

International clinical guidelines suggest that the treatment of severe asthma be guided by clinical presentation and biomarkers such as blood and/or sputum eosinophils and FeNO tests. These T2 inflammation biomarkers are also used to predict the risk of future asthma attacks.

FeNO breath measurement is now available at selected Ampath Care Centres. Please contact your nearest Ampath Care Centre to find out more about asthma test offerings.



## AMPATH APP



Your test results are available to you through our easy-to-use Ampath App, downloadable from your favourite App store.

You will need to consult a medical practitioner of your choice for further management of your result, if necessary.

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# LABORATORY TESTING OF ASTHMA

Asthma is a common condition that is characterised by lower airway inflammation.



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Most patients with asthma have type 2 (T2) inflammation which may be associated with cells called eosinophils in blood and/ or airways. The identification of T2 severe asthma will allow your doctor to correctly choose, adjust and monitor your treatment.

Your asthma is classified as severe if your symptom control is only achieved by:

- High-dose inhaled corticosteroids (ICS)
- A second controller and/or frequent oral corticosteroid use
- Or if your asthma remains uncontrolled despite these interventions

## LABORATORY TESTING OF ASTHMA

The laboratory investigation of asthma includes routine laboratory tests as well as the measurement of T2 inflammation biomarkers.

### Full blood count (FBC) with differential count

The FBC and differential count will confirm or exclude the presence of eosinophils in blood. The eosinophil count is used to assess your response to treatment.

### Sputum eosinophils

Eosinophils that are present in your sputum despite corticosteroid asthma treatment, are associated with more severe asthma symptoms.

### Total serum immunoglobulin E (IgE)

Total serum IgE testing can be used to guide specific asthma treatment.

## Specific IgE

IgE tests for specific allergens are useful to identify allergens that you should avoid as they might trigger asthma symptoms.

## Fractional exhaled nitric oxide (FeNO)

- The FeNO test is a quick and easy test that is performed with a handheld device.
- This test is used to monitor your airway inflammation. This will guide your doctor to prescribe appropriate asthma treatment and to adjust your medication accordingly.
- You will receive your own mouthpiece for the test.



### PATIENT PREPARATION

The FeNO test can be performed immediately, but it is preferable that the following information be adhered to and the test to be booked for the following day.

#### 24 hours prior to the test:

- Avoid alcohol consumption.

#### 12 hours prior to the test:

- Avoid smoking and eating foods high in nitrates e.g. rocket, turnip, carrot, spinach, cabbage, potato, lettuce, green beans, garlic, radish, leek, sweet pepper, beetroot, spring onion, green pepper, Chinese cabbage and cucumber.

#### 1 hour prior to the test:

- Avoid eating, drinking, smoking and exercise.

## Measuring FeNO is as easy as:

### 1. Inhale



### 2. Exhale



### 3. Reading instantly available

