



SHAREABLE PDF

# Leveraging early markers of cystic fibrosis structural lung disease to improve outcomes

Patrick A. Flume<sup>1</sup> and Donald R. VanDevanter<sup>2</sup>

**Affiliations:** <sup>1</sup>Depts of Medicine and Pediatrics, Medical University of South Carolina, Charleston, SC, USA. <sup>2</sup>Dept of Pediatrics, Case Western Reserve University School of Medicine, Cleveland, OH, USA.

**Correspondence:** Patrick A. Flume, Depts of Medicine and Pediatrics, 96 Jonathan Lucas Street, Room 816-CSB, MSC630, Charleston, SC 29451 USA. E-mail: flumepa@musc.edu



@ERSpublications

Wijker and colleagues have demonstrated the link of inflammation and obstruction to eventual structural disease in CF. Now we may have another clinical endpoint by which we can judge the impact of early interventions. <http://bit.ly/2v5A5Qw>

**Cite this article as:** Flume PA, VanDevanter DR. Leveraging early markers of cystic fibrosis structural lung disease to improve outcomes. *Eur Respir J* 2020; 55: 2000105 [<https://doi.org/10.1183/13993003.00105-2020>].

This single-page version can be shared freely online.

The natural history of cystic fibrosis (CF) lung disease has been described as a complex process of obstruction, infection, and inflammation, all contributing to airways injury and eventual structural disease (*i.e.* bronchiectasis). Consequences of the CF genetic abnormality begin *in utero* and are the basis for newborn screening for elevated levels of circulating immunoreactive trypsinogen (IRT) [1]. Thus, it should be no surprise that the process of airway obstruction begins immediately at birth. Ample cross-sectional evidence has been published of airway obstruction, inflammation, bacterial infection, bronchial wall thickening, air trapping and bronchiectasis in the first year of life for infants with CF [2].