

# Adult NO<sub>breath</sub><sup>®</sup> FENO interpretation chart for use in asthma management



Adults				
FENO (ppb)	Range	Airway Inflammation	Interpretation (as an aid in the management of asthma)	
			If Symptomatic	If Asymptomatic and taking ICS
<25	Low	Unlikely	Review diagnosis - Consider: Neutrophilic asthma Anxiety/hyperventilation Vocal Cord Dysfunction Rhinosinusitis Gastro-oesophageal reflux	Implies good compliance with treatment. Consider reducing dose or, in case of low ICS dose consider withdrawal of ICS altogether
26 - 49	Intermediate	Present but mild	Consider: Viral Infection or intense allergen exposure may lead to increasing levels Adding in other therapy (not ICS) Increase in ICS dose	No change in ICS dose if patient is stable
50+	High	Significant	Consider: Check compliance Check for poor inhaler technique Inadequate ICS dose Continuous high level allergen exposure Imminent exacerbation or relapse depending on patient history	No change in ICS dose if patient is stable

## Children (<12 years of age)

FENO (ppb)	Range	Airway Inflammation	Interpretation (as an aid in the management of asthma)	
			If Symptomatic	If Asymptomatic and taking ICS
<20	Low	Unlikely	Review diagnosis - Consider: Wheezy bronchitis Cystic Fibrosis Congenital abnormalities e.g. airway malacia Primary ciliary dyskinesia	Implies good compliance with treatment. Consider reducing dose or, in case of low ICS dose consider withdrawal of ICS altogether
21 - 44	Intermediate	Present but mild	Consider: Viral Infection or intense allergen exposure may lead to increasing levels Adding in other therapy (not ICS) Increase in ICS dose Check compliance Check for poor inhaler technique	No change in ICS dose if patient is stable
45+	High	Significant	Consider: Check compliance Check for poor inhaler technique Inadequate ICS dose Continuous high level allergen exposure Imminent exacerbation or relapse depending on patient history Metered dose inhaler and spacer if patient is currently using a dry powder device	No change in ICS dose if patient is stable

Reference: Taylor D R et al. 2006, Exhaled nitric oxide measurements: clinical application and interpretation  
(adapted from direct communication with D R Taylor)