Eviti Imaging:
Bladder and Urothelial Cancer

Version: 1.0

Effective Date: 1/1/2026

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Please note the following:

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For Medicare members/enrollees, to ensure consistency with the Medicare National Coverage Determinations (NCD) and Local Coverage Determinations (LCD), all applicable NCDs, LCDs, and Medicare Coverage Articles should be reviewed prior to applying the criteria set forth in this clinical policy. Please refer to the CMS website at http://www.cms.gov for additional information.

For Medicaid members/enrollees, circumstances when state Medicaid coverage provisions conflict with the coverage provisions within this clinical policy, state Medicaid coverage provisions take precedence. Please refer to the state Medicaid manual for any coverage provisions pertaining to this clinical policy.

Bladder and Urothelial Cancer Imaging

Discussion

This imaging guideline provides a standardized framework for the use of diagnostic and surveillance imaging in the management of common adult malignancies, specifically bladder and urothelial carcinoma. The goal is to ensure timely, evidence-based imaging that supports accurate staging, treatment planning, response assessment, and post-treatment surveillance.

Guiding Principles

- Follow evidence-based practices from major guidelines (e.g., NCCN, ESMO, ACR Appropriateness Criteria)
- Ensure imaging aligns with the clinical context and stage of disease
- Minimization of unnecessary radiation exposure
- Promote timely and cost-effective imaging utilization
- Incorporate multidisciplinary collaboration in imaging decisions

Imaging Guidelines

This guideline applies to the following patients:

1. At least 18 years of age with confirmed or suspected diagnoses of bladder and urothelial carcinoma; AND
2. All phases of oncologic care, including one of the following:
   a) Initial staging
   b) Treatment response evaluation
   c) Post-treatment surveillance
   d) Detection of recurrence or progression; AND
3. All imaging modalities used in oncology care, including but not limited to the following:
   a) Computed tomography (CT) (neck, chest, abdomen, pelvis, neck, or site-specific)
   b) Magnetic resonance imaging (MRI) (including site-specific protocols such as pelvis MRI, brain MRI, liver MRI)
   c) Fluorodeoxyglucose positron emission tomography/CT (FDG-PET/CT)
   d) PET/MRI
   e) Somatostatin receptor PET/CT (SSTR-PET/CT)
   f) Nuclear medicine (e.g., bone scan, PSMA PET)
   g) Single photon emission computed tomography/CT (SPECT/CT) (e.g., octreotide SPECT/CT for neuroendocrine tumors)

Notes:

1. The concurrent utilization of multiple advanced imaging modalities—such as PET/CT and MRI—is not routinely warranted and should be considered only when each modality is expected to provide distinct and clinically relevant information that will directly impact patient management. The selection of the most appropriate imaging study should be individualized, taking into account tumor type, clinical presentation, prior imaging, and other patient-specific factors. Imaging requests will be evaluated on a case-by-case basis to

ensure clinical necessity, appropriateness, and the potential to influence therapeutic decision-making.
2. When PET imaging is clinically indicated, the appropriate radiotracer should be selected based on tumor type and clinical scenario.

Bladder and Urothelial Imaging

Imaging in bladder and urothelial carcinoma determines local invasion, evaluates the upper tracts, and detects nodal or distant metastases. CT Urogram with excretory phase imaging is preferred for baseline evaluation, while MRI of the pelvis offers improved soft-tissue resolution for local staging and post-treatment assessment.

PET/CT is reserved for staging in advanced disease or problem-solving when CT findings are inconclusive.

Surveillance schedules are tailored to pathologic risk, with closer follow-up in high-risk and muscle-invasive disease. Imaging should be integrated with cystoscopic findings and performed per NCCN guidelines.

Bladder Cancer and Urothelial Cancer Recommendations			
Clinical Scenario	**Recommended Modality**	**Frequency/Timing**	**Purpose/Notes**
Initial Diagnosis and Staging (Suspected Bladder Mass After Cystoscopy/TURBT Planned)	CT urogram (CT abdomen and pelvis with excretory phase) or MRU if CT contraindicated	At diagnosis/pre-TURBT (when upper tract or extravesical extension is a concern)	Assess upper tracts; evaluate extravesical extension and pelvic nodes.
Baseline Staging – Non-Muscle Invasive (NMIBC)	No routine cross-sectional imaging MRI pelvis	N/A As indicated	Can be considered in sessile or high-grade tumors.
NIMBC Surveillance	Upper tract and abdomen/pelvic imaging CT urogram	At baseline then every 1–2 yrs for up to 10 years (high-risk) At 3 and 12 months then annually for 5 years (post cystectomy)	CT urogram preferred.
Baseline Staging – Muscle-Invasive (MIBC)		At diagnosis	Standard systemic staging prior to NAC + cystectomy

			or bladder-sparing CRT. May be helpful for local staging and may be ordered in addition to CTU.
	FDG-PET/CT	As clinically indicated	Not routine; consider for equivocal CT/MRI or suspected occult metastases (avoid as blanket staging). (2B) Selected patients with T2 or T3 disease when metastatic disease is suspected.
	Brain MRI Bone scan	As clinically indicated	
Treatment Monitoring Muscle-Invasive (MIBC)	CT chest CTU or MRU FDG-PET/CT Bone scan	Every 3-6 months or based on new symptoms As indicated	PET 2B (only if metastatic disease suspected)
Muscle-Invasive (MIBC) Surveillance Post-Cystectomy or Bladder Sparing	CT chest CTU or MRU FDG-PET/CT	Every 3-6 months for 2 years, then annually for 3 additional years	Renal US used for year 5-10 for patients who have undergone cystectomy. PET 2B (only if metastatic disease suspected)

Suspected Recurrence	CT chest/abdomen/ pelvis (include excretory phase when feasible) MRU if CT contraindicated MRI pelvis PET/CT (FDG) (when clinically indicated due to inconclusive or inadequate findings on conventional imaging) Brain MRI Bone scan	Once as indicated	Evaluate for local recurrence or metastatic progression
Consideration For Less Common Subtypes			
Urothelial Carcinoma of the Prostate/Urethra Staging	CT chest CT abdomen/pelvis CTU MRU if CT contraindicated (for prostate) MRI pelvis	At diagnosis	Or chest x-ray CTU preferred; MRU if CT contraindicated (for prostate)
Urothelial Carcinoma of Prostate/Urethra Surveillance	CT chest CT or MRI pelvis	Every 3-6 months for 2 years then yearly	High risk At baseline for low risk T1 or less.

Notes:

1. Upper tract urothelial cancer of ≤T1 follow NMIBC and if ≥T2 then follow MIBC
2. Local (T) staging is primarily pathologic; imaging complements by defining nodal/visceral spread and upper tract disease.
3. Prefer CT urogram protocols when evaluating hematuria/high-risk NMIBC to visualize the upper tracts.
4. PET/CT is not routine at baseline; reserve for equivocal cases or when results would change management (avoid stacking PET/CT + MRI without clear incremental value).[1]

Revision and Review History

No.	Description	Date
1	Original Effective Date:	1/1/2026
2	Policy Annual Review Dates:	
3	Department Owner:	Medical Affairs
4	NH Advisory Committee Approval Dates:	
5	Revision Changes:	

References

[1] National Comprehensive Cancer Network Guidelines: Bladder Cancer. https://www.nccn.org/professionals/physician_gls/pdf/nscl.pdf. Accessed December 15, 2025.