

## Bacillus Calmette Guerin (BCG) treatment for Superficial Bladder Cancer

### Introduction

Bacillus Calmette Guerin (BCG) is commonly used to treat superficial non-muscle invasive bladder cancer. This leaflet answers questions many people ask about the treatment.

### What is BCG?

BCG is a live vaccine normally used to inoculate against Tuberculosis (TB). When it is put into the bladder it causes an inflammatory reaction to occur. This inflammation seems to destroy the cancerous cells, although it is not yet clear exactly how it does this. However, BCG has been used very successfully worldwide to treat and prevent the recurrence of superficial non-muscle invasive bladder cancer.

### Is there anything I need to do before treatment?

You should not drink too much fluid for six hours before the treatment. One glass of water may be taken with breakfast. If you drink as little as possible the kidneys will produce less urine and thus prevent the dilution of the BCG when it is in your bladder. It will also make it easier for you to retain the treatment in the bladder for the necessary amount of time, this is usually 2 hours.

If you normally take water tablets (diuretics) take them **after** your BCG treatment rather than first thing in the morning on your treatment days.

### Where do I come for the treatment?

This treatment takes place at Eastbourne District General Hospital, the BCG is given in the Urology Investigation Suite.

You will be asked to attend once a week for six weeks. You will be given an appointment time.

### How long does the treatment take?

You will be in hospital for about two and a half hours on your first visit. On subsequent appointments you may go home immediately after treatment has been administered if it is appropriate. We try hard to keep to your appointment time, but sometimes unavoidable delays do occur. You should feel well enough to drive yourself home after the treatment. However, if you are elderly or have mobility problems, please arrange for a friend or relative to collect you.

### Who gives the treatment?

The treatment is given by senior nurses in the Urology Investigation Suite who have been trained in the procedure.

### What will happen when I arrive?

Please book in at reception. You will be asked to provide a urine sample to ensure you do not have a current urine infection.

### How is the treatment given?

A catheter tube is passed into the bladder. The BCG, which is in 50mls (1½oz.) of fluid, is then instilled via the catheter into the bladder. The catheter is then gently removed.

You are asked not to pass urine for the next two hours. It is during this time that the treatment is working to destroy the cancerous cells or prevent them from recurring.

What happens after the drug has been put into your bladder depends upon how close to the hospital you live, and whether you are able to hold the drug in your bladder for the journey home. The options will be as follows:

1. Remain on the couch for the two hours (for those patients who find movement gives the desire to urinate).
2. Sit in a chair in the department for the two hours.
3. Go home as soon as the drug has been put into the bladder and pass the treatment at home.

If staying in the department bring something with you that will help pass the time, e.g. books, magazines, personal stereo etc.

### What do I do after each treatment?

When the two hours are finished (or sooner if you are unable to hold on that long) you should pass urine. Afterwards, both men and women should wash the genital area thoroughly with soap and water. Most of the drug is passed out the first time you pass urine, and after this no further precautions are required.

#### **For six hours after the treatment you need to do the following:**

1. Men need to sit rather than stand to urinate (to prevent splashing and contamination of the toilet seat).
2. After passing urine, pour two cups of undiluted liquid household bleach into the toilet and let it stand for 15 minutes **before** flushing. A nurse will do this for you if you are still in the department the first time you pass urine.

#### **For 24 hours after the treatment the following is advised**

1. Drink two to three litres (five to six pints) of fluids for the first 24 hours after the treatment to flush any remaining drug out of the bladder. This will also help prevent bladder irritability.
2. Take two paracetamol tablets as soon as you arrive home (these will help to avoid the flu-like symptoms that can occur), and take a further two tablets at six hourly intervals if you feel you need them.
3. If sexually active, engage in protective intercourse (i.e. with a condom), or abstain, for a week following treatment.

