

# Bladder Cancer Basics Learn the facts,

Learn the facts, get support, find hope



# Care, Advice, and Support: You are not alone.

If you have questions about bladder cancer, this guide can help you learn the facts, get support, and find hope for your future. It does not replace medical care or advice from your health care team. Talk with them about the information you read here. They welcome your questions.

Learn as much as you can about your condition and options for treatment. The more you know, the better you'll feel about taking charge of your treatment and your life. For more information, resources, and a supportive community, visit our web site,

#### **BCAN.org**

Special thanks to the doctors, nurses, and patient volunteers who helped create this guide, and to our generous sponsors for their support.













#### **You Are Not Alone**

When you hear "You have bladder cancer," it can be very scary. Remember, you are not alone. You have people who care and resources to help you. It is okay to feel scared, angry, or unsure about what lies ahead. These emotions are a natural part of processing life-changing news. Be kind to yourself as you process this news.

Bladder cancer is more common than you might realize. Each year, more than 80,000 people in the United States are diagnosed. With advances in early detection and treatment, more people are living well with bladder cancer.

You are part of a caring community of people, doctors, and patient advocates who understand what you are going through and want to help. Take comfort in knowing that support and resources are available to guide you every step of the way. You do not have to face this alone. Every day, thousands of medical professionals, patient advocates, and the BCAN staff are working hard to create better todays and more tomorrows.

#### Be proactive about choosing a doctor

A urologist is a doctor who treats diseases of the urinary system. However, not all urologists are experts on bladder cancer. Choose a doctor who has treated many people with this disease. Find someone you can trust who will answer your questions.

If you want, go for a second and third opinion. Learn all you can about your options. When you know the facts, you can make good decisions about your care.

#### How BCAN began: John and Diane's story

John Quale learned he had bladder cancer in the year 2000. At that time, people knew little about it—the signs and symptoms, causes,

or treatments. As time passed, John and his wife Diane overcame challenges and celebrated small successes. And they knew what they had to do—help others on similar journeys. In 2005, they started a movement and a message, right from their kitchen table and in 2025, due to John and Diane's vision and determination, BCAN celebrates its 20th anniversary. Sadly, John passed away in 2008, but the mission and vision of BCAN continues.

#### What is BCAN?



We are the Bladder Cancer Advocacy Network (BCAN). As a nonprofit organization, BCAN provides patients with the critical information

and community support they need to thrive today. We support innovative research and responsive national policy to inspire hope for tomorrow.

As scientists work to find a cause, the research also helps find treatments—and in the future, a cure for this disease. Helping us share the movement of help and message of hope are:

- Survivors of bladder cancer
- ▶ Families and caregivers
- ▶ The research and medical community

#### The experts are working for you

More than 70 experts make up BCAN's Scientific Advisory Board. They help us bring you the best information in this guide and on our website. Many of them represent the major cancer centers in the United States and Canada. Some of these experts are:

- Urologists: doctors who treat diseases of the urinary system.
- Oncologists: doctors who treat cancer.
- Radiologists: doctors who diagnose and treat diseases through the use of medical imaging techniques such as X-rays, CT scans, MRIs, and ultrasounds. Pathologists: doctors who interpret and diagnose body tissue and fluid changes that disease can cause.



#### What can I do for the best result?

**Take it easy on yourself.** Finding out you have cancer can be a lot to take in. When you are at an appointment, it is hard to truly understand everything the doctor says. You may nod and think you understand. But when you get home, you may have little memory of much after you heard the word "cancer." You are not the first person to have this experience.

**Ask lots of questions.** Studies show that emotional situations lower our ability to understand things, especially personal things. And nothing is more personal than your health.

The first step is to ask a lot of questions. You can feel good about asking questions. Never feel as if you are "bothering" anyone.

**Bring backup for support.** Bring a family member or friend to each appointment if you can. They can help by asking questions and hearing the answers. It often takes more than one set of ears to get all the information you need.

Be sure to ask again if you do not understand something or don't get a complete answer.

**Make a plan.** Bladder cancer can make you feel like life isn't in your control. Making an action plan is a proactive step you can take to feel better.

### Survivor to Survivor talk with someone who understands.

# Facing Bladder Cancer Surgery or a Procedure? We are Here to Help!



Preparing for bladder cancer surgery or treatment can feel overwhelming. But you don't have to face it alone. BCAN's Survivor to Survivor Program connects you with someone who has been through it and understands how you feel.

Our trained volunteers are bladder cancer survivors who share their personal experiences, answer your questions, and provide support at any step on your journey.

- Free and Confidential: Talk to someone who truly gets it.
- Helpful Advice: Learn what to expect and feel more prepared.
- Emotional Support: You are not alone in this journey.

#### **Get Started Today:**

- To learn more about our Survivor to Survivor program and ask to be matched with someone, please visit BCAN.org/S2S.
- ▶ Email survivor@bcan.org
- Call 301-215-9099, ext. 207

Let someone who's been there guide and support you through your journey!



#### **BCAN provides education and support**

**Diane Quale, BCAN Co-founder:** "The first time you hear about bladder cancer should not be when you are diagnosed with this disease. To be informed gives you power. It gives you some sense of control when your life has been turned upside down with a cancer diagnosis."

"BCAN.org is the place that I go when I need the information, when I want to be able to be more informed and when I want to be able to be part of the community to help others."— Gail D.

"I had my bladder cancer surgery five years ago. I knew very little about the disease. Now, thanks to BCAN, I know quite a bit more." — Ralph U.

"Bladder cancer hit me like a rock even though my parents died from cancer. I knew so little about it." — Dorothy D.

"I just can't say enough good things about BCAN. I get emotional because they have just done so much for me." — Bill R.

### **Table of Contents**

10
11
11
<b>16</b>
17
20 20 20 21
23
24 24 26 28
32 32 34 39

What is UTUC? How is it treated?
What is advanced or metastatic bladder cancer? How is it treated?
What are clinical trials and how do they help? 49
How to be your own advocate! 50
Life after bladder cancer: thriving beyond treatment

Bladder cancer has impacted many people of different ages, genders, and lifestyles. Visit

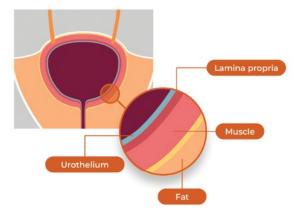
BCAN.org/stories to read their personal stories.

#### How does the bladder work?

The **bladder** is part of your urinary system. It is like a balloon with a muscle wall on the outside. The bladder has three main layers:

- **1. Urothelium:** This is the thin, inner lining of the bladder. It protects the bladder from urine.
- **2. Lamina propria:** This is the middle layer under the urothelium. It has blood vessels and provides support.
- **3. Muscle:** The outer layer is made of muscle. It helps squeeze urine out of the bladder when you go to the bathroom.

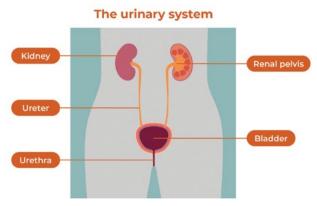
Each layer has an important role in how the bladder works. Bladder cancer can start in any of these layers, and where it starts can affect treatment.



Layers of the bladder wall

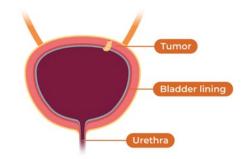
Your kidneys' main job is to filter waste (urine) from your blood. The middle part of the kidney is the **renal pelvis**. This is what collects the urine. It also pushes urine through the **ureters**. These two narrow tubes connect the renal pelvis in each kidney to the bladder. Your bladder stores urine until you are able to empty it.

