Measure breath nitric oxide for airway inflammation with the NObreath® FeNO monitor

NObreath®
#knowyourFeNO
10
YEARS
improving asthma management.

Aids in the diagnosis and management of asthma, one breath at a time.

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Made in UK

CE 0086

bedfont® est. 1976

For more information on this product call us now

Contents

Fractional Exhaled Nitric Oxide (FeNO)

Airway inflammation is a central process in asthma and other lung diseases[1]. Being able to detect eosinophilic airway inflammation and monitor a patient's response to treatment is regarded as gold standard in the management of respiratory diseases.
The production of nitric oxide is often found to be higher in inflammatory conditions such as asthma and therefore FeNO monitoring can be used for the detection and management of such conditions[2], but also to differentiate between COPD, ACOS and other interstitial lung diseases that are not assessed by other means, such as lung function[3].
Nitric oxide measurement is not intended as a stand-alone method for diagnosis and should be used in conjunction with other evaluation methods and tests[4].
Using FeNO measurements to evaluate airway inflammation in asthma represents a significant advance in respiratory medicine[5], but until now this has been an expensive test to deliver in everyday practice.

Benefits of performing FeNO tests:

- Non-invasive, quick and easy to perform[5]
- Aids in asthma management, assisting the correct prescription and making monitored adjustments
- Shows patient adherance to treatment[9]
- Aids in identifying patients who do/do not require on-going treatment
- Shown to be superior to the majority of conventional tests of lung function, such as peak flow recording and spirometry[5]
- Aids in differentiating between allergic (eosinophilic) and non-allergic asthma[7].

on +44(0)1622 851122 or email ask@bedfont.com

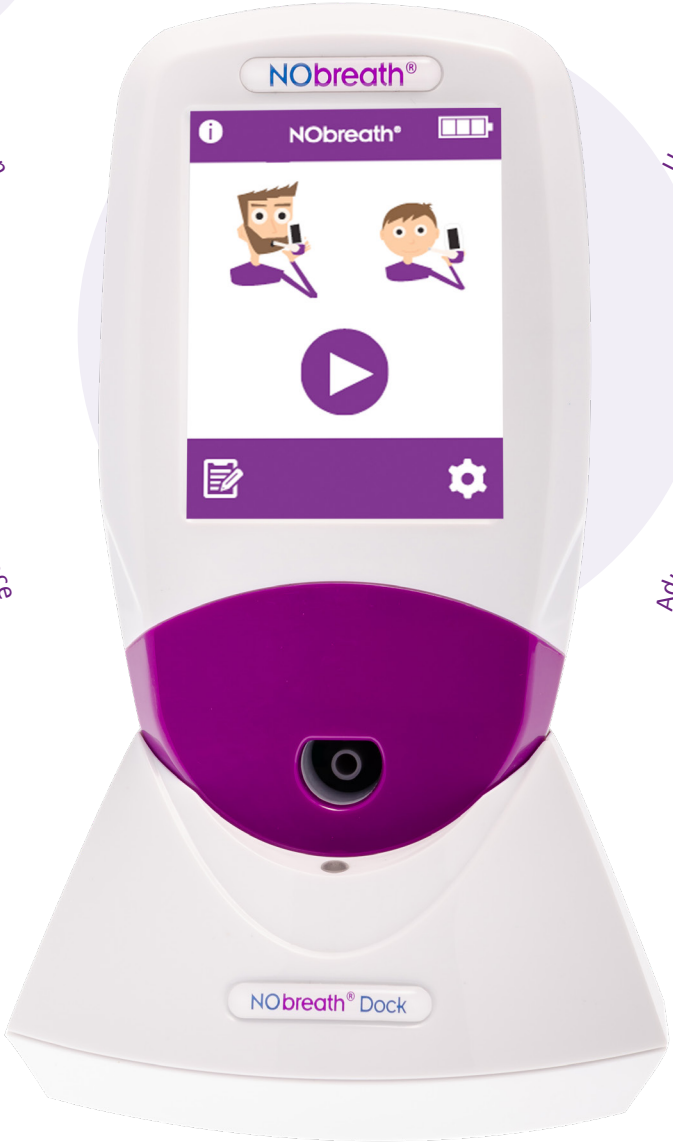
NObreath® features

An ergonomic design, fully-portable and incorporated with SteriTouch® technology for optimum infection control.

Clinically proven

Low cost

Low maintenance



Unlimited usage*

Easy to use

Adult & child testing

INDEPENDENTLY TESTED SteriTouch® ANTIMICROBIAL TECHNOLOGY

* Subject to correct use, maintenance and service.

Measuring FeNO with NObreath®

IT'S AS EASY AS:

Consumables

NObreath® Mouthpiece

The NObreath® mouthpiece is single-patient use and incorporates a one-way valve to prevent air being drawn back from the monitor.

Monitor Cleaning Wipes

Free from alcohol to ensure continued performance of your monitor. Pack of 50 wipes.

