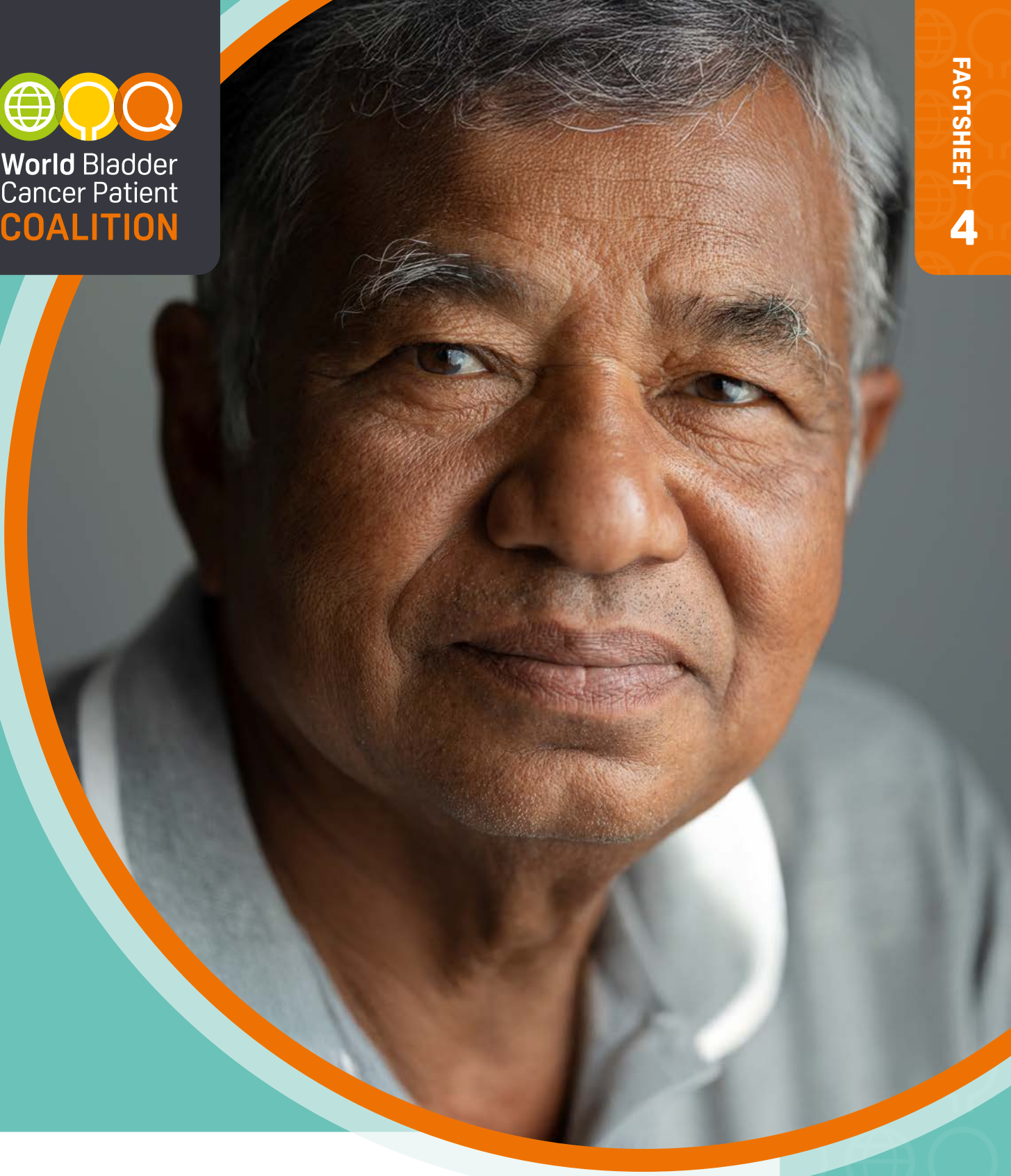
World Bladder Cancer Patient COALITION

FACTSHEET 4



What is **Non-Muscle-Invasive Bladder Cancer (NMIBC)?**

a guide about the effects of NMIBC, diagnosis and treatments.

