

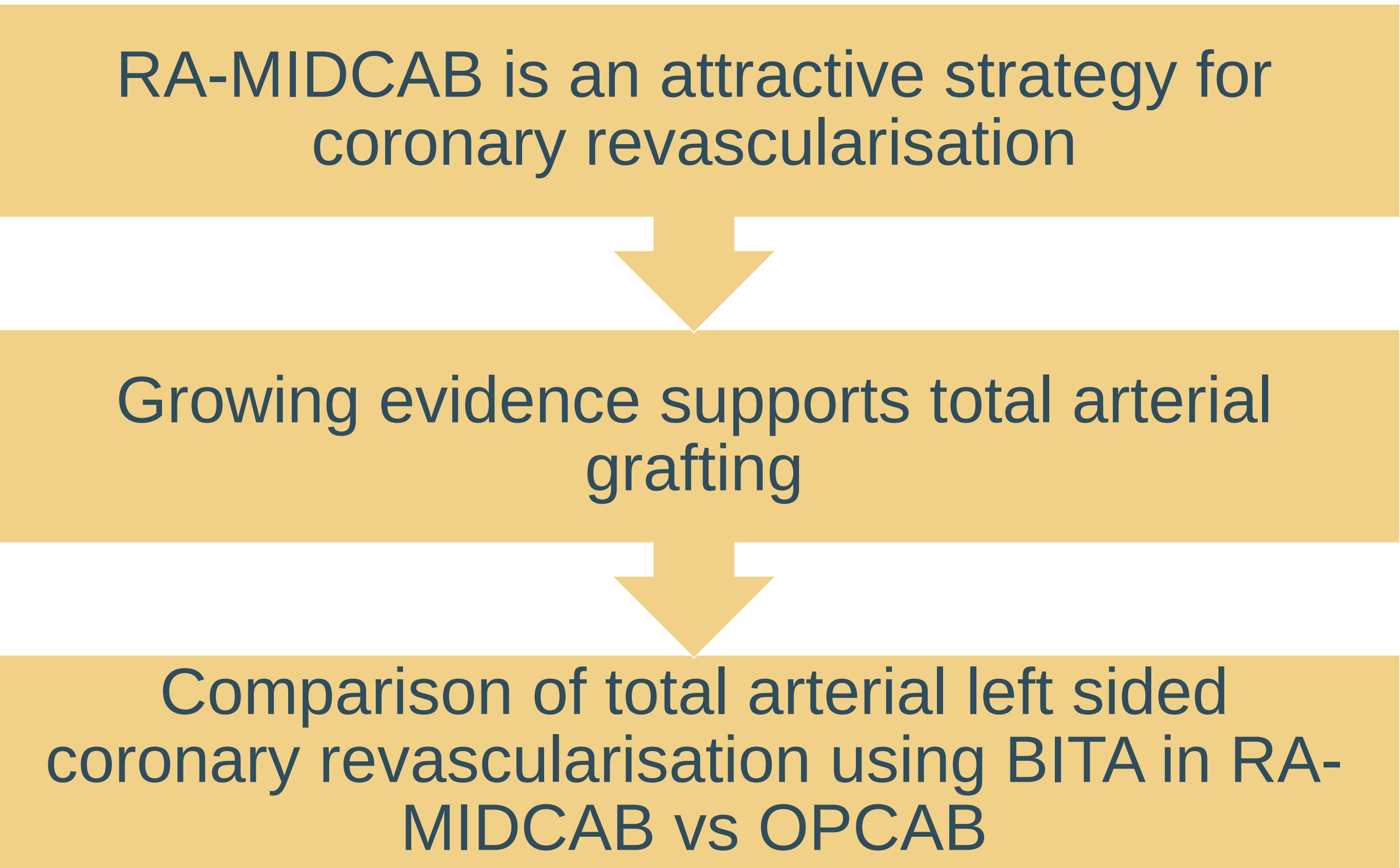
Robotically-assisted MIDCAB using bilateral internal thoracic artery, a propensity matched study with OPCAB patients.

