

Supplemental Digital Content 10: Sensitivity Analyses – Associations of Bundled Lung Protective Ventilation Strategies with Primary and Secondary Outcomes Following Multivariable Adjustment: Clinical Subgroups

	Clinical Subgroup	Postoperative Pulmonary Complication		Postoperative Ventilator Duration		ICU Duration		Hospital LOS	
		Adjusted Odds Ratio	95% CI	$\beta$	95% CI	$\beta$	95% CI	$\beta$	95% CI
<b>Bundled LPV Strategy*</b>	Sex								
	Males	0.54	(0.38, 0.76)	-3.98	(-7.94, -0.02)	-0.80	(-8.28, 6.68)	-0.46	(-0.95, 0.02)
	Females	0.51	(0.29, 0.89)	-2.56	(-16.98, 11.86)	-3.48	(-22.50, 15.54)	-0.50	(-1.45, 0.45)
	Operative Status								
	Elective	0.52	(0.36, 0.73)	-1.75	(-7.00, 3.50)	-0.68	(-8.67, 7.30)	-0.25	(-0.71, 0.20)
	Urgent	0.70	(0.41, 1.18)	-10.00	(-27.11, 7.10)	-4.49	(-28.68, 19.71)	-1.02	(-2.40, 0.36)
	BMI								
	Underweight / Normal	0.48	(0.27, 0.88)	-4.93	(-16.73, 6.87)	2.57	(-16.54, 21.68)	-0.36	(-1.41, 0.69)
	Overweight	0.45	(0.27, 0.75)	-5.15	(-12.09, 1.78)	-6.25	(-18.11, 5.62)	-1.04	(-1.79, -0.28)
	Obese	0.61	(0.38, 0.97)	-2.17	(-11.90, 7.57)	-3.03	(-15.50, 9.44)	-0.29	(-0.95, 0.37)
	Chronic Lung Disease								
	Yes	0.85	(0.41, 1.77)	3.93	(-24.06, 31.91)	1.92	(-31.63, 35.47)	0.23	(-1.50, 1.96)
	No	0.53	(0.38, 0.73)	-4.01	(-8.93, 0.91)	-2.02	(-9.94, 5.90)	-0.56	(-1.03, -0.10)
	Age, years, quartiles								
	Q1 (18 – 53)	0.53	(0.26, 1.07)	-2.14	(-6.00, 1.72)	7.09	(-2.73, 16.91)	0.02	(-0.61, 0.66)
Q2 (54 – 63)	0.71	(0.38, 1.33)	-3.63	(-7.61, 0.34)	-10.25	(-22.28, 1.79)	-0.58	(-1.43, 0.28)	
Q3 (64 – 71)	0.66	(0.36, 1.19)	-10.25	(-29.66, 9.15)	-9.45	(-32.97, 14.07)	-0.70	(-1.86, 0.46)	
Q4 (72 – 89+)	0.39	(0.22, 0.68)	-0.29	(-10.92, 10.35)	4.01	(-26.56, 23.50)	-0.49	(-1.46, 0.49)	
Surgical Procedure Type									
Isolated CABG	0.69	(0.34, 1.39)	-7.66	(-19.18, 3.86)	-3.25	(-19.32, 12.82)	-0.78	(-1.78, 0.23)	
Valve or (Valve + CABG)	0.43	(0.28, 0.67)	-2.29	(-10.58, 6.00)	-4.64	(-16.78, 7.51)	-0.15	(-0.80, 0.49)	
(Aortic) or (Aortic + Valve) or (Aortic + Valve + CABG)	0.67	(0.10, 1.11)	-0.71	(-7.44, 6.03)	10.48	(-0.77, 21.73)	-0.35	(-1.13, 0.42)	

BMI = body mass index; CABG = coronary artery bypass grafting; ICU = intensive care unit; LOS = length of stay; LPV = lung-protective ventilation

\* Defined as intraoperative median values of: tidal volume <8 mL/kg predicted body weight, positive end-expiratory pressure  $\geq$ 5 cm H<sub>2</sub>O, and driving pressure <16 cm H<sub>2</sub>O