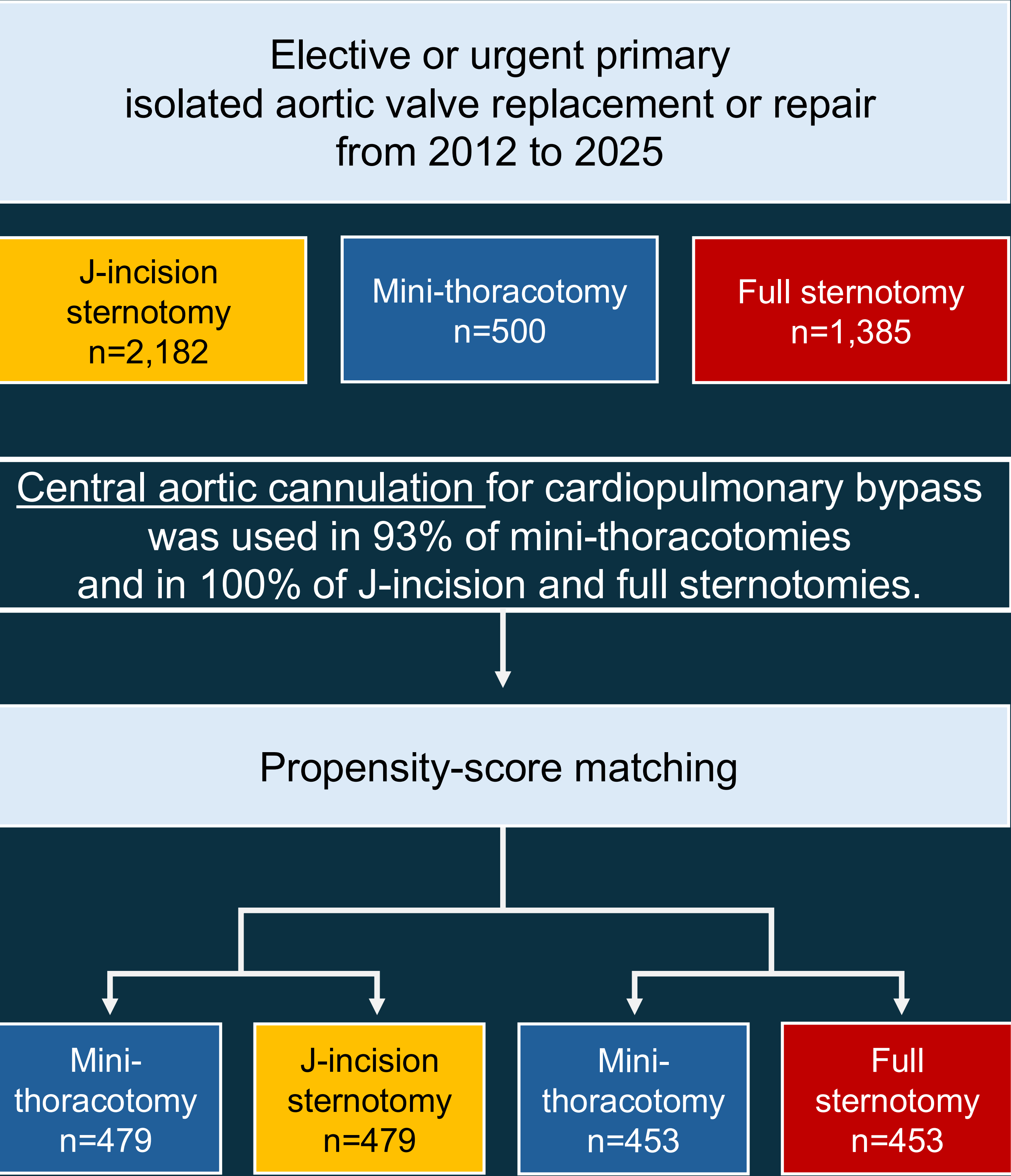


500 Mini-thoracotomy Aortic Valve Replacements: Propensity-Matched Comparison with J-incision Sternotomy and Full Sternotomy