The bladder leads to the urethra, the thin tube that takes urine out of the body. In men, the urethra goes through the prostate and penis. In women, the urethra is shorter and comes out above the opening of the vagina.



#### What is bladder cancer?

Bladder cancer happens when cells in the bladder start to grow out of control. It starts in the **urothelial cells** of the bladder's inner layer. This is the layer that's in contact with urine.

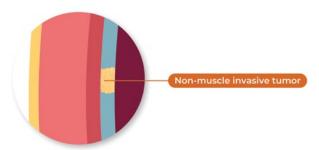


Bladder cancer often starts in the bladder lining

#### Types of bladder cancer

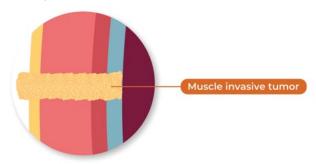
Doctors describe bladder cancer by how far it has grown into the bladder wall.

• NMIBC (non-muscle invasive bladder cancer) remains in the urothelial cells that line the bladder or the lamina propria, just beneath the lining. This type doesn't invade into the muscle wall of the bladder.



Non-muscle invasive bladder cancer is in the lining of the bladder.

• MIBC (muscle invasive bladder cancer) has grown into the deeper layers of the bladder. As it grows into the wall and muscle of the bladder, it becomes harder to treat.

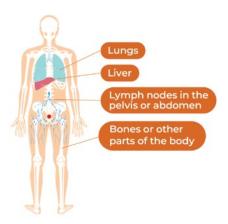


When the tumor grows into the muscle wall it becomes muscle invasive bladder cancer.

**UTUC** stands for Upper Tract Urothelial Cancer. This is a less common type of cancer that starts in the cells lining the upper urinary tract, which includes the kidneys and the tubes (ureters) that carry urine from the kidneys to the bladder. UTUC is a rare form of cancer, but it can be serious if not treated early. See page 40 for more information about diagnosing and treating UTUC.



Advanced or metastatic bladder cancer has spread beyond the muscle wall of the bladder to another part of the body. Your cancer may be advanced when it is first diagnosed, or it may have come back after you finish treatment. This is called recurrent bladder cancer.



If bladder cancer advances, it can spread to other parts of the body.



Visit *BCAN.org/what-is-bladder-cancer* to learn more or scan this QR code.



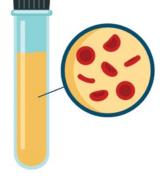
#### Common signs of bladder cancer

Hematuria is the name for blood in the urine. It's the most common sign of bladder cancer. When you can see blood in your urine, this is gross hematuria. A urinalysis is a test that can show tiny amounts of blood—so tiny that you may not be able to see it. This is microscopic hematuria.



Doctors may do this test as part of a routine checkup. Scan this code to learn more about hematuria or visit *BCAN.org/video-what-is-hematuria*.





Gross hematuria

Microscopic hematuria

Blood in the urine doesn't always mean bladder cancer. Hematuria can happen with other conditions, too. This blood may come from the:

- Kidneys
- Ureters
- Bladder
- Urethra
- Prostate (in men)

People may have different signs of bladder cancer. Some other common signs include changes in how you empty your bladder. You may have:

- A need to pee (urinate) often
- A strong urge to pee
- Pain when you pee with no evidence of infection
- A feeling that the bladder isn't emptying all the way

Other conditions can also cause these symptoms. They're not always related to bladder cancer.

#### What are symptoms of advanced bladder cancer?

- Being unable to urinate
- Loss of appetite and weight loss
- Overwhelming feeling of being tired or weak
- Swelling in the feet
- Pain in your bones
- Pain in your lower back on one side

Learn more about bladder cancer signs and symptoms at *BCAN.org/bladder-cancer-signs-symptoms*.



"I didn't feel great and I was having some spotting, which my doctor said was normal. Sometimes I noticed that the toilet bowl was a little orange colored. Now I know if there is orange in the toilet bowl, you just run to the urologist, like I should have. I'm embarrassed to say I really didn't know. I associated a urologist with my husband."

— Camille W.

### How did I get bladder cancer?

Many things can put you at risk for bladder cancer. You can control some of these risk factors. But many of them, you can't control.

#### **Habits and lifestyle**

**Smoking:** Being a smoker puts you at the greatest risk. Smokers have 3-4 times more risk of getting bladder cancer than people who don't smoke. If you smoke, ask for help. Your doctor can help you quit. It's hard, but you can do it. People quit smoking every day. Today could be your day. Learn more at *BCAN.org/smoking-bladder-cancer-risk*.

#### **Personal traits**

- Race: Whites are twice as likely to get bladder cancer as African Americans or Hispanics. Asians have the lowest rate of bladder cancer.
- ▶ **Age:** The risk of bladder cancer increases as you get older.
- Gender: Men get bladder cancer more often. But women are getting it more and more. And women have a special challenge. The symptoms are much the same as those of other women's health issues. So, they may not find out they have cancer until it's at a later stage.

#### Other health conditions and treatments

- Chronic (long-term) bladder inflammation: Urinary infections, kidney stones, and bladder stones don't cause bladder cancer. But studies have found links between these conditions and bladder cancer.
- **Past bladder cancer:** People who have had bladder cancer have a higher risk of getting another tumor in their urinary system. So do people whose family members have had bladder cancer.
- **Birth defects of the bladder:** Sometimes the connection between the belly button and the bladder doesn't disappear as it should before birth. People can get cancer in this area, but it's very rare.
- **Some medicines**: Some chemotherapy or radiation for treatment of other cancers can increase the risk of bladder cancer.

#### **Environment**

Contaminants: Studies link arsenic in drinking water to a higher risk of bladder cancer.

#### Work

- **Some chemicals:** Studies also link some chemicals to bladder cancer. People who work with them may have a higher risk. These chemicals are used to make rubber, leather, printing materials, textiles, dye, and paint products.
- Firefighters and members of the military: These occupations may have increased risks due to exposure to chemicals through their work environments.

Learn more about bladder cancer risk factors: BCAN.org/risks.

#### Do my genes matter?

Genes are short pieces of DNA that carry your traits—those things your parents pass on to you. Your genes have instructions that tell your cells what to do. But your genes can change over time, as you age.

A gene that changes is a **mutation**. These aren't related to the genes that you inherit from your parents. A mutation can happen as a result of contact with things in your environment, like smoking or certain chemicals. With some mutations, you may be more likely to get bladder cancer.

# Knowing more about your genes may help target your treatment.

Your doctor may want to find out if you have certain gene mutations. Why? Researchers have found that specific medicines work well on certain mutations in bladder cancer. These medicines can target the mutations and slow a tumor's growth or improve your chances of successful treatment.

To learn more about genes and bladder cancer, visit BCAN.org/genes.

### How do doctors find bladder cancer?

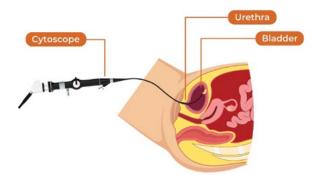
If you have signs of bladder cancer, your doctor will want to do some tests to look inside your bladder, kidneys, and tubes that carry urine (called ureters). A urologist, a doctor who specializes in these areas, will do these tests.

