

## WHY PERFORM URINE CYTOLOGY:

Urine typically contains epithelial cells shed from the urinary tract. Urine cytology evaluates this urinary sediment for the presence of cancerous cells from the lining of the urinary tract, and it is a convenient noninvasive technique for follow-up analysis of patients treated for urinary tract cancers. For this process, urine must be collected. In urine cytology, collected urine is examined microscopically.

Screening tests for bladder cancer look for different substances or cancer cells in the urine. Urinalysis, one way to test for bladder cancer is to check for blood in the urine, called **hematuria**. This can be done during a urinalysis, which is a simple test to check urine for blood and other substances. **This test is sometimes done as a routine part of a general health checkup.** In a cytology exam of urine, cells collected from urine are sent to a laboratory and examined to see how they look and function. **The test is commonly used to check for infection, inflammatory disease of the urinary tract, cancer, or precancerous conditions.** It is important to note that if cancer is not identified through this test, it does not necessarily mean you are cancer-free. Urine cytology is better at finding larger and more aggressive cancers than small, slow-growing cancers.

The cells for **urine cytology** are easier to obtain than tissue, causing less discomfort and less risk to the patient. Abnormal results from the urine cytology are normally reflexed to **UroVysion™** (the only urine-based molecular test, approved by the FDA, to aid in the diagnosis and monitoring of bladder cancer <http://www.fda.gov>. This test looks for chromosome changes that are often seen in bladder cancer cells) and followed-up with a biopsy to clarify the diagnosis, if necessary.

**Advanced Clinical Laboratories performs Urine Cytology and will reflex the sample to UroVysion™, if abnormal cells are detected, to aid you in early diagnosis and treatment of your patients for Bladder Cancer** (require 60 ml of urine in a sterile urine cup, please call the ACL for UroVysion™ sample kits). **Bladder cancer is the fourth most common cancer diagnosed in men.**

Blood in the urine is usually caused by benign (non-cancerous) conditions such as infections, but it also can be the first sign of bladder cancer. Large amounts of blood in the urine can easily be seen, but a urinalysis is needed to find small amounts. Many of these symptoms often have less serious causes, but it's important to have them checked by a doctor right away so the cause can be found and treated, if needed. **If the symptoms are due to bladder cancer, finding it early offers the best chance for successful treatment.**

Blood in the urine does not mean one has bladder cancer. It also can be caused by other things like an infection, benign (non-cancerous) tumors, stones in the kidney or bladder, or other benign kidney diseases. **But it is important to have it checked by a doctor so that the cause can be found.** If there is a reason to suspect that a patient might have bladder cancer, the doctor will use one or more methods to find out if it is cancer or something else. If it is cancer, further tests will be done to help determine the extent (stage) of the disease.