AUA Guidelines for Invasive Bladder Cancer: What’s New?”

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Department of Urology, University of Oklahoma
History

- 2009: Update AUA guidelines Panel Non-muscle invasive bladder cancer (AUA) – Hall et al
- 2016: Update AUA guidelines Panel Non-muscle invasive bladder cancer (AUA/SUO) – Chang et al
Guideline Review

AHRQ SYSTEMATIC REVIEW
• January 1990- October 2014

Two investigators independently assessed the risk of bias for all randomized trials and observational studies and assigned ratings of “high,” “medium,” or “low” risk of bias.
Methodology

• Grading of Guidelines:
  
  A
  • Well conducted RCT’s
  • Exceptional observational studies

  B
  • RCT’s and/or observational studies with some weaknesses

  C
  • Observational studies that are inconsistent - difficult to interpret
## Methodology

<table>
<thead>
<tr>
<th>Strong Recommendation</th>
<th>Moderate Recommendation</th>
<th>Conditional Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>(Net benefit or harm substantial)</strong></td>
<td><strong>(Net benefit or harm moderate)</strong></td>
<td><em>(No apparent net benefit or harm)</em></td>
</tr>
<tr>
<td>Benefits &gt; Risks/Burdens (or vice versa)</td>
<td>Benefits &gt; Risks/Burdens (or vice versa)</td>
<td>Benefits = Risks/Burdens</td>
</tr>
<tr>
<td>Net benefit (or net harm) is substantial</td>
<td>Net benefit (or net harm) is moderate</td>
<td>Best action depends on individual patient circumstances</td>
</tr>
<tr>
<td>Applies to most patients in most circumstances and future research is unlikely to change confidence</td>
<td>Applies to most patients in most circumstances but better evidence could change confidence</td>
<td>Future research unlikely to change confidence</td>
</tr>
<tr>
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<tr>
<td>Net benefit (or net harm) is substantial</td>
<td>Net benefit (or net harm) is moderate</td>
<td>Best action appears to depend on individual patient circumstances</td>
</tr>
<tr>
<td>Applies to most patients in most circumstances but better evidence could change confidence</td>
<td>Applies to most patients in most circumstances but better evidence is likely to change confidence</td>
<td>Better evidence could change confidence</td>
</tr>
<tr>
<td>Benefits &gt; Risks/Burdens (or vice versa)</td>
<td>Benefits &gt; Risks/Burdens (or vice versa)</td>
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<td>Applies to most patients in most circumstances but better evidence is likely to change confidence</td>
<td>Better evidence could change confidence</td>
</tr>
<tr>
<td>(rarely used to support a Strong Recommendation)</td>
<td></td>
<td>Balance between Benefits &amp; Risks/Burdens unclear</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Alternative strategies may be equally reasonable</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Better evidence likely to change confidence</td>
</tr>
</tbody>
</table>
Principle vs. Expert Opinion

CLINICAL PRINCIPLE

• A statement about a component of clinical care that is very widely agreed upon by urologists or other clinicians for which there may or may not be evidence in the medical literature.

EXPERT OPINION

• A statement, achieved by consensus of the Panel, that is based on members’ clinical training, experience, knowledge, and judgment for which there is no published evidence.
Epidemiology

- 79,000 new cases in 2017
- 16,870 deaths in 2017
- 25% of newly diagnosed patients present with muscle invasive disease

### Estimated New Cases

<table>
<thead>
<tr>
<th>Tumor Type</th>
<th>Males</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prostate</td>
<td>161,360</td>
<td>19%</td>
</tr>
<tr>
<td>Lung &amp; bronchus</td>
<td>116,990</td>
<td>14%</td>
</tr>
<tr>
<td>Colon &amp; rectum</td>
<td>71,420</td>
<td>9%</td>
</tr>
<tr>
<td>Urinary bladder</td>
<td>60,490</td>
<td>7%</td>
</tr>
<tr>
<td>Melanoma of the skin</td>
<td>52,170</td>
<td>6%</td>
</tr>
<tr>
<td>Kidney &amp; renal pelvis</td>
<td>40,610</td>
<td>5%</td>
</tr>
<tr>
<td>Non-Hodgkin lymphoma</td>
<td>40,080</td>
<td>5%</td>
</tr>
<tr>
<td>Leukemia</td>
<td>36,290</td>
<td>4%</td>
</tr>
<tr>
<td>Oral cavity &amp; pharynx</td>
<td>35,720</td>
<td>4%</td>
</tr>
<tr>
<td>Liver &amp; intrahepatic bile duct</td>
<td>29,200</td>
<td>3%</td>
</tr>
<tr>
<td>All Sites</td>
<td>836,150</td>
<td>100%</td>
</tr>
</tbody>
</table>
• Guidelines