Remember, these tests are done all the time by doctors, but they know it is not routine for you. They want to make sure you feel as comfortable as possible. If you are feeling worried, ask your doctor to:

- Help you feel more comfortable
- Explain what will happen before the test
- ▶ Talk you through the test while it's happening

**Urine cytology** checks your urine for abnormal cells or certain genetic markers that are caused by bladder cancer cells. This test helps your doctor figure out what's going on inside your bladder and is often used along with other tests to get more information.

A **cystoscopy** shows what is happening inside your bladder, urethra, and for men, the prostate. The doctor uses a thin tube called a cystoscope, which has a tiny camera on it. The tube goes through your urethra (the tube that urine passes through) into your bladder. This test is the best way to look inside your bladder and urethra. The doctor checks to see if anything looks unusual. If they find something like a tumor or other changes, you might need to do the test again later.



A cystoscopy helps your doctor see inside your bladder.



Scan this QR code or visit *BCAN.org/cystoscopy-video* to watch a video about cystoscopies.

After a cystoscopy, you might notice a little blood in your urine. Your bladder could feel irritated. This is normal and usually goes away in a day or two. If you get a fever or it does not improve after 3-5 days, tell your urologist.

It is good to check the color of your urine regularly. It should be a pale yellow. Even a small amount of blood can change its color. Be sure to drink plenty of water to stay hydrated.

There are other tests your doctor might use to look at your urinary system:

- CT Urogram: This is a special X-ray that uses a dye in your veins to help your doctor see your kidneys and ureters. It is good at finding tumors in the kidneys and the ureters (tubes that carry urine).
- MR Urogram: This test uses magnets instead of X-rays and does not use dye. It is a good option if you're allergic to dye or have kidney problems.
- Renal Ultrasound: This test uses sound waves, not X-rays or dye, to look at the size, shape, and location of your kidneys and bladder. It can spot tumors or infections but may miss small kidney stones or tumors.
- **Bladder Biopsy or TURBT:** In this procedure, the doctor removes part or all of a tumor for testing. You will probably be asleep during the procedure with the help of medicine. For more on TURBT, see page 24.

#### Diagnosis by accident

Sam was driving home from work in stop-and-go traffic when he was rear-ended by a large truck. Later on, at the hospital, he had tests to rule out any internal injuries.

When reading the CT scan, the doctor noticed a spot on Sam's bladder. More tests confirmed he had NMIBC (non-muscle invasive bladder cancer). Luckily, they found it early, so Sam's doctors were able to treat it more easily.

Some people learn they have bladder cancer this way.

# What do grades and stages mean?

**Pathologists** are doctors who study changes in body tissue and fluids caused by disease. They are the ones who look closely at the biopsy, which is a small piece of the tumor taken from your body. They figure out if the tumor is cancer and what kind it might be.

Pathologists also check your urine for cancer cells. The information they find helps your urologist choose the best way to treat the cancer.

#### Bladder tumors can be **benign** or **malignant**:

- **Benign tumors** are not cancer. They don't spread to other parts of the body and are usually less harmful. However, they may still need to be removed if they cause problems.
- Malignant tumors are cancer. These can grow and spread to other areas of the body if not treated.

Your doctor will check if a bladder tumor is benign or malignant. The pathologist will give your doctor information about the stage and grade of your tumor, to decide the best treatment for you.

#### **Types of Tumors**

Most bladder tumors begin to grow on the urothelium. These are cells on the inner lining of the bladder. Other tumors grow on different parts of the urinary tract (see page 40).

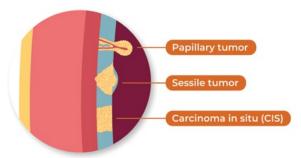
Your bladder wall has:

- Muscle
- Blood vessels
- Connective tissue
- Nerves

Tumors that grow from the bladder's inner lining can start as:

- Papillary tumors: These grow along the bladder wall. Under a microscope, they may look like tiny trees sticking up on the lining of the bladder.
- Sessile tumors: These solid, flat masses grow along the surface of the bladder.

• CIS (carcinoma in situ): This is another type of flat tumor or patch of NMIBC on the bladder lining. It is a higher grade of cancer. This increases the risk of it coming back or getting worse.



Types of bladder cancer tumors.

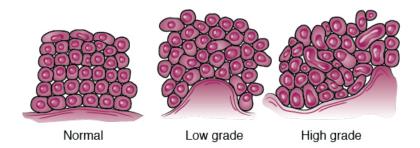
All of these tumors can also grow into the bladder wall and invade the muscle. Bladder cancer tumors are described by their grade and stage. These terms help doctors understand how serious the cancer is and how to treat it.

#### What is Tumor Grade?

The grade tells how much cancer cells look like normal cells under a microscope. It also shows how fast the tumor may grow and spread:

- **Low grade:** The cells look more like normal cells and grow slowly.
- **High grade:** The cells look very different from normal cells and grow faster. High-grade tumors are more likely to come back and get worse.

High-grade tumors are more likely to turn into invasive disease. That means they grow into the muscle layer of the bladder.



Cancer cells look different from normal cells (on the left).

#### What is Tumor Stage?

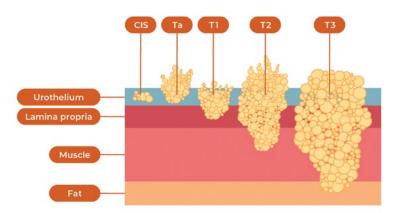
The stage of a tumor describes how far the cancer has spread and how deep it has grown into the bladder. There are different stages of bladder cancer:

- **CIS (Carcinoma in situ):** This is a flat tumor on the surface of the bladder lining.
- Non-invasive: The tumor is only on the inner lining of the bladder, not going deeper into the bladder walls.
- Superficially invasive: The tumor has spread to the layer of tissue under the bladder lining, the lamina propria, but not yet into the bladder muscles.
- **Muscle invasive:** The tumor has grown into or through the bladder wall and can affect the muscle layer.
- **Metastasized:** The cancer has spread to other parts of the body, away from the bladder.

Doctors use the stage to decide on the best treatment for you. Early-stage cancers may need less aggressive treatment, while advanced stages might require stronger options like surgery, chemotherapy, or immunotherapy.

The letter "T" followed by a letter or number from 0-4 describes the cancer stage. The higher the number, the more the cancer has spread away from the bladder lining.

#### Stages and cancer invasion into bladder wall



#### When cancer spreads to the lymph nodes

Lymph nodes are small glands that hold white blood cells. These cells help your body fight disease. Cancer cells in the lymph nodes show that the tumor has metastasized (spread outside the bladder). If that happens, you may need more treatments, such as chemotherapy (page 39).



To learn more about bladder cancer treatments that might be right for you, scan this QR code or visit *BCAN.org/treatment-matrix*.

# Can bladder cancer come back?

Bladder cancer has a high rate of **recurrence** (coming back), even after treatment. Bladder cancer cells can return in the bladder or other parts of the body. Some people who get treatment for bladder cancer never have a recurrence.

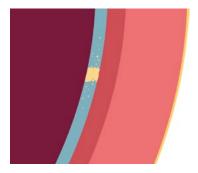
If the cancer grows back, you can get treatment again. This is especially true for non-invasive bladder cancer that:

- Is in the lining of the bladder (the urothelium)
- Hasn't grown into the muscle of the bladder wall

Talk about your options with your doctor. It is a good idea to stay in touch with your bladder cancer doctor. If the cancer does come back, it is easier to treat in the early stages.

