

GW Cancer Center Website Information

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

Prostate Cancer

Prostate Cancer is cancer of the prostate gland. It is the most common non-skin cancer in men, occurring in about 1 in 6-7 men. About 200,000 new cases are diagnosed annually in the United States. It usually affects men in their 50s-70s, but can occur earlier in high risk groups. Risk factors include family history of prostate cancer and African American race. Most men do not have any symptoms and are diagnosed based on a blood test done for prostate cancer screening called a PSA (prostate specific antigen). PSA screening usually begins around age 55 in men of average risk, but may be offered to high risk men at age 40-45. Due to the high prevalence of PSA screening in the United States, the majority of prostate cancer cases are diagnosed at an early stage and have a high probability of cure with early treatment. Prostate cancer cannot be diagnosed by PSA alone; the diagnosis involves an office-based biopsy to examine tissue and determine if there are abnormal cancer cells present. Once diagnosed, treatment options include surgery, radiation, and/or systemic treatment such as androgen deprivation therapy (reduction of the body's testosterone level to combat the cancer). The specific treatment choice is determined by a man's age, medical problems, and the stage and grade of the cancer.

Given better understanding about the low risk of disease progression and the overtreatment of low-grade prostate cancer, the Urologic Oncology specialists at GW understand the role of closely watching this disease rather than having treatment right away. This approach is called Active Surveillance and has been shown in multiple clinical trials to be safe and effective, while avoiding the side effects of more traditional treatments like surgery and radiation therapy. So, just because prostate cancer may be diagnosed, it does not automatically mean that it must be treated.

The GW Cancer Center will provide you information to guide you in deciding which treatment pathway that is right for you. We offer the latest technologies to ensure superlative treatment of prostate cancer including UroNav MRI-ultrasound fusion biopsy, genomic and molecular testing of prostate biopsy tissue (see *Specialized Cancer Screening* below), DaVinci robotic surgery, intensity-modulated radiotherapy, and cryotherapy.

For those patients with advanced or metastatic disease or those who have failed conventional treatment, we utilize the latest proven combinations of androgen deprivation therapy, new generation anti-androgen agents, androgen synthesis inhibitors, and chemotherapy to maximize the potential for achieving best treatment response. We also offer the opportunity to enroll in clinical trials to benefit from the latest developments in the field. The treatment team uses a multidisciplinary approach involving Urologists, Medical Oncologists, Radiation Oncologists, and specialized Nurses to help you navigate the process. Genetic counselors are also available to provide genetic testing to patients with strong family history of prostate cancer.

Prostate Cancer Information Resources for Patients & their Families

1. Us Too – International Prostate Cancer Education & Support: www.ustoo.org
2. Urology Care Foundation: <http://www.urologyhealth.org/urologic-conditions/prostate-cancer>
3. Prostate Cancer Foundation: www.pcf.org
4. American Cancer Society: <http://www.cancer.org/cancer/prostatecancer/index>
5. American Society of Clinical Oncology (ASCO): <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/prostate-cancer-trials/>
3. Clinical Trials at the US National Institutes of Health (NIH): <https://clinicaltrials.gov>

Specialized Cancer Screening, Genomic Testing, & Imaging

There are several cutting edge cancer detection tools and genetic tests that are available to improve diagnosis, enhance treatment selection, 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 several of these tests for prostate cancer. Some tests require no more than a simple blood draw. Others analyze the tissue obtained during a biopsy to improve treatment selection.

We also offer the latest in imaging technology for prostate cancer biopsy. Prostate MRI is performed by our radiology department and can be used to increase the detection rate of clinically significant cancers. The MRI images are harnessed to guide and improve prostate biopsy using the UroNav MRI-Ultrasound Fusion biopsy platform (see link below).

Other useful information related to the Prostate Cancer

Prior to Prostate Biopsy

1. 4KScore blood test - <http://4kscore.com/>
2. Prostate Health Index (PHI) blood test - <http://prostatehealthindex.us/>
3. SelectMDx tissue test - <http://mdxhealth.com/selectmdx-prostate-cancer>

During Prostate Biopsy

4. UroNav MRI-Ultrasound Fusion biopsy - <http://www.invivocorp.com/solutions/prostate-solutions/uronav/>

After Prostate Biopsy

5. ConfirmMDx - <http://mdxhealth.com/confirmmdx-prostate-cancer>
6. Oncotype DX - http://www.genomichealth.com/en-US/oncotype iq_products/oncotype_dx/oncotype_dx_prostate_cancer
7. Decipher - <http://deciphertest.com/>
8. Prolaris - <https://prolaris.com/>