

**Supplemental Table S1. Demographic and operative variables**

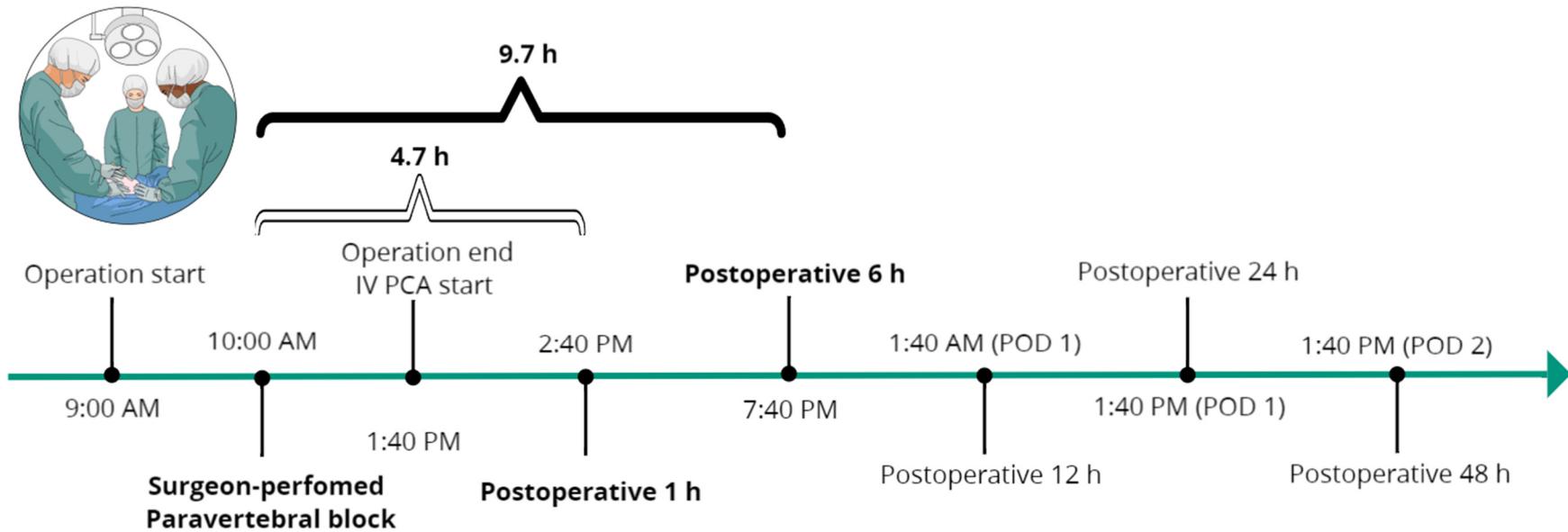
	<b>Control group (N=16)</b>	<b>PVB group (N=15)</b>	<b>P value</b>	<b>Effect size (95% CI)</b>	<b>Power</b>	<b>Statistics</b>	<b>df</b>
Age (years)	14.1 ± 2.6	13.7 ± 1.9	0.694	0.143 (-0.670, 0.850)	0.067	0.398	29
Female/Male	11/5	11/4	>0.999	0.050 (0.000, 0.380)	0.040	NA	NA
Height (cm)	156.6 ± 11.4	160.9 ± 13.0	0.332	-0.354 (-1.210, 0.400)	0.159	-0.986	29
Weight (kg)	48.4 ± 8.7	52.5 ± 14.8	0.364	-0.336 (-1.050, 0.370)	0.147	-0.926	22.3
Body mass index (kg/m <sup>2</sup> )	19.7 ± 2.6	20.1 ± 4.1	0.764	-0.109 (-0.860, 0.770)	0.060	-0.303	29
ASA class (I/II/III)	8/6/2	10/3/2	0.686	0.196 (0.000, 0.494)	NA	NA	NA
Preoperative Cobb angle	56.5 [51.5-71.0]	59.0 [55.5-61.5]	0.566	0.107 (0.007, 0.460)	0.050	105	NA
Preoperative bending	30.9 ± 15.5	30.9 ± 16.0	0.999	0.001 (-0.690, 0.770)	0.050	0.001	29
Flexibility	48.8 ± 26.5	50.2 ± 23.1	0.870	-0.059 (-0.730, 0.660)	0.053	-0.166	29
Duration of surgery (min)	249.0 [196.0-354.0]	273.0 [246.5-300.5]	0.406	0.153 (0.007, 0.500)	0.073	99	NA
Surgical vertebral level during surgery	8.0 [7.0-13.0]	11.0 [9.0-11.0]	0.425	0.147 (0.008, 0.510)	0.111	100	NA
Postoperative Cobb angle	20.2 ± 11.0	20.0 ± 9.7	0.947	0.024 (-0.660, 0.790)	0.050	0.067	29
Correction rate	66.6 ± 18.6	67.6 ± 13.7	0.862	-0.063 (-0.820, 0.580)	0.053	-0.175	29
Anesthesia duration (min)	340.0 [300.0-457.5]	375.0 [340.0-417.5]	0.313	0.185 (0.007, 0.510)	0.069	94	NA
Remifentanil use (mcg)	2694.6 ± 826.9	2856.4 ± 1231.2	0.687	-0.158 (-0.950, 0.820)	0.071	-0.408	25
Propofol use (mg)	2113.0 [1908.5-2315.0]	2110.0 [1910.0-3305.5]	0.478	0.161 (0.008, 0.580)	0.379	49	NA
Norepinephrine use (mcg)	18.5 [4.4-36.0]	36.2 [24.7-63.5]	0.163	0.285 (0.020, 0.630)	0.096	51	NA
Amount of fluid infused (mL)	2342.5 ± 794.2	2684.7 ± 832.0	0.251	-0.421 (-1.280, 0.260)	0.205	-1.172	29
Amount of bleeding (mL)	456.4 ± 245.4	686.7 ± 336.2	0.037	-0.787 (-1.620, -0.120)	0.562	-2.189	29
Amount of transfusion (mL)	252.4 ± 254.9	394.0 ± 160.4	0.077	-0.660 (-1.700, 0.040)	0.427	-1.837	29

Values are reported as the median (interquartile range), mean ± standard deviation, or number of patients (%). ASA, American Society of Anesthesiologists; CI, confidence interval; df, degrees of freedom; NA, not applicable.