# What's Non-Muscle Invasive Bladder Cancer (NMIBC)?

Non-muscle invasive bladder cancer (NMIBC) is the type of bladder cancer that stays on the inner urothelial lining of the bladder. It has not spread into the bladder muscle. Since it is on the surface of the bladder, it is easier to treat than cancer that has spread into the muscle. Treatments can include surgery to remove the tumor(s) or medicines placed directly into the bladder to stop the cancer from coming back. Regular check-ups are important to make sure the cancer does not grow or return.



Bladder cancer usually starts in the urothelial cells in the bladder lining.

#### **How is NMIBC treated?**

There are many good treatment options for NMIBC (non-muscle invasive bladder cancer). Once a bladder tumor is found, a TURBT is performed to determine the stage and grade of the tumor, which helps your doctor decide how to treat your cancer.

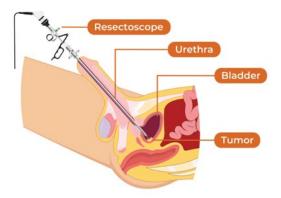
#### TURBT—a way to test and treat tumors

TURBT stands for transurethral resection of a bladder tumor. It allows doctors to:

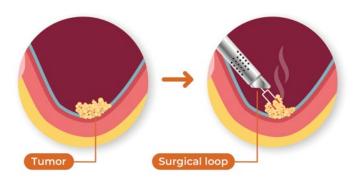
- Get a closer look at the bladder.
- Remove a sample of the tumor for testing. Sometimes they **resect** (remove) the entire tumor as part of treatment.

#### **How TURBT works**

The TURBT method is not just for testing. To see inside the bladder, the urologist uses a tool called a **resectoscope**. The tool goes through the urethra and into the bladder. It has a small loop of surgical wire at the end that can remove a tumor. The loop also cauterizes (seals off) the blood vessels to help stop any bleeding. This is known as fulguration.



A tool called a resectoscope helps the urologist take out the tumor.



A surgical loop seals off the blood vessels to help stop bleeding.

#### **Benefits of TURBT**

TURBT is a way to get to the bladder tumor without cutting through the abdomen. It helps with:

- Diagnosis, staging and removal of bladder tumors
- Planning additional treatment options

The urologist may want to repeat TURBT in 4-6 weeks. This can give more information about your tumor. Remember, the doctor uses medicine during TURBT so you don't have any discomfort.



Visit *BCAN.org/video-what-is-a-turbt* to learn more about TURBTs or scan this QR code.

#### **Risks of TURBT**

There is only a small risk of infection or hurting your bladder with TURBT. The most common risks are bleeding, pain, and burning when you pee. These are temporary and may happen from time to time. Tell your urologist if these last more than one month afterward.

For large tumors, your urologist may leave a **catheter** in the bladder for a few days. This is a small tube that goes through the urethra into your bladder. This helps reduce problems from bleeding and:

- Blood clots in the bladder
- Too much expansion of the bladder due to blood or more urine than usual

Even if a tumor is small, the doctor may use a catheter to drain or rinse the bladder. This can help if there is concern about bleeding or problems with peeing.

# Enhanced cystoscopy—a better way to see and remove tumors

Cystoscopy helps see what is happening in the bladder, urethra, and prostate. Many doctors now have enhanced cystoscopy tools. They are able to see bladder cancer tumors better at the time of bladder biopsy or TURBT. Both ways help doctors:

- See a difference between healthy tissue and cancer
- Find easily missed tumors

# BLC (blue light cystoscopy) with Cysview® (hexaminolevulinate)

Cysview is a medicine your doctor places inside the bladder. Cancer cells absorb the medicine. During cystoscopy, the urologist shines a blue light in the bladder. With this blue light, the tumors with Cysview glow bright pink.



Bladder image with white light cystoscopy alone



Same image after BLC with Cysview

BLC images courtesy of Photocure.

#### NBI (narrow band imaging)

This method changes wavelengths of light from the cystoscope to find any areas with more blood vessels. Bladder tumors tend to have an increased blood supply to feed them. Your doctor can see this better with NBI.

Both BLC and NBI are enhanced methods and need special tools. You can ask if your medical center offers them.



Bladder image with white light cystoscopy alone



Same image after NBI

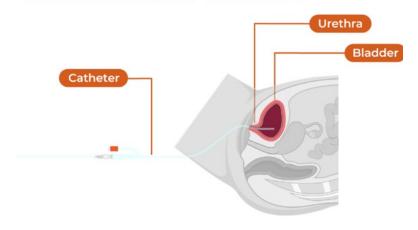
NBI image courtesy of Olympus.

# Types of Intravesical Therapy for Non-Muscle Invasive Bladder Cancer (NMIBC)

### Intravesical treatment—placing medicine inside the bladder

Some flat bladder tumors are hard to remove with methods like TURBT. Others may be likely to grow back, even after your doctor removes them. Intravesical therapy is a treatment for bladder cancer that puts medication *directly into the bladder* through a thin tube called a catheter. By putting the drug right where the cancer is, these treatments can target the cancer cells without affecting other parts of the body. Intravesical therapy is often used for non-muscle invasive bladder cancer (NMIBC). The treatment helps to kill cancer cells and lower the risk of the cancer coming back. Your doctor will let you know how often you need this treatment and what to expect.

#### INTRAVESICAL THERAPY





To learn more about intravesical therapy, please visit *BCAN.org/intravesical-therapy* or scan this QR code.

#### Immunotherapy with BCG (Bacille Calmette-Guérin)

- ▶ **How It Works:** BCG is a type of immunotherapy that uses a weakened form of bacteria to create an immune response. When BCG is placed in the bladder once a week for six weeks, the immune system becomes alert and starts to fight cancer cells on the bladder lining.
- **Who It's For:** BCG may be an option if you have a high-grade tumor, a carcinoma in situ (CIS) tumor (a high-grade cancer that is non-invasive and flat), or a T1 tumor (a tumor that has reached below the top layer of the bladder but not the muscle).
- **How Well It Works:** BCG is very effective for many patients with NMIBC. However, not all tumors respond. If BCG does not work, other treatment options are available.
- What Patients Should Know: Some people may have side effects, like needing to pee more often, burning when peeing, or feeling like they have the flu. Talk to your doctor if you feel these symptoms. Right now, there isn't always enough BCG available, so your doctor may suggest other treatments if needed. Staying in touch with your care team is important to get the best results.

#### Adstiladrin® (nadofaragene firadenovec-vncg)

- ▶ **How It Works:** Adstiladrin is a gene therapy that delivers interferon alpha-2b (IFNa-2b) to bladder cells. This activates immune cells to kill the cancer cells.
- **Who It's For:** Patients with NMIBC who have CIS and tumors that do not respond to BCG. A urologist puts this medicine in the bladder with a catheter.
- **How Well It Works:** Adstiladrin can reduce or eliminate cancer in some patients who did not respond to BCG, though results vary.
- **What Patients Should Know:** This therapy is put directly in the bladder. It targets cancer cells without affecting the rest of the body. Some side effects like bladder irritation may occur. It is given once every three months.