Technical specification

Concentration range		0-500ppb
Display		Full colour touchscreen
Detection principle		Electrochemical sensor
Repeatability		±5ppb of measured value ≤ 50ppb ±10% of measured value > 50ppb
Accuracy		±5ppb of measured value ≤ 50ppb ±10% of measured value > 50ppb
Power	**NObreath® monitor**	1 x main rechargeable Li-ion battery- Approx. 100 uses on fully charged battery 2 x Li-ion coin cell battery- Approx. 5 years Input: 5V, 0.5A
	NObreath® Dock	Mains powered Input: 5V, 0.5A Output: 5V, 0.5A
	Plug	Input: 100-240V ~ 50/60Hz., 0.2A Output: 5.0V, 1.0A
T_{90} response time		≤10 seconds
Operating temperature		10-30ºC
Storage/transport temperature		0-40°C
Operating/storage/transport pressure		Atmospheric ±10%
Operating humidity		25-75% non-condensing
Storage/transport humidity		0-95% non-condensing
Sensor operating life		5 years (Subject to correct use, maintenance and service)
Sensor sensitivity		1ppb
Sensor drift		<5% per annum
Dimensions		Approx. 90 x 159 x 59 mm
Weight		Approx. 400g
Materials	**NObreath® monitor**	Case: polycarbonate/abs blend SteriTouch® anti-microbial additive
	NObreath® Dock	
	NObreath® mouthpiece	Polypropylene
Breath test time		Adult: 12 seconds Child: 10 seconds Ambient: 30 seconds
Warm-up time		≤60 seconds
Maximum ambient operating level		350 ppb NO
CO cross interference		45ppm ≤17.6 ppb

FeNOchart™

FeNOchart™ is free patient management software available with every NObreath®. FeNOchart™ enables you to track patients progress, view live reading, download results plus much more.

FREE FeNOchart™ patient management software.

NObreath® Forum

Purchasing a NObreath® entitles you to free membership of the NObreath® forum. The NObreath® forum is an international, invitation-only platform where professionals using the Bedfont® NObreath® FeNO monitor can communicate, share experiences and knowledge, and ask for other professional opinions. There is no cost or obligation to participate but membership is free when you purchase a NObreath®.

Aid in diagnosis using the NObreath® FeNO monitor

FeNO (ppb) Levels	LOW <25ppb (<20ppb in children)	INTERMEDIATE 25-50ppb (20-35ppb in children)	HIGH >50ppb (>35ppb in children) or rise in FENO of >40% from previously stable levels
Symptomatic (chronic cough and/or wheeze and/or shortness of breath during past 6 wk)	**Allergic airway inflammation unlikely Unlikely to benefit from ICS	Be cautious Evaluate clinical context Monitor change in FeNO over time	Allergic airway inflammation present Likely to benefit from ICS
Possible Diagnosis	• Non-allergic asthma • Rhinosinusitis • Reactive airways dysfunction syndrome • Bronchiectasis • Cystic fibrosis, primary ciliary dyskinesia • Extended post-viral bronchial hyperresponsiveness syndrome • Vocal cord dysfunction • Non-pulmonary/airway causes: • Anxiety-hyperventilation • Gastroesophageal reflux disease • Cardiac disease/pulmonary hypertension/pulmonary embolism **Confounding factors:** • Smoking • Obesity	Evaluate clinical context	• Allergic asthma • Atopic asthma • Allergic bronchitis • COPD with mixed inflammatory phenotype

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eness of medication and can be used to predict the risk of Asthma attacks[1]*.

Monitoring (in patients with diagnosed asthma) using the NObreath® FeNO monitor

FeNO (ppb) Levels	LOW <25ppb (<20ppb in children)	INTERMEDIATE 25-50ppb (20-35ppb in children)	HIGH >50ppb (>35ppb in children) or rise in FENO of >40% from previously stable levels
Symptomatic (chronic cough and/or wheeze and/or shortness of breath during past 6 wk)	Possible alternative diagnosis (see below) Unlikely to benefit from increase in ICS	Persistent allergen exposure Inadequate ICS dose Poor adherence Steroid resistance	Persistent allergen exposure Poor adherence or inhaler technique Inadequate ICS dose Risk for exacerbation Steroid resistance
Possible Diagnosis	• **Non-allergic asthma (probably steroid unresponsive) • Vocal cord dysfunction • Anxiety-hyperventilation • Bronchiectasis • Cardiac disease • Rhinosinusitis • Gastroesophageal reflux disease	Evaluate clinical context	• Allergic asthma • Atopic asthma • Allergic bronchitis • COPD with mixed inflammatory phenotype
Asymptomatic	Implies adequate dosing and good adherence to anti-inflammatory therapy ICS dose may possibly be reduced (repeat FeNO 4 week later to confirm this judgment; if it remains low then relapse is unlikely).	Adequate ICS dosing Good adherence Monitor change in FENO	ICS withdrawal or dose reduction may result in relapse Poor adherence or inhaler technique

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* FeNO is not a definitive indication of asthma and should be used in conjunction with (but not limited to) spirometry, patient history, symptoms.
**Allergic = Eosinophilic / Non- Allergic = Non-Eosinophilic

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Contact Bedfont® or one of our worldwide NObreath® distributors for a free demonstration.

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bsi. ISO 13485 Medical Devices Quality Management

Issue 3 - October 2018, Part No: MKT503