



SHAREABLE PDF

# The effect of catch-up growth in the first year of life on later wheezing phenotypes

Sarah J. Kotecha<sup>1,3</sup>, John Lowe<sup>1,3</sup>, Raquel Granell<sup>2</sup>, W. John Watkins<sup>1</sup>,  
A. John Henderson<sup>2,+</sup> and Sailesh Kotecha<sup>1</sup>

**Affiliations:** <sup>1</sup>Dept of Child Health, Cardiff University School of Medicine, Cardiff, UK. <sup>2</sup>MRC Integrative Epidemiology Unit, Population Health Sciences, Bristol Medical School, University of Bristol, Bristol, UK. <sup>3</sup>Joint first authors.

**Correspondence:** Sailesh Kotecha, Dept of Child Health, School of Medicine, Cardiff University, Heath Park, Cardiff, CF14 4XN, UK. E-mail: KotechaS@cardiff.ac.uk

 @ERSpublications

**This study shows that catch-up growth in infancy is associated with increased early wheeze in childhood, so care is needed to not to excessively feed in early infancy** <https://bit.ly/2YPxtBw>

**Cite this article as:** Kotecha SJ, Lowe J, Granell R, *et al.* The effect of catch-up growth in the first year of life on later wheezing phenotypes. *Eur Respir J* 2020; 56: 2000884 [<https://doi.org/10.1183/13993003.00884-2020>].

This single-page version can be shared freely online.

## To the Editor:

Although wheezing phenotypes have previously been accurately described using well-defined cohorts reporting longitudinal wheezing, early-life factors which lead to development of each wheezing phenotype remain uncertain [1, 2]. Birth weight and catch-up growth affect later respiratory outcomes [3], but the influence of weight gain on specific wheezing phenotypes in term-born children has not been described. Rapid weight gain in early-life is associated with increased rates of childhood wheeze and lower lung function [4, 5]. In one meta-analysis rapid infant weight gain was linked to pre-school wheeze and school-aged asthma; and to increased childhood respiratory symptoms in another meta-analysis [6, 7]. Effect of weight gain in early-life in term-born children on wheezing in early-life is less well reported [8]. In contrast, rapid increase in body mass index in infancy is associated with increased risk of asthma at school-age in preterm-born infants [9].