140 mm

184 mm

BCG for immunotherapy I.P

UROVAC
40mg/vial
Intravesical Injection

Warning

UROVAC (Intravesical Instillation) contains live attenuated *Mycobacterium bovis*. It should be prepared, handled and disposed off as a biohazardous material as it can cause serious infections in susceptible individuals.

BCG infections have been reported in health care workers and immunosuppressed patients. BCG is capable of dissemination when given intravesically and fatal infections have been reported in scientific literature.

The product labeled UROVAC is for use only in treatment of bladder carcinoma. It is not intended to be used as an immunizing agent for the prevention of tuberculosis.

UROVAC is not a vaccine for the prevention of cancer.

UROVAC preparation is not to be used as a vaccine against tuberculosis.

Name of the product

UROVAC (Intravesical Instillation)
lyophilized

Description

UROVAC (Intravesical Instillation) is a live freeze dried preparation made from Bacillus Calmette-Guerin strain, which is an attenuated strain of *Mycobacterium bovis*. Each vial contains 40mg of BCG, having 1 to 8 x 10^8 CFU. Sodium Glutamate is used as a stabilizer.

Qualitative and Quantitative composition

1. Each vial contains 40 mg of Bacillus Calmette Guerin (Freeze Dried)
2. CFU 1 to 8 x 10^8 per vial
3. Stabilizer 5% Sodium Glutamate
4. Reconstitute each vial with 50 mL of Sodium chloride (0.9%w/v) injection

Indications

Carcinoma in situ of urinary bladder, (prophylaxis and treatment) BCG is used intravesically for prophylaxis and treatment of primary multifocal, high grade and relapsed superficial transitional bladder carcinoma. It is used to reduce the frequency of tumor recurrence after transurethral resection and to eliminate existing tumors, including [Ta and T1 tumors] and carcinoma in situ (CIS tumors) with or without associated papillary tumors. It is not indicated for treatment of papillary tumors occurring alone or for prevention of papillary tumors after transurethral resection.

Clinical Pharmacology

BCG induces a granulomatous reaction at the local site of administration. It is believed to work by stripping the bladder lining and killing any organisms which may be present in the bladder. By stripping of the damaged bladder lining, it will encourage the regeneration of a new, undamaged bladder lining.

Possible Side Effect

Urinary frequency, dysuria, Flu-like symptoms, fatigue, malaise.

Precautions to Consider

UROVAC should not be used when the patient has any injury/ infection in urinary tract.
HIV positive patients.
Known Tuberculosis patients and those who are on treatment with anti tuberculosis drugs.
It is advisable to abstain from intercourse till 10 days after the last instillation of treatment.

Pregnancy

Studies have not been done in humans and / or animals.

Breast feeding

It is not known whether intravesical BCG is distributed into breast milk. However, problems in humans have not been documented.

Pediatrics

No information is available on the relationship of age to the effects of the BCG in pediatric patients. Safety and efficacy have not been established.

Geriatrics

Studies have not demonstrated geriatrics-specific problems that would limit the usefulness of BCG as an antineoplastic in the elderly.

Administration

Intravesical treatment should begin between 7 to 14 days after biopsy or Trans Urethral Resection (TUR). After use, all equipment should be sterilized or disposed off properly, as with any other biohazardous waste.

UROVAC should not be injected subcutaneously or intravenously. The preparation of **UROVAC** suspension should be done using sterile technique. If the preparation cannot be performed in a biocontainment hood, the pharmacist or individual responsible for mixing the agent should wear gloves, mask and gown to avoid inadvertent exposure to broken skin or inhalation of BCG organisms. Precautions should be taken particularly in common preparation areas, to avoid cross contamination of parenteral products with BCG.

UROVAC should not be handled by persons with an immunological deficiency. Draw 1 mL of sterile diluent (preservative free 0.9% w/v Sodium chloride injection) into a syringe and add to one vial of UROVAC to resuspend. Leave them in contact for about 1 min. Then mix the suspension by withdrawing it into the syringe and expelling it gently back into the vial 2 or 3 times. Avoid the formation of foam: Do not shake. The reconstituted product should not be exposed to sunlight, direct or indirect. Exposure to artificial light should be kept to a minimum period of time. Dilute the reconstituted product in an additional 49 mL of diluent, bringing the total volume to 50 mL.

The resuspended UROVAC should be used immediately after preparation. Discard unused portion after two hours.