#### Anktiva® (nogapendekin alfa inbakicept-pmln)

- How It Works: Anktiva boosts the immune system by activating a protein called interleukin-15 on bladder cells. It helps immune cells attack and kill cancer cells.
- **Who It's For:** Anktiva is for NMIBC patients with CIS who didn't respond to BCG. It is given along with BCG to increase its effects.
- How Well It Works: When combined with BCG, Anktiva has helped reduce cancer in some patients whose tumors didn't respond to BCG alone, but individual results can vary.
- What Patients Should Know: Given through a catheter, Anktiva works locally in the bladder and may cause side effects like bladder irritation. It is given weekly for six weeks, like BCG. Talk with your doctor about any concerns.



#### **How These Immunotherapies Work Together**

BCG, Adstiladrin®, and Anktiva® all can stimulate the immune system to attack cancer cells in the bladder. This is different from immune checkpoint inhibitors [see page 44] which stop pathways that cancer cells use to hide from the immune system. BCG and other bladder cancer treatments can have side effects. Talk with your doctor about what to expect and any symptoms to watch for.

#### Intravesical treatment with Mitomycin C or Gemcitabine

- How does it work? Mitomycin C is an antibiotic medicine that has anti-tumor effects. Gemcitabine is a chemotherapy medicine for the treatment of certain types of cancer. Your doctor places the medicine inside the bladder:
  - One time only for people with low-risk NMIBC.
  - Once a week for 6-8 weeks and then monthly for 11 months for people with higher-risk NMIBC.
- **Who it's for?** This medicine is for people with lower-risk NMIBC.
- **How Well It Works:** In clinical studies, using these medicines after TURBT worked to keep cancer from coming back for many people.
- **What Patients Should Know:** These intravesical treatments can have side effects. Be sure to talk with your doctor about what to expect with each medicine.

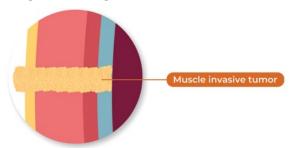
# SIDE EFFECTS OF INTRAVESICAL CHEMOTHERAPY



ALWAYS SPEAK TO YOUR DOCTOR IF YOU ARE EXPERIENCING ANY NEW OR WORSENING SIDE EFFECTS

# What is MIBC (muscle invasive bladder cancer)?

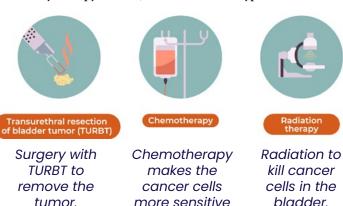
Muscle invasive bladder cancer (MIBC) has grown into the muscle layer of the bladder wall. This makes it more serious than cancer that stays in the bladder's inner lining. MIBC can spread to other parts of the body if not treated. Treatment can include surgery, chemotherapy, or radiation, depending on the person's health and the stage of the cancer. Early treatment is important to improve outcomes.



When cancer grows deeper into the bladder wall, it becomes muscle invasive bladder cancer.

# Can You Treat Bladder Cancer Without Removing the Bladder?

For some people with MIBC, a treatment that preserves the bladder is possible. This is called bladder preservation therapy. The most common way to do this is with trimodality therapy (TMT), which uses three types of treatment:



to radiation.

This treatment aims to get rid of cancer while keeping the bladder intact. However, not everyone can have this type of treatment. Your doctor can help you decide if bladder preservation is right for you.

You will need a team of specialists for TMT:

- ▶ **Urologic Oncologist:** Using a TURBT (transurethral resection of bladder tumor), the urologist removes the tumor through a small scope inserted into the bladder. (View page 24 for more information on TURBT.)
- Radiation Oncologist: A doctor who treats cancer with radiation therapy targets the entire bladder or the area where the tumor is located.
- Medical Oncologist: A doctor who uses medicines like chemotherapy medicines like cisplatin, mitomycin C, or gemcitabine to help the radiation work better.

#### Follow-Up Care

After TMT, it's important to have regular checkups because there's a chance the cancer could come back, or a new tumor could form in the bladder. Your doctor will monitor you with cystoscopies to look inside the bladder, and other tests. If the cancer does return, removing the bladder may still be an option.

#### Is Bladder Preservation Therapy Effective?

For the right patients, TMT can provide long-term survival rates similar to those who have their bladder removed. To qualify, patients must meet certain criteria, such as:

- Tumors that can be removed through the urethra.
- No cancer outside the bladder.
- Good bladder function.
- No blockage of urine from the kidneys.

Talk to your care team to see if this approach is an option for you.



Please visit *BCAN.org/preservation* or scan the QR code to watch a short video about bladder preservation.

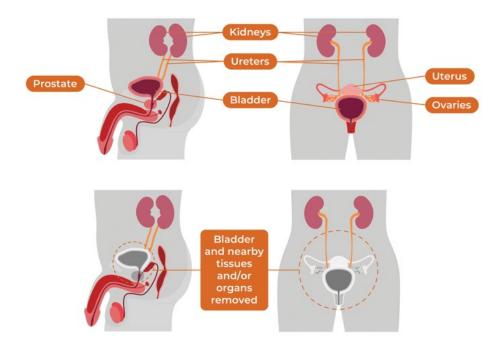
#### Surgery: Removing and Rebuilding the Bladder

Sometimes, your doctor may recommend surgery to remove your bladder, called a **radical cystectomy**. This is usually suggested if the tumor grows through the bladder muscle wall. Certain types of tumors come back after treatment inside the bladder and bladder removal may be needed.

#### **Key Facts About Bladder Removal**

This is a major surgery. It removes the bladder and nearby lymph nodes.

- In men, the prostate is usually removed too.
- In women, other organs may be removed including the uterus, fallopian tubes, ovaries, cervix, and part of the vagina.



The bladder and sometimes nearby organs may be removed during a radical cystectomy.

#### **Before Surgery**

- You will need tests, like CT scans, to check if the cancer has spread to other parts of your body. If it has spread, your treatment may involve chemotherapy instead of surgery.
- The goal of bladder removal is to stop the cancer from spreading further. After removing the bladder, your doctor will create a new way for urine to leave your body. This is called a urinary diversion.

#### **After Surgery**

- You'll stay in the hospital for several days to recover.
- Recovery at home takes several weeks before you can return to normal activities.

Like any surgery, there are risks and benefits. Talk to your doctor about them to make the best decision for you.



To watch a video to learn more about bladder removal surgery, or radical cystectomy, visit *bcan.org/cystectomy-video* or scan this QR code.

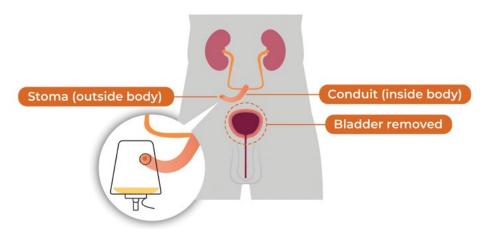
#### **Types of Urinary Diversions**

Your doctor will help you decide the best option to get urine out of your body, based on your health, age, and the stage of your cancer. Each type of urinary diversion is different. BCAN can connect you with others who have had similar surgeries so you can learn from their experiences. Read about the Survivor to Survivor program on page 3 and how you can connect with a BCAN volunteer.

#### 1. Ileal Conduit

An ileal conduit is a simple way to help urine leave your body. The urologist creates a small opening in your belly called a **stoma** or **ostomy**. A piece of your small intestine (ileum) is used to make a passage for urine. Urine flows from your kidneys, through this passage, and out of your body into a bag worn outside your belly.