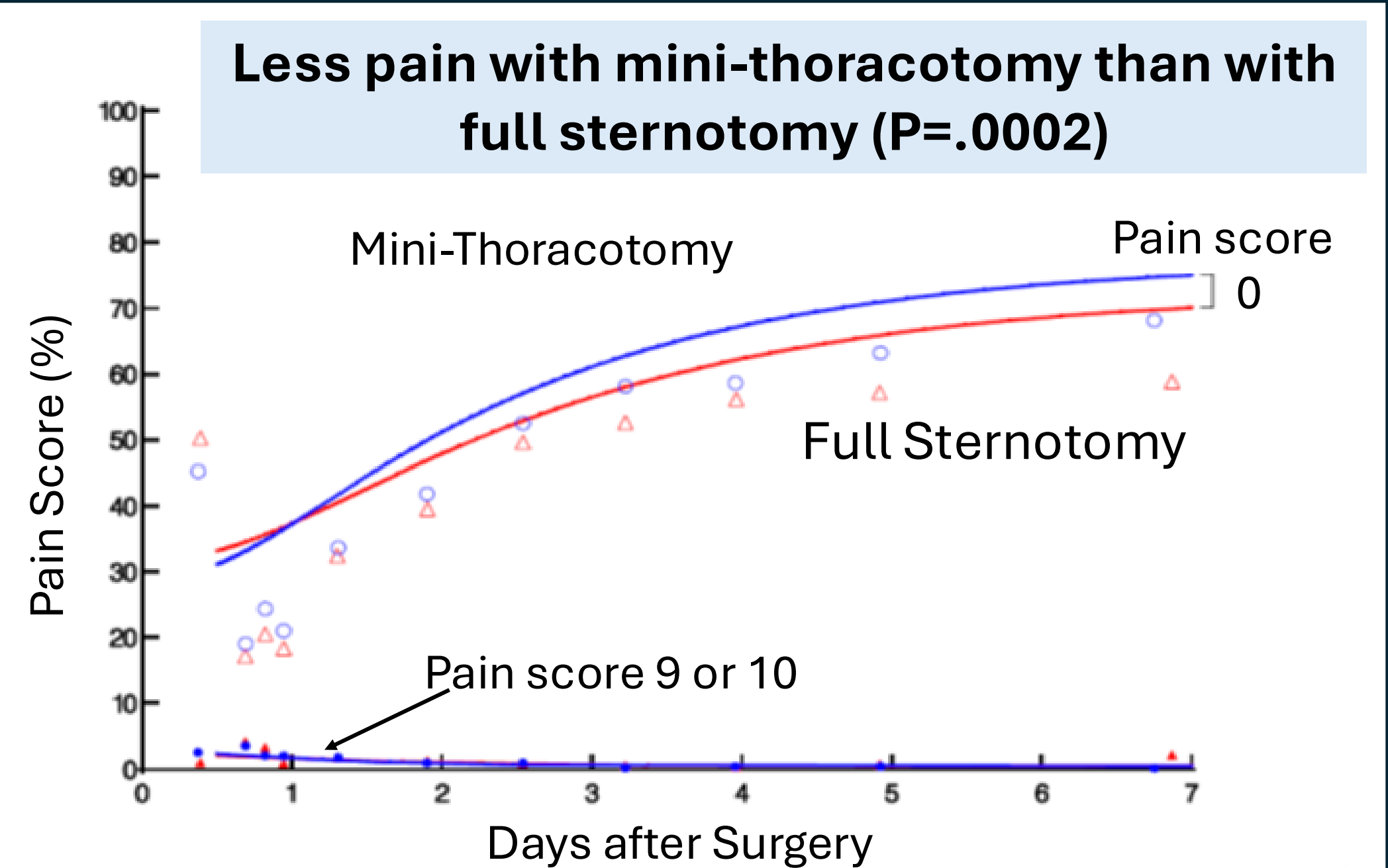
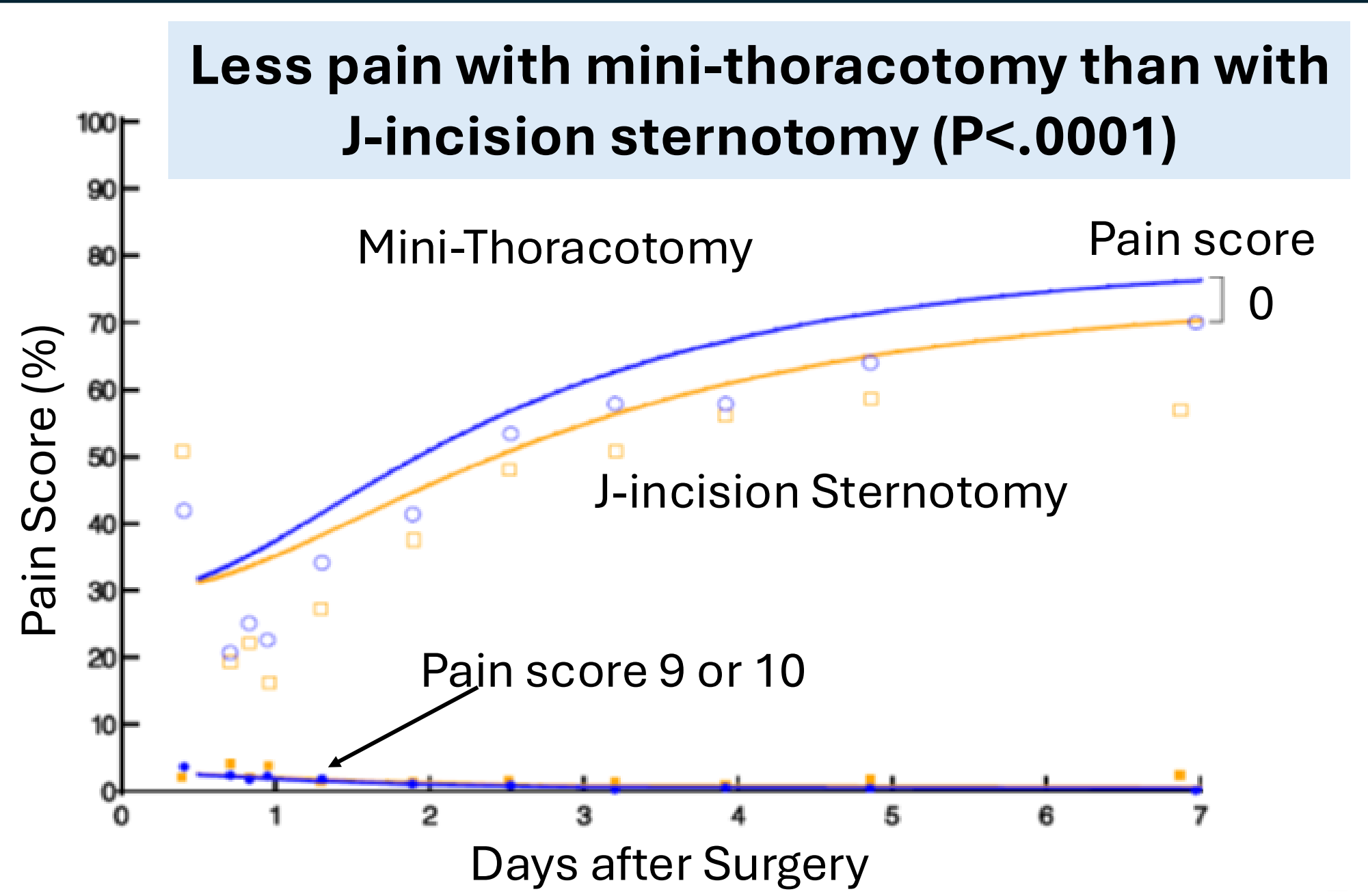
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	Mini-Thoracotomy (n=479)			J-Incision Sternotomy (n=479)			Mini-Thoracotomy (n=453)			Full Sternotomy (n=453)		
	No. (%) or median [15th, 85th percentiles]			No. (%) or median [15th, 85th percentiles]			No. (%) or median [15th, 85th percentiles]			No. (%) or median [15th, 85th percentiles]		
	n			n		P	n			n		P
Operative mortality	471	1(0.22)		472	0(0)	–	446	0(0)		449	0(0)	–
Permanent stroke	476	4(0.84)		479	4(0.84)	.99	450	3(0.67)		453	2(0.44)	>.99
Reoperation for bleeding or tamponade	476	10(2.1)		479	5(1)	.3	450	10(2.2)		452	5(1.1)	.3
New requirement for dialysis	474	1(0.21)		478	0(0)	–	450	0(0)		448	0(0)	–
Prolonged ventilation (>24 h)	476	4(0.84)		479	6(1.3)	.7	453	3(0.67)		450	6(1.3)	.5
Operative length of stay (days)	479	5[4, 7]		479	5[4, 7]	.5	453	5[4, 7]		453	5[4, 8]	<.0001
Total dose of oral morphine equivalents taken (mg)	285	35[10, 100]		306	42.5[10, 132]	.005	265	35[10, 100]		303	47.5[10, 140]	.004

Pain scores (%)



Transfusion

Mini-thoracotomy resulted in lower transfusion of platelets than J-incision sternotomy	.0001	Mini-thoracotomy group had lower transfusion of blood and platelets versus full sternotomy group	<.0001
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Conclusions

Mini-thoracotomy and J-incision sternotomy are safe and reasonable options for isolated aortic valve replacement in selected patients at experienced centers

Mini-thoracotomy may enhance postoperative comfort by reducing pain and transfusion requirements while being safely performed with central aortic cannulation in most cases