Bladder cancer (BC) is the 7th most commonly diagnosed cancer in males. BC incidence and mortality rates vary across countries. For about 35% of patients, bladder cancer is either muscle-invasive or metastatic at disease presentation. Non-muscle invasive disease can progress to become muscle-invasive bladder cancer later on in the disease course. 

Active and passive tobacco smoking is the main risk factor, while the exposure-related incidence is decreasing.

**PATHOLOGY:**
Specimens should be taken from the superficial and deep areas and sent to the pathology laboratory separately. All muscle-invasive bladder cancer (MIBC) cases are high-grade. Identification of morphological subtypes is important for prognostic reasons and treatment decisions.

**PATHOLOGY DIFFERENTIATIONS**
1. Pure urothelial carcinoma (more than 90% of all cases);
2. Urothelial carcinomas with partial squamous and/or glandular or trophoblastic differentiation;
3. Micro papillary and microcystic UC;
4. Nested variant (including large nested variant);
5. Lymphoepithelioma-like;
6. Plasmocytoid, signet ring, diffuse;
7. Some UCs with small-cell carcinomas;
8. Sarcomatoid carcinomas;

*Most frequent non-urothelial carcinomas: Pure squamous cell carcinoma, Adenocarcinoma and Neuroendocrine tumors*

**STAGING: TNM, 2017:**

**Recommendations**
- Record the depth of invasion (categories pT2a and pT2b, pT3a and pT3b or pT4a and pT4b).
- Record margins with special attention paid to the radical margin, prostate, ureter, urethra, perineal fat, uterus and vaginal top.
- Record the total number of lymph nodes (LN), the number of positive LN and extranodal spread.
- Record lymphatic or blood vessel invasion.
- Record the presence of carcinoma in situ.

**Strength rating** Strong

**Summary of evidence**

- Imaging for staging of MIBC:
  - CT urography for staging locally advanced or metastatic disease in patients in whom radical treatment is considered.
  - Use magnetic resonance urography when CT urography is contraindicated for reasons related to contrast administration or radiation dose.

**Recommendations**

- Perform a CT urography for upper tract evaluation and for staging.
- For upper tract evaluation, use diagnostic uroscopy and biopsy only in cases where additional information will impact treatment decisions.

**Strength rating** Strong

- Use CT or magnetic resonance imaging (MRI) for staging locally advanced or metastatic disease in patients in whom radical treatment is considered.
- Use CT to diagnose perineal metastases. Computed tomography and MRI are generally equivalent for diagnosing local disease and distant metastases in the abdomen.

**Strength rating** Strong

**DIAGNOSIS:**

- Symptoms: Most common symptom: painless haematuria
- Physical examination: bimanual examination under anaesthesia should be carried out before and after TUR
- Bladder imaging: Patients with a bladder mass in any diagnostic imaging technique should undergo cystoscopy, biopsy and/or resection.
- Cytology: high sensitivity in high-grade urothelial tumours.
- Cystoscopy , transurethral resection of invasive bladder tumours:

**Strength rating** Strong

**Recommendations**

- Take a biopsy of the prostatic urethra in cases of bladder neck tumour, when bladder carcinoma in situ is present or suspected, when there is positive cytology without evidence of tumour in the bladder, or when abnormalities of the prostatic urethra are visible.

**Strength rating** Strong

- Markers

**Recommendations**

- Assess comorbidity by a validated score, such as the Charlson Comorbidity Index. The American Society of Anesthesiologists score should not be used in this setting (see Section 5.3.2).

**Strength rating** Strong

**Strength rating** Strong

**Strength rating** Strong

In patients with metastatic disease, genetic profiling should always be done.

In invasive non metastatic disease, prospectively validated prognostic and predictive molecular biomarkers will present valuable adjuncts to clinical and pathological data.