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Breath volatile organic compounds and inflammatory markers in adult asthma patients: negative results from the ALLIANCE cohort

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Despite recent publications, we are not close to finding a clinically valuable breath VOC biomarker for asthma or asthma phenotypes <https://bit.ly/3heTgtK>

Cite this article as: Holz O, Waschki B, Watz H, *et al.* Breath volatile organic compounds and inflammatory markers in adult asthma patients: negative results from the ALLIANCE cohort. *Eur Respir J* 2021; 57: 2002127 [<https://doi.org/10.1183/13993003.02127-2020>].

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To the Editor:

“Breathomics” in asthma is a rapidly growing area of significant scientific interest, as indicated by a recently published review, two research articles, and their accompanying editorials in high impact pneumology journals [1–5]. The repeatedly observed associations between breath volatile organic compounds (VOCs) and sputum or blood inflammatory cells [2, 3] suggest that breathomics are on the brink of introduction as a valuable clinically tool. However, there are also major concerns about unresolved methodological issues and a general paucity of high-quality data [1, 6]. In this letter we detail our concerns with breathomics based on data from a cohort of adult asthma patients with a broad spectrum of clinical phenotypes.