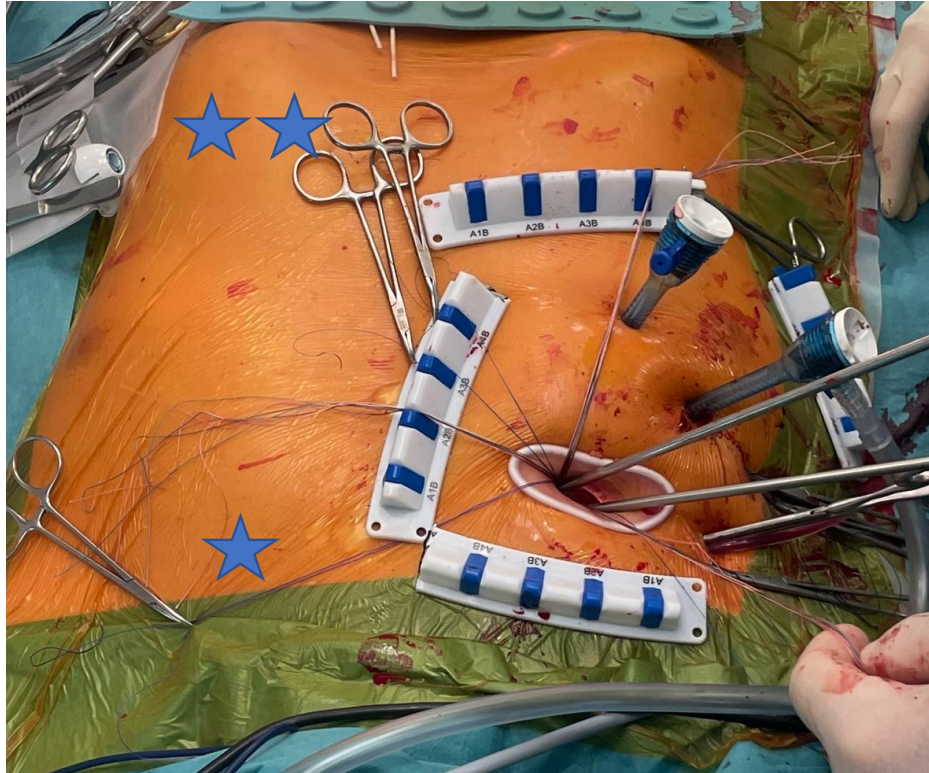
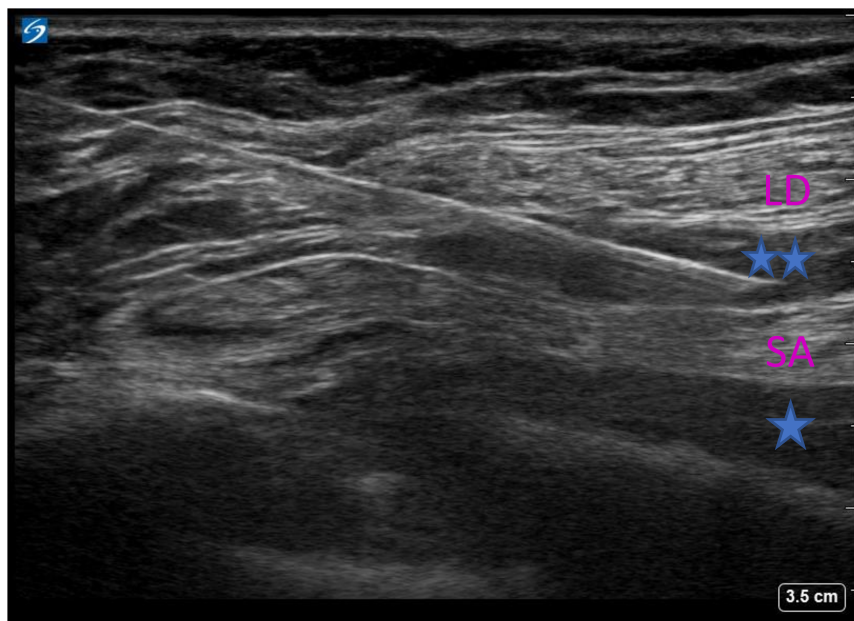


Supplementary Figure 1A. Surgical field of a totally endoscopic aortic valve replacement (TEAVR)



Over the right anterior hemithorax three 5mm trocar ports and one utility port are inserted. The second intercostal space is spread with a soft tissue retractor. The cranial (\*) and caudal (\*\*) side of the patient are marked.

Supplementary Figure 1B. Ultrasound view of a SAPB after TEAVR.



