

Supplements

Table S1: Formulas

| Variable | Abbreviation (unit) | Formula |
|-------------------------------------|-----------------------------------|----------------------------------|
| Diastolic pulmonary gradient | DPG (mmHg) | PAD – PAWP |
| Right ventricular stroke work index | RWSWI (mmHg.L/m ²) | (mean PAP – RAP) x (CI / HR) |
| Pulmonary artery pulsatility index | PAPi | (PAS – PAD) / RAP |
| Pulmonary vascular resistance | PVR (Wood unit) | (mean PAP – PAWP) / CO |
| Pulmonary artery compliance | PAC (mL/mmHg) | [(CO / HR) / (PAS – PAD)] x 1000 |
| Pulmonary arterial elastance | Ea (mmHg/mL) | [PAS / (CO / HR)] / 1000 |

Table S2: Baseline characteristics of LVAD subjects

| | | Value (median, IQ) |
|------------------------------|---------------------------------|---------------------------|
| Time intervals (days) | LVAD-RHC | 305 (233-399) |
| | LVAD-CPET | 244 (222-332) |
| | RHC-CPET | 45 (26-116) |
| LVAD parameters | Speed (rpm) | 2622 (2540-2760) |
| | Pump flow (rest) (L/min) | 4.4 (4-5) |
| | Pump flow (exercise) (L/min) | 5.9 (4.9-6.8) |
| Heart failure history | Non-ischemic | 8 (67%) |
| | Ischemic | 4 (33%) |
| | Duration (months) | 12 (6-84) |

Table S3: Hemodynamics pre- and post-LVAD insertion (paired comparison)

| | Pre-LVAD (n) | Post-LVAD (n) | p |
|---|-------------------------------|--------------------------------|----------|
| RAP (mmHg) | 12.5 (6.5-18) (12) | 3 (1.5-6.5) (12) | 0.01 |
| Mean PAP (mmHg) | 28 (25-40) (12) | 16 (14-18) (12) | 0.0022 |
| PAWP (mmHg) | 19 (17-26) (12) | 6 (4-16) (11) | 0.0033 |
| CO (L/min) | 3.9 (3.4, 4.4) (12) | 4.9 (4.5, 5.4) (12) | 0.0076 |
| PAPi | 2.1 (1.4, 2.9) (12) | 4 (2.7, 11.4) (12) | 0.02 |
| RVSWI (mmHg.L/m²) | 0.4 (0.2, 0.6) (12) | 0.3 (0.3, 0.4) (12) | 0.3 |
| RAP:PAWP | 0.6 (0.3-0.9) (12) | 0.5 (0.3-0.8) (11) | 0.9 |
| PVR (Wood units) | 2.2 (1.7, 4.3) (12) | 2.2 (1.2, 2.5) (11) | 0.03 |
| PAC (mL/mmHg) | 2.4 (1.5, 3) (12) | 3.9 (2.9, 4.7) (12) | 0.0022 |
| Ea (mmHg/mL) | 0.9 (0.7, 1.6) (12) | 0.5 (0.4, 0.5) (12) | 0.0025 |

Table S4: Laboratory values of LVAD subjects within two weeks of right heart catheterization

| Variable | Median (25th-75th Interquartile range) |
|-------------------------|---|
| BUN (mg/dL) | 16 (14-20) |
| Creatinine (mg/dL) | 1 (1-1.6) |
| Pre-albumin (mg/dL) | 23 (21-25) |
| AST (units/L) | 33 (30-50) |
| ALT (units/L) | 41 (24-49) |
| Total bilirubin (mg/dL) | 0.8 (0.4-1.1) |