140 mm

184 mm

Treatment and Schedule

Patients should not drink fluid for 4 hours before treatment, and should empty their bladder prior to UROVAC administration. UROVAC is instilled into the bladder slowly by gravity flow via the catheter. DO NOT FORCE the flow of reconstituted UROVAC. UROVAC is retained in the bladder for 2 hours and then voided. Patients unable to retain the suspension for 2 hours should be allowed to void sooner, if necessary. Ideally, during the first hour following instillation, the patient should lie for 15 min each in the prone and supine positions and also on each side. The patient is then allowed to be up but should retain the suspension for another 60 min for a total of 2 hours. After 2 hrs of instillation, patients should be instructed to drink enough fluid to maintain adequate hydration.

The recommended induction course of UROVAC therapy is a single dose of 80 to 120 mg instilled into the bladder once weekly for 6 weeks. Followed by fortnightly instillation for 2 times and continued by monthly instillation for 4 times. This schedule may be repeated if tumor remission has not been achieved and if the clinical, circumstances warrant. The use of maintenance UROVAC is on the basis of tumor classification and clinical diagnosis of the oncologists.

Dosage

Per instillation the contents of 2 or 3 vials (80mg-120mg) are required. Reconstitute each vial with 50mL of sodium chloride injection for instillation into the urinary bladder.

Drug interactions and/or related problems

Antimicrobial therapy (potential negative effect on actions of BCG) Bone marrow depressants or immunosuppressants or radiation (may impair immune response to BCG). The interval between discontinuation of medications that cause immunosuppression and restoration of the patient's ability to respond to BCG depends on the intensity and type of immunosuppression causing therapy used, the under lying disease, and other factors; estimates vary from 3 months to 1 year. Also may increase the risk of osteomyelitis or disseminated BCG infections. The concurrent administration of vaccines, killed or live virus with BCG is not recommended; it is recommended that the live virus vaccines be given 6 to 8 weeks after BCG; it is recommended that the killed virus vaccine be given 7 days before or 10 days after BCG.

This medication should not be used when the following medical problems exists except under special circumstances:

Fever (BCG should not be administered until the cause has been determined; if fever is caused by infection, BCG should be withheld until the patient is afebrile and off all therapy).

Urinary tract infection (risk of disseminated BCG infection; increased severity of bladder irritation).

Risk-benefit should be considered when the following medical problems exist

Hematuria gross, existing (risk of disseminated BCG infection; caution is necessary especially if the Hematuria is induced by recent biopsy or resection, and it is recommended that intravesical BCG not to be given until gross Hematuria has cleared; if hematuria is from tumor itself, BCG can still be given but with caution because irritable bladder symptoms may be increased). Impaired immune response (decreased response to treatment; risk of osteomyelitis or disseminated BCG infection).

Sensitivity to BCG

Small bladder capacity (increased incidence and severity of local irritation; in addition, therapy with BCG may rarely cause bladder contracture, which further decreases capacity).

Precautions while using this medication

Avoiding persons with active tuberculosis for 6 to 12 weeks after treatment; telling physician about any exposure to active tuberculosis; avoiding immunizations unless approved by physician.

Special precautions for use

Do not expose the UROVAC to light before or after reconstitution. Use the reconstituted preparation immediately after reconstitution and discard the unused portion.
Reconstitution, preparation and administration should be performed under aseptic conditions.

Warning

To be sold by retail on the prescription of an oncologist only.

Storage

UROVAC should be stored in dark between 2 - 8 °C. Do not expose to light. Use immediately after reconstitution.

Shelf life

UROVAC has a shelf life of 24 months, provided it is stored in dark between 2 -8°C and protected from direct sunlight.

Presentation

UROVAC is supplied as single vial of 40 mg in a carton.

General dosing information

Patients receiving intravesical BCG should be under the supervision of a physician experienced in immunotherapy.
UROVAC should not be injected intravenously, subcutaneously or intramuscularly.
Care and aseptic techniques are necessary during administration of intravesical BCG therapy so as not to introduce contaminants into the urinary tract or to unduly traumatize the urinary mucosa.

Manufactured by:

GreenSignal
Bio Pharma Pvt. Ltd.
WELLNESS FOR ALL

No.49, Pappankuppam Village, Gummidipoondi
Tamilnadu - 601201. India.
Ph: 044-27922436, 27922446
Email: gsbpl@gsbpl.com