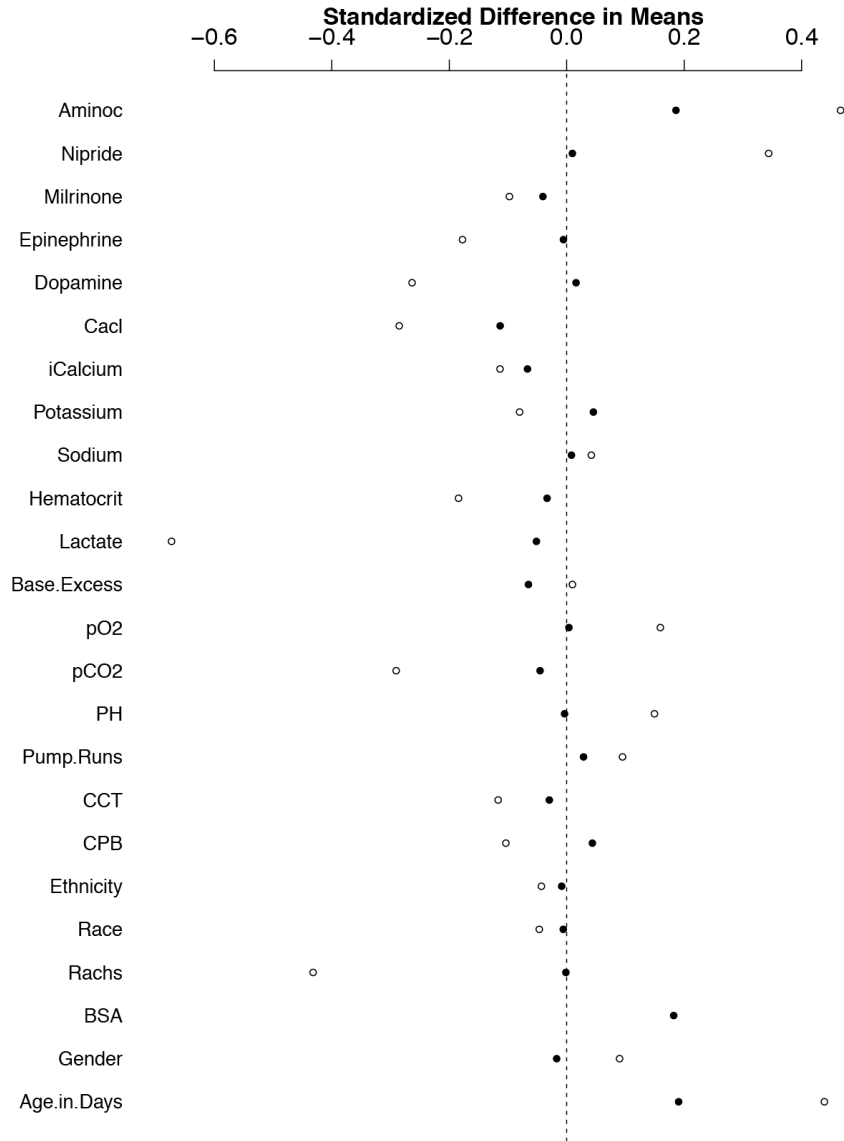


SUPPLEMENTAL MATERIAL



Supplemental Figure 1: Standardized difference in means before and after propensity score matching using 468 subjects receiving dexmedetomidine and 468 control subjects. The open circles represent the difference in means prior to matching and the filled circles represent the difference in means after matching.

Aminoc: aminocaproic acid; CaCl: calcium chloride infusion; iCalcium: ionized calcium; CCT: cross clamp time; CPB: cardiopulmonary bypass; RACHS: Risk Adjustment for Congenital Heart Surgery version 1; BSA: body surface area

Supplemental Table 1. Arrhythmia incidence and 95% confidence interval (CI) for the difference in proportions between the dexmedetomidine group (DEX) and control groups after propensity score matching