• 35 statements total:

• Initial Patient Evaluation and Counseling: #1-5
• Treatment (Chemotherapy): #6-9
• Treatment (Radical Cystectomy): #10-14
• Perioperative Considerations: #15-18
• Treatment (Pelvic Lymphadenopathy): #19-20
• Bladder Preservation: #21-29
• Surveillance: #30-35
Guidelines

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INITIAL PATIENT EVALUATION & COUNSELING

1. Prior to treatment consideration, a full history and physical exam should be performed, including an exam under anesthesia, at the time of transurethral resection of bladder tumor for a suspected invasive cancer. (Clinical Principle)

• H&P, PE, exam under anesthesia at TURBT

2. Prior to muscle-invasive bladder cancer management, clinicians should perform a complete staging evaluation, including imaging of the chest and cross sectional imaging of the abdomen and pelvis with intravenous contrast if not contraindicated. Laboratory evaluation should include a CMP and CBC. (Clinical Principle)

• Imaging: chest, cross sectional abd/pelvis w contrast (if not contraindicated)

• Labs: CBC, CMP
INITIAL PATIENT EVALUATION & COUNSELING

3. An experienced genitourinary pathologist should review the pathology of a patient when variant histology is suspected or if muscle invasion is equivocal (e.g., micropapillary, nested, plasmacytoid, neuroendocrine, sarcomatoid, extensive squamous or glandular differentiation). (Clinical Principle)

• Variant Histology should be re-viewed by GU trained pathologist
• Up to 1/3 treatment strategies changed after review by GU Pathologist
• Variant Histologies ➔ More locally advanced compared to UC bladder
### Initial Patient Evaluation & Counseling

**Selected urothelial carcinoma variants and their treatment**

<table>
<thead>
<tr>
<th>Variant</th>
<th>Treatment/Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Squamous</td>
<td>Higher risk of upstaging, local recurrence can be high</td>
</tr>
<tr>
<td>Small cell</td>
<td>Systemic Chemotherapy → observation, RC, XRT</td>
</tr>
<tr>
<td><strong>Plasmacytoid</strong></td>
<td>Aggressive cancer → immediate RC, has predilection for carcinomatosis</td>
</tr>
<tr>
<td>Micropapillary</td>
<td>Aggressive cancer → immediate RC +/- neoadjuvant chemo**</td>
</tr>
<tr>
<td>Sarcomatoid</td>
<td>Aggressive cancer → immediate RC</td>
</tr>
<tr>
<td>Nested/large nested</td>
<td>Aggressive cancer → immediate RC</td>
</tr>
<tr>
<td>Adenocarcinoma</td>
<td>-- Can consider partial cystectomy if urachal/dome</td>
</tr>
<tr>
<td></td>
<td>-- evaluate for GI adenocarcinoma</td>
</tr>
</tbody>
</table>
For patients with newly diagnosed muscle-invasive bladder cancer, curative treatment options should be discussed before determining a plan of therapy that is based on both patient comorbidity and tumor characteristics. Patient evaluation should be completed using a multidisciplinary approach. (Clinical Principle)

- **Multi-disciplinary discussion:**
  - Cysectomy +/- Neoadj Chemotherapy
  - Trimodal Therapy: TURBT + Chemotherapy + Radiotherapy
5. Prior to treatment, clinicians should counsel patients regarding complications and the implications of treatment on quality of life (e.g., impact on continence, sexual function, fertility, bowel dysfunction, metabolic problems). (Clinical Principle)

- Complication impact on QOL discussion
- Both: sexual and urinary
- Cystectomy:
  - Complication: 60% Grade 2-5 Clavien complication rate (Recent RCT)
  - Readmission RC: 10-30%
  - Diversion related QOL: continence, metabolic

- Trimodal Therapy
  - Early and late GU/GI toxicity
  - Long term follow-up with cystoscopy
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6. Utilizing a multidisciplinary approach, clinicians should offer cisplatin-based neoadjuvant chemotherapy to eligible radical cystectomy patients prior to cystectomy. (Strong Recommendation; Evidence Level: Grade B)

