World Bladder Cancer Patient COALITION

FACTSHEET 4

What is **Muscle-Invasive Bladder Cancer (MIBC)?**

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

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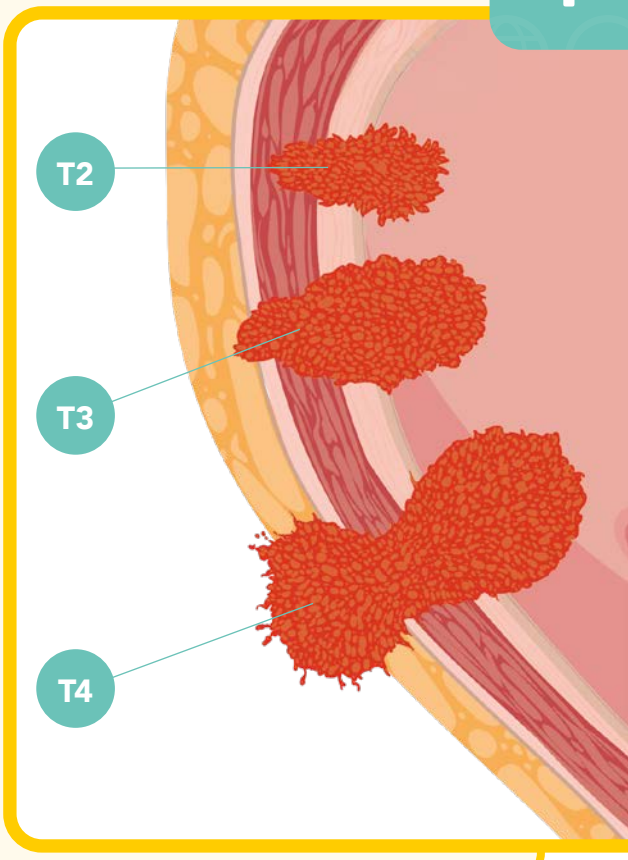
What is Muscle-Invasive Bladder Cancer (MIBC)?

Muscle Invasive Bladder Cancer (MIBC) is an advanced stage of bladder cancer that grows into the bladder's muscle layer. This deeper invasion increases the risk of spreading to other parts of the body, making treatment more complex than for early-stage bladder cancer.

Globally, MIBC is diagnosed in about 25–30% of cases.



Common MIBC stages:

- **T2:** tumour invades the bladder muscle
- **T3:** tumour reaches fatty tissue outside the bladder
- **T4:** The tumour invades nearby organs or structures, such as the prostate, uterus, vagina, pelvic wall or abdominal wall. (Spread to lymph nodes and distant organs is described separately as **N** (nodes) and **M** (metastasis) in the staging system.)

What are the treatment goals for MIBC?

The main goal of treating MIBC is to get rid of the tumour and prevent it from spreading to lymph nodes or other organs. Treatment usually aims to:

- Eradicate the primary tumour and any signs of disease in the lymph nodes or elsewhere in the body
- Lower the chance of the cancer coming back in the bladder or pelvic area, or spreading to other parts of the body, by using treatments such as chemotherapy, immunotherapy, surgery and/or radiotherapy as recommended
- Improve survival by choosing treatment combinations (for example surgery plus chemotherapy, or chemoradiation) that have been shown to help people live longer with MIBC
- Offer bladder-preserving options for those unable or unwilling to have a cystectomy (removal of the bladder)
- Minimise side effects and protect quality of life by carefully planning treatment, managing symptoms (such as pain, fatigue, bowel or urinary changes), and providing rehabilitation and supportive care

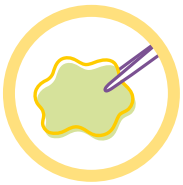
How is Muscle-Invasive Bladder Cancer (MIBC) diagnosed?

Diagnosing MIBC involves confirming the presence of cancer and establishing how deeply it has invaded the bladder wall or beyond.

A combination of tests is used to assess the extent of the disease:

Urine cytology:
Checks urine for abnormal or cancerous cells.

Cystoscopy:
A camera-tipped tube is inserted through the urethra to inspect the inside of the bladder.



TURBT:
A key procedure to remove a tumour sample from the bladder to determine the cancer's type, stage, and grade.

Blood tests:
Evaluate kidney and liver function and overall health.

Imaging tests:
X-ray, CT, MRI, or PET scans show the bladder and nearby organs.

