Bacillus Calmette-Guerin (BCG) is a common intravesical immunotherapy.

**Priorities for BCG**
1. HG T1 with CIS
2. HG Ta with CIS
3. CIS
4. HG T1
5. HG Ta

Note: Induction therapy always takes priority over maintenance therapy

**2016 AUA guidelines**

**Induction**
- Low-risk disease: Do not use induction
- Intermediate-risk: Consider six-week course of chemotherapy or immunotherapy
- High-risk: CIS, HG T1, HG Ta; should give induction BCG

**Maintenance**
- Intermediate-risk disease: If patient responds to induction; maintenance for one year
- High-risk: If responds to BCG; maintenance for 3 years

**AUA Strategies for BCG shortage**
1. Low-risk disease: No BCG
2. Intermediate-risk: First-line option is intravesical chemotherapy; use alternate chemotherapy
3. High-risk patients who are BCG-naïve should be prioritized over maintenance
4. If no BCG; mitomycin is the preferable alternative (induction and monthly maintenance up to one year). Other alternatives include the following:
   - Gemcitabine
   - Epirubicin
   - Docetaxel
   - Valrubicin
   - Sequential gemcitabine/docetaxel or gemcitabine/mitomycin
5. Patients with high-risk features (HG T1 + CIS, variant histologies, lymphovascular invasion, prostatic urethral involvement) who are not willing to accept potential oncologic risks with alternative intravesical agents should be offered initial radical cystectomy
Alternatives to BCG
Mitomycin (40 mg)
Gemcitabine/Docetaxel (1000 mg/37.5 mg; 1 hour each)
Early cystectomy

| TABLE 4: AUA Risk Stratification for Non-Muscle Invasive Bladder Cancer |
|---------------------------------|---------------------------------|---------------------------------|
| Low Risk                        | Intermediate Risk               | High Risk                       |
| LG³ solitary Ta ≤ 3cm           | Recurrence within 1 year, LG Ta | HG T1                           |
| PUNLMPb                         | Solitary LG Ta > 3cm            | Any recurrent, HG Ta            |
| LG Ta, multifocal               | HG Ta, >3cm (or multifocal)     | Any CISd                        |
| HG³ Ta, ≤ 3cm                   | Any BCG failure in HG patient   | Any variant histology           |
| LG T1                           |                                  | Any LVIe                        |
|                                 |                                  | Any HG prostatic urethral       |
|                                 |                                  | involvement                     |

³LG = low grade; bPUNLMP = papillary urothelial neoplasm of low malignant potential; HG = high grade; CIS = carcinoma in situ; LVI = lymphovascular invasion