You will learn to use a **urostomy bag** to collect urine. You empty the urine into the toilet as the bag fills. Special ostomy nurses will teach you how to take care of your stoma and choose the best supplies for you to use. Using an ileal conduit becomes routine over time.

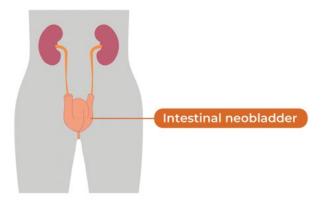


With the ileal conduit, a small bag outside of the body catches urine that comes from the stoma.

#### 2. Neobladder

A neobladder is a new bladder made from part of your small intestine. It connects to your ureters and urethra so you can urinate more naturally. With a neobladder, you learn to use your belly muscles to push urine out through your urethra. You won't need a stoma or external bag.

Some people may have trouble fully controlling urine (incontinence) or may need a catheter to help drain their bladder. Some do not have complete control over the neobladder, especially at night. This means they may leak urine or have trouble controlling when they pee.



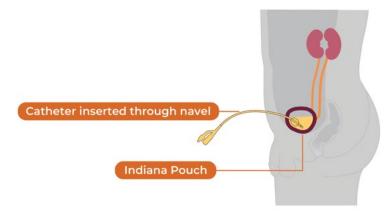
A neobladder is made from a part of your intestine.

Urine is pushed out through the urethra.

#### 3. Continent Cutaneous Pouch (CCP)

A CCP, like the Indiana pouch, stores urine inside your body. The urologist makes a pouch from part of your colon. This pouch connects to your kidneys with your ureters. A small stoma is made on your belly. You empty the pouch by inserting a catheter into the stoma.

This option does not require an external bag, but it takes practice to learn self-care with the catheter.



An Indiana pouch holds the urine in the body. A catheter is put in the stoma to drain the urine.

#### **Getting Support**

BCAN's Survivor to Survivor program (page 3) connects you with volunteers who've

had similar surgeries.
They can answer
questions and share
their experiences. Learn
more at BCAN.org/\$2\$.

#### Systemic medicine—treating the whole body

Systemic therapy treatments use medicines to fight cancer throughout your whole body. It includes treatments like chemotherapy, immunotherapy, or targeted therapy. Sometimes radiation is also used. These medicines travel through your blood to find and destroy cancer cells wherever they are. Your doctor may suggest systemic therapy if the cancer has spread beyond one area. It can be used alone or with other treatments, like surgery or radiation.

**Systemic chemotherapy** is medicine that works throughout your whole body to treat cancer. Here are some important things to know about this treatment:

- The medicine is given through a vein, often using a small device placed under the skin, usually in the upper chest. This device, called a "port," makes it easier to receive treatment over time. With a port, you will not need a new IV line for each treatment.
- The port can stay in place for many months to help with ongoing chemotherapy.

If your bladder cancer has grown into the muscle layer of the bladder wall (MIBC), your doctor may suggest surgery to remove your bladder. Before bladder removal surgery, or cystectomy, some people get **neoadjuvant chemotherapy** (medicine given before surgery). This type of treatment can help shrink the tumor in the bladder. It can kill cancer cells that may have spread to other parts of the body, even if scans don't show them.

Studies have shown that using cisplatin chemotherapy before bladder removal surgery can help people with muscle-invasive bladder cancer live longer. Sometimes, chemotherapy is combined with immunotherapy. You can learn more about immunotherapy on page 44.

After surgery, your doctor may suggest **adjuvant chemotherapy** (medicine given after surgery). This may be recommended if they see the cancer has spread to nearby lymph nodes or tissues. The goal is to lower the chance of the cancer coming back near the bladder or in other parts of your body.

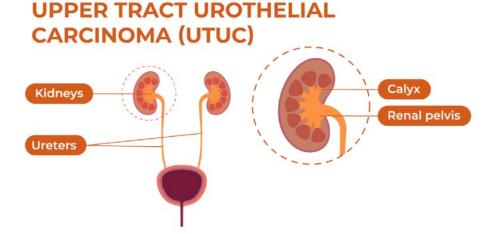
Your doctor might also suggest other treatments after surgery, like immunotherapy.

# What is UTUC? How is it treated?

Most bladder cancers (about 90-95%) start in the urothelial cells that line the bladder and the rest of the urinary tract. When they grow out of control, it is known as urothelial carcinoma. The urothelial cells that line the bladder are also in other parts of the urinary system. Urothelial cells are also in the:

- · Renal pelvis: the middle part of the kidney
- Ureters: the small tubes that carry urine from the renal pelvis down to the bladder

If cancer develops in the lining of the kidney (the renal pelvis or calyx) or the ureters, the tubes that connect the kidneys to the bladder, it is called **upper tract urothelial carcinoma (UTUC)**.



The renal pelvis and ureters are part of the upper tract in your urinary system. Cancer that happens there is called **UTUC** or **upper tract urothelial carcinoma**. People have two kinds of UTUC:

- Non-invasive: more than half the people have this type, where the cancer remains in the urothelial cells that line the renal pelvis or ureters.
- Invasive: the cancer has grown beyond those urothelial cells. Or it may have spread to other parts of the body.

#### **Common signs of UTUC**

With UTUC, some people may have blood in their urine. Others have discomfort or pain on the side of their body (flank pain). This pain happens near the lower ribs. A tumor may cause pain. The pain may also come from small blood clots or tumors that block the ureters.

Some people have no signs or symptoms of UTUC. Their doctor finds the tumors when looking for other health problems during radiology tests or scans.



#### **How is UTUC treated?**

The stage and grade of the UTUC will determine the treatments available. Treatment options for UTUC include **intracavitary** (in the lining where the tumor is) for low grade tumors. Systemic (throughout your body) medications can treat high grade tumors. Surgery can remove the entire kidney and ureter (a radical nephroureterectomy or RNU, for high grade disease).

Chemotherapy, immunotherapy, and targeted therapies can also be used to treat UTUC that cannot be removed with surgery or has spread beyond the urothelial lining in the upper tract. If you are diagnosed with UTUC, speak with your doctor about your best treatment options.

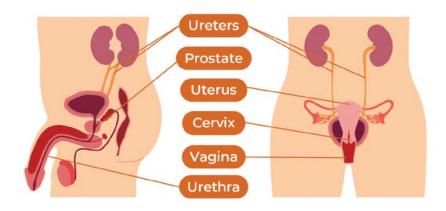


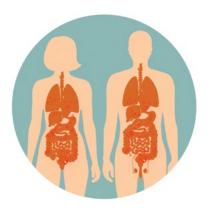
To learn more about UTUC, visit our web site at *BCAN.org/UTUC* or scan this QR code:

# What is advanced or metastatic bladder cancer?

#### What if my cancer spreads beyond my bladder?

Bladder cancer starts in the bladder, which is the part of the body that stores urine. "Locally advanced" bladder cancer means the cancer has grown. It has spread beyond the bladder to nearby organs. "Metastatic" bladder cancer means the cancer has spread to parts of the body far from the bladder, like the lungs, liver, or bones. Both types of cancer are more serious because they affect more parts of the body and are harder to treat.





Locally advanced bladder cancer can spread to nearby organs in the pelvis. Advanced or metastatic disease can spread to other parts of the body.

#### What is advanced or metastatic bladder cancer?



To watch a video and read more about advanced, bladder cancer, please visit *BCAN.org/what-is-advanced-bladder-cancer* or scan this QR code.

