

## 1 YEAR-MORTALITY RISK ASSESSMENT IN PULMONARY ARTERIAL HYPERTENSION PATIENTS. A MULTICENTRE RETROSPECTIVE STUDY.

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### Background and importance

2022 ESC/ERS Guidelines for pulmonary arterial hypertension [PAH] recommend treatment decisions based on patient's 1-year mortality risk.

This guidelines provide a simplified four-strata risk-assessment tool to estimate patient's 1-year mortality risk

### Aim and objectives

- To assess whether patients' mortality risk is estimated and registered in clinical charts to guide treatment decisions in a cohort of PAH patients.
- To assess whether it is possible to measure patients' risk with the simplified tool using medical chart data.

### Material and methods

 **Study design:** A cross-sectional, retrospective, descriptive

 **Study period:** January 2016 – March 2022

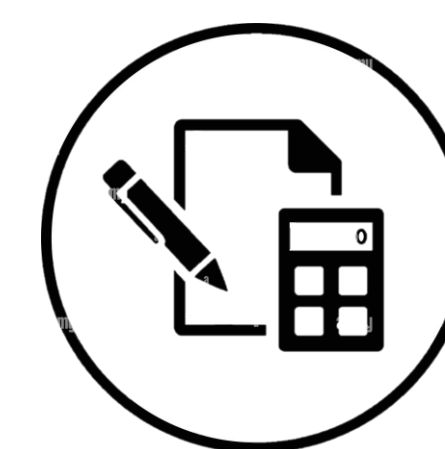
 **Setting:** 2 tertiary hospitals

 **Population:** adult PAH patients who initiated a PAH-specific therapy after 2016.

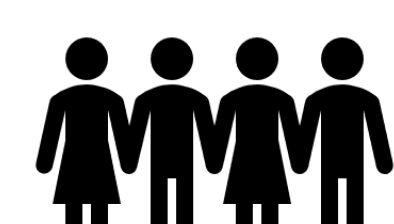
 **Variables:** PAH subsets, PH-specific drug initiated, year of the initiation, and physician's explicit assertions of the patient risk.

Simplified four-strata risk-assessment tool calculated with:

- World Health Organization functional class [WHO-FC]
- 6-minute walking distance [6MWD],
- N-terminal pro-brain natriuretic peptide [NT-proBNP]



### Results


 n= 102  
35.5% Male  
64.5% Female



145 changes in PAH-specific therapy.



13.8% patient's risk registered at treatment initiations by physicians.

 56 (18-99)% years

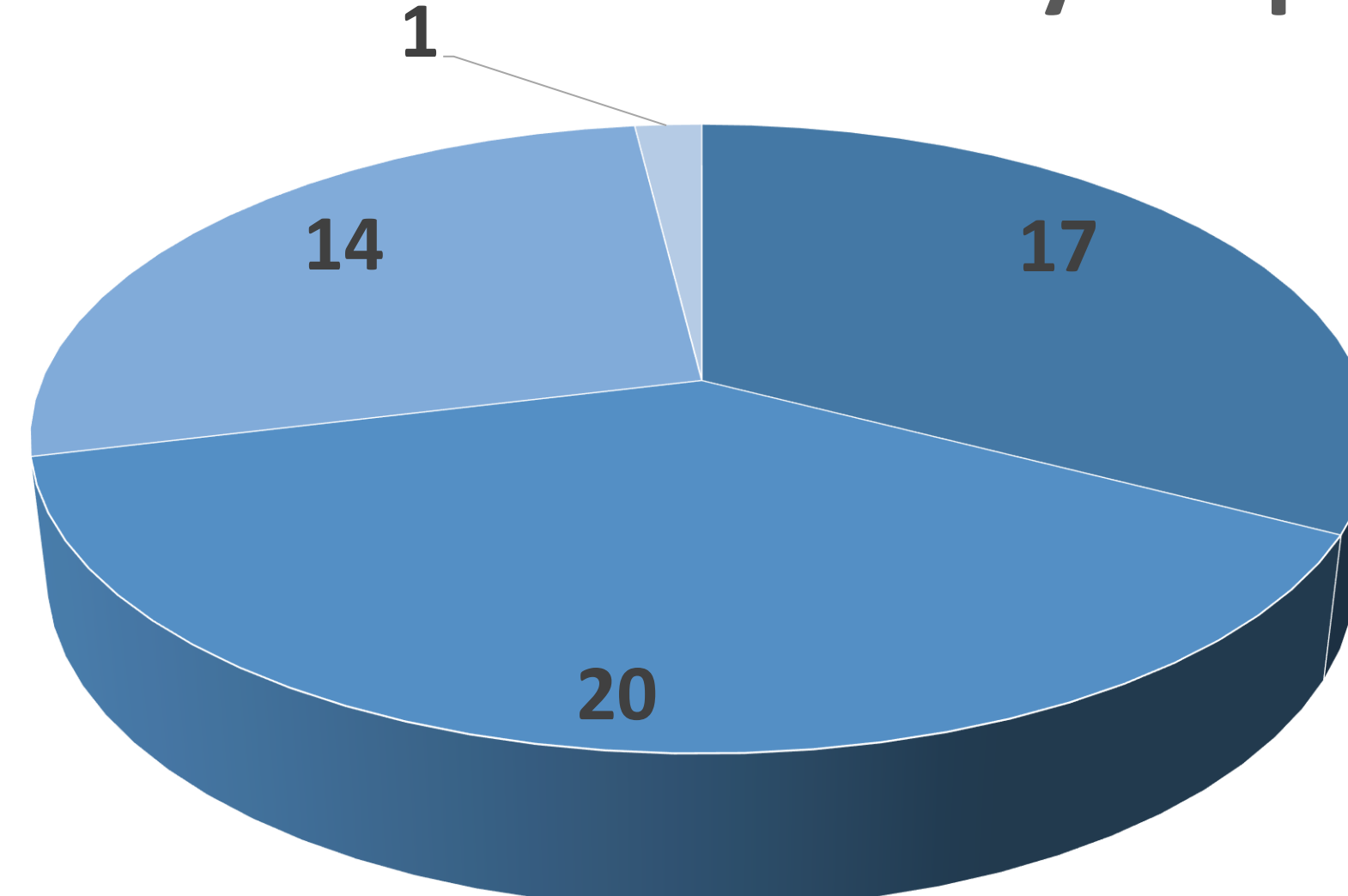
35.9% Risk estimations using the simplified tool ✓



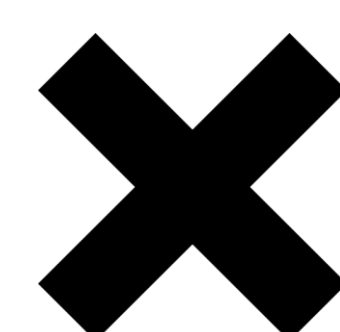
#### Patients' HAP subsets

- Congenital heart disease 35%
- Connective tissue disease 29%
- portal hypertension 9%
- HIV infection 3%
- Drugs and toxins 2%,
- Idiopathic HAP 22%.

#### Estimates 1-year patients risk



- Low risk
- Intermediate-low
- Intermediate-high
- High risk



64.5% Insufficient data to calculate risk

### Conclusions

Patients' mortality risk was rarely claim by physicians.

Assessing patient's risk with the simplified tool, was impossible to estimate it for most patients. Therefore, this process is missing critical clinical variables, even if the mortality risk is being assessed but not registered in clinical charts.

