

## C A N C E R — B L A D D E R

### **Bladder Cancer Overview:**

About 55,000 individuals are diagnosed with bladder cancer in the United States each year and about 10,000 deaths are reported for the condition. Bladder cancer is most common among individuals over age 50; the condition is three times more common in men than in women. Smoking has been indicated as a major risk factor, as is exposure to chemicals in certain industrial applications. The disease is also common with frequent visitors to the tropics where the parasitic infection with schistosomiasis is prevalent.

The most common type of bladder cancer is transitional cell carcinoma, representing roughly 90% of all bladder cancers. These cancers arise from the epithelial cells that line the bladder. Other types of bladder cancer include papillary, squamous cell carcinoma, and adenocarcinoma, which have a poorer diagnosis and are rated higher.

Bladder cancer is often diagnosed following the report of blood in the urine (hematuria) or difficulty with urination. Cystoscopic studies, including biopsies of abnormal tissues found, either confirm or deny the presence of cancer. If cancer is detected, it will be staged and graded. The stage of the cancer indicates how large the cancer has grown and how far it reaches into, or beyond, the bladder wall. The cancer's grade indicates how abnormal or aggressive the cancer cells are. There are a variety of staging system used, but as with most cancers, the lower the stage and grade, the better the prognosis.

Depending on the stage and grade of the cancer, a variety of treatment options are likely to be considered. Sometimes treatment options are combined to combat the higher stage/grade cancers. Common treatment include surgery (to remove the tumor and surrounding tissue, and sometimes the whole bladder), radiation therapy, chemotherapy, and immunotherapy or biological therapy. Photodynamic therapy is currently being tested in clinical trials.

Regardless of staging system used, the long term prognosis for bladder cancer is excellent for the early stages. However five year survival rates for individuals with cancer beyond the bladder wall is less than half.

### **Impact on Life Underwriting:**

Life underwriting outcomes depend on the exact type (name), size (stage), and aggressiveness (grade) of the cancer, as well as it's response to treatment and date of last treatment. The lower the stage and grade of the tumor, and the more time elapsed since the date of last treatment, the more favorable the underwriting outcome. Most bladder cancers are postponed 1 year following the date of last treatment, in order to minimize the risk of early recurrence. SB 05/14/2001

<b>National Cancer Institute Stage:</b>	<b>Jewett-Strong-Marshall Staging System</b>	<b>TNM Staging System</b>	<b>Tumor Characteristics</b>	<b>Likely minimum rating</b>
<b>Stage 0 ("in-situ") (non-invasive)</b>	<i>In-situ or 0</i>	<i>Tis</i>	Cancer is only found in the inner lining of the bladder; after removal, no swelling or lumps are felt during an internal examination.	Standard to Flat extra of \$5x3
<b>Stage I (invasive)</b>	<i>A</i>	<i>T1N0M0</i>	Cancer cells have spread a little deeper into the lining but have not spread to the muscular wall of the bladder.	\$7/\$1,000 x 5 years; grades III & IV PP 1 yr
<b>Stage II (invasive)</b>	<i>B1</i>	<i>T2N0M0</i>	Cancer has spread to the inside lining of the muscular wall of the bladder.	PP 3 years, then \$7/\$1,000 x 5 years
<b>Stage III (invasive)</b>	<i>B2 – infiltration of deep muscle C – infiltration of perivesical fat</i>	<i>T2N0M0 T3AN0M0</i>	Cancer cells have spread throughout the muscular wall of the bladder and/or to the layer of tissue surrounding the bladder; swelling or lumps may be felt with an internal examination even after removal of the cancer.	PP 5 years, then \$15/\$1,000 x 5 years
<b>Stage IV (invasive)</b>	<i>D1 – infiltration of adjacent organs or lymph nodes D2 – extension beyond pelvis</i>	<i>T3BN0M0 T4N1-3M0-1</i>	Cancer cells have spread to the nearby reproductive organs and/or to the lymph nodes in the area or have metastasized to other parts of the body.	Individual Consideration after more than 5 years.
<b>Recurrent</b>			The cancer has returned to the same site or to another part of the body after have been treated previously.	Individual Consideration