient encounters across a health system. Data were included for 19,262 procedures in 10,023 participants.

The researchers found that 25.8 percent of the participants had PH-HFpEF. At years one and five, mortality was 23.6 and 48.2 percent, respectively. Cardiac hospitalizations occurred in 28.1 and 47.4 percent at one and five years, respectively. Using clinically defined cut-offs for transpulmonary gradient ( $>12$  mm Hg), pulmonary vascular resistance (3 Woods units), and diastolic pulmonary gradient ( $\geq 7$  mm Hg), the frequency of precapillary PH was 12.6, 8.8, and 3.5 percent, respectively. Mortality and cardiac hospitalizations were predicted by transpulmonary gradient, pulmonary vascular resistance, and diastolic pressure gradient.

"Transpulmonary gradient, pulmonary vascular [resistance](#), and diastolic pulmonary gradient are all associated with [mortality](#) and cardiac hospitalizations," the authors write.

Three authors disclosed financial ties to the pharmaceutical industry.

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