

Thomson, N. C., McSharry, C., and Chaudhuri, R. (2015) Response. CHEST Journal, 148(1), e33-e34.

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Letter re CT Chest paper

Thomson and colleagues conclude that airway lumen is reduced in asthmatics who smoke compared to those who have never smoked, although they did not detect an expected increase in wall thickness1.

1. An alternative explanation not discussed would be that both smoking and airway size reflect socioeconomic status (SES) in early life. The association of lower SES with poorer lung function persists throughout life2 and smoking is strongly correlated with social class in the UK3. It is unfortunate the paper presents BSA rather than height, as the latter is a marker of childhood SES4 and might be more informative.

	Asthma			Healthy control		
-	Never smoker	Smoker	p- value	Never smoker	Smoker	p- value
<mark>Height</mark>						
BMI	28.5 (24.9, 34.7)	25.7 (22.8, 29.8)	p=0.009	26.0 (23.2, 29.4)	26.6 (22.2, 29.5)	p=1.000
BSA	1.90 (1.74, 2.18)	1.84 (1.69, 2.02)	p=0.132	1.76 (1.69, 1.93)	1.86 (1.68, 2.00)	p=0.283

Charlie Could you provide a comparison of height between groups?

2. On a prosaic note, the LB3 (ie more proximal airway) lumen area in both columns of table 1 is 8mm2 (with appropriate confidence intervals), much smaller than both the equivalent on the right (22mm2) and in the more distal airways. Hopefully this is a transcription error as such internal inconsistency could undermine an otherwise comprehensive and excellent body of work.

Charlie Could you check the LB3 lumen area results?

	Never smoker n=47	Smoker n=46	p-value
LB 3 lumen area, mm2	8.4 (6.1, 13.1)	8.2 (5.1, 11.8)	p=0.257