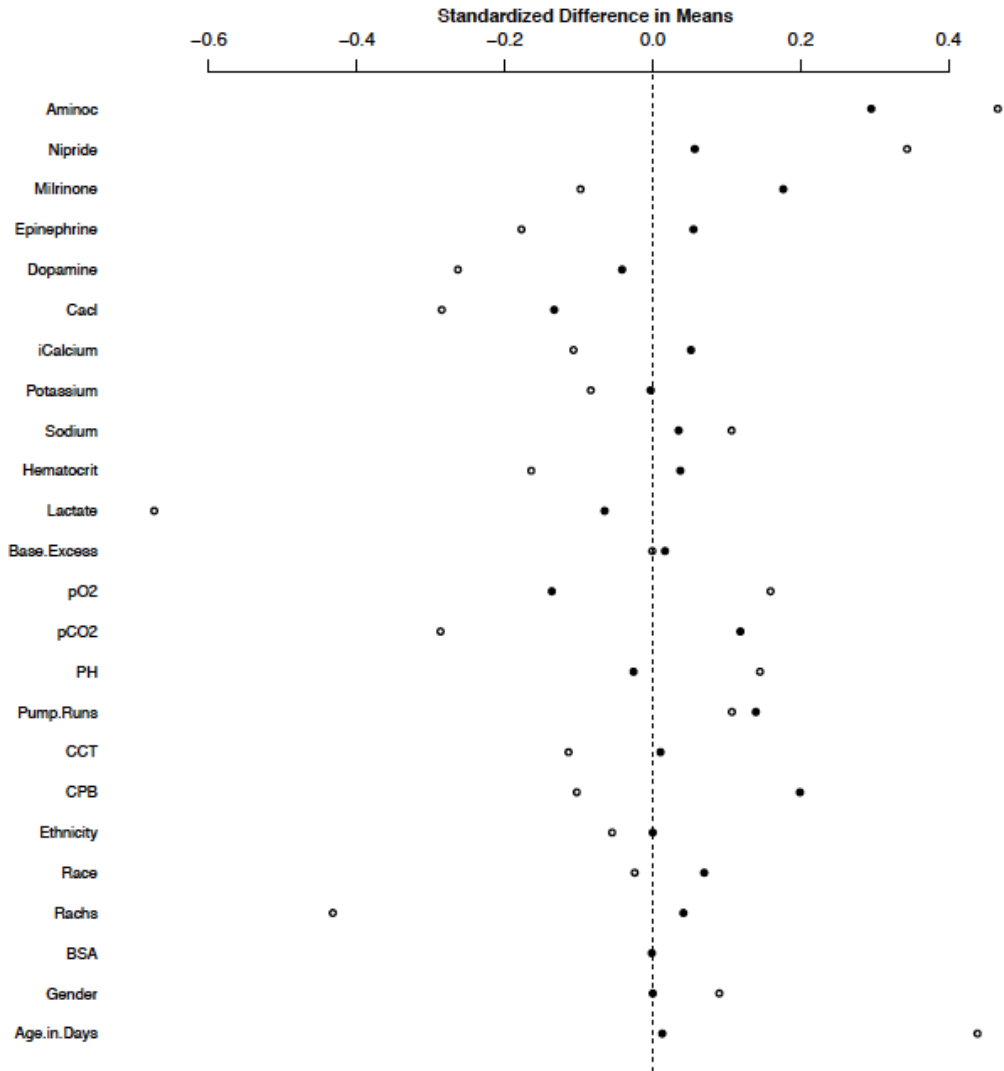
	Control (n = 468)	DEX (n = 468)	p-Value*	Proportion Difference (95% CI)†
One or More Arrhythmia	41% (194)	46% (213)	0.22	0.05 (-0.02 – 0.10)
Tachyarrhythmia (TA)	31% (144)	29% (137)	0.66	-0.02 (-0.07 – 0.04)
TA Receiving Intervention	17% (81)	14% (65)	0.16	-0.03 (-0.08 – 0.01)
Bradyarrhythmia (BA)	15% (72)	18% (82)	0.44	0.03 (-0.03 – 0.07)
BA Receiving Intervention	9% (41)	12% (55)	0.17	0.03 (-0.01 – 0.07)
JET	6% (29)	4% (17)	0.44	-0.02 (-0.03 – 0.01)
JET Receiving Intervention	5% (24)	3% (16)	0.33	-0.02 (-0.03 – 0.01)
AT	6% (29)	7% (31)	0.74	0.01 (-0.03 – 0.05)
AT Receiving Intervention	3% (15)	4% (20)	0.35	0.01 (-0.01 – 0.05)
Third Degree AV Block	2% (11)	3% (16)	0.11	0.01 (-0.003 – 0.05)
Arrhythmia Resulting in CPR	1% (6)	2% (11)	0.27	0.01 (-0.01 – 0.04)
AJR	10% (48)	9% (44)	0.89	-0.01 (-0.04 – 0.03)
AJR Receiving Intervention	7% (35)	6% (27)	0.50	-0.01 (-0.04 – 0.01)
VT	10% (48)	12% (56)	0.48	0.02 (-0.02 – 0.06)
VT Receiving Intervention	3% (13)	3% (13)	>0.99	0.00 (-0.02 – 0.02)
AVR	6% (26)	5% (22)	0.65	-0.01 (-0.04 – 0.02)
AVR Receiving Intervention	<1% (2)	<1% (2)	>0.99	0.00 (-0.01 – 0.01)

Values are represented as % (n)

*McNemar's test

†Values are represented as point estimate of proportion difference (95% confidence interval for the difference in proportions); DEX minus control

JET: junctional ectopic tachycardia; AT: atrial tachycardia; AV: atrioventricular; CPR: cardiopulmonary resuscitation; AJR: accelerated junctional rhythm; VT: ventricular tachycardia; AVR: accelerated ventricular rhythm



Supplemental Figure 2: Standardized difference in means before and after propensity score matching using 468 subjects receiving dexmedetomidine and 468 control subjects that were not exposed to dexmedetomidine at a later time in their hospitalization. The open circles represent the difference in means prior to matching and the filled circles represent the difference in means after matching.

Aminoc: aminocaproic acid; CaCl: calcium chloride infusion; iCalcium: ionized calcium; CCT: cross clamp time; CPB: cardiopulmonary bypass; RACHS: Risk Adjustment for Congenital Heart Surgery version 1; BSA: body surface area

Supplemental Table 2. Arrhythmia incidence and 95% confidence interval (CI) for the difference in proportions between the dexmedetomidine (DEX) and control groups after propensity score matching excluding controls that were exposed to DEX at any point in their hospitalization

	Control (n = 468)	DEX (n = 468)	p-Value*	Proportion Difference (95% CI) †
One or More Arrhythmia	44% (208)	46% (213)	0.79	0.02 (-0.06 – 0.07)
Tachyarrhythmia (TA)	34% (158)	29% (137)	0.13	-0.05 (-0.10 – 0.01)
TA Receiving Intervention	17% (79)	14% (65)	0.23	-0.03 (-0.08 – 0.02)
Bradyarrhythmia (BA)	19% (88)	18% (82)	0.66	0.01 (-0.06 – 0.04)
BA Receiving Intervention	12% (57)	12% (55)	0.92	0.005 (-0.04 – 0.04)

Values are represented as % (n)

*McNemar's test

†Values are represented as point estimate of proportion difference (95% confidence interval for the difference in proportions); DEX minus control