

## **BCG Treatment for Bladder Cancer**

Bacillus Calmette-Guerin (BCG) is a type of bacteria similar to the one that causes tuberculosis. It works by eliciting an inflammatory response in the bladder, which causes the cells lining the bladder to slough off and pass out of the bladder in the urine. The bladder lining can then be replaced by normal cells. BCG may also stimulate the immune system to fight the cancer. There are several intravesical (in-the-bladder) therapies available for superficial bladder cancer. BCG is the most effective of them.

Treatment involves placing approximately two ounces of fluid containing BCG into the bladder through a catheter. Treatments are once a week for six weeks and then possibly at variable intervals thereafter. Your treatment plan may vary at the discretion of your physician.

You should not drink fluids for four hours before receiving your treatment, and you should empty your bladder just before the installation. You should retain the fluid in your bladder for two hours after installation. You should then sit down on the toilet and fully empty your bladder. After urinating, pour two cups of bleach (Clorox) into the toilet. Let the medication and the Clorox stay in the toilet for 15 to twenty minutes before flushing it down. Repeat this process each time you urinate for 6 hours after each treatment. Wash your hands thoroughly after you urinate and drink plenty of fluids to flush out your bladder.

After treatment, you may experience burning on urination, urinary frequency and urgency, or the passage of blood or pieces of tissue in your urine. You may also experience a low-grade fever and increased fatigue. You should call your doctor immediately for fever  $> 101.4$ , chills, flu-like symptoms, persistent bright red blood, inability to urinate or a skin rash.

The initial tumor-free response to BCG averages 76%. Fifty percent remain free of tumor recurrence or progression at 4 years and 30% at 10 years. Persistent disease after a complete course of therapy or early recurrence of high-risk disease is a cause for concern and indicates the need for more aggressive therapy.

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