FACTSHEET 4

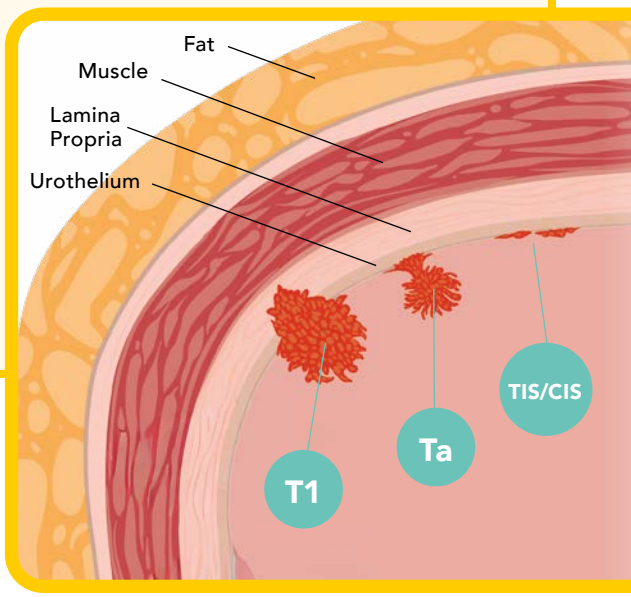
What is Non-Muscle-Invasive Bladder Cancer (NMIBC)?

Non-Muscle-Invasive Bladder Cancer (NMIBC) occurs when cancer cells are found only in the inner layers of the bladder wall and have not grown into the muscle layer. It is considered an earlier and usually more treatable stage of bladder cancer.

When you are diagnosed with bladder cancer, doctors describe both the stage and the grade of the tumour:

- **Stage tells you how deeply the tumour has grown into the bladder wall or beyond.**
- **Grade describes how abnormal and aggressive the cancer cells look under the microscope.**

Both stage and grade help guide your treatment plan.



Tumour stage in NMIBC

Tumour stage is directly linked to the depth of invasion of the tumour into the bladder wall.

NMIBC stages include Ta, T1 and CIS:

- **Ta:** A papillary (wart-like) tumour confined to the inner lining of the bladder (the mucosa).
- **T1:** A tumour that has grown into the connective tissue beneath the lining, called the lamina propria, but not into the muscle layer.
- **CIS (carcinoma in situ):** A flat, high-grade tumour on the inner lining of the bladder. Because it is high-grade, it needs careful treatment and follow-up, as it has a higher risk of coming back or progressing than low-grade tumours.

Together, these stages represent about 70–75% of all bladder cancer diagnoses.

Tumour grade

PUNLMP (Papillary urothelial neoplasm of low malignant potential): Cells that look almost normal and grow in small finger-like structures in the bladder, with a very low risk of becoming more aggressive.

Low-grade (LG): Cancer cells that look only slightly abnormal and tend to grow more slowly, often associated with a lower risk of progression, though they may still recur (come back).

High-grade (HG): Cancer cells that look very abnormal and disorganised, with high mitotic activity (dividing quickly). High-grade tumours, which include CIS and more aggressive Ta/T1 tumours, have a higher risk of progression and therefore require closer monitoring and more intensive treatment.

Symptoms

Common symptoms include blood in the urine (hematuria), urgency, frequency and pain during urination. Some patients may have no symptoms at all. In these cases, changes in the bladder lining – including a loss of the normal organisation ("polarity") of the cells – are only visible when the tissue is examined under the microscope.

Most Common

Blood in urine · **Urgency to urinate** · **Pain during urination** · **Frequent urination** · **No Symptoms**

What are the goals of treatment for NMIBC?

The main goal of treating Non-Muscle-Invasive Bladder Cancer (NMIBC) is to remove the cancer tissue and stop it from coming back or spreading deeper into the bladder wall.

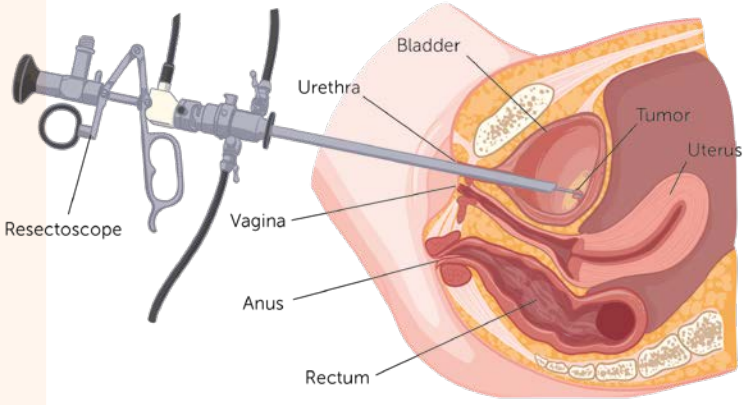
Because NMIBC is an early-stage cancer, treatment usually aims to:

- **Completely remove the tumour**
- **Prevent the cancer from coming back (recurrence)**
- **Stop it from becoming muscle-invasive or spreading to other parts of the body (metastatic progression)**
- **Preserve bladder function and quality of life**

Your treatment plan may include a combination of procedures and therapies over time. Regular follow-up is also an important part of managing NMIBC effectively.

