

INTRAVESICAL ANTINEOPLASTIC AGENTS (BCG, epirubicin, gemcitabine/docetaxel)

BCG, also known as Bacillus Calmette–Guérin, is an immunotherapy drug (i.e., one that stimulates your immune system) made from weakened mycobacteria. Epirubicin and gemcitabine/docetaxel are chemotherapy agents. These drugs are introduced intravesically (into your bladder) via a temporary catheter (bladder catheter).

They can be used to:

- Reduce the risk of cancer returning.
- Reduce the risk of cancer becoming more aggressive.

Take advantage of your visits to the doctor to ask any questions you may have about your health, treatment, and recovery.

ABOUT THE TREATMENT

Intravesical antineoplastic agents are usually administered in 2 phases:

1. Induction phase

The induction phase is the first stage lasting 6 weeks (1 treatment per week).

2. Maintenance phase

The maintenance phase can last from one year (for tumors of intermediate risk) to 3 years (for tumors of higher risk of recurrence). Treatment is administered every 3 to 6 months (see the calendar), with each cycle lasting 3 weeks (1 treatment per week).

COURSE OF TREATMENT IN OUTPATIENT MEDICINE*

When you arrive at the outpatient clinic, the nursing staff will ask you about your current state of health and your urinary symptoms as well as answer any questions you might have.

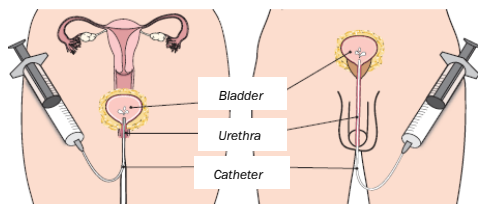
A catheter (a small flexible tube) will be inserted into your bladder to empty it and inject the medication. The catheter will be removed after administration of the drug, unless you suffer from urinary retention or incontinence.

Each treatment visit lasts approximately 2 to 4 hours and consists of:

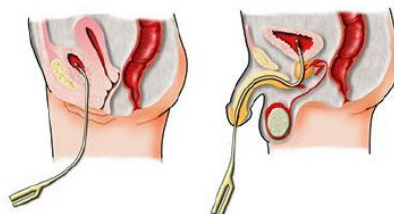
- Nurse assessment.
- Drug preparation.
- Administration of treatment via bladder catheter.

*You may have received this treatment in the recovery room following your operation.

Injection of BCG in the bladder



The medicine is injected through a small tube (catheter) into the bladder



BEFORE YOUR TREATMENT

- Items to have at home before treatment: Tylenol®, Advil®, thermometer, chemotherapy-resistant gloves, urinal, panty liners or incontinence pants, bleach (for BCG only).
- The treatment cannot be administered if you are taking an antibiotic. It is therefore important to notify the outpatient clinic in order to reschedule your treatment.
- Avoid urinating just before your treatment, as the nursing staff will want to see your urine.
- Your vaccines (e.g. COVID, influenza, shingles, etc.) should be administered 2 weeks before or after your treatment.
- If you have symptoms of a urinary-tract infection (e.g., burning when you urinate; more frequent, cloudy, or foul-smelling urine; blood in the urine) at least 48 hours before your appointment, contact the outpatient clinic. The staff will assess your symptoms and tell you what actions to take.
- If you are taking medicines that makes you urinate (e.g., diuretics) or anticoagulants, do not take them before your treatment. Take them 2 hours after your treatment.
- BCG works best when concentrated. It must be prevented from mixing with the urine in your bladder.
- Do not drink liquids for 4 hours before treatment.
- Avoid stimulants such as coffee, tea, alcohol, soft drinks, and energy drinks
- Remember to bring an up-to-date list of all the medications you are taking, and indicate any allergies you may have.
- Notify the outpatient clinic if you have had any side effects from your last treatment.
- If you are unable to come in for your treatment, notify the outpatient department as soon as possible.

To contact the outpatient clinic:

CHUS – Hôtel-Dieu (Sherbrooke) : 819-346-1110, ext.: 24310

Hôpital de Granby : 450-375-8000, ext. : 62543

Hôpital Brome-Missisquoi-Perkins (Cowansville) : 450-266-4342, ext. : 35513

DURING THE TREATMENT

During treatment, it is important to notify the nursing staff if:

- You have a burning sensation or uncontrollable pain.
- You have a skin rash, itching, swelling, or difficulty breathing.
- The treatment cannot be administered if bleeding is detected during catheter installation.

Depending on the treatment, you may be able to return home afterwards. In other cases, you may have to stay in the hospital for the duration of the treatment.

