

Elevated expression of placental growth factor is associated with airway-wall vascular remodelling and thickening in smokers with asthma

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Supplemental Table 1. Association between serum, induced sputum PIGF levels and lung function in four groups.

	Groups	Pre-bronchodilator FEV ₁ % pred	Post-bronchodilator FEV ₁ % pred	Post-bronchodilator FEV ₁ /FVC	DLCO% pred COHb	FeNO ₅₀
serum PIGF levels	Smoking asthmatics	0.162 (-0.184-0.494)	-0.735 (0.065-0.599)*	-0.139 (0.070-0.626)*	0.089 (-0.279-0.463)	0.168 (-0.132-0.435)
	Non-smoking asthmatics	0.217 (-0.135-0.563)	0.231 (-0.081-0.534)	0.181 (-0.134-0.465)	-0.098 (-0.398-0.229)	0.179 (-0.159-0.439)
	Smoking healthy control	0.284 (-0.089-0.545)				-0.228 (-0.591-0.124)
	Non-smoking healthy control	0.201 (-0.103-0.567)				-0.255 (-0.567-0.421)

induced sputum PIGF levels	Smoking asthmatics	0.225 (-0.064-0.515)	-0.568 (0.008-0.587)#	-0.170 (0.105-0.614)#	0.189 (-0.159-0.503)	-0.172 (-0.517-0.209)
	Non-smoking asthmatics	0.151 (-0.179-0.451)	0.173 (-0.159-0.465)	0.113 (-0.184-0.413)	-0.356 (-0.635- -0.138) #	0.065 (-0.284-0.367)
	Smoking healthy control	0.131 (-0.169-0.434)				-0.041 (-0.357-0.279)
	Non-smoking healthy control	0.103 (-0.249-0.425)				0.185 (-0.159-0.506)

*Indicate significant associations for serum PIGF level. #Indicate significant associations for induced sputum PIGF level. FEV1: forced expiratory volume in 1s; FVC: forced vital capacity; $D_{LCO}\%$ pred COHb: diffusing capacity of the lung for carbonmonoxide corrected for haemoglobin and carboxyhaemoglobin, as a percentage of the predicted value; $FeNO_{50}$: exhaled nitric oxide fraction measured at a flow rate of $50 \text{ mL} \cdot \text{s}^{-1}$.

Supplemental Table 2. Association between serum, induced sputum PIGF levels and computed tomography RB10 airway dimensions in asthmatics

	Groups	RB10 % wall area	RB10 wall thickness	RB10 lumen area
serum PIGF levels	Smoking asthmatics	0.069 (-0.254–0.383)	0.545 (0.102–0.668)*	-0.038 (-0.364–0.312)
	Non-smoking asthmatics	0.034 (-0.276–0.415)	0.081 (-0.263–0.387)	0.213 (-0.067–0.551)
induced sputum PIGF levels	Smoking asthmatics	0.076 (-0.317–0.420)	0.571 (0.189–0.728)#	0.169 (-0.153–0.438)
	Non-smoking asthmatics	0.081 (-0.243–0.444)	0.138 (-0.249–0.431)	0.096 (-0.253–0.432)

*Indicate significant associations for serum PIGF level. #Indicate significant associations for induced sputum PIGF level.; RB10: right bronchial division 10.