Can Clinical Variables and Noninvasive Diagnostic Tools Predict Severe Pulmonary Hypertension (PH) in COPD

**STUDY DESIGN**

- **Retrospective analysis of 142 patients** with COPD and suspected PH undergoing evaluation with right-sided heart catheterization.

- Clinical variables potentially indicative of severe PH or death were analyzed.

**RESULTS**

- **Predictive criteria** for severe PH:
  - sPAP ≥ 56 mm Hg on echo
  - NT-proBNP ≥ 650 pg/mL
  - PA/Ao-ratio on chest CT scan ≥ 0.93

- After correcting for age and gender, both airflow and PH **severity** were independently associated with **survival**.

- Combination of **GOLD 3-4 airflow limitation and severe PH** had **worst survival**

The combination of echocardiography, NT-proBNP, and PA/Ao-ratio predicts severe PH with high sensitivity and specificity in COPD patients and severe PH contributes to impaired survival comparably to air-flow limitation.