**Supplemental Table S2. Intravenous patient-controlled and postoperative rescue analgesia**

Control group (N=16)	PVB group (N=15)	P value	Effect size (95% CI)	Power	Statistics	df
Fentanyl consumption (µg) as background infusion plus boluses via PCA						
0–1 h	20.3 ± 9.9	16.5 ± 10.2	0.313	0.375 (-0.300, 1.180)	0.172	1.027
1–6 h	78.2 [57.2–92.5]	96.7 [64.8–130.3]	0.338	0.177 (0.007, 0.540)	0.312	95
6–12 h	72.5 [49.9–107.5]	67.7 [51.0–121.3]	0.859	0.036 (0.007, 0.420)	0.102	115
12–24 h	133.8 [95.5–212.4]	125.7 [94.1–211.8]	0.953	0.014 (0.007, 0.390)	0.064	122
24–48 h	282.2 ± 147.7	291.8 ± 81.1	0.823	-0.080 (-0.910, 0.590)	0.055	-0.226
Number of boluses given via PCA						
0–1 h	2 (1–3)	1 (0–2)	0.050	0.364 (0.040, 0.670)	0.523	148.5
1–6 h	6.6 ± 3.4	8.3 ± 4.4	0.237	-0.441 (-1.200, 0.280)	0.220	-1.207
6–12 h	5.0 [2.5–8.0]	4.0 [1.5–9.5]	0.983	0.008 (0.004, 0.420)	0.052	113.5
12–24 h	8.0 [2.5–20.0]	5.0 [3.0–13.0]	0.708	0.072 (0.004, 0.440)	0.082	122
24–48 h	13.1 ± 11.9	13.7 ± 8.3	0.886	-0.06 (-1.080, 0.880)	0.053	-0.145
Number of invalid bolus attempts via PCA						
0–1 h	3.5 [0.0–6.0]	1.0 [0.0–3.0]	0.267	0.210 (0.009, 0.570)	0.101	130
1–6 h	3.0 [0.5–11.5]	1.0 [0.0–10.5]	0.556	0.111 (0.008, 0.460)	0.059	127
6–12 h	0.0 [0.0–4.0]	0.0 [0.0–6.0]	0.982	0.008 (0.004, 0.390)	0.113	113.5
12–24 h	1.0 [0.0–10.5]	0.0 [0.0–4.0]	0.485	0.008 (0.004, 0.390)	0.113	113.5
24–48 h	1.0 [0.0–3.0]	0.0 [0.0–3.0]	0.804	0.057 (0.006, 0.460)	0.170	76
Patients receiving rescue analgesics (n)						
0–1 h	13 (81%)	10 (67%)	0.433	0.167 (0.000, 0.518)	0.120	NA
1–6 h	7 (44%)	7 (47%)	>0.999	0.029 (0.000, 0.327)	0.053	0.000
6–12 h	2 (13%)	5 (33)	0.220	0.249 (0.000, 0.601)	0.290	NA
12–24 h	3 (19%)	6 (40%)	0.252	0.234 (0.000, 0.586)	0.180	NA
24–48 h	6 (38%)	10 (67%)	0.206	0.292 (0.000, 0.644)	0.369	1.599

Values are presented as median (interquartile range), mean ± standard deviation, or number of patients (%). CI, confidence interval; df, degrees of freedom; NA, not applicable; PCA, intravenous patient-controlled analgesia.



**Figure S1.** Study timeline.

### **\*Effect Size**

For an independent t-test, Cohen's d is used. For the Mann-Whitney U test, Wilcoxon effect size (r) is used. For Fisher's exact test or chi-square test, Cramer's V is calculated.

Cohen's  $|d|$  values are considered small for  $0.2 \leq d < 0.5$ , medium for  $0.5 \leq d < 0.8$ , and large for  $d \geq 0.8$ .

Wilcoxon effect size (r) values are considered small for  $0.1 \leq r < 0.3$ , moderate for  $0.3 \leq r < 0.5$ , and large for  $r \geq 0.5$ .

Cramer's V values are considered small for  $0.1 \leq V < 0.3$ , medium for  $0.3 \leq V < 0.5$ , and large for  $V \geq 0.5$ .

(Reference: Cohen J. Statistical Power Analysis for the Behavioral Sciences. Lawrence Erlbaum; 1988.)

### **\*Statistics and Degrees of Freedom**

For an independent t-test, report the t statistic and degrees of freedom (df).

For a chi-square test, report the  $\chi^2$  statistic and degrees of freedom (df).

For a Mann-Whitney U test, since it does not use approximation but exact distribution for p-value, report the U-value and denote degrees of freedom (df) as not applicable (NA).

For a Fisher exact test, since it does not use approximation but exact distribution for p-value, denote the statistic as NA and degrees of freedom (df) as NA.