



## Fraction of exhaled nitric oxide is associated with disease burden in the German Asthma Net severe asthma cohort

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Shareable abstract (@ERSpublications)

In a severe asthma cohort of 1007 patients, high  $F_{\rm ENO}$  was associated with chronic rhinosinusitis/ polyps, later asthma onset, poor lung function and asthma control, low quality of life, frequent exacerbations and the need for maintenance OCS. #GANregistry https://bit.ly/3sNrtlQ

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The fraction of exhaled nitric oxide ( $F_{\rm ENO}$ ) is a biomarker for type 2 asthma, reflecting the degree of local pulmonary inflammation linked to immune pathways, including interleukin (IL)-13 [1]. In clinical practice,  $F_{\rm ENO}$  is a reliable marker for inhaled corticosteroid (ICS) responsiveness [2] and the efficacy of biological therapies, such as those targeting IL-4/IL-13 pathways [3, 4], as well as the detection of steroid nonadherence or resistance in severe asthma [2]. The prospective Severe Asthma Registry of the German Asthma Net (GAN) enrols patients with severe asthma for in-depth assessment of phenotypes, underlying mechanisms and therapeutic strategies; GAN has been approved by respective ethics committees, with all included patients having signed informed consent [5]. Prior studies of  $F_{\rm ENO}$  either included patients with asthma of any severity [6] or did not involve a comprehensive analysis in a large cohort [7]. We therefore used cross-sectional data from GAN to determine the correlation of  $F_{\rm ENO}$  with epidemiological, laboratory, clinical, lung function, or quality of life parameters and the need for oral corticosteroid (OCS) maintenance therapy in a carefully selected severe asthma cohort to better characterise the severe asthma subtype with high  $F_{\rm ENO}$  values.