Treatment options for NMIBC

1 **TURBT** (Transurethral Resection of Bladder Tumour)



- Usually the first step in treatment.
- A small surgical instrument is passed through the urethra (the tube that carries urine out of the body) to remove the tumour.
- There are no cuts on the abdomen.
- The procedure is done under anaesthesia, and you may go home the same day or after a short hospital stay.
- The removed tissue is examined under a microscope to assess the stage and grade of the cancer and to help plan further treatment.

Intravesical therapy (treatment inside the bladder)

- After TURBT, your healthcare team may recommend intravesical therapy – medicines placed directly into your bladder through a thin, flexible tube (catheter).
- These treatments aim to destroy any remaining cancer cells in the bladder lining and reduce the risk of the cancer coming back or becoming more aggressive.
- Intravesical therapy usually starts with an induction course (more intensive, often weekly for several weeks) and, in some cases, continues as maintenance treatment (less frequent treatments over months or years).

BCG therapy
(Bacillus Calmette-Guérin)

- A weakened, non–disease-causing form of bacteria is placed into your bladder as an intravesical treatment.
- It helps your immune system recognise and attack cancer cells in the bladder lining.
- BCG is usually given once a week for several weeks (induction), and in some cases followed by maintenance courses given less often over a longer period.

Intravesical chemotherapy

- Anti-cancer medicines are placed directly into your bladder as another type of intravesical treatment.
- They help kill cancer cells in the bladder lining and lower the chance of the cancer returning.
- Intravesical chemotherapy may be given once right after TURBT, or as weekly treatments over a few weeks, depending on your treatment plan.

Your healthcare team will recommend the most appropriate treatment approach for you based on your tumour type, risk of recurrence and progression, overall health, lifestyle and priorities.

Key questions to ask your doctor

When you are diagnosed with NMIBC, it is important to fully understand your treatment options. Here are some questions you can ask your healthcare team to guide the conversation and help you participate in shared-decision making. This helps you and your doctor choose the best treatment plan.

- **What risk factors may have contributed to my cancer?**
- **What treatments are available for my stage and grade of NMIBC?**
- **Is TURBT the only procedure I will need?**
- **Will I need intravesical therapy (like BCG therapy or chemotherapy) and why and how it works?**
- **How long will my treatment take?**
- **Who should I contact if I experience severe side effects or unexpected symptoms between appointments?**
- **What can we do to prevent recurrence or progression?**
- **What side effects should I expect from BCG therapy or intravesical chemotherapy?**
- **How will we know if the treatment is working?**

- How will different treatment options impact my quality of life and my ability to carry out regular activities that are important to me?
- What support services are available - support groups, mental health professionals, patient navigators, nursing care?
- Is there any evidence the cancer has spread outside the bladder?
- What are the estimated recurrence and progression risks given my risk profile?
- Could radical cystectomy (removal of the bladder) be a treatment option for me now or in the future (for instance, if BCG fails)?
- Is partial cystectomy (surgery to remove only the part of the bladder containing the tumour) an option for me?
- If my bladder needs to be removed, what are the urinary diversion options (for example, neobladder, ileal conduit, continent reservoir), and what are the pros and cons of each?
- Does this centre participate in any clinical trials that may be applicable to me? What are the potential risks and benefits?
- Could I get a second opinion or review at a cancer centre? How do I do that?
- Where can I get information about how these treatments are covered by my insurance?

Monitoring and follow-up care

Even after successful treatment, bladder cancer can come back. That is why regular check-ups are a very important part of managing NMIBC. Your doctor will create a follow-up schedule to check for any signs of recurrence or new tumours.

What follow-up usually includes:

Cystoscopy

Cystoscopy is a test where a cystoscope is passed through the urethra to look inside the bladder. It can also be used to take tissue samples.

Cytology

Cytology is a test that checks urine under a microscope for abnormal cells. It can help detect bladder cancer or monitor for recurrence.

CT scan (computed tomography)

A CT scan uses X-rays and a computer to create detailed pictures of the inside of the body. It helps doctors see the size and spread of cancer.

Following your check-up schedule closely helps catch any problems early and ensures that you continue receiving the care you need.

Notes

Local patient support and resources:

World Bladder Cancer Patient COALITION

You can find us here:

X: @WorldBladderCan
Facebook: WorldBladderCan
LinkedIn: worldbladdercan
Youtube: WorldBladder
Instagram: worldbladdercancer
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The **World Bladder Cancer Patient Coalition** gratefully acknowledges the support of our premier partners: Astellas, AstraZeneca, Ferring Pharmaceuticals, Johnson & Johnson, Merck and Pfizer and our supporters Bristol Myers Squibb.

This factsheet has been reviewed for accuracy by the World Bladder Cancer Patient Coalition Scientific Advisory Board (SAB).