- Neoadjuvant Cisplatin based chemo should be offered
TREATMENT: CHEMOTHERAPY (NAC/AC)

• N=976, RC or RT vs. CMV + RC or RT
• 16% reduction in cancer specific mortality
• Increase 3-year cancer-specific survival from 50 to 56%

International Phase III Trial Assessing Neoadjuvant Cisplatin, Methotrexate, and Vinblastine Chemotherapy for Muscle-Invasive Bladder Cancer: Long-Term Results of the BA06 30894 Trial

International Collaboration of Trialists on behalf of the Medical Research Council Advanced Bladder Cancer Working Party (now the National Cancer Research Institute Bladder Cancer Clinical Studies Group), the European Organisation for Research and Treatment of Cancer Genito-Urinary Tract Cancer Group, the Australian Bladder Cancer Study Group, the National Cancer Institute of Canada Clinical Trials Group, FinnBladder, Norwegian Bladder Cancer Study Group, and Club Urologico Espanol de Tratamiento Oncologico Group

International Collaboration of Trialists 2011
TREATMENT: CHEMOTHERAPY (NAC/AC)

Neoadjuvant Chemotherapy plus Cystectomy Compared with Cystectomy Alone for Locally Advanced Bladder Cancer

H. Barton Grossman, M.D., Ronald B. Natale, M.D., Catherine M. Tangen, Dr.P.H., V.O. Speights, D.O., Nicholas J. Vogelzang, M.D., Donald L. Trump, M.D., Ralph W. deVere White, M.D., Michael F. Sarosdy, M.D., David P. Wood, Jr, M.D., Derek Raghavan, M.D., Ph.D., and E. David Crawford, M.D.

• N=317, RC vs. MVAC + RC
• cT2-cT4 N0
• Median OS: 77 versus 46 months, p=0.05
• Higher pT0 rate: 38% vs 15%

Grossman et al 2003
• Utilization lags behind the data
• 7.6% → 20.9% utilization from 2006-2010
• Reasons:
  • Overtreatment
  • Delay in treatment if no response
  • Toxicity
  • Modest Survival benefit

**Figure 1.** Use of neoadjuvant chemotherapy (NAC) increased with time for patients undergoing radical cystectomy (RC). The difference between 2006 (7.6%) and 2010 (20.9%) reached significance ($P < .01$). 

Zaid et al 2014
TREATMENT: CHEMOTHERAPY (NAC/AC)

- MD Anderson risk adapted approach
- Retrospective
- Not validated

Figure 4. Neoadjuvant platform for clinical based staging and therapy for bladder cancer.

Culp et al 2013
TREATMENT: CHEMOTHERAPY (NAC/AC)

• There are no validated predictive factors or clinical characteristics (including age) associated with an increased or decreased probability of response and benefit.

• The best regimen and duration for cisplatin-based NAC remains undefined.

• The decision regarding eligibility for cisplatin-based NAC should be based on comorbidities and performance status, including cardiac status and presence of peripheral neuropathy, hearing loss, and renal dysfunction.
TREATMENT: CHEMOTHERAPY (NAC/AC)

7. Clinicians should not prescribe carboplatin-based neoadjuvant chemotherapy for clinically resectable stage cT2-T4aN0 bladder cancer. Patients ineligible for cisplatin-based neoadjuvant chemotherapy should proceed to definitive locoregional therapy. (Expert Opinion)

- **No Carboplatin** (patients who are cisplatin ineligible)
- Proceed to definitive treatment
8. Clinicians should perform radical cystectomy as soon as possible following a patient’s completion of and recovery from neoadjuvant chemotherapy. (Expert Opinion)

- Timely Cystectomy after Neoadj chemo
- ~4 weeks (depending on patient’s functional status, CBC)
9. Eligible patients who have not received cisplatin-based neoadjuvant chemotherapy and have non-organ confined (pT3/T4 and/or N+) disease at cystectomy should be offered adjuvant cisplatin-based chemotherapy. (Moderate Recommendation; Evidence Level: Grade C)

- **Adjuvant Cisplatin** based chemo should be **offered** pT3/pT4/ and or N+
- All adj chemo trials underpowered, terminated early
- Meta-analyses have demonstrated possible benefit (quality of data variable)
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10. Clinicians should offer radical cystectomy with bilateral pelvic lymphadenectomy for surgically eligible patients with resectable non-metastatic (M0) muscle-invasive bladder cancer. (Strong Recommendation; Evidence Level: Grade B)