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INTRODUCTION

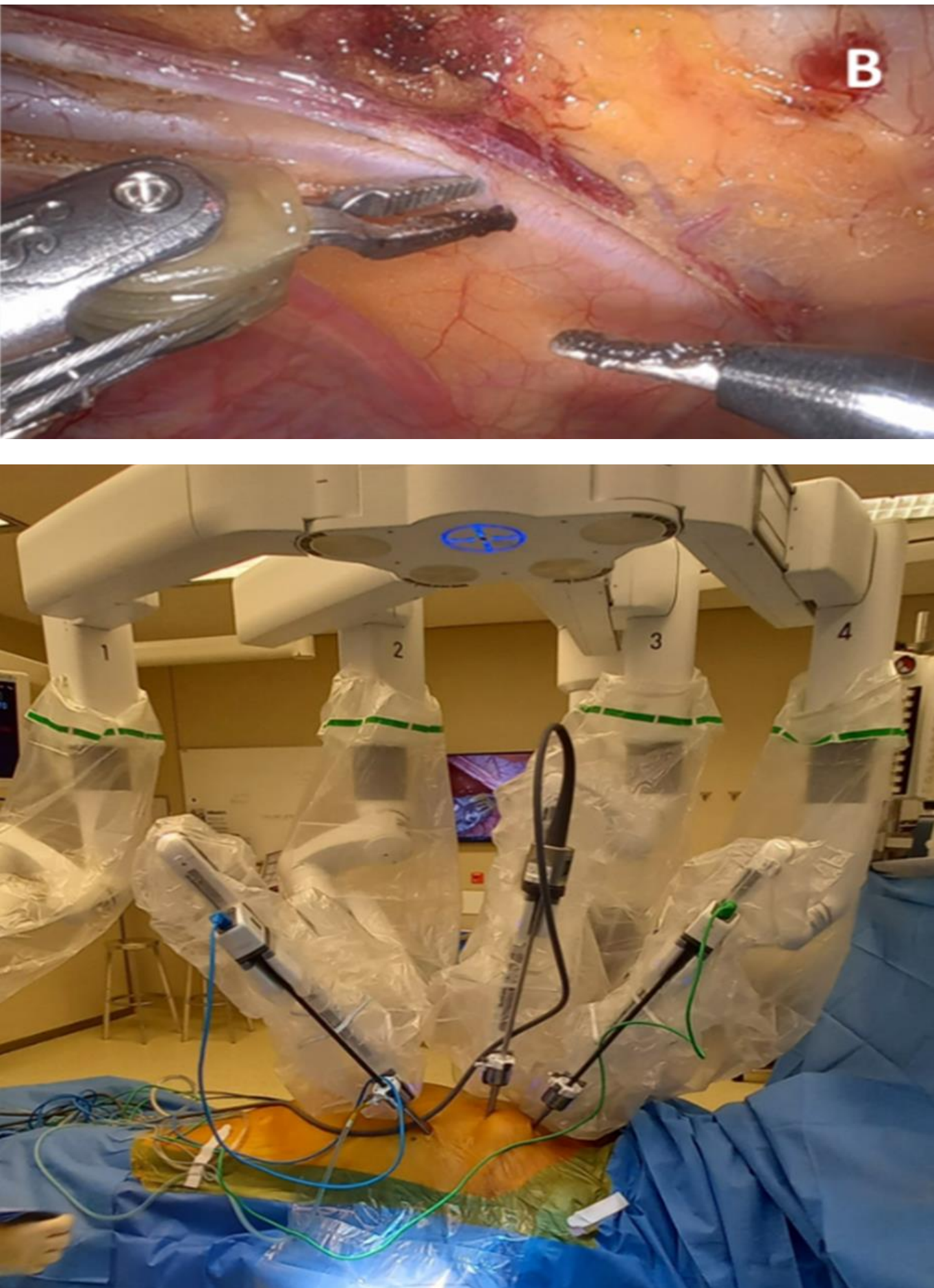
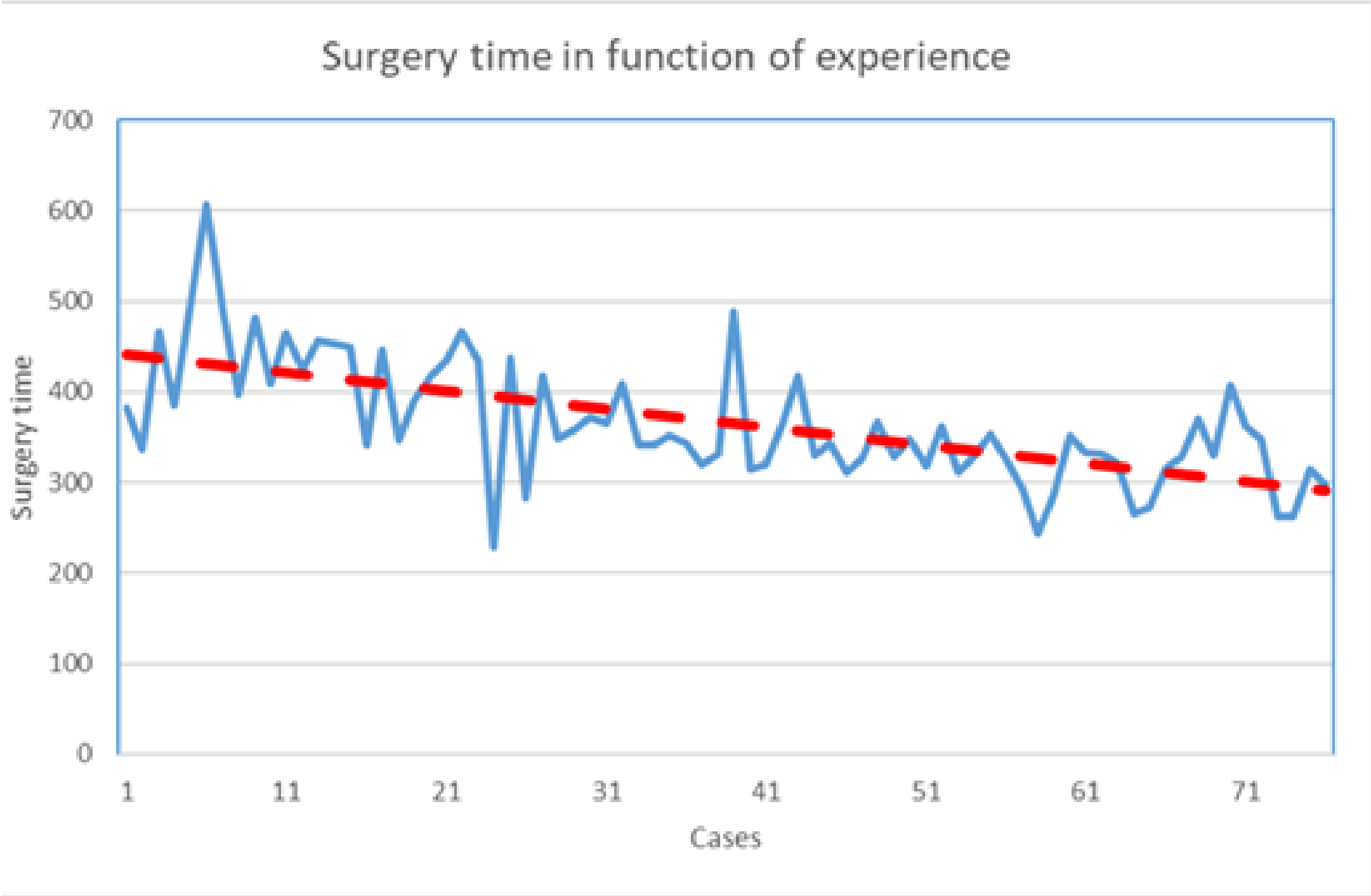


