

**SUPPLEMENTAL INFORMATION – IATROGENIC ATRIAL SEPTAL DEFECTS (IASD) AFTER MITRAL VALVE (MV) TRANSCATHETER EDGE-TO-EDGE REPAIR (TEER) IN THE LONG-TERM FOLLOW-UP**

<b>Supplemental Table 1 – Follow-up Echocardiography (Details)</b>				
<b>Parameter</b>	<b>Total (N=48)</b>	<b>non-iASD (N=28)</b>	<b>iASD (N=20)</b>	<b>p-value</b>
LVEF (%) FU	40.7±16.3	41.5±17.7	39.7±14.4	0.73
LVEDd FU (mm)	60.9±12.9	61.0±13.8	60.7±12.0	0.94
LVESd FU (mm)	46.4±14.7	46.8±15.6	45.8±13.5	0.84
IVSd FU (mm)	10.6±2.6	11.0±2.7	10.1±2.4	0.28
PWd FU (mm)	11.3±2.9	10.7±2.1	12.2±3.6	0.12
LA diameter FU (mm)	54.4±7.3	56.7±6.8	51.6±7.0	<b>0.03</b>
sPAP FU (mmHg)	48.8 ±14.8	48.4±15.1	49.2±14.9	0.89
Grade of TR FU	1.4±0.9	1.3±0.9	1.5±1.0	0.65
TAPSE (mm)	18.9±4.5	19.9±4.6	17.6±4.1	0.1 (0.05)
Grade of MR	1.5±0.7	1.5±0.7	1.35±0.6	0.34
mPG FU (mmHG)	3.1±1.9	3.04±1.9	3.2±2.0	0.8
<p>Values are mean ± standard deviation, or number (%). p-values in parentheses refer to one-sided testing.</p> <p>FU = Follow-up; LVEF = Left Ventricular Ejection Fraction, LVEDd = Left Ventricular End-Diastolic diameter; LVESd = Left Ventricular End-Systolic diameter; IVSd = Septum diameter; PWd = Posterior Wall Diameter; LA = Left Atrium; MR = Mitral Regurgitation; sPAP = Systolic Pulmonary Artery Pressure; TR = Tricuspid Regurgitation, TAPSE= Tricuspid Annular Plane Systolic Excursion; mPG = Mean Pressure Gradient</p>				

<b>Supplemental Table 2 – Patient Characteristics of Non-participating and Participating Patients</b>				
<b>Parameter</b>	<b>Total</b>	<b>Non-Participating</b>	<b>Participating</b>	<b>p-value</b>
Patients, N (%)	166 (100)	118 (71.1)	48 (28.9)	
Patients alive at time of study initiation, N (%)	139 (83.7)	91 (65.5)	48 (34.5)	
Age (years)	76.6±8.4	77.2±8.3	75.3±8.5	0.2
BMI (kg/m <sup>2</sup> )	25.9±4.5	25.3±4.6	27.3±4.1	<b>0.01</b>
Male, N (%)	67 (40.4)	44 (37.3)	23 (47.9)	0.23
Arterial Hypertension, N (%)	132 (79.5)	92 (78.0)	40 (83.3)	0.53
Hyperlipidemia, N (%)	106 (63.9)	72 (61.0)	34 (70.8)	0.29
Diabetes mellitus, N (%)	42 (25.3)	27 (22.9)	15 (31.3)	0.33
Pulmonary Hypertension, N (%)	37 (22.3)	25 (21.2)	12 (25.0)	0.68
COPD, N (%)	18 (10.8)	13 (11.0)	5 (10.4)	1.0
AF, N (%)	114 (68.7)	83 (70.3)	31 (64.6)	0.47
LBBB, N (%)	22 (13.3)	11 (9.3)	11 (22.9)	0.03
CRT-D/P, N (%)	18 (10.8)	11 (9.3)	7 (14.6)	0.41
FMR, N (%)	79 (59.0)	47 (54.7)	32 (66.7)	0.2
DCM, N (%)	26 (15.7)	18 (15.3)	8 (16.7)	0.82
NYHA Class pre Clip	3.1±0.7	3.1±0.7	3.0±0.6	0.4
NYHA Class IV pre Clip	44 (26.5)	34 (28.8)	10 (20.8)	0.34
Euro SCORE II	7.1±7.7	7.6±8.4	5.9±5.6	0.22
STS Risk of Mortality Score	4.9±6.7	5.2±7.6	4.2±4.0	0.37
Troponin-T pre (µg/L)	37.35±40.7	40.6±45.5	27.1±21.0	0.12
NT-pro-BNP pre (pg/mL)	5279.5±6544.6	5843.6±7260	3901.9±4077.6	0.27
eGFR (ml/min)	51.6±20.5	51.9±19.8	50.7±22.4	0.72
Systolic BP (mmHg)	126.5±20.1	126.6±20.7	126.1±19.1	0.88
Diastolic BP (mmHg)	72.6±11.0	72.6±10.7	72.4±12.0	0.9
Values are mean ± standard deviation, or number (%). p-values in parentheses refer to one-sided testing.				

