#### **Bacillus Calmette-Guerin (BCG) vaccine:**

**Class:** Biological Response Modulator; Vaccine, Live (Bacterial)

<u>Indications:</u> -Immunization against tuberculosis
-Immunotherapy for bladder cancer

Available dosage form in the hospital: BCG for intravesical installation INJ

Trade Names: Tice BCG, ImmuCyst®; Oncotice™

# **Dosage:**

- -Immunization against tuberculosis: Percutaneous: 0.2-0.3 mL (full strength dilution); conduct postvaccinal tuberculin test (5 TU of PPD) in 2-3 months; if test is negative, repeat vaccination. Note: Initial lesion usually appears after 10-14 days consisting of small, red papule at injection site and reaches maximum diameter of 3 mm in 4-6 weeks.
- **-Immunotherapy for bladder cancer:** Intravesicular: Note: Treatment should begin 7-14 days after biopsy or TUR. The contents of one vial is used for each dose.
  - -TheraCys®: One dose instilled into bladder (retain for 2 hours) once weekly for 6 weeks followed by 1 treatment at 3, 6, 12, 18, and 24 months after initial treatment
  - -TICE® BCG: One dose instilled into the bladder (retain for 2 hours) once weekly for 6 weeks (may repeat cycle 1 time) followed by approximately once monthly for at least 6-12 months.

## Geriatric

Refer to adult dosing

## **Renal Impairment:**

No dosage adjustment provided in manufacturer's labeling.

# **Hepatic Impairment:**

No dosage adjustment provided in manufacturer's labeling.

## **Common side effect:**

>10%:

Central nervous system: Malaise (7% to 40%), fever (17% to 38%), chills (9% to 34%), pain (17%)

Gastrointestinal: Nausea/vomiting (3% to 16%), anorexia/weight loss (2% to 11%)

Genitourinary: Dysuria (52% to 60%), bladder irritation (50%), urinary frequency (40% to 50%), hematuria (26% to 39%), cystitis (6% to 30%), urinary urgency (6% to 18%), urinary tract infection (2% to 18%)

Hematological: Anemia (<21%)

Miscellaneous: Flu-like syndrome (24% to 33%)

1% to 10%:

Central nervous system: Headache (2%)

Dermatologic: Rash (2% to 3%)

Gastrointestinal: Diarrhea (6%), abdominal pain (2% to 3%)

Genitourinary: Genital pain (10%), hemorrhagic cystitis (9%), bladder cramps/pain (6% to 8%), urinary incontinence (2% to 6%), contracted bladder (5%), nocturia (5%), urinary debris (2%), genital inflammation/abscess (2%)

Hematological: Leukopenia (<6%)

Neuromuscular & skeletal: Arthralgia/myalgia (3% to 7%), cramps/pain (4%), rigors (3%)

Renal: Renal toxicity (10%)

Respiratory: Pulmonary infection (<3%)

Miscellaneous: Infection (<1% to 5%), diaphoresis (3%), allergy (2%)

**Pregnancy Risk Factor: C**