

**Supplementary Material S2. Clinical and demographic characteristics among intervention and control group before and after propensity matching**

	Overall, unmatched population			Propensity matched population		
	Intervention group (n=308)	Control group (n=980)	P*	Intervention group (n=300)	Control group (n=580)	P**
<b>Characteristics</b>						
Sex (male, n (%))	217 (71)	676 (69)	0.624	209 (70)	400 (69)	0.831
Age (median (IQR))	70 (62;75)	71 (63;76)	0.627	70 (63;76)	71 (63;76)	0.815
Living alone (n (%))	79 (26)	263 (27)	0.681	79 (26)	147 (25)	0.750
<b>Pre-operative information</b>						
Reduced pulmonary function <sup>a</sup> (n (%))	111 (36)	361 (37)	0.800	109 (36)	213 (37)	0.909
EuroScore II (logistic) (median (IQR))	2.0 (1.1;3.5)	2.1 (1.3;3.6)	0.327	2.0 (1.1;3.5)	1.9 (1.2;3.6)	0.963
Estimated glomerular filtration rate ml/min. <sup>b</sup> (median (IQR))	76 (60;99)	76 (59;95)	0.330	75 (60;98)	78 (60;97)	0.749
Prior percutaneous coronary intervention (n (%))	25 (8)	93 (100)	0.466	25 (8)	51 (9)	0.818
Permanent pacemaker (n (%))	9 (3)	25 (3)	0.723	7 (2)	18 (3)	0.515
Atrial fibrillation (n (%))	61 (21)	240 (25)	0.181	62 (21)	122 (21)	0.899
Diabetes <sup>c</sup> (n (%))	38 (12)	124 (13)	0.884	38 (13)	68 (12)	0.684

Ejection fraction $\leq 50\%$ (n (%))	86 (28)	293 (30)	0.507	82 (27)	173 (30)	0.439
NYHA class $\geq 2$ (n (%))	291 (95)	899 (92)	0.113	284 (95)	546 (94)	0.748
Body Mass Index (median, (IQR))	26 (24;29)	27 (24;30)	0.310	26 (24;29)	27 (24;29)	0.501
Current or former smoker (n (%))	181 (59)	561 (57)	0.637	175 (58)	335 (58)	0.870
Alcohol intake above national recommendations (n (%))	36 (12)	111 (11)	0.862	35 (12)	67 (12)	0.960
<b>Primary diagnosis, n (%)<sup>d</sup></b>						
Aortic stenosis	185 (60)	620 (63)	0.312	185 (62)	378 (65)	0.304
Aortic regurgitation	61 (20)	143 (15)	0.029*	55 (18)	105 (18)	0.933
Mitral stenosis or regurgitation	61 (20)	212 (22)	0.494	59 (20)	94 (16)	0.199
Acute / unplanned surgery (n (%))	9 (3)	20 (2)	0.363	9 (3)	13 (2)	0.494
<b>Type of valve procedure, (n (%))</b>						
Aortic valve, biological	201 (65)	612 (62)	0.372	201 (67)	381 (66)	0.697
Aortic valve, mechanical	42 (14)	152 (16)	0.423	42 (14)	99 (17)	0.239
Aortic valve, repair	10 (3)	7 (1)	0.001*	4 (1)	5 (1)	0.499
Mitral valve, replacement <sup>e</sup>	29 (9)	57 (6)	0.027*	27 (9)	47 (8)	0.650
Mitral valve, repair	25 (8)	147 (15)	0.002*	25 (8)	45 (8)	0.765
Concomitant CABG (n (%))	68 (22)	269 (27)	0.061	68 (23)	137 (24)	0.751
Re-operation (n (%))	28 (9)	84 (9)	0.778	28 (9)	50 (9)	0.724
Length of stay, intensive care unit (median	1 (1;1)	1 (1;1)	0.655	1 (1;1)	1 (1;1)	0.990

(IQR))						
Length of stay (median (IQR))	9 (7;12)	9 (7;13)	0.313	9 (7;12)	9 (7;13)	0.362

IQR, interquartile range, 25<sup>th</sup> to 75<sup>th</sup> quartile. NYHA, New York Heart Association Class

<sup>a</sup> Patients with forced expiratory volume,%  $\leq$ 80% of predicted value and / or a history of chronic obstructive pulmonary disease

<sup>b</sup> Estimated glomerular filtration rate estimated by the Cockcroft-Gault Equation

<sup>c</sup> Patients with diabetes; insulin, per oral and non-pharmacological treatment

<sup>d</sup> Six patients had a tricuspid-valve disease and are not shown in the table.

<sup>e</sup> Both biological and mechanical mitral valve replacement

\* P<0.05 between the intervention group and the control group (all)

\*\* P<0.05 between the intervention group and the propensity matched control group