

## **Title**

Left atrial ejection fraction and outcomes in heart failure with preserved ejection fraction

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## Online Resource Supplementary Materials

**Online Resource Supplementary Table 1.** CMR LA parameters according to atrial fibrillation and sinus rhythm

|                                                  | HFpEF<br>n = 140 | Controls<br>n = 48 | p value |
|--------------------------------------------------|------------------|--------------------|---------|
| <i>Atrial fibrillation subjects only</i>         |                  |                    |         |
| LAEF (%)                                         | 14±7             | NA                 | -       |
| Normal-sized LA (%)                              | 2 (5)            | NA                 | -       |
| LAVImax (ml/m <sup>2</sup> )                     | 76±27            | NA                 | -       |
| LAVImin (ml/m <sup>2</sup> )                     | 66±25            | NA                 | -       |
| LA reservoir volume indexed (ml/m <sup>2</sup> ) | 10±5             | NA                 | -       |
| LA conduit volume indexed (ml/m <sup>2</sup> )   | 32±10            | NA                 | -       |
| <i>Sinus rhythm subjects only</i>                |                  |                    |         |
| LAEF (%)                                         | 41±12            | 51±11              | <0.0001 |
| Normal-sized LA (%)                              | 48 (50)          | 33 (69)            | 0.037   |
| LAVImax (ml/m <sup>2</sup> )                     | 43±17            | 35±12              | <0.001  |
| LAVImin (ml/m <sup>2</sup> )                     | 26±13            | 17±8               | <0.0001 |
| LA reservoir volume indexed (ml/m <sup>2</sup> ) | 17±6             | 17±6               | 0.791   |
| LA conduit volume indexed (ml/m <sup>2</sup> )   | 28±8             | 30±9               | 0.136   |
| Abbreviations are as for main Table 2            |                  |                    |         |

**Online Resource Supplementary Table 2.** Intra-observer and inter-observer assessments for left atrial volumes and left atrial ejection fraction

| Parameter                                                                            | Observer 1<br>Mean $\pm$ SD | Observer 2<br>Mean $\pm$ SD | Mean<br>difference $\pm$ SD | ICC  | Variability (1 –<br>ICC) | Co-efficient of<br>variation | 95% Limits<br>of Agreement |
|--------------------------------------------------------------------------------------|-----------------------------|-----------------------------|-----------------------------|------|--------------------------|------------------------------|----------------------------|
| Intra-observer                                                                       |                             |                             |                             |      |                          |                              |                            |
| LAV min (ml)                                                                         | 70 $\pm$ 45                 | 71 $\pm$ 44                 | 1 $\pm$ 4                   | 0.99 | 0.01                     | 5.4                          | -7 to 8                    |
| LAV max (ml)                                                                         | 99 $\pm$ 48                 | 101 $\pm$ 49                | 2 $\pm$ 5                   | 0.99 | 0.01                     | 4.8                          | -7 to 12                   |
| LAEF (%)                                                                             | 33 $\pm$ 13                 | 33 $\pm$ 13                 | 0.1 $\pm$ 3                 | 0.98 | 0.02                     | 9.4                          | -6 to 6                    |
| Inter-observer                                                                       |                             |                             |                             |      |                          |                              |                            |
| LA min (ml)                                                                          | 70 $\pm$ 45                 | 71 $\pm$ 46                 | 0.7 $\pm$ 5                 | 0.99 | 0.01                     | 6.8                          | -9 to 10                   |
| LA max (ml)                                                                          | 99 $\pm$ 48                 | 102 $\pm$ 47                | 3 $\pm$ 6                   | 0.99 | 0.01                     | 6.3                          | -10 to 15                  |
| LAEF (%)                                                                             | 33 $\pm$ 13                 | 35 $\pm$ 16                 | 2 $\pm$ 4                   | 0.95 | 0.05                     | 12.2                         | -6 to 10                   |
| Abbreviations are as for main Table 2 and: ICC = intra-class correlation coefficient |                             |                             |                             |      |                          |                              |                            |