

Bladder EpiCheck[®]

Non-invasive urine test for bladder cancer

Bladder EpiCheck is a simple, accurate, non-invasive urine used to detect bladder cancer. It is designed to reliably detect high-grade bladder cancer at an early stage, which greatly increases the chances of successful treatment. It can be used for the surveillance of bladder cancer recurrence after treatment, or in initial diagnosis.

Bladder cancer is the 5th most common cancer in the western world. 70-80% of cases are non-muscle invasive (NMIBC), meaning it is localised in the bladder wall and has not spread. If it is caught early at this stage, it is treatable and may not require chemotherapy. However, even when bladder cancer is detected at an early stage and treated appropriately, it often recurs. It can recur anywhere along the urinary tract, kidneys, ureters, prostate or bladder. Therefore, close follow-up is required after treatment, which is done with regular cystoscopies. Cystoscopies are invasive, can be painful and uncomfortable, and are burdensome, particularly for elderly patients and those with reduced mobility.

Bladder EpiCheck has been designed as a simple tool which reduces the need for cystoscopy, by testing for markers in the urine which indicate that there may be a bladder cancer tumour. There are two groups of people who are eligible for Bladder EpiCheck:

- *For surveillance: If you have been treated for bladder cancer and are in surveillance, Bladder EpiCheck is recommended to be used in alternation with cystoscopies, to half the number of cystoscopies required.*
- *For early detection: Patients presenting with haematuria, other urinary tract symptoms, or other findings which may indicate bladder cancer, can use Bladder EpiCheck as an initial test before cystoscopy. Those with a positive test result would then be recommended for a cystoscopy.*



Bladder EpiCheck is CE-Mark Approved, included in the European Association of Urology Guidelines, and FDA approved.

FAQs

What does Bladder EpiCheck measure?

Bladder EpiCheck measures DNA Methylation patterns at 15 locations on your DNA. DNA Methylation can occur naturally as well as due to environmental risk factors, and it alters the way your genes work. DNA Methylation changes in these 15 locations have been shown to contribute to the development of bladder cancer. Therefore, finding these changes early means that the cancer could be caught at a very early stage, even before symptoms show.

How can I get a Bladder EpiCheck test?

Ask your doctor/nurse to contact Cambridge Clinical Laboratories to order a Bladder EpiCheck test for you. They will then organise an appointment for you to give a urine sample for the test.

What do the results tell me?

The results give you a clear Positive/Negative result for bladder cancer. This is done using an EpiScore, which is a value between 0-100. A score of 60 and above is a Positive result, indicating that the test has detected a high chance of bladder cancer.

Any score below 60 is Negative, indicating that the test did not detect a bladder cancer tumour. To see a sample results form, scan the QR code:

Or visit <https://www.camclinlabs.co.uk/bladder-epicheck>.



How will I receive my results?

The results will be sent to the doctor/hospital that requested the Bladder EpiCheck test for you. They will arrange a phone call or appointment with you to discuss the results.

Do I have to pay for Bladder EpiCheck?

Unfortunately, Bladder EpiCheck is not yet covered by the NHS so you will need to pay for the test. Your doctor/nurse can discuss the costs with you.

How accurate is the test?

Bladder EpiCheck has a very high Negative Predictive Value of 99.3%. This means that a negative result correctly rules out high-grade bladder cancer in 99.3% of cases. This is very similar to the NPV of cystoscopy which ranges from 98-100%, therefore Bladder EpiCheck can safely be used to reduce waiting times for initial diagnosis and reduce the number of cystoscopies required during surveillance for recurrence.

Why does the NHS not use this test?

Bladder EpiCheck is fairly new to the UK and therefore it is not yet included in the NICE guidelines, which are followed by the NHS. However, the NHS are currently doing a 2-year study using Bladder EpiCheck at the Western General Hospital in Edinburgh (find out more about this at <https://www.camclinlabs.co.uk/bladder-epicheck>). It is expected that Bladder EpiCheck, or a similar test, will be introduced into the NHS over the next couple of years.

What happens next if I have a positive result?

If you have a positive result your doctor/nurse will contact you and they will arrange for you to have a cystoscopy. If you have a negative result your doctor/nurse will advise you on when to get checked in the future.