- RC + Bilateral PLND should be performed

11. When performing a standard radical cystectomy, clinicians should remove the bladder, prostate, and seminal vesicles in males and should remove the bladder, uterus, fallopian tubes, ovaries, and anterior vaginal wall in females. (Clinical Principle)

- Remove adjacent organs at highest risk of harboring disease
  - Male: Prostate, SVs
  - Female: Uterus, fallopian tubes, ovaries, anterior vaginal wall
12. Clinicians should discuss and consider sexual function preserving procedures for patients with organ-confined disease and absence of bladder neck, urethra, and prostate (male) involvement. (Moderate Recommendation; Evidence Level: Grade C)

- **Consider sexual preservation**
  - Vaginal sparing, ovarian sparing
  
  - Periprostatic nerve sparing
13. In patients undergoing radical cystectomy, ileal conduit, continent cutaneous, and orthotopic neobladder urinary diversions should all be discussed. (Clinical Principle)

• **Consider QOL with diversion choice**
14. In patients receiving an orthotopic urinary diversion, clinicians must verify a negative urethral margin. (Clinical Principle)

- **Verify negative urethral margin**
- Risk of cancer in retained urethra can be between 1%-17%
- Reported risk factors:
  - tumor multifocality
  - papillary pattern
  - CIS/tumor at the bladder neck
  - prostatic urethral involvement and prostatic stromal invasion**
  (should not preclude neobladder→frozen section)
Guidelines

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Perioperative Management

15. Clinicians should attempt to optimize patient performance status in the perioperative setting. (Expert Opinion)

- **Optimization of patient performance status**
- Nutritional counseling
- Smoking cessation
- Physical Conditioning
Perioperative Management

Pre-Op
- Counseling
- No mechanical bowel preparation
- Carbohydrate loading
- Avoidance of prolonged NPO
- Adequate VTE prophylaxis
- Appropriate anti-microbial prophylaxis

Operative
- Analgesic protocol with epidural analgesia
- Conservative fluid management
- Prevention of hypothermia

Post-Op
- Removal of NG tube before PACU
- Avoidance opioids
- Aggressive control of nausea/vomiting
- Early ambulation
- Early Feeding

Discharge
- Enterostomal therapy
- Patient education
- Caretaker education
- Survivorship
Perioperative Management

Enhanced Recovery Protocol after Radical Cystectomy for Bladder Cancer

Siamak Daneshmand,* † Hamed Ahmadi, Anne K. Schuckman, ‡ Anirban P. Mitra, Jie Cai, Gus Miranda and Hooman Djaladat

• N=110 patients,
• Median LOS 4 days
• 82% BM on POD 2
• 30 day readmission rate: 21%
16. Perioperative pharmacologic thromboembolic prophylaxis should be given to patients undergoing radical cystectomy. (Strong Recommendation; Evidence Level: Grade B)

- VTE prophylaxis
- Optimal Perioperative timing and duration still undetermined
- Consider extended DVT proph for 30 days post-op (up to 15% may experience post-op DVT)
- >50% VTE occur after discharge
17. In patients undergoing radical cystectomy μ-opioid antagonist therapy should be used to accelerate gastrointestinal recovery, unless contraindicated. (Strong Recommendation; Evidence Level: Grade B)

- Entereg (Alvimopan) post-op:
Perioperative Management

• **Entereg (Alvimopan) post-op:**
  - Time bowel function: (5.5 versus 6.8 days, p<0.001)
  - Shorter LOS (7.4 versus 10.1 days; p=0.005).
    - First dose is given just prior to surgery and then continued until diet is tolerated or for a maximum of 15 doses (7 days)
    - No opioids 7 days prior

Lee 2014
18. Patients should receive detailed teaching regarding care of urinary diversion prior to discharge from the hospital. (Clinical Principle)

- **Urinary Diversion Patient Education is Paramount**
- Ostomy teaching
- Continent diversion teaching
- Home health assistance post-op
Guidelines

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• Surveillance: #30-35
19. Clinicians must perform a bilateral pelvic lymphadenectomy at the time of **any surgery with curative intent**. (Strong Recommendation; Evidence Level: Grade B)

- **PLND with any surgery with curative intent**
  - Radical Cystectomy
  - Partial Cystectomy
Treatment: Pelvic Lymphadenectomy

20. When performing bilateral pelvic lymphadenectomy, clinicians should remove, at a minimum, the external and internal iliac and obturator lymph nodes (standard lymphadenectomy). (Clinical Principle)

