Supplementary Online Content

Bree KK, Shan Y, Hensley PJ, et al. Management, surveillance patterns, and costs associated with low-grade papillary stage Ta non–muscle-invasive bladder cancer among older adults, 2004-2013. JAMA Netw Open. 2022;5(3):e223050. doi:10.1001/jamanetworkopen.2022.3050

eTable 1. Drug and Procedure Codes

eTable 2. Adherence to Current Low-Risk NMIBC Guidelines 1 Year After Diagnosis

eFigure. Study Flow Diagram Illustrating Cohort Selection

This supplementary material has been provided by the authors to give readers additional information about their work.
### eTable 1. Drug and Procedure Codes

| Screening       | CPT/HCPCS             | ICD-9-PCS     |
|-----------------|-----------------------|---------------|
| Cystoscopy      | 52000                 |               |
| CT/MRI          | 74176, 74177, 74178, 74181, 74182, 74183, 74150, 74160, 74170, 72194, 72197 |               |
| Renal Ultrasound| 76770, 76775          |               |
| IV Pyelography  | 74400-74415           |               |
| Retrograde pyelogram | 74420, 52005   |               |
| Urine cytology or other urine biomarker | 88112, 88120, 88121, 86316, 86294, 86386, 81479, 88106, 88108 |               |
| Treatment       |                       |               |
| TURBT           | 52234, 52235, 52240   |               |
| BCG therapy     | J9031, 90586          |               |
| Intravesical chemotherapy | 51720           |               |
| Radical cystectomy | 51570, 51575, 51580, 51585, 51590, 51595, 51596, 51597 | 57.71, 57.79, 68.8 |
| Radiation       | 77261, 77385, 77386, 77399, 77401-77499, 77371-77373, G0173, G0174, G0251, G0339, G0340, G6001-G6017, 77520-77525 | 92.21–92.29 |

Abbreviations: BCG, bacillus Calmette-Guérin; CPT, Current Procedural Terminology; CT, computed tomography; HCPCS, Healthcare Common Procedure Coding System; ICD-9(10)-PCS, International Classification of Diseases, Ninth (Tenth) Revision, Procedure Coding System; MRI, magnetic resonance imaging; TURBT, transurethral resection of bladder tumor.
eTable 2. Adherence to Current Low-Risk NMIBC Guidelines 1 Year After Diagnosis

| Quality of care measure                        | 2004-2008 N (%) | 2009-2013 N (%) | P-value |
|-----------------------------------------------|-----------------|-----------------|---------|
| ≤2 Cystoscopies                               | 4,398 (55.2)    | 2,736 (53.8)    | 0.108   |
| ≤1 Cytology                                   | 5,103 (64.1)    | 2,748 (54.0)    | <.0001  |
| ≤1 Upper tract imaging                        | 4,181 (52.5)    | 2,585 (50.8)    | 0.061   |
| Absence of any BCG instillation              | 6,492 (81.5)    | 4,312 (84.7)    | <.0001  |
| Absence of intravesical chemotherapy\(b\)     | 6,302 (79.1)    | 3,912 (76.9)    | 0.0027  |

Abbreviations: BCG, bacillus Calmette-Guérin; NMIBC, non-muscle invasive bladder cancer.

\(a\)The AUA/SUO guidelines recommend the following surveillance within 1 year of diagnosis:\(b\):
- Cystoscopies: two (first-look cystoscopy at 3 months, followed by repeat cystoscopy at 6-9 months)
- Upper tract imaging: none
- Urine-based tests: none
\(b\)Intravesical chemotherapy: receipt of intravesical treatment beyond single perioperative dose
**eFigure.** Study Flow Diagram Illustrating Cohort Selection

118,059 Patients in SEER database queried for cases of bladder cancer

82,512 Patients were identified

47,869 Patients were identified

13,054 Patients with LG Ta NMIBC included in analysis

Search criteria:
- Year of diagnosis: 2004-2013
- Urothelial carcinoma or transitional cell carcinoma
- Age 66-90 years

34,643 Distinct patients excluded for lack of Medicare Part A&B coverage or with HMO coverage

34,815 Distinct patients excluded based upon the following:
- Inclusion criteria: LG Ta NMIBC
- Exclusion criteria:
  - Any N+
  - Any M+
  - Any other cancer diagnosis (excluding non-basal cell skin carcinoma)

Abbreviations: HMO, health maintenance organization; NMIBC, non-muscle invasive bladder cancer; SEER, surveillance, epidemiology, and end results.