When bladder cancer spreads, doctors may use other types of treatment to help. These can include

chemotherapy (medicine that kills cancer cells), immunotherapy (treatment that helps your body fight the cancer), and targeted therapy (medicine that attacks cancer cells in a specific way). These treatments are used because they can:

- Slow the spread of cancer
- Shrink the tumor (temporary remission)
- Relieve symptoms
- Extend life as long as possible



To learn more about how advanced bladder cancer is treated, please visit *BCAN.org/treating-advanced* or scan this QR code.

With advances in treatment,
most people with advanced
bladder cancer can expect
to live longer and better
than they could just a
few years ago.

#### **Immunotherapy**

Cancer cells can make proteins that stop your immune system from attacking them. These proteins act like a "switch" that turns off the immune system. Immunotherapy is a type of treatment that helps your body's immune system fight cancer. For advanced bladder cancer or UTUC, the type of immunotherapy is called "immune checkpoint inhibitors." Immune checkpoint inhibitors block this "off" switch. This helps the immune system stay active and fight cancer cells.

#### How do immune checkpoint inhibitors work?

One key protein involved is called PD-L1. Many bladder cancers and UTUCs use this protein to avoid the immune system. Immune checkpoint inhibitors, like pembrolizumab and nivolumab, target PD-L1, helping the immune system fight cancer.

#### How often and for how long is it given?

Immunotherapy is given through an IV (in a vein). The schedule can depend on the specific medicine. Your doctor will tell you how long you need the treatment.

#### Who can use immunotherapy?

Immunotherapy can be used in different situations:

- 1. For patients with bladder cancers that do not respond to other treatments.
- 2. For patients with muscle-invasive bladder cancer, along with chemotherapy, before surgery.
- 3. After surgery for muscle-invasive bladder cancer or UTUC, if the cancer is likely to come back or spread.
- 4. For patients with cancer that has spread to other parts of the body (metastatic cancer).

#### What to know about side effects

Like other treatments, immunotherapy can cause side effects. It is important to talk to your doctor about what to expect and how to manage any side effects. More immunotherapy drugs may receive FDA approval for advanced bladder cancer soon. There are many ongoing clinical trials.

At the start of 2025, the following FDA-approved immunotherapies for advanced bladder cancer are available to treat advanced or metastatic bladder cancer. Ask your doctor if an immunotherapy is right for you, including:

#### 1. Atezolizumab (Brand Name: Tecentriq®)

• Approved for: Locally advanced or metastatic bladder cancer.

#### 2. Durvalumab (Brand Name: Imfinzi®)

· Approved for: Locally advanced or metastatic bladder cancer.

#### 3. Avelumab (Brand Name: Bavencio®)

 Approved for: Maintenance treatment of locally advanced or metastatic bladder cancer.

#### 4. Nivolumab (Brand Name: Opdivo®)

• Approved for: Locally advanced or metastatic bladder cancer.

#### 5. Pembrolizumab (Brand Name: Keytruda®)

- Approved for: Locally advanced or metastatic bladder cancer.
- Disease progression during or following platinum-based chemotherapy.

#### **Targeted Therapies for Bladder Cancer**

Targeted therapies are treatments that focus on specific parts of cancer cells to stop them from growing or spreading. These treatments target things that help cancer survive, like certain proteins or genes. The FDA has approved two targeted therapies for people with bladder cancer:

#### 1. Balversa™ (erdafitinib)

**How does it work?** Balversa targets proteins that help cancer cells grow and survive.

**How often do you need it?** You take Balversa as a pill once a day. Your doctor will tell you how long to take it.

Who is it for? Balversa is used for adults with bladder cancer that has spread or can't be removed by surgery. Your doctor may recommend Balversa if your cancer has a certain gene mutation called FGFR. Or if you have already tried at least one chemotherapy treatment with platinum that didn't work or is no longer working.

**How well does it work?** In studies, about 1 in 3 people had a good response to Balversa, meaning their cancer shrank or stopped growing. More studies on this treatment are still being done.

**Side effects:** Like all treatments, Balversa can cause side effects. Be sure to talk to your doctor about what side effects to expect.

#### 2. Padcev® (enfortumab vedotin-ejfv)

**How does it work?** Padcev is a special kind of medicine called an antibodydrug conjugate (ADC). It targets cancer cells and kills them while trying to leave healthy cells alone. Padcev attaches to a protein on bladder cancer cells called nectin-4, stopping the cancer cells from dividing and causing them to die.

**How often do you need it?** Padcev is given through an IV (intravenously, or through a vein) over 30 minutes. It's given in cycles, with a break in between. Your doctor will tell you how many cycles you need.

Who is it for? Padcev is for adults with bladder cancer or cancers of the urinary tract that have spread or can't be removed by surgery. Your doctor may recommend Padcev if you've already tried both immunotherapy and chemotherapy.

**How well does it work?** Padcev was approved based on a study that looked at how well it worked in people with bladder cancer. Many patients showed a good response.

**Side effects:** Padcev, like all treatments, can cause side effects. Be sure to talk to your doctor about what to expect.

### How do I keep my advanced bladder cancer from coming back?

Platinum-based chemotherapy can help treat bladder cancer by stopping it from growing, shrinking it, or even making it disappear. However, sometimes the cancer can come back or start growing again after chemotherapy is finished.

For people with advanced bladder cancer, if the cancer does not grow after chemotherapy, starting another treatment called immunotherapy right after chemotherapy may help keep the cancer from coming back. This is called maintenance therapy. Maintenance therapy can help improve the chances of living longer and keeping the cancer under control. Always talk to your doctor about the best treatment plan for you.

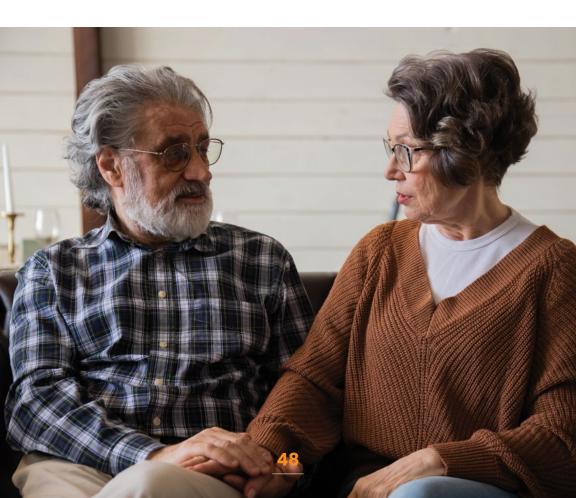
Learn more about targeted therapies: BCAN.org/targeted-therapy.



#### What do the clinical guidelines say?

Clinical guidelines are recommendations on how to diagnose and treat a medical condition. These guidelines are mainly for doctors to use. They summarize current medical knowledge. When doctors follow guidelines, they ensure people get the right treatment and care.

Experts weigh the benefits and harms of procedures and treatments. Based on this information, they give detailed recommendations. These guidelines are updated often. BCAN provides links to the most recent bladder cancer guidelines on our website. Visit *BCAN.org/bladder-cancer-treatment-guidelines* to learn more.



# What are clinical trials and how do they help with bladder cancer?

Clinical trials are important because they help develop new investigational treatments for bladder cancer. A clinical trial is a study that tests a new medicine or treatment to see if it is safe and works well. The people in the trial might get the usual treatment, called "standard of care," or they might get the new treatment being studied.

By taking part in a clinical trial, you can help doctors learn more about what works for bladder cancer. If you are interested, talk to your doctor to see if a clinical trial might be a good option for you.

Want to find a clinical trial? Just visit *BCAN.org/clinicaltrials* to check BCAN's Clinical Trials Dashboard. You can search by your diagnosis and your preferred state to see which trials are open in your area.

"I was diagnosed with metastatic bladder cancer at age 48. Today, I can report that I did have a 50th and 51st birthday. I am starting to think about many more to come!! If it weren't for my doctor, clinical trials, my faith and the support of my family, I would not be here."

— Bob K.

"Researchers and scientists often forget to tell clinical trial patients how truly valuable they are. We use data and images from patients for teaching and understanding patterns of disease.

Every time I use data from a patient in one of our clinical trials, I think about them. I think about their family and their loved ones. I remember the conversations we had while they were in clinic about politics, travel and the hobbies they enjoyed. I have memories of hundreds of study patients. I am very grateful to each of them for their altruistic contribution to my research."

—Dr. Andrea Apolo, National Cancer Institute

## How to be your own advocate!

You are the leader of your health care team. Be sure you have a team you can easily communicate with and trust. Then work with them to make a plan. Remember, people other than your doctor can often answer questions. From navigating the health care system to learning about your condition, many different experts can help:

- Nurses or advanced practice providers like nurse practitioners or physician assistants
- Financial counselors
- Scheduling coordinators
- Dietitians

#### What can you do?

- **1. Stay Informed.** Learn as much as you can about your bladder cancer. Ask your doctor to explain your diagnosis, treatment options, and possible side effects in a way you can understand.
- **2. Ask Questions.** Don't be afraid to ask your doctor and healthcare team questions. For example:
- What are my treatment options?
- What are the side effects?
- How can I manage side effects?
- Are there any new treatments or clinical trials that could help me?
- **3. Keep Track of Your Health.** Write down important details about your treatment, symptoms, and any changes you notice. This will help you remember what to discuss with your healthcare team during each visit.
- **4. Take Part in Decisions.** You are in charge of your health. Be active in making decisions with your doctor about your treatment plan. Let them know your preferences, concerns, and goals for treatment.
- **5. Follow Up and Stay Organized.** Make sure to keep all your appointments, follow-up visits, and tests. Stay organized with medical records and treatment schedules so you can share updates with your team.

**6. Support Your Well-Being.** Take care of your emotional and physical health. Ask for support from family, friends, or a counselor. Staying healthy and positive can help you through your treatment.

By taking an active role in your care, you help guide your healthcare team toward the best decisions for your treatment and well-being.



### Life After Bladder Cancer: Thriving Beyond Treatment

Being diagnosed with bladder cancer is life-changing. Many people ask themselves, "How can I keep enjoying life?" The good news is that there is life after bladder cancer. With the right resources and support, you can continue to live fully and focus on your well-being.

#### **Physical Health**

Some treatment effects, like urinary discomfort or incontinence, can require changes to your lifestyle. It is important to discuss these with your healthcare team, who can provide tips, treatments, or referrals to specialists.

#### **Emotional Health**

Feeling anxious or low after treatment is common, especially since bladder cancer can recur. Do not hesitate to ask your doctor for help if you feel overwhelmed or down for more than two weeks. Counselors and social workers who specialize in cancer care can provide strategies to help you cope and regain joy.

#### **Sexual Well-Being**

Changes in sexual health are a common side effect of treatment. These changes may affect your relationship, but they are manageable. Speak with your doctor about sexual health counselors or visit *AASECT.org* to find a therapist specializing in sexual health.

#### **Asking for Help**

Your quality of life is just as important as your physical health. Your healthcare team is there to support you and answer questions, whether they are about managing side effects, emotional challenges, or relationships. If they cannot assist directly, they will guide you to someone who can.

Remember, life after bladder cancer is about more than survival—it's about thriving. Support is always available to help you adapt, overcome challenges, and find joy in everyday life.

# Free Support Line – connecting you to help in your community



If you or a loved one has been impacted by bladder cancer, BCAN's toll-free support line, is here to help. Call 833-ASK-4-BCA (833-275-4222) to connect with professional oncology social workers who provide emotional support, practical resources, and

information tailored to the bladder cancer community, including caregivers and those who have lost loved ones. Don't face this journey alone—call today for guidance and compassionate support.



For more information, please visit **BCAN.org/support** or scan this QR code.



#### **Caregiver Corner**

BCAN has developed a Tips for
Caregivers Handbook in collaboration
with our Bladder Cancer Carer
Committee to support bladder
cancer patients' friends and family
with helpful tools and resources to
navigate this challenging journey.
To get your free copy, please visit
BCAN.org/tips.

Notes		

## Key terms index

ADC (antibody-drug conjugate) 46	NBI (narrow band imaging) 27
Adjuvant chemotherapy39	Neoadjuvant chemotherapy39
BCG (Bacille Calmette-Guerin) 28	Neobladder37
Benign 20	NMIBC (non-muscle
Bladder	invasive bladder cancer) 11, 24
Bladder preservation therapy32	Ostomy
BLC (blue light cystoscopy) 27	Papillary tumors 20
CIS (carcinoma in situ)21, 22	Questions to ask 50
Clinical guidelines 48	Recurrence
Clinical trials 49	Renal (kidney) ultrasound 19
Continent cutaneous (Indiana)	Renal pelvis 40
pouch	Resect, resectoscope 25
CT (computerized	RT (radiation therapy)33
tomography) urogram19	Sessile tumors
Cystectomy	Sexual well-being 52
Cystoscope	Stoma
Cystoscopy18	Survivor to Survivor program3
Enhanced cystoscopy 26	Systemic chemotherapy
Genes	Targeted therapies 46
Hematuria14	TMT (tri-modality therapy)32
Indiana pouch	Tumor grades20, 21
Ileal conduit	Tumor stages 22
Immune checkpoint inhibitors . 44	TURBT 24
Immunotherapy 44	Ureters
Intravesical treatment 28	Urethra
Lamina propria	Urinalysis14
Lymph nodes 23, 34, 42	Urinary incontinence 37, 52
Malignant	Urinary diversion 35, 36
Metastatic	Urine cytology
MIBC (muscle invasive	Urostomy
bladder cancer)12, 32	Urothelial cells11, 24, 40
MR (magnetic resonance)	Urothelium
urogram19	UTUC (upper tract
Mutation17	urothelial carcinoma)

Now in our 20th year, the Bladder Cancer Advocacy Network (BCAN) provides patients with the critical information and community support they need to thrive today. We support innovative research and responsive national policy to inspire hope for tomorrow.

Visit **BCAN.org** to request additional copies of this guide and stay updated on the latest bladder cancer news and events.

Your generosity makes a difference! Donations are tax-deductible and can be made online at **BCAN.org/donate** or by check sent to:

Bladder Cancer Advocacy Network (BCAN) 4520 East West Highway, Suite 610 Bethesda, MD 20814



To make a donation from your mobile device, please scan this QR code.

For more information, reach out to BCAN:



Phone: 888.901.BCAN (2226)



Email: info@BCAN.org

We hope you found this guide helpful. Your support enables us to provide essential resources like this guide and other educational materials, free of charge, to patients and caregivers who need them. Together, we can share hope and help those impacted by bladder cancer. Thank you for being part of our mission and for helping us spread our movement of help and message of hope.

