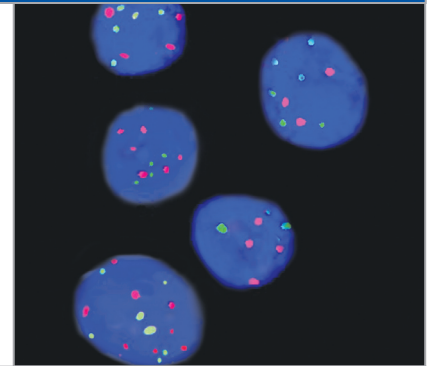


FLUORESCENCE IN SITU HYBRIDIZATION

FISH

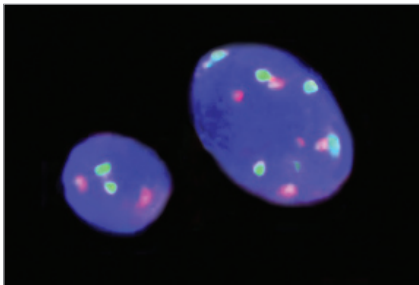


WHAT IS FLUORESCENCE IN SITU HYBRIDIZATION (FISH)?

FISH is a type of hybridization in which a DNA “probe” is labeled with fluorescent molecules so that it can be seen with a microscope. FISH is a urine-based genetic assay for the diagnosis and surveillance of bladder cancer. It provides the most sensitive detection of bladder cancer available today—and can detect bladder cancer up to six months sooner than other tests.

The FISH test looks specifically for abnormalities of four chromosomes—3, 7, 17, and the 9p21 locus. Changes to the normal chromosome pattern, particularly with these four chromosomes indicate a high risk for bladder cancer.

This test is the first genetic test approved by the FDA for both the diagnosis and monitoring of bladder cancer.



One benign urothelium cell on the left with a normal chromosomal pattern (2 red dots for chromosome 3, 2 green dots for chromosome 7). One bladder cancer cell on the right with gains of chromosomes 3 and 7 (5 red dots for chromosome 3, 4 green dots for chromosome 7).

WHY DO I NEED A FISH TEST?

There are approximately 57,000 new cases of bladder cancer diagnosed each year in the United States. Your physician wants you to have a FISH test to determine whether or not you have bladder cancer or to monitor for recurrence. Cystoscopy and cytology are other tests used to detect and monitor bladder cancer.

Urinary cytology is the microscopic analysis of cells collected from a urine sample. Because FISH is a genetic test, it is often used in conjunction with cytology to increase the sensitivity for the detection of bladder cancer. It can also clarify cases in which the cytology results are equivocal or suspicious.

Because this test is performed from a urine sample, your physician may order this test prior to or along with performing a cystoscopy or cytology.

If your FISH test is positive, a cystoscopy and/or bladder biopsy procedure might be needed. Your doctor will discuss with you the next steps to take.

If you are currently being treated for bladder cancer, your physician may order a FISH test to monitor for possible recurrence of the disease.

ADDITIONAL RESOURCES

American Cancer Society (ACS)
800.ACS.2345
www.cancer.org

American Urological Association (AUA)
www.urologyhealth.org

National Cancer Institute
Cancer Information Service (CIS)
800.4.CANCER

The Mayo Clinic
www.mayoclinic.org

The Urology Channel
www.urologychannel.com

UroToday.com
www.urotoday.com

ABOUT BOSTWICK LABORATORIES

Bostwick Laboratories® is a full-service reference laboratory specializing in uro pathology.

Dr. David G. Bostwick and our staff of veteran pathologists are dedicated to the diagnosis, treatment and management of prostate cancer, kidney disease, cancer of the bladder and other urologic conditions.

These internationally-renowned board-certified pathologists use the most technologically advanced testing available to ensure accuracy.

Our quick turnaround on reports affords you and your doctor the time you need to choose the best course of treatment.



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