BMI = Body Mass Index (kg/m<sup>2</sup>); COPD = Chronic Obstructive Pulmonary Disease, AF = Atrial Fibrillation, LBBB = Left Bundle Branch Block, CRT = Cardiac Resynchronization Therapy, FMR = functional mitral regurgitation, DCM = Dilatative Cardiomyopathy, NYHA = New York Heart Association, STS = Society of Thoracic Surgeons; NT-proBNP = N-terminal pro hormone brain natriuretic peptide, eGFR = estimated glomerular filtration rate; BP = Blood Pressure

<b>Supplemental Table 3 – Baseline Echocardiography of Non-participating and Participating Patients</b>				
<b>Parameter</b>	<b>Total</b>	<b>Non-Participating</b>	<b>Participating</b>	<b>p-value</b>
LVEF (%)	44.7±18.5	46.4±18.9	40.9±16.9	0.09
LVEDd (mm)	59.6±11.3	59.3±11.0	60.2±12.1	0.63
LVESd (mm)	45.2±14.3	44.6±14.9	46.7±14.7	0.4
IVSd (mm)	11.0±2.2	11.3±2.3	10.1±1.8	<b>&lt;0.01</b>
PWd (mm)	10.9±2.0	11.2±2.1	10.4±1.6	<b>0.02</b>
LA diameter (mm)	55.7±9.1	55.9±9.5	55.3±8.2	0.7
Grade of MR preprocedural	3.67±0.5	3.64±0.5	3.73±0.4	0.43
Severe MR (IV pre, N (%))	93 (56.0)	58 (49.2)	35 (72.9)	<b>&lt;0.01</b>
Grade of MR postprocedural	1.5±0.6	1.5±0.6	1.44±0.6	0.43
Grade of TR	1.8±0.8	1.8±0.8	1.58±0.7	0.04
Severe TR (Grade 3), N (%)	30 (18.1)	24 (20.3)	6 (12.5)	0.27
sPAP (mmHg)	57.0±16.9	58.7±16.7	54.2±17.2	0.15
<p>Values are mean ± standard deviation, or number (%). p-values in parentheses refer to one-sided testing.</p> <p>LVEF = Left Ventricular Ejection Fraction, LVEDd= Left Ventricular End-Diastolic diameter; LVESd= Left Ventricular End-Systolic diameter; LA= Left Atrium; IVSd= Septum diameter; PWd= Posterior Wall diameter; MR = Mitral Regurgitation; TR = Tricuspid Regurgitation; sPAP = Systolic Pulmonary Artery Pressure</p>				

<b>Supplemental Table 4 - Procedural Details of Non-participating and Participating Patients</b>				
<b>Parameter</b>	<b>Total</b>	<b>Non-Participating</b>	<b>Participating</b>	<b>p-value</b>
Fluoroscopy time (min)	25.3±11.0	22.6±8.1	29.1±13.3	<b>0.04</b>
No. of clips implanted	1.2±0.5	1.2±0.5	1.1±0.6	0.58
mPG preprocedural (mmHg)	1.6±1.0	1.6±1.0	1.6±1.1	0.99
mPG postprocedural (mmHg)	3.4±1.6	3.5±1.6	3.3±1.6	0.41
mean change in mPG (mmHg)	1.7±1.5	1.9±1.4	1.6±1.6	0.25
p-value	<b>&lt;0.01</b>	<b>&lt;0.01</b>	<b>&lt;0.01</b>	
mean LA pressure preprocedural (mmHg)	21.8±7.4	23.9±6.9	20.6±7.5	<b>0.02</b>
mean LA pressure postprocedural (mmHg)	16.7±5.9	17.6±5.3	16.0±6.1	0.15
mean change in LA pressure (mmHg)	-5.5±5.1	-6.0±5.3	-5.1±5.0	0.37
p-Value	<b>&lt;0.01</b>	<b>&lt;0.01</b>	<b>&lt;0.01</b>	
LA v-wave preprocedural (mmHg)	34.3±14.6	34.2±11.5	34.3±16.3	0.98
LA v-wave postprocedural (mmHg)	24.7±10.0	25.8±9.2	23.9±10.4	0.31

mean change in LA	-9.6±10.5	-8.6±9.4	-10.2±11.2	0.44
v-wave (mmHg)				
p-value	<b>&lt;0.01</b>	<b>&lt;0.01</b>	<b>&lt;0.01</b>	
Values are mean ± standard deviation, or number (%). p-values in parentheses refer to one-sided testing.				
No.= Number; mPG= Mean Pressure Gradient; LA= Left Atrium				