



Charlotte Keel
MEDICAL PRACTICE

NObreath Fractional exhaled Nitric Oxide (FeNO) measurement Standard Operating Procedure

Version:	Owner:	Created:
2.0	Danielle Townsend (Lead Nurse CKMP.)	13 th May 2022
Published:	Approving Director:	Next Review
25 th March 2024	Rhys Hancock, Director of Nursing, Allied Health Professionals and Governance	21 st March 2027

Contents

Before test:.....3

Instructions for performing test:3

Results:4

Cleaning and maintenance:4

FeNO Standard Operating Procedure

Before test:

1 week before test: stop inhaled corticosteroid

24 hours before test: avoid alcohol

12 hours before test: avoid smoking and vegetables (many are high in nitrates)

1 hour before test: avoid eating, drinking and exercise

Perform FeNO test BEFORE spirometry

Instructions for performing test:

1. Press and hold the on/off button once to switch the monitor on and wait up to 10 seconds for the monitor to stabilise.
2. Attach a new mouthpiece to the unit and select either the adult or child breath test.
NOTE: to cancel the breath test, press the home icon.
3. As prompted onscreen by the arrow, inhale until prompted to exhale. **Do not inhale through the mouthpiece.**
4. When the exhale arrow appears, keep the monitor upright and blow gently into the mouthpiece. **Make sure you are not covering the vent holes.**
NOTE: the exhalation time is approx. 12 seconds for an adult and 10 seconds for a child.
5. The onscreen flow meter will guide you on the exhalation rate: continue blowing until the green tick appears.
NOTE: if you blow outside of the exhalation guidelines, the test will beep, before signifying a fail, and a red cross will appear. Touch the refresh icon to retry the test.
6. Following the green tick, a result will appear on the screen.
7. Once the test is complete remove the mouthpiece and dispose of it appropriately. Placing the machine back onto its charging unit.

FeNO Standard Operating Procedure

Results:

BTS/SIGN: Use measurement of FeNO to find evidence of eosinophilic inflammation. A positive test increases the probability of asthma but a negative test does not exclude asthma.

In **steroid-naive adults, a FeNO level of 40 parts per billion (ppb)** or more is regarded as positive; in **schoolchildren a FeNO level of 35 ppb** or more is regarded as a positive test.

Record results in patient's notes, EMIS code: Measurement of expired nitric oxide.

Cleaning and maintenance:

It is best practice to not let the battery run flat. If this occurs, the device may need calibration.

Clean with Clinell (green) universal wipes.

CAUTION: Do not use any substances containing alcohol on or near the NObreath®.

The device or consumables cannot be sterilised. It is recommended that wipes are used once and for one surface only. The NObreath® device should be cleaned for initial use and after each patient use.

Under no circumstances should the instrument be immersed in liquid or splashed with liquid.

Tables

Date	Version	Author	Change
13 th May 2022	1	Liz Turner	New SOP
21 st March 2024	2	LT	New owner Danielle Townsend and review.