Ultrasound view of a SAPB after TEAVR. Spread of local anesthetics can be seen in the deep SAP between the 5<sup>th</sup> rib (\*) and the serratus muscle (\*\*). Next, the needle was withdrawn for a superficial injection between the serratus (\*\*\*) and latissimus dorsi muscles. LD = latissimus dorsi, SA = serratus anterior muscle

## Supplementary Methods

The extubation criteria and ICU dismissal criteria are standardized within our ICU.

The criteria for extubation are being conscious and comfortable, to have stable hemodynamics, a  $\text{FiO}_2 < 60\%$ , temperature  $> 35.5^\circ\text{C}$  and a minimal blood loss.

The criteria for ICU dismissal are stable hemodynamics and heart rhythm (not paced), weaned off vasopressors/inotropes, nasal prongs  $< 4\text{L O}_2/\text{min}$  and Acute Kidney Injury maximal KDIGO 2.

### Supplementary Table 1 Quality of Recovery outcomes.

	No block	Serratus anterior plane block	Difference (95% CI)	P-value
Sample size, n	37	38		
Subcutaneous emphysema, n (%)	7 (18.9)	7 (18.4)	0.0 [-0.2, 0.2]	0.95
POAF n (%)	6 (16.2)	7 (18.4)	0.0 [-0.2, 0.2]	0.80
Pneumonia n (%)	0 (0.0)	1 (2.6)	0 [0.1, 0.1]	0.32
Patient satisfaction	8 (7.8, 9.0)	8.0 (7.0, 9.3)	0 [-1.0, 1.0]	0.92
POD 2				
EQ5D				
Index	0.5 (0.4, 0.6)	0.5 (0.4, 0.7)	-0.2 [-0.1, 0.1]	0.59
VAS score	60.0 (50.0, 77.5)	70.0 (53.8, 80.0)	-5.0 [-10.0, 0.0]	0.18
SF-36				
Physical functioning	20.0 (0.0, 45.0)	20.0 (0.0, 56.3)	-5.0 [-15.0, 5.0]	0.33
Role-physical health	0.0 (0.0, 0.0)	0.0 (0.0, 25.0)	0.0 [0.0, 0.0]	0.09
Pain	45.0 (33.8, 67.5)	67.5 (45.0, 80.0)	-10.0 [-22.5, 0.0]	0.08
General health	80.0 (67.5, 85.0)	70.0 (58.8, 80.0)	5.0 [0.0, 15.0]	0.06
Role-emotional health	100.0 (16.66, 100.0)	100.0 (91.7, 100.0)	0.0 [0.0, 0.0]	0.63
Energy	55.0 (40.0, 75.0)	55.0 (38.8, 65.8)	4.0 [-10.0, 15.0]	0.65
Emotional wellbeing	92.0 (78.0, 100.0)	86.0 (68.0, 100.0)	0.0 [-4.0, 12.0]	0.63
Social functioning	62.5 (37.5, 88.8)	75.0 (50.0, 100.0)	-10.0 [-25.0, 0.0]	0.20
POD 7				
EQ5D				
Index	0.8 (0.6, 0.9)	0.8 (0.7, 0.8)	0.0 [-0.5, 0.1]	0.43
VAS score	70.0 (60.0, 80.0)	70.0 (57.5, 80.0)	0.0 [-5.0, 10.0]	0.76
SF-36				
Physical functioning	60.0 (35.0, 77.5)	55.0 (35.0, 71.3)	5.0 [-10.0, 15.0]	0.59
Role-physical health	0.0 (0.0, 100.0)	0.0 (0.0, 6.3)	0.0 [0.0, 25.0]	0.02
Pain	77.5 (57.5, 95.0)	67.5 (56.9, 90.0)	2.5 [-7.5, 12.5]	0.38
General health	75.0 (65.0, 86.3)	75.0 (63.8, 85.0)	5.0 [-5.0, 10.0]	0.28
Role-emotional health	100.0 (100.0, 100.0)	100.0 (100.0, 100.0)	0.0 [0.0, 0.0]	0.17
Energy	60.0 (45.0, 82.5)	60.0 (43.75, 70.0)	0.0 [-10.0, 15.0]	0.71
Emotional wellbeing	96.0 (80.0, 100.0)	92.0 (80.0, 100.0)	0.0 [-3.0, 8.0]	0.50
Social functioning	100.0 (75.0, 100.0)	75.0 (62.5, 100.0)	0.0 [0.0, 12.5]	0.44

Data are expressed as median (25%, 75%). A p-value  $< 0.05$  is considered statistically significant.