

**Appendix 2 (as supplied by the authors): Characteristics of patients with and without a peak serum creatinine measurement in the 14 days after surgery (N = 7286)<sup>a</sup>**

	Data on peak postoperative serum creatinine in the 14 days after surgery		p value <sup>b</sup>
	Yes (n = 7224)	No (n = 62)	
Age, mean (SD), years	67.9 (13.7)	64.0 (15.1)	0.03
Women, No. (%)	2843 (39.4%)	41 (66.1%)	<0.01
Body mass index, mean (SD), kg/m <sup>2</sup>	26.7 (5.6)	24.9 (6.3)	0.01
<b>Ethnicity, No. (%)</b>			
African	60 / 6741 (0.9%)	0 / 62 (0.0%)	<0.01
Asian (including South Asian)	1769 / 6741 (26.2%)	29 / 62 (46.8%)	
Caucasian	4147 / 6741 (61.5%)	20 / 62 (32.3%)	
Aboriginal	10 / 6741 (0.2%)	0 / 62 (0.0%)	
Hispanic	456 / 6741 (6.8%)	12 / 62 (19.4%)	
Middle-Eastern	299 / 6741 (4.4%)	1 / 62 (1.6%)	
<b>Year of Randomization, No. (%)</b>			
2007-2010	589 (8.2%)	2 (3.2%)	0.1
2011	1428 (19.8%)	16 (25.8%)	
2012	2834 (39.2%)	30 (48.4%)	
2013	2373 (32.9%)	14 (22.6%)	
<b>Location, No. (%)</b>			
North America	3210 (44.4%)	10 (16.1%)	<0.01
South America	550 (7.6%)	14 (22.6%)	
Europe	1014 (14.0%)	8 (12.9%)	
Asia	1732 (24.0%)	28 (45.2%)	
Australia	441 (6.1%)	1 (1.6%)	

Appendix to: Garg AX, Chan MTV, Cuerden MS, et al.; for the SIRS Investigators. Effect of methylprednisolone on acute kidney injury in patients undergoing cardiac surgery with a cardiopulmonary bypass pump: a randomized controlled trial.

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	Data on peak postoperative serum creatinine in the 14 days after surgery		<i>p</i> value <sup>b</sup>
	Yes (n = 7224)	No (n = 62)	
Middle East	277 (3.8%)	1 (1.6%)	
<b>Past Medical History, No. (%)</b>			
Congestive heart failure	1946 (26.9%)	17 (27.4%)	0.9
Atrial fibrillation	1648 (22.8%)	16 (25.8%)	0.6
Previous cardiac surgery	1114 (15.4%)	15 (24.2%)	0.06
CABG	378 (5.2%)	5 (8.1%)	0.3
Valvular	645 (8.9%)	8 (12.9%)	0.3
Other	226 (3.1%)	2 (3.2%)	0.7
Stroke	586 (8.1%)	7 (11.3%)	0.4
Diabetes	1861 (25.8%)	10 (16.1%)	0.08
Hypertension	4757 (65.9%)	36 (58.1%)	0.2
Peripheral artery disease	738 (10.2%)	6 (9.7%)	0.9
Smoking (within 12 months)	913 (12.6%)	6 (9.7%)	0.5
<b>Left Ventricular Ejection Fraction, No. (%)</b>			
≥ 50%	4601 (63.7%)	39 (62.3%)	0.9
< 50%	2623 (36.3%)	23 (37.7%)	
<b>Estimated glomerular filtration rate</b>			
eGFR, mL/min per 1.73 m <sup>2</sup>	73 (22)	74 (22)	0.7
<b>eGFR category</b>			
<b>≥ 60 mL/min per 1.73 m<sup>2</sup></b>			
No. (%)	5109 (70.7%)	43 (69.4%)	0.8
Mean (SD), mL/min per 1.73 m <sup>2</sup>	83 (17)	86 (13)	
<b>&lt; 60 mL/min per 1.73 m<sup>2</sup></b>			

