




Regarding epithelial dysregulation in obese severe asthmatics with gastro-oesophageal reflux

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Alveolar epithelial A549 cells may not be the best model in asthma studies. Proton pump inhibitor use may associate with a dysregulated aerodigestive microbiome, and in obese severe asthmatics obstructive sleep apnoea may be a relevant comorbidity. <http://bit.ly/2kMHj7q>

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To the Editor:

We read with interest the recent article by PEROTIN *et al.* [1], which investigated epithelial dysregulation in obese severe asthma patients with gastro-oesophageal reflux. The researchers found that bronchial epithelial gene expression, sampled by airway brushing, identified an endotype defined by epithelial dysregulation associated with obesity, gastro-oesophageal reflux and use of proton pump inhibitors (OGP cluster). Relative to non-asthmatic healthy controls, pathway signature analysis indicated that the wingless tail (WNT)/ β -catenin pathway was the top epithelial pathway dysregulated in the OGP cluster. The cluster was also associated with paucigranulocytic sputa, lower numbers of biopsy lymphocytes, but no thickening of the basement membrane.