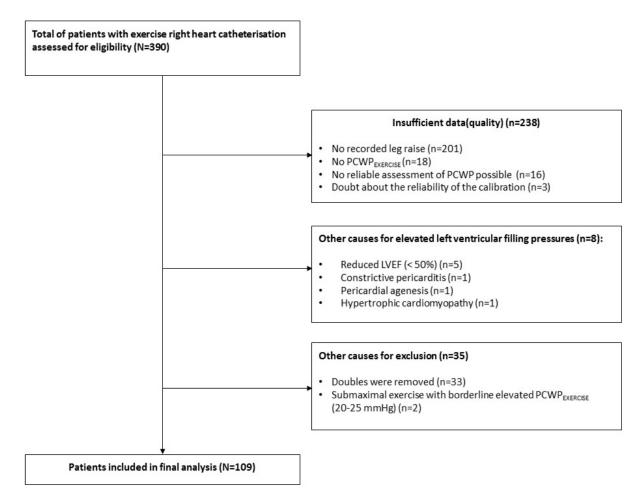
**Supplemental Material** 

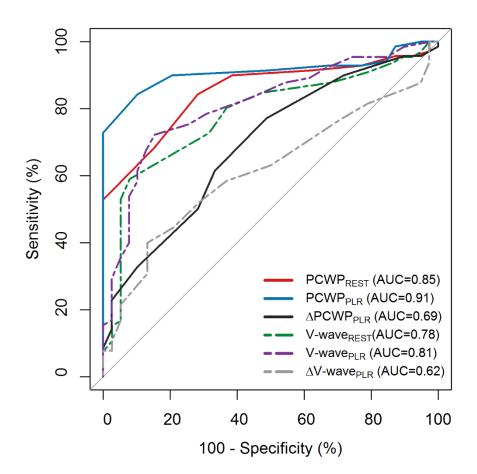
Supplemental Figures and Figure Legends I-III

## **Supplemental Figure I. Flowchart**



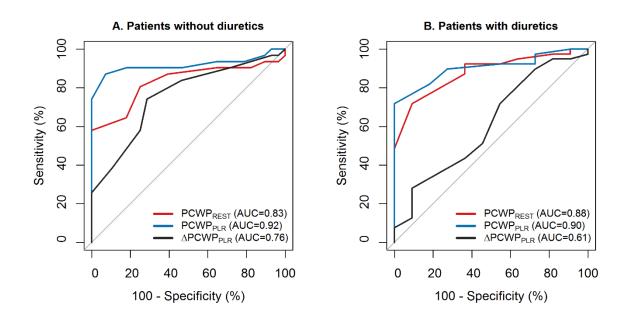
*Supplemental Figure I Legend:* Abbreviations: PCWP, pulmonary capillary wedge pressure; PCWP<sub>EXERCISE</sub>, PCWP at peak exertion; LVEF, left ventricular ejection fraction.

## Supplemental Figure II. ROC-curve analysis to diagnose HFpEF (occult- and manifest-HFpEF combined)



*Supplemental Figure II Legend:* Abbreviations: AUC, area under the curve; PCWP, pulmonary capillary wedge pressure; PLR, passive leg raise.

Supplemental Figure III. Influence of diuretics to diagnose HFpEF (occult- and manifest-HFpEF combined)



*Supplemental Figure III Legend:* Abbreviations: AUC, area under the curve; PCWP, pulmonary capillary wedge pressure; PLR, passive leg raise.

Supplemental Tables I-II

## Supplemental Table I. Diagnoses of non-HFpEF patients

| Diagnoses                       | n = 39  |
|---------------------------------|---------|
| СТЕРН                           | 6 (15%) |
| CTED                            | 7 (18%) |
| IPAH                            | 6 (15%) |
| Asymptomatic PH-gene carriers   | 4 (10%) |
| Dyspnea e.c.i.                  | 4 (10%) |
| Deconditioning / Obesity        | 4 (10%) |
| Fatigue post-pulmonary embolism | 2 (5%)  |
| Symptomatic atrial fibrillation | 1 (3%)  |
| Diffusion-disorder with MCTD    | 1 (3%)  |
| Dilated pulmonary artery e.c.i. | 1 (3%)  |
| Post-viral dyspnea              | 1 (3%)  |
| OSAS                            | 1 (3%)  |
| PVOD                            | 1 (3%)  |

*Subtext Supplemental Table I:* Abbreviations: CTEPH, chronic trombo-embolic pulmonary hypertension; CTED, chronic thrombo-embolic disease; IPAH, idiopathic pulmonary arterial hypertension; PH, pulmonary hypertension; e.c.i., e cause ignota; MCTD, mixed connective tissue disease; OSAS, obstructive sleep apnea syndrome; PVOD, pulmonary veno-occlusive disease.

| <b>Supplemental</b> | Table II. Da | ta external va | alidation cohort |
|---------------------|--------------|----------------|------------------|
|---------------------|--------------|----------------|------------------|

|                                 | non-HFpEF (n=24) | occult-HFpEF (n=18) |
|---------------------------------|------------------|---------------------|
| Age (years)                     | 61 (12)          | 72 (9)              |
| Gender (female)                 | 11 (46%)         | 7 (39%)             |
| BMI                             | 27.2 (4.4)       | 33.0 (6.0)          |
| NYHA                            |                  |                     |
| 1                               | 2 (8%)           | 0 (0%)              |
| 2                               | 14 (58%)         | 9 (50%)             |
| 3                               | 7 (29%)          | 9 (50%)             |
| 4                               | 1 (4%)           | 0 (0%)              |
| H <sub>2</sub> FPEF score       |                  |                     |
| Low (0-1)                       | 8 (33%)          | 0 (0%)              |
| Intermediate (2-5)              | 16 (67%)         | 13 (72%)            |
| High likelihood (6-9)           | 0 (0%)           | 5 (28%)             |
| PCWP measurements               |                  |                     |
| PCWP <sub>REST</sub> (mmHg)     | 8 [6, 9]         | 12 [10, 13]         |
| PCWP <sub>PLR</sub> (mmHg)      | 12[10-13]        | 20 [16-22]          |
| PCWP <sub>EXERCISE</sub> (mmHg) | 15[12-17]        | 30 [27-34]          |

Subtext Supplemental Table II: Abbreviations: PCWP<sub>REST</sub>, pulmonary capillary wedge pressure at rest;

PCWP<sub>PLR</sub>, PCWP at passive leg raise;