IF YOU CAN RETURN HOME WHILE THE TREATMENT IS IN YOUR BLADDER:

- Once you've kept the treatment in your bladder for 1 to 2 hours, you'll be able to urinate. It's important to urinate in a seated position to avoid splashing. You will need to urinate in a toilet in your home. Using a urinal may remain an option if you have a long way to go.
- From then on, you'll need to take certain precautions. These precautions are listed in the After Your Treatment section.
- If you're unable to empty your bladder after 2 hours, you need to go to the emergency room to remedy the situation.

IF YOU HAVE TO STAY IN THE HOSPITAL WHILE THE TREATMENT IS IN YOUR BLADDER:

- Once you've kept the treatment in your bladder for 1 to 2 hours, you'll be able to urinate. The nursing staff will tell you which toilet to use. It's important to urinate in a seated position to avoid splashing. Do not flush the toilet, as the nursing staff will need to look at the color of your urine.
- From then on, you'll need to take certain precautions. These precautions are listed in the After Your Treatment section.
- If you are unable to urinate before departure, notify the nursing staff.

TREATMENT SCHEDULE

BCG TREATMENT:

	Maintenance of intermediate risk tumors (12 months)			Maintenance tumors at higher risk of recurrence (36 months)			
Induction (start of treatments)	3 months	6 months	12 months	18 months	24 months	30 months	36 months
Week 1 (I ₁):	Week 1 (M ₃₁):	Week 1 (M ₆₁):	Week 1 (M ₁₂₁):	Week 1 (M ₁₈₁):	Week 1 (M ₂₄₁):	Week 1 (M ₃₀₁):	Week 1 (M ₃₆₁):
Week 2 (I ₂):	Week 2 (M ₃₂):	Week 2 (M ₆₂):	Week 2 (M ₁₂₂):	Week 2 (M ₁₈₂):	Week 2 (M ₂₄₂):	Week 2 (M ₃₀₂):	Week 2 (M ₃₆₂):
Week 3 (I ₃):	Week 3 (M ₃₃):	Week 3 (M ₆₃):	Week 3 (M ₁₂₃):	Week 3 (M ₁₈₃):	Week 3 (M ₂₄₃):	Week 3 (M ₃₀₃):	Week 3 (M ₃₆₃):
Week 4 (I ₄):	Cystoscopy	Cystoscopy	Cystoscopy	Cystoscopy	Cystoscopy	Cystoscopy	Cystoscopy
Week 5 (I ₅):							
Week 6 (I ₆):							
Cystoscopy							

EPIRUBICIN TREATMENT

You will start with induction treatment once a week for 6 weeks. Then you will have maintenance treatment for 1 year, i.e., 1 treatment per month for 12 months. Follow-up cystoscopies will be scheduled by the doctor.

TREATMENT WITH GEMCITABINE/DOCETAXEL:

You will start with induction treatment once a week for 6 weeks. Then you will have the maintenance treatment for 2 years, i.e. 1 treatment per month for 24 months. Make sure you take your sodium bicarbonate tablets the day before and the morning of your treatments. Follow-up cystoscopies will be scheduled by the doctor. Allow about 5 hours for this appointment.

AFTER YOUR TREATMENT

HYDRATION

- Do not drink while the drug is in your bladder.
- For 48 hours after treatment: drink 8 to 10 8-oz or 250 mL glasses of liquid (water, cranberry or vegetable juice, milk, broth, soup, or herbal tea) a day, unless medically contraindicated.
- Avoid alcohol and drinks containing caffeine.

BODY FLUIDS

- Urinate in a seated position to avoid splashing.
- If possible, ask family members to use a different toilet than the one you used.
- Wash your hands with soap and water after going to the bathroom and after handling body fluids (blood, urine, etc.).
- For patients with an indwelling catheter:
 - Clean the tip of the drainage bag tubing with soap and water (discard or wash the washcloth separately after each use);
 - Avoid changing the collection bag for 96 hours after chemotherapy administration or for 1 week after BCG administration.

SPECIAL FEATURES FOR BCG

- For 6 hours after treatment: pour 2 cups of sodium hypochlorite (bleach) into the toilet bowl, close the lid, and leave for 15 minutes before flushing.
- In case of splashes: Clean anything in contact with urine with diluted bleach (2 tablespoons to 1 cup of water), then rinse with water.
- For soiled incontinence products (panties and panty liners): pour in enough bleach to soak the items, then place them in a closed regular double-wall waste bag.