- **At minimum remove:**
  - Obturator nodes
  - External/internal iliac nodes

ADD RCT trial LERNER
Guidelines

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21. For patients with newly diagnosed non-metastatic muscle-invasive bladder cancer who desire to retain their bladder, and for those with significant comorbidities for whom radical cystectomy is not a treatment option, clinicians should offer bladder preserving therapy when clinically appropriate. (Clinical principle)

- Selection: unfit for cystectomy or desire bladder preservation
- Panel preferred approach: TURBT, systemic chemotherapy, radiation therapy, and ongoing cystoscopy to evaluate response
In patients under consideration for bladder preserving therapy, maximal debulking transurethral resection of bladder tumor and assessment of multifocal disease/carcinoma in situ should be performed. (Strong Recommendation; Evidence Strength: Grade C)

- TURBT consideration for bladder preservation therapy:
  - Maximal Resection
  - Assessment of Multifocal disease
  - CIS assessment
  - Tumor size
BLADDER PRESERVATION: MAXIMAL TURBT AND PARTIAL CYSTECTOMY

23. Patients with muscle-invasive bladder cancer who are medically fit and consent to radical cystectomy should not undergo partial cystectomy or maximal transurethral resection of bladder tumor as primary curative therapy. (Moderate Recommendation; Evidence Level: Grade C)

• The ideal patients for partial cystectomy have a, no hydronephrosis, solitary, initial tumor without concomitant CIS in the bladder or prostatic urethra that is amenable to resection with a 2cm surgical margin.

• Literature review indicates that only 5% of patients with invasive bladder cancer meet these criteria
BLADDER PRESERVATION: PRIMARY RADIOTHERAPY

24. For patients with muscle-invasive bladder cancer, clinicians should not offer radiation therapy alone as a curative treatment. (Strong Recommendation; Evidence Level: Grade C)

- Do not offer radiation therapy alone:
- High rates of pelvic failure
- Five year local control rates of 31-50%
  - Likely an underestimate as those who develop metastatic disease are less likely to undergo continued bladder surveillance
MULTIMODAL BLADDER PRESERVATION THERAPY

25. For patients with muscle-invasive bladder cancer who have elected multimodal bladder preserving therapy, clinicians should offer maximal transurethral resection of bladder tumor, chemotherapy combined with external beam radiation therapy, and planned cystoscopic re-evaluation. (Strong Recommendation; Evidence Level: Grade B)

- Maximal TURBT + chemo + radiation
- Chemo sensitizes tumor cells to radiation and control of occult metastases
- Consider Cystoscopic re-evaluation with biopsy (advocated during middle of RT)
MULTIMODAL BLADDER PRESERVATION THERAPY

• Maximal TURBT + chemo + radiation

• Ideal candidate
  • 1) unifocal tumor <3cm
  • 2) no carcinoma in situ (CIS),
  • 3) no evidence of hydronephrosis, and
  • 4) a tumor that can be completely transurethrally resected
### Table 2. Pooled Long-Term Outcomes

<table>
<thead>
<tr>
<th>Outcome</th>
<th>No. of Patients</th>
<th>Estimate (%)</th>
<th>95% CI (%)</th>
<th>No. of Patients at Risk</th>
<th>Estimate (%)</th>
<th>95% CI (%)</th>
<th>No. of Patients at Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local failure, any</td>
<td>212</td>
<td>43</td>
<td>39 to 48</td>
<td>148</td>
<td>48</td>
<td>43 to 53</td>
<td>39</td>
</tr>
<tr>
<td>Local failure, muscle invasive</td>
<td>56</td>
<td>13</td>
<td>10 to 17</td>
<td>191</td>
<td>14</td>
<td>10 to 17</td>
<td>52</td>
</tr>
<tr>
<td>Local failure, non-muscle invasive</td>
<td>156</td>
<td>31</td>
<td>27 to 36</td>
<td>162</td>
<td>36</td>
<td>32 to 41</td>
<td>44</td>
</tr>
<tr>
<td>Nodal recurrence</td>
<td>66</td>
<td>13</td>
<td>10 to 16</td>
<td>199</td>
<td>16</td>
<td>12 to 19</td>
<td>54</td>
</tr>
<tr>
<td>Distant metastases</td>
<td>153</td>
<td>31</td>
<td>27 to 36</td>
<td>188</td>
<td>35</td>
<td>30 to 39</td>
<td>53</td>
</tr>
<tr>
<td>Disease-specific survival</td>
<td>150</td>
<td>71</td>
<td>67 to 75</td>
<td>205</td>
<td>65</td>
<td>61 to 70</td>
<td>57</td>
</tr>
<tr>
<td>Bladder-intact disease-free survival</td>
<td>282</td>
<td>56</td>
<td>51 to 61</td>
<td>173</td>
<td>55</td>
<td>50 to 60</td>
<td>46</td>
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<tr>
<td>Overall survival</td>
<td>262</td>
<td>57</td>
<td>52 to 61</td>
<td>205</td>
<td>36</td>
<td>31 to 42</td>
<td>57</td>
</tr>
</tbody>
</table>
MULTIMODAL BLADDER PRESERVATION THERAPY