### Are there any possible side effects?

Because the drug goes directly into the bladder, the common side effects are on the bladder itself. You will not lose your hair (this is a common worry). Most patients have increased frequency and urgency to pass urine, and many have flu-like symptoms - headache, fever and chills for 24 to 48 hours.

You may also experience a small amount of bleeding and discomfort when passing urine, particularly in the first 24 to 48 hours after treatment. Drinking plenty of clear fluids will help.

Avoid tea and coffee as caffeine tends to make the bladder irritability worse. If any of these symptoms persist for more than 48 hours, or you are passing offensive smelling urine you should contact your General Practitioner (GP) or your Urology Nurse Specialist because you may have a water infection.

Other less common side effects are:

- Skin rash.
- Joint pain.
- Fatigue.
- Nausea and vomiting.
- Cough.

If you develop any of the following:

- Smelly, cloudy urine.
- Severe frequency or a burning sensation when passing urine that persists for longer than 48 hours.

It is important to contact your own general practitioner (GP) or your Uro-oncology Clinical Nurse Specialist as you may have a urine infection that requires treatment with antibiotics.

### **What drugs may interfere with the treatment?**

Drugs and therapy that suppress your immune system, including radiation, can interfere with how well the malignant cells in the bladder respond to the treatment and may increase the risk of bone and other infections.

This is why it is important to make sure your Consultant or Urology Clinical Nurse Specialist are aware of all the drugs you are taking before beginning your treatment.

### **Follow up**

On completion of your course of treatment arrangements will be made for you to have a further cystoscopy. It is important to examine the bladder lining to assess how the treatment has worked.

Part of this assessment may involve taking biopsies from the bladder lining this is usually done under a general anaesthetic. We may also ask for urine specimens to see if there are cancer cells present in the urine. Please contact your Urology Clinical Nurse Specialist if you do not receive an appointment for a follow-up cystoscopy.

We hope these details are of help to you. If you have any worries or queries do not hesitate to contact your Urology Clinical Nurse Specialist.

### **Sources of information for patients**

Uro-Oncology Clinical Nurse Specialists – 0300 131 4500 ext: 770658

Macmillan Cancer Support [www.macmillan.org.uk](http://www.macmillan.org.uk)

Action Bladder Cancer UK <https://actionbladdercanceruk.org>

Fight Bladder Cancer <https://fightbladdercancer.co.uk>

### **Benefits Advice**

East Sussex Macmillan Welfare Benefits Advice Service 01323 635989

Macmillan Cancer Support [www.macmillan.org.uk](http://www.macmillan.org.uk) 0808 808 2000

### **Important information**

The information in this leaflet is for guidance purposes only and is not provided to replace professional clinical advice from a qualified practitioner.

## Your comments

We are always interested to hear your views about our leaflets. If you have any comments, please contact the Patient Experience Team – Tel: **0300 131 4731** or by email at [esh-tr.patientexperience@nhs.net](mailto:esh-tr.patientexperience@nhs.net)

## Hand hygiene

The Trust is committed to maintaining a clean, safe environment. Hand hygiene is very important in controlling infection. Alcohol gel is widely available at the patient bedside for staff use and at the entrance of each clinical area for visitors to clean their hands before and after entering.

## Other formats

**If you require any of the Trust leaflets in alternative formats, such as large print or alternative languages, please contact the Equality and Human Rights Department.**

**Tel: 0300 131 4434** Email: [esh-tr.accessibleinformation@nhs.net](mailto:esh-tr.accessibleinformation@nhs.net)

After reading this information are there any questions you would like to ask? Please list below and ask your nurse or doctor.

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## References

The following clinicians have been consulted and agreed this patient information:

Consultant Urologists: Mr S Garnett, Mr P Rimington

Sally Sawyer – Lead Uro-Oncology Clinical Nurse Specialist

Clare Callaghan – Uro-Oncology Clinical Nurse Specialist

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Responsible clinician: Sally Sawyer – Lead Uro-Oncology Clinical Nurse Specialist

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