CHEMOTHERAPY (EPIDRUBICIN, GEMCITABINE, DOCETAXEL):

- Close the toilet lid after use and flush twice after urinating.
- For 96 hours (4 days) after treatment, clean the toilet and surrounding floor (wipe with a special wipe).
- For incontinent users, wash the genitals with soap and water, and use a protective cream on genitals and buttocks, if necessary.
- Dispose of soiled incontinence products (panties, panty liners) in two closed bags.
- If you received epirubicin, your urine may be reddish.

WASHING

- Wash bedding and clothes that are not visibly soiled with regular washing.
- Wash bedding and clothing soiled with the biological fluids of the person receiving treatment with antineoplastic agents separately from those of other family members.
- A double hot-water wash may be considered if the bedding is heavily soiled.

SEXUAL RELATIONS

- For BCG: Refrain from sexual intercourse for one week after each treatment, otherwise use a condom for intercourse.
- For chemotherapy: the user or their partner must wear a condom during sexual contact for 96 hours following treatment. Semen and vaginal secretions may contain residues of dangerous drugs.

CONTRACEPTION

- Steps should be taken to prevent pregnancy in women receiving antineoplastic agents and in the wives of men undergoing treatment.
- Seek medical advice if you wish to have children after treatment.

CONTACTS WITH RELATIVES

- Kissing, sleeping, and activities with loved ones are possible and not at risk.
- Pregnant or breast-feeding women should avoid handling or coming into contact with the user's biological fluids.
- Relatives should wear a pair of chemotherapy-resistant gloves when handling excreta, soiled clothing, and bedding.

MEDICATION:

Talk to your doctor or pharmacist before taking any new medications, as some may reduce the effect of your treatment.

IN THE EVENT OF A SPILLAGE AT HOME:

Use the spill kit provided by clinic staff and follow the instructions.

POTENTIAL SIDE EFFECTS

During the two days (48 hours) after each treatment, you might experience the following side effects:

- More urgent and frequent urinary urges.
- Urine with whitish or brownish deposits.
- Blood in the urine (red, pinkish, or brownish urine or the presence of clots).
- Difficulty emptying your bladder completely.
- Slight pain in the lower abdomen or lower back when you urinate.
- Skin irritation in the genital area Good hygiene after urination can prevent irritation. Uncircumcised users require special attention.
- Fatigue.
- Flu-like symptoms (headache, sore throat, cough, etc.).
- Appearance of mild joint pain.
- Mild nausea.

If you experience these side effects, we recommend taking over-the-counter medications such as Tylenol® (acetaminophen) or anti-inflammatories (ibuprofen - Advil®, Motrin®, etc.).

SPECIAL FEATURES FOR BCG

Mild fever (lower than 38.5 °C).

Notify outpatient medicine if symptoms persist for more than 2 days (48 hours) or if symptoms worsen.

WHEN TO CONSULT?

If you have the following symptoms:

- Difficulty breathing.
- Nausea, vomiting, or diarrhea.
- Inability to empty your bladder.
- Significant or increased blood in the urine, with or without clots.
- Moderate or severe joint pain, when you had no pain before your BCG treatments.
- Uncontrollable cough.
- Oral temperature > 39° C or chills. Make sure you have a thermometer at home.

SPECIAL CONSIDERATIONS WITH BCG

- Eye pain or redness



Contact day care (Monday to Friday, between 8 a.m. and 4 p.m.).



Outside of these hours, go to the emergency room nearest to you. For users treated at the CIUSSS de l'Estrie – CHUS, it is recommended that you consult the emergency department at Fleurimont Hospital. Do not forget to notify the healthcare staff that you have received BCG treatments.

MORE INFORMATION

Canadian Cancer Society : cancer.ca

Bladder cancer – Canada: <https://bladdercancercanada.org>

CHECKLIST (Treatment locations) :

CHUS Hôtel-Dieu de Sherbrooke

Day medicine: 580 Bowen St., 2nd floor, room 2355,
C wing. Main entrance, door 1, Bowen Street
819-346-1110, ext.: 24310

Hôpital de Granby

Day medicine: 205 boulevard Leclerc
Ouest, 2nd floor
450-375-8000, ext.: 62543

Hôpital Brome-Missisquoi-Perkins

Day medicine: 950, rue Principale
450-266-4342, ext.: 35513

If you have any symptoms, please notify the nursing staff (Monday to Friday, between 8 a.m. and 3 p.m.) or go to the nearest emergency room.

If you need to cancel your treatment, contact the nursing staff.

Authors

Équipe d'urologie de l'Hôpital Fleurimont

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