

# Measure Breath Nitric Oxide for Airway Inflammation...

...with NObreath<sup>®</sup> F<sub>E</sub>NO monitor



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*Improving quality of life, one breath at a time*

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## NObreath® F<sub>ENO</sub> monitor

### Fractional Exhaled Nitric Oxide (F<sub>ENO</sub>):

Airway inflammation is a central process in asthma and other lung diseases<sup>4</sup>. Being able to measure this inflammation and monitor the patient's reaction to medication is regarded as a gold standard in the management of respiratory diseases. It is increasingly recognised that the measurement of F<sub>ENO</sub> in particular constitutes a novel way to monitor separate aspects of diseases. These include asthma, COPD and interstitial lung diseases, that are not assessed by other means, such as lung function<sup>2</sup>.

F<sub>ENO</sub> measurements to evaluate airway inflammation in asthma represents a significant advance in respiratory medicine<sup>1</sup>, but until now this has been an expensive test to deliver in everyday practice.

### Benefits of performing F<sub>ENO</sub> tests:

- Non invasive, quick and easy to perform<sup>1</sup>
- Shows patient's response to treatment, enabling the correct prescription of medication
- Shows patient compliance
- Aids in identifying patients who do/do not require ongoing treatment<sup>3</sup>
- Shown to be superior to the majority of conventional tests of lung function, such as peak flow recording and spirometry<sup>1</sup>



## Each NObreath® comes complete with:

**50 Mouthpieces** – specifically designed with the latest bacterial filtration to remove 99.9% of airborne bacteria from the patient's breath. These can be used up to 3 times per patient, dramatically reducing the cost of testing for F<sub>E</sub>NO.

Order Code	Description
NTK50	50 Mouthpieces and 1 NObreathFlo™
NTK100	100 Mouthpieces and 2 NObreathFlo™
NTK300	300 Mouthpieces and 6 NObreathFlo™
NTK1000	1000 Mouthpieces and 20 NObreathFlo™
NTK1400	1400 Mouthpieces and 28 NObreathFlo™



**NObreathFlo™** – eye level flow indicator makes keeping a constant flow during exhalation easy, even for young children. Using the NObreathFlo™ and mouthpieces provided allows the user to comply with ATS/ERS guidelines for F<sub>E</sub>NO testing<sup>2</sup>. The NObreathFlo™ is changed after 50 mouthpieces are used to further reduce the risk of cross-infection



**NObreathFlo™ Trainer** – for patients to practise their technique before taking the test to ensure correct results and avoid using consumables unnecessarily.



**Carry case** – for protecting the NObreath® whilst in storage or when being transported.

**25 alcohol free Cleaning Wipes** – Wipes/gels containing alcohol cannot be used on the NObreath® or any of its components. **Order code – WIPE-BB**

## NObreath® Features

### Battery Indicator

The NObreath® requires 3 AA batteries, making it totally portable and easy to transport.

### Colour Touch Screen

For quick and easy use, with visual prompts for patients whilst taking a test to ensure correct results every time.

### ABS body

for easy grip and cleaning for optimum infection control every test.

### Internal pump and NO scrubber

Enabling warm up and recovery time to be a maximum of 60 seconds by constantly presenting the sensor with NO free ambient air.



# Measuring $FE_{NO}$ with NObreath® is as easy as 1, 2, 3

1



Inhale

2



Exhale

3



Readings instantly available

## Technical Specification

Concentration range:	5-300ppb nitric oxide
Accuracy:	± 5ppb of measured value ≤50ppb ± 10% of measured value >50ppb
Repeatability:	± 5ppb of measured value ≤50ppb ± 10% of measured value >50ppb
Sensor sensitivity:	5ppb
Breath test time:	16 seconds
Response time	<10 sec
Warm up time	<2 mins
Ambient air test:	30 seconds
Operating temperature range:	10-30°C (ambient)
Operating relative humidity (environmental):	10-80% Rh (non-condensing)
Sensor operating life:	1-2 years; 6 month warranty
Detection principle:	Electrochemical sensor
Sensitivity drift:	<5% per annum
Maximum ambient operating level:	350 ppb NO
Power:	4.5V DC: 3 x AA (LR6 or equivalent) alkaline batteries
Battery Life (1 set of 3 AA batteries):	Up to 120 tests
Display:	Colour LCD with touch screen
Dimensions:	Approx. 152 x 87 x 47mm
Weight:	Approx. 400g including batteries
Construction:	Case – Polycarbonate/ABS blend with elastomeric overmould NObreathFlo – Polycarbonate/ABS blend Mouthpiece – Polypropylene

**References:**  
 1. Andrew D. Smith, Jan O. Cowan, Sue Filsell, Chris MacLachlan, Gabrielle Monti-Sheehan, Pamela Jackson and D. Robin Taylor. Diagnosing Asthma: Comparisons between Exhaled Nitric Oxide Measurements and Conventional Tests. Am J Respir Crit Care Med Vol 169. pp 473-478, 2004.  
 2. ATS/ERS Recommendations for Standardized Procedures for the Online and Offline Measurement of Exhaled Lower Respiratory Nitric Oxide and Nasal Nitric Oxide, 2005; American Journal of Respiratory and Critical Care Medicine; vol. 171: 912-930;2005  
 3. D R Taylor, MW Pinenburg, A D Smith and J C D Jongste. Exhaled nitric oxide measurements: clinical application and interpretation. Thorax 2006;61:817-827.  
 4. Shelhamer JH, Levine SJ, Wu T, Jacoby DB, Kaliner MA, Rennard SI. NIH conference: airway inflammation. Ann Intern Med 1995;123:288-304.



Contact Bedfont or one of our worldwide **NObreath<sup>®</sup>** distributors for a free demonstration

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## **breath analysis is the new blood test**

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