

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

STUDY DESIGN

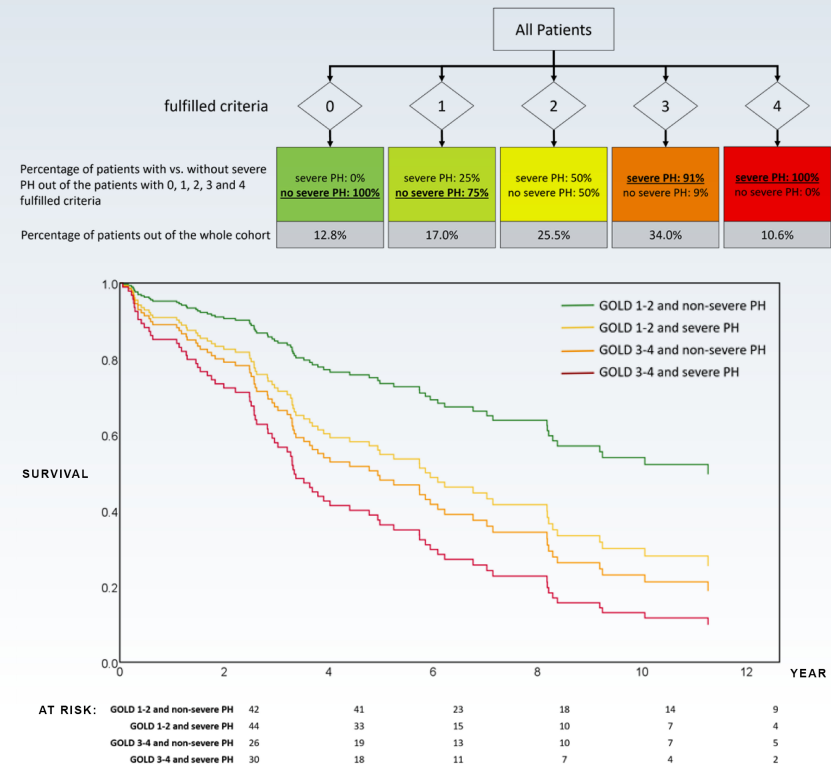
- **Retrospective analysis** of **142 patients** with COPD and suspected PH undergoing evaluation with right-sided heart catheterization
- Clinical variables potentially indicative of severe PH or death were analyzed.

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.