METHODS

- Retrospective inclusion of all BITA (without SVG) cases between 2015 and 2022
- 1:1 PSM resulted in two groups of 54 patients
- Primary outcomes: MACCE and mortality
- Secondary outcomes: Surgical parameters and length of hospital stay

RESULTS

Variable	Before matching			After matching		
	RA-MIDCAB (n=75)	OPCAB (n=601)	P-value	RA-MIDCAB (n=54)	OPCAB (n=54)	P-value
Euroscore	1,14% (±0,6)	1,46% (±1,3)	0,04	1,24% (±0,64)	1,16% (±0,68)	0,58
Distal anastomosis	2,07 (±0,25)	2,81 (±0,80)	<0,01	2,04 (±0,19)	2,11 (±0,42)	0,24
Surgery time	365,6 (±69,0)	287,6 (±56,9)	<0,01	364,0 (±71,0)	286,1 (±45,8)	<0,01
Reoperation	5,3% (4)	7,8% (47)	0,64	3,7% (2)	9,3% (5)	0,43
Pleurocentesis	0%	5,0% (30)	0,06	0%	7,3% (4)	0,12
Peroperative bloodtranssfusion	12,0% (9)	27,6% (166)	<0,01	13,0% (7)	37,0% (20)	<0,01
Bloodtransfusion during hospital stay	18,7% (14)	35,1% (211)	<0,01	16,7% (9)	38,9%(21)	0,02
Wound infection	0%	1,3% (8)	0,61	0%	1,8% (1)	1,00
De novo atrial fibrillation	26,7% (20)	20,0% (120)	0,176	31,5% (17)	20,4% (11)	0,27
Post surgery STEMI	0%	0,2% (1)	1,00	0%	1,8% (1)	1,00
Post surgery NSTEMI	0%	0,8% (5)	1,00	0%	1,8% (1)	1,00
Target Vessel Revascularisation	1,3% (1)	3,2% (19)	0,72	1,9% (1)	1,9% (1)	1,00
Post surgery stroke	0%	2,0% (12)	0,38	0%	1,8% (1)	1,00
ICU admission	22,7% (17)	75,3% (452)	<0,01	24,1% (13)	96,3% (52)	<0,01
ICU stay	1,76 (±3,0)	1,09 (±3,3)	0,07	0,78 (± 1,7)	1,91 (±1,01)	<0,01
Hospital stay	6,95 (±4,8)	7,8 (±6,9)	0,32	6,78 (±2,4)	8,01 (± 2,5)	<0,01
Rehospitalisation	4,0% (3)	2,0% (12)	0,23	0%	0%	1,00
30 day mortality	0%	0,7% (4)	1,00	0%	0%	1,00
30 day MACCE event	0%	1,8% (11)	0,62	0%	0%	1,00



CONCLUSION

- Short and long term postoperative outcomes in OPCAB and RA-MIDCAB surgeries are similar
- Lower blood transfusion rate and wound infections in RA-MIDCAB group
- Reduced length of stay in ICU and hospital in RA-MIDCAB group
- Significant shorter operation time and less ICU admissions after 40 cases