



**Figure S1** The measurement of the surgical corridor. The region 'a' refers to the edge of the vertebrae covered by the abdominal aorta (aorta corridor). The region 'b' refers to the edge without any covered structure (exposed corridor) while the letter 'c' refers to the region covered by the psoas of the anterior-lateral vertebral (psoas corridor).

**Table S1** The values of the surgical corridor

Corridor	Aorta corridor	Exposed corridor	Psoas corridor	Ideal corridor*
<b>L1-2</b>				
Maximum value	15.7	23.2	12.8	30.2
Minimum value	7.8	7.7	2	15.6
Mean ± SD	12.1±1.5	13.3±3.8	7.5±2.7	20.8±3.5
Mean-2*SD	9.1	5.6	2.2	13.9
<b>L2-3</b>				
Maximum value	14.7	19.3	20	32.3
Minimum value	8.8	6.4	5.5	14.9
Mean ± SD	11.2±1.2	13.0±3.1	10.9±3.0	23.8±3.8
Mean-2*SD	8.8	6.8	5	16.3
<b>L3-4</b>				
Maximum value	15.3	22.5	21	34.8
Minimum value	8.1	6.2	6.0	15.3
Mean ± SD	11.3±1.5	13.1±3.8	12.9±3.7	26.0±4.3
Mean-2*SD	8.4	5.5	5.6	17.4
<b>L4-5</b>				
Maximum value	23.4	22.1	19.9	33.4
Minimum value	6.6	1.3	5.8	10.6
Mean ± SD	10.6±3.6	9.4±3.6	13.8±3.8	23.2±5.5
Mean-2*SD	3.4	2.2	6.2	12.1

\*, Ideal corridor = Exposed corridor + Psoas corridor.