	Data on peak postoperative serum creatinine in the 14 days after surgery		p value <sup>b</sup>
	Yes (n = 7224)	No (n = 62)	
No. (%)	2115 (29.3%)	19 (30.7%)	
Mean (SD), mL/min per 1.73 m <sup>2</sup>	47 (10)	47 (10)	
≤ 45 mL/min per 1.73 m <sup>2</sup>	782 (10.8%)	6 (9.7%)	0.8
≤ 30 mL/min per 1.73 m <sup>2</sup>	159 (2.2%)	2 (3.2%)	0.4
<b>Pre-randomization medication use, No. (%)</b>			
ACE inhibitor or angiotensin receptor blocker use	3965 (54.9%)	34 (54.8%)	0.99
ACE inhibitor use	2625 (36.3%)	20 (32.3%)	0.4
Angiotensin receptor blocker use	1171 (16.2%)	16 (25.8%)	0.04
Statin use <sup>c</sup>	4050 (56.1%)	26 (41.9%)	0.03
Diuretic use	3982 (55.1%)	41 (66.1%)	0.08
Aspirin use	3283 (45.5%)	21 (33.9%)	0.07
<b>Surgery, No. (%)</b>			
Evidence of non-elective surgery <sup>d</sup>	1382 (19.1%)	22 (35.5%)	<0.01
Preoperative use of inotropes or vasopressors	593 (8.2%)	15 (24.2%)	<0.01
Preoperative use of IABP or VAD	119 (1.7%)	3 (4.8%)	0.05
Previous MI within 30 days of surgery	825 (11.4%)	9 (14.5%)	0.5
<b>Surgery Type, No. (%)</b>			
Isolated CABG	1526 (21.1%)	8 (12.9%)	0.07
Isolated valve	2391 (33.1%)	20 (32.3%)	
CABG and valve	1778 (24.6%)	13 (21.0%)	
Other <sup>e</sup>	1529 (21.2%)	21 (33.9%)	

*Abbreviations:* ACE, angiotensin converting enzyme; CABG, coronary artery bypass graft; eGFR, estimated glomerular filtration rate; IABP, intra-aortic balloon pump; MI, myocardial infarction; VAD, ventricular assist device.

<sup>a</sup> All characteristics (except surgical data) were assessed before randomization (surgical data [i.e. preoperative use of inotropes or vasopressors, or IABP or VAD, and surgery type] were assessed at the time of surgery; the median time from randomization to surgery was 17 hours [interquartile range, 3-26]; time of surgery was missing for 2 patients in the main study and all 483 patients in the pilot study).

<sup>b</sup> Chi square tests and independent samples t tests were used to test whether the proportions or means were equal across groups.

<sup>c</sup> All patients in the pilot study (methylprednisolone [n=243] and placebo [240]) were missing data on pre-randomization body mass index, ethnicity, and pre-randomization use of ACE inhibitors or angiotensin receptor blockers (however, information on combined ACE/ARB use was available). For patients in the main study, data on left ventricular ejection fraction was missing in 68 patients (methylprednisolone [n=29], placebo [n=39]); missing data were imputed as described in **eAppendix 1** in Supplement 1). Missing data on the remaining variables was less than 0.2%. For missing data on categorical variables, the condition/medication/procedure was considered absent; for calculating eGFR, patients missing ethnicity were assumed to be white. Pilot patients who answered 'yes' to taking a statin or a non-statin lipid lowering agent were assumed to be taking a statin.

<sup>d</sup> Evidence of non-elective surgery was defined by preoperative use of inotropes, vasopressors, an intra-aortic balloon pump, or a ventricular assist device, or history of a myocardial infarction in the 30 days before surgery.

<sup>e</sup> Surgery type 'other' includes patients who had an aorta surgery (patch enlargement, Bentall procedure, ascending aortic replacement, arch replacement, and/or descending thoracic aortic replacement) or cardiac ablation surgery, or some type of "other cardiac procedure." Patients in this category may have had one of CABG or valve surgery, but not both; if a patient had both CABG and valve as well as aorta surgery and/or cardiac ablation surgery, then they are included in the 'CABG and valve' category.