• It is unclear what proportion of patients who, having initially chosen bladder preservation, ultimately require cystectomy in a non-study setting.

• The reported bladder preservation rates may be dependent upon the degree of initial patient evaluation and selection.
26. Radiation sensitizing chemotherapy regimens should include cisplatin or 5-fluorouracil and mitomycin C. (Strong Recommendation; Evidence Level: Grade B)

- **Radiation sensitizers:**
  - 5 FU + MMC
  - Cisplatin
27. Following completion of bladder preserving therapy, clinicians should perform regular surveillance with CT scans, cystoscopy, and urine cytology. (Strong Recommendation; Evidence Level: Grade C)

- **Survveillance Strategy:**
- Published protocols recommend every 3 month cystoscopy during the first year, every 4-6 months in the second, and every 6-12 months thereafter.
- Cross-sectional imaging of the abdomen and pelvis and chest imaging every six months for the first two years
MULTIMODAL BLADDER PRESERVATION THERAPY

28. In patients who are medically fit and have residual or recurrent muscle-invasive disease following bladder preserving therapy, clinicians should offer radical cystectomy with bilateral pelvic lymphadenectomy. (Strong Recommendation; Evidence Level: Grade C)

- If multimodal therapy fails → Radical cystectomy:
- Up to 30% of patients will have an invasive recurrence
29. In patients who have a non-muscle invasive recurrence after bladder preserving therapy, clinicians may offer either local measures, such as transurethral resection of bladder tumor with intravesical therapy, or radical cystectomy with bilateral pelvic lymphadenectomy. (Moderate Recommendation; Evidence Level: Grade C)

- Non-muscle invasive recurrence ➔ TURBT, intravesical therapy, or RC:
- Case series show that NMIBC recurrences following bladder sparing therapy may still be managed by standard local measures similar to de novo NMIBC
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Clinicians should obtain chest imaging and cross sectional imaging of the abdomen and pelvis with CT or MRI at 6-12 month intervals for 2-3 years and then may continue annually. (Expert Opinion)

- Radiographic evaluation of the abdomen and pelvis:
  - Detection of upper tract cancer
  - Disease detection in the most common sites of recurrence, progression, and metastasis
  - Urinary diversion concerns
PATIENT SURVEILLANCE

31. Following therapy for muscle-invasive bladder cancer, patients should undergo laboratory assessment at three to six month intervals for two to three years and then annually thereafter. (Expert Opinion)

- Lab evaluation: Electrolyte imbalances, B12 deficiency, acidosis

31. Following radical cystectomy in patients with a retained urethra, clinicians should monitor the urethral remnant for recurrence. (Expert Opinion)

- Monitor urethra for recurrence:
- 4-14% risk of recurrence in urethra
- Urethral Cytology can be low yield (no specific recommendation)
  - Consider in higher risk patients (pain or urethral bleeding at time of dx)
33. Clinicians should discuss with patients how they are coping with their bladder cancer diagnosis and treatment and should recommend that patients consider participating in a cancer support group or consider receiving individual counseling. (Expert Opinion)

- bcancer.org
- cancersupportcommunity.org
- cancersocialwork.org
- bladdercancersupport.org
- cancer.org
- urologyhealth.org

34. Clinicians should encourage bladder cancer patients to adopt healthy lifestyle habits, including smoking cessation, exercise, and a healthy diet, to improve long-term health and quality of life. (Expert Opinion)

• Survivorship:
PATIENT SURVEILLANCE

35. In patients diagnosed with variant histology, clinicians should consider unique clinical characteristics that may require divergence from standard evaluation and management for urothelial carcinoma. (Expert Opinion)

• Modify standard evaluation for variant histology: