

GW Cancer Center Website Information

<http://cancercenter.gwu.edu/cancer-type-condition/bladder-cancer>

Bladder Cancer/Urothelial Cancer

Urothelial cancer is defined as the development of tumors in the bladder, ureters, or collecting system of the kidneys. It is more common in men than women and represents the fourth most common cancer in men in the United States. Risk factors include older age, family history, occupational exposure to chemical solvents, and tobacco use. The most common presentation of urothelial cancer is painless blood in the urine, a condition called "Gross Hematuria." Evaluation of blood in the urine consists of imaging scans, urine analysis to look for evidence of infection or abnormal cells, and an office-based endoscopic procedure of the bladder called cystoscopy. If tumors are found during this evaluation, then further surgery is usually required under general anesthesia to remove the tumors and determine the stage and confirm the diagnosis of the cancer. The next steps in treatment depend on the location of the tumor (i.e. bladder, ureter, or kidney), as well as the depth of penetration into the organ wall (i.e. non-muscle invasive vs. muscle invasive).

The majority of bladder cancers are non-muscle invasive (75%) at diagnosis. Tumors of this type are amenable to endoscopic surgery to remove the tumors followed by repeated instillation of medicines directly into the bladder to help reduce the risk of disease recurrence and progression. Such medicines consist of a type of chemotherapy called Mitomycin C and a type of immunotherapy called BCG. Muscle-invasive tumors (25%) require more intensive treatment often consisting of systemic chemotherapy and radical surgery to remove the bladder and construct a urinary diversion out of a segment of intestine (Radical Cystectomy with Urinary Diversion). Tumors in the ureters and kidney are often treated with surgery to remove the organ, but may be treated endoscopically for small or low grade tumors. Patients with locally advanced disease often benefit from systemic chemotherapy with consolidative surgery. Some patients may benefit from radiation therapy depending on their fitness to undergo an operation. For patients with metastatic disease, systemic chemotherapy and immunotherapy are usually needed to improve survival.

The GW Cancer Center will provide you information to guide you in deciding which treatment pathway that is right for you. The treatment team uses a multidisciplinary approach involving Urologists, Medical Oncologists, Radiation Oncologists, and specialized Nurses to help you navigate the process. We offer the latest technologies to ensure superlative treatment of bladder cancer including fluorescence in situ hybridization (FISH) and Blue light cystoscopy (see below) to enhance cancer detection. We have much experience with BCG-refractory high-risk non-muscle invasive bladder cancer and are currently developing clinical trials to provide novel treatment options for this disease. We understand the role and benefits of neoadjuvant chemotherapy for muscle-invasive bladder cancer and include this option in our multidisciplinary approach. We also offer DaVinci robotic surgery for radical cystectomy and ileal neobladder for continent urinary diversion in appropriately selected patients. For those patients with advanced or metastatic disease or those who have failed conventional treatment we offer the opportunity to enroll in clinical trials to benefit from the latest developments in the field, especially immunotherapy.

Bladder Cancer Information Resources for Patients & their Families

1. Bladder Cancer Advocacy Network (BCAN): www.bcan.org
 - a. **BCAN Survivor to Survivor Program: 301-215-9099, ext. 212**
2. INOVA's *Life with Cancer*
 - a. Patient Support/Coping/Counseling
 - b. Oncology therapists on staff can see patients for ~8-10 sessions
 - c. Call 703-206-5433 to schedule an intake
3. NCCN Patient Guidelines on Bladder Cancer:
<https://www.nccn.org/patients/guidelines/content/PDF/bladder-patient.pdf>
4. Urology Care Foundation: <http://www.urologyhealth.org/urologic-conditions/bladder-cancer>
5. Bladder Cancer Advocacy Network (BCAN): www.bcan.org
6. American Cancer Society: <http://www.cancer.org/cancer/bladdercancer/index>
7. [American Society of Clinical Oncology \(ASCO\): http://www.cancer.net/](http://www.cancer.net/)

Clinical Trials Information

1. Clinical trials at GW Cancer Center: <http://cancercenter.gwu.edu/clinical-trials/all>
2. GUMDROP (GenitoUrinary Multidisciplinary DC Regional Oncology Project):
<http://www.gumdroptrials.org/bladder-cancer-trials/>
3. Clinical Trials at the US National Institutes of Health (NIH): <https://clinicaltrials.gov>

Specialized Cancer Testing & Imaging

(make this a separate tab under program information)

There are a few cutting edge cancer detection tools that are available to improve diagnosis, enhance treatment, and provide predictive information about a patient's response to therapy. These tests have been developed by industry and validated in clinical trials to ensure their validity and role in routine clinical practice. Most tests have earned FDA-approval.

Our Program is very happy to be able to offer Urovysion Fluorescence In Situ Hybridization (FISH) for detection of chromosomal abnormalities of atypical cells detected in the urine. We also offer Blue light cystoscopy (See below) which has been shown to increase the detection rate of bladder tumors and reduce their rate of recurrence and progression.

Bladder Cancer

Cysview® Blue Light cystoscopy - <https://www.cysview.com/blue-light-cystoscopy-with-cysview-2/what-is-blue-light-cystoscopy-with-cysview/>