

**Supplementary Table 1. Sensitivity analysis: single-value imputation for missing covariables**

	After matching		P value
	Remimazolam (n=182)	Dexmedetomidine (n=182)	
Timely recovery	166 (91.2)	170 (93.4)	0.451
Duration of ICU stay (hr)	25 (23, 27)	26 (24, 28)	0.110
Time to be fully awake (hr)	2 (0, 4)	3 (2, 6)	<0.001
Oxygen supplementation duration (hr)	5 (4, 6)	6 (5, 6)	0.264
Intubation	0 (0)	2 (1.1)	
Vasopressor/inotropes	25 (13.7)	43 (23.6)	0.018
Need for TPM	82 (45.1)	116 (63.7)	<0.001
Delirium	31 (17.0)	36 (19.8)	0.501

Data are presented as number of patients (%) or median (Q1, Q3). ICU: intensive care unit, TPM: temporary pacemaker.