

Optimal esophageal balloon volume for accurate estimation of pleural pressure at end-expiration and end-inspiration: an *in vitro* bench experiment

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Additional file 3

Table S2. Minimal and maximal balloon volume (V_{MIN} and V_{MAX}) estimated by sigmoid fitting and by visual inspecting of intermediate linear section of the balloon pressure-volume curve during end-expiratory (EEO) and end-inspiratory occlusion (EIO)

		EEO				EIO			
		By sigmoid fitting		By visual inspection		By sigmoid fitting		By visual inspection	
		V_{MIN}	V_{MAX}	V_{MIN}	V_{MAX}	V_{MIN}	V_{MAX}	V_{MIN}	V_{MAX}
Cooper	No1	0.6	1.7	0.5	2.0	0.7	1.8	0.5	2.0
	No2	0.6	1.7	0.5	2.0	0.7	1.8	0.5	2.0
	No3	0.7	1.8	0.5	2.0	0.7	1.8	0.5	2.0
	No4	0.6	1.8	0.5	2.0	0.7	1.8	0.5	2.0
	No5	0.5	1.5	0.5	1.5	0.7	1.8	0.5	2.0
	No6	0.5	1.5	0.5	1.5	0.6	1.8	0.5	2.0
SmartCath-G	No1	1.6	4.1	1.0	5.0	2.2	4.9	1.5	5.0
	No2	1.4	3.5	1.0	4.0	1.9	3.9	1.5	5.0
	No3	1.4	3.5	1.0	4.0	1.8	4.2	1.0	4.0
	No4	1.5	3.6	1.0	4.0	2.0	4.5	1.5	5.5
	No5	1.3	3.4	1.0	4.0	1.8	4.1	1.0	4.5
	No6	1.3	3.6	0.5	4.0	1.8	4.4	1.0	5.0
Microtek	No1	2.0	4.6	1.5	5.5	2.3	5.0	2.0	5.5
	No2	2.0	4.8	1.0	5.5	2.4	5.0	2.5	5.5
	No3	1.8	4.7	1.5	5.5	2.2	4.9	1.5	5.0
	No4	2.1	4.6	1.5	5.5	2.3	4.9	2.0	6.0
	No5	1.7	4.5	1.0	5.5	2.0	4.8	1.5	5.0
	No6	1.7	4.5	1.0	5.5	2.0	4.6	1.5	5.0

All V_{MIN} and V_{MAX} determined by the sigmoid fitting were within the intermediate linear section obtained by visually inspecting of the balloon pressure-volume curve.

Figure S4. Absolute balloon transmural pressure (P_{TM}) at minimal (V_{MIN}) and maximal balloon inflating volume (V_{MAX})

Absolute P_{TMS} determined by sigmoid fitting was significantly lower than those by intermediate linear section inspecting. Mean and standard deviation are also shown.

