



**Supplementary material**

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## Conduction Abnormalities and Pacemaker Implantations After SAPIEN 3 Vs SAPIEN XT Prosthesis Aortic Valve Implantation

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**Table of the supplementary material**

Baseline Characteristics of Patients With and Without Need for Permanent Pacemaker Implantation  
for the Entire Population and the SAPIEN 3 and SAPIEN XT Subgroups

Variables	All patients		<i>P</i>	SAPIEN 3		<i>P</i>	SAPIEN XT		<i>P</i>
	pacemaker + n = 23	pacemaker - n = 160		pacemaker + n = 12	pacemaker - n = 84		pacemaker + n=11	pacemaker - n=76	
<b>Clinical characteristics</b>									
Age (y)	82 ± 5	81 ± 6	.50	84 ± 4	80 ± 6	.02	79 ± 5	82 ± 5	.13
Male sex, n (%)	17 (74)	80 (50)	.03	9 (75)	42 (50)	.13	8 (73)	38 (50)	.16
Logistic EuroSCORE (%)	15 ± 8	14 ± 10	.68	15 ± 6	13 ± 8	.38	14 ± 8	15 ± 10	.80
Diabetes, n (%)	10 (44)	42 (26)	.09	5 (42)	24 (29)	.50	5 (46)	18 (24)	.13
Hypertension, n (%)	19 (83)	146 (91)	.19	9 (75)	76 (91)	.12	10 (91)	70 (92)	.89
Hypercholesterolemia, n (%)	15 (65)	118 (74)	.39	7 (58)	59 (70)	.41	8 (73)	59 (78)	.72
Smoking, n (%)	5 (22)	31 (19)	.78	3 (25)	16 (19)	.70	2 (18)	15 (20)	.99
Previous surgical aortic valve replacement, n (%)	0 (0)	3 (2)	1.00	0 (0)	2 (2)	1.00	0 (0)	1 (1)	.99
Previous coronary artery bypass graft, n (%)	3 (13)	13 (8)	.44	0 (0)	5 (6)	1.00	3 (27)	8 (11)	.12
Previous percutaneous coronary intervention, n (%)	8 (35)	56 (35)	.99	5 (42)	21 (25)	.30	3 (27)	35 (46)	.34
Previous malignoma, n (%)	6 (26)	33 (21)	.55	3 (25)	18 (21)	.72	3 (27)	15 (20)	.56
Previous myocardial infarction, n (%)	0 (0)	13 (8)	.38	0 (0)	5 (6)	1.00	0 (0)	8 (10)	.59
Previous stroke, n (%)	0 (0)	13 (8)	.38	0 (0)	10 (12)	.35	0 (0)	3 (4)	.99
Glomerular filtration rate (mL/min)	49 ± 18	53 ± 21	.33	45 ± 13	55 ± 20	.11	53 ± 23	52 ± 21	.86
Chronic obstructive pulmonary disease, n (%)	4 (17)	19 (12)	.50	3 (25)	10 (12)	.21	1 (9)	9 (12)	.79
Peripheral artery disease, n (%)	4 (17)	13 (8)	.24	2 (17)	10 (12)	.64	2 (18)	3 (4)	.12
New York Heart Association class III/IV, n (%)	15 (65)	101 (63)	.80	8 (67)	52 (62)	.75	7 (64)	48 (63)	.99
<b>Echocardiography</b>									
Left ventricular ejection fraction ≤ 40%, n (%)	5 (22)	27 (17)	.57	3 (25)	15 (18)	.69	2 (18)	12 (16)	1.00
Mean gradient (mmHg)	37 ± 15	45 ± 17	.10	34 ± 11	43 ± 17	.09	42 ± 20	46 ± 18	.50
Aortic valve area (cm <sup>2</sup> )	0.75 ± 0.2	0.73 ± 0.2	.73	0.75 ± 0.1	0.75 ± 0.2	.99	0.75 ± 0.3	0.71 ± 0.2	.60
<b>Electrocardiogram</b>									

Atrial fibrillation, n (%)	8 (35)	44 (27)	.47	4 (33)	22 (26)	.73	4 (36)	22 (29)	.62
LBBB, n (%)	0 (0)	5 (3)	.99	0 (0)	1 (1)	.999	0 (0)	4 (5)	.99
RBBB, n (%)	8 (35)	12 (8)	.01	5 (42)	6 (7)	.01	3 (27)	6 (8)	.08
<b>MSCT measurements of the aortic annulus</b>									
Minimal diameter (mm)	21.42 ± 2.56	20.81 ± 2.52	.28	21.45 ± 2.53	20.87 ± 2.66	.48	21.39 ± 2.72	20.75 ± 2.38	.42
Maximal diameter (mm)	27.12 ± 2.73	26.79 ± 2.56	.57	26.91 ± 2.87	26.80 ± 2.79	.90	27.35 ± 2.70	26.78 ± 2.30	.46
Effective diameter (mm)	24.49 ± 2.61	23.80 ± 2.35	.20	24.60 ± 2.95	23.84 ± 2.55	.35	24.37 ± 2.31	23.77 ± 2.14	.39
Perimeter (mm)	77.70 ± 7.33	76.60 ± 7.48	.51	77.32 ± 7.37	76.60 ± 8.05	.77	78.12 ± 7.62	76.59 ± 6.88	.50
Area (cm <sup>2</sup> )	4.71 ± 0.89	4.53 ± 1.00	.42	4.67 ± 0.90	4.57 ± 1.00	.74	4.74 ± 0.92	4.49 ± 1.00	.42
Eccentricity index	0.21 ± 0.09	0.22 ± 0.07	.32	0.20 ± 0.08	0.22 ± 0.06	.32	0.22 ± 0.10	0.23 ± 0.07	.68
% Oversizing by area	12 [4-21]	13 [7-21]	.86	11 [3-14]	12 [4-25]	.54	19 [6-33]	16 [9-24]	.55