Treatment options for MIBC

Neoadjuvant chemotherapy

Cancer medicines given before surgery to shrink the tumour and target cancer cells that cannot be seen on scans.

Radical cystectomy

Removal of the bladder and nearby lymph nodes. Men may also need removal of the prostate; women may require removal of the uterus and some surrounding organs.

Radiation therapy

External beam radiotherapy directed at the bladder area to control the primary tumour.

Chemoradiation (trimodal therapy)

A bladder-preserving approach that combines:

- a procedure done through the urethra to remove as much of the tumour as possible using a small instrument (this is called a transurethral resection of bladder tumour, or TURBT),
- radiation therapy to the bladder, and
- chemotherapy given at the same time to make the radiation work better. In carefully selected patients, this combination may allow the bladder to be preserved.

Immunotherapy

Medicines called checkpoint inhibitors that help your own immune system recognise and attack cancer cells. These may be used if you cannot have chemotherapy or if chemotherapy has not worked.

Targeted therapy

Drugs that block specific changes in cancer cells (for example, FGFR changes) that help the cancer grow. These are usually used for advanced or spreading MIBC when other treatments are no longer working.

Adjuvant chemotherapy

Chemotherapy given after radical cystectomy to kill any remaining cancer cells and reduce the risk of the cancer coming back.

Urinary diversion and reconstruction

Urostomy (ileal conduit)

The ureters are connected to a short piece of small bowel, which is brought to the surface of the abdomen to form a small opening (stoma). Urine drains continuously into an external bag attached to the skin.

Continent cutaneous reservoir (Indiana pouch):

An internal pouch is made from bowel to collect urine. The pouch is connected to a small opening on the abdomen, and you empty it several times a day using a catheter.

Neobladder

A new bladder is made from a section of bowel and connected to the urethra so that you can pass urine in a way that feels more natural. You empty the neobladder by relaxing your pelvic muscles and pushing down with your abdominal muscles; in some cases, catheterisation is still needed.

Before surgery, you may be offered a prehabilitation programme to help you prepare. This can include meeting a stoma care nurse (if you are having a urostomy or continent reservoir) to plan the stoma site and learn how to look after it, as well as advice on breathing exercises, physical activity and nutrition. If you are having a neobladder, you may also be taught pelvic floor exercises to strengthen the muscles that help you control urine both before and after surgery.

What questions should I ask my doctor?

When you are diagnosed with MIBC, it is important to fully understand your treatment options. Here are some questions you can ask your healthcare team to guide the conversation:

- What are my treatment options?
- What are the benefits and risks of each option?
- Will I need additional treatments?
- How will treatment affect my daily life?
- Can I preserve my bladder?
- Am I eligible for chemotherapy or radiotherapy?
- Am I eligible for any clinical trials?
- Should I be referred to a specialist or tertiary cancer centre for my treatment?
- How often will I need follow-up checks?
- How could treatment affect my sexual function and bowel function?
- What can I expect if I don't have any of the treatments being recommended?

Monitoring and follow-up care

Life after treatment

Life can change after treatment, but with proper care and support, many people return to their routines and maintain a good quality of life.

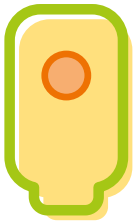
Follow-up care: Regular check-ups are essential to detect recurrence and manage long-term side effects.

Healthy lifestyle: Focus on getting enough protein to maintain muscle and support recovery. Eat a balanced diet, stay as physically active as your healthcare team recommends, and avoid smoking and excess alcohol.

Emotional wellbeing: Counselling, support groups, or talking openly with loved ones can help you cope with the emotional impact of bladder cancer and its treatment.

Fatigue: Feeling very tired is common during and after treatment. Rest when you need to, pace your activities, and speak to your healthcare team if fatigue is affecting your daily life.

Daily life: Over time, most people are able to gradually return to work, travel, exercise, and social activities, adapting their routines as needed.



Changes in urination: Treatment can affect how you urinate. Here's what to expect with different approaches:

- **Urostomy:** Urine is redirected through a stoma (opening) in the abdomen into an external collection bag.
- **Neobladder or Internal Pouch:** You may need to self-catheterize to fully empty the bladder.
- **Smaller Bladder:** Some treatments result in a smaller bladder, leading to more frequent or urgent urination.

Notes

Local patient support and resources:

World Bladder Cancer Patient COALITION

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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).