Diabetes mellitus: insulin-dependent as well as noninsulin dependent diabetes mellitus. Hypertension: resting blood pressure > 140/90 mmHg and/or medication with antihypertensive agents. Hypercholesterolemia: total cholesterol > 200 mg/dL and/or medication with cholesterol synthesis inhibitors. Smoking: present and past smokers. Atrial fibrillation denotes rhythm on admission electrocardiogram.

LBBB, left bundle branch block; RBBB, right bundle branch block.

**Figure of the supplementary material.** A: Sapien 3 and B: Sapien XT uIVCA: unspecific intraventricular conduction abnormality.

**Figure S1A - SAPIEN 3**

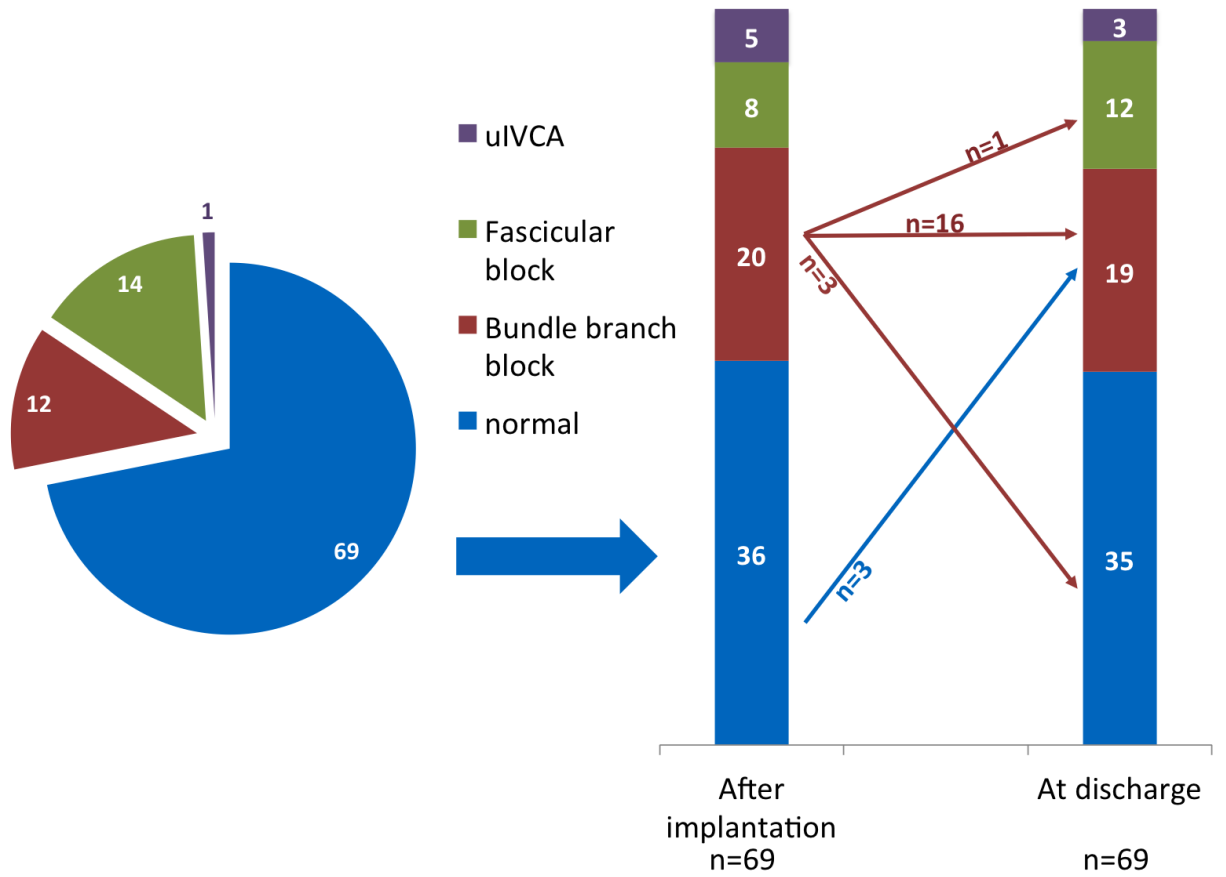


Figure S1B SAPIEN XT

