“Prostate Staging”

AJCC TNM Staging 8th Edition

Brief Webinar | 2 August 2019

Judd W Moul MD, FACS
Professor of Urology, Duke University
Executive Committee, AJCC
Prostate-AJCC TNM Staging 8th Edition

• AJCC established in 1959 (60th Anniversary!)
• Formulate and publish systems of classification of cancer, including staging and end-results reporting
• Goal: Create acceptable tools to be used by the medical profession for selecting-the most effective treatment,
  • determining prognosis, and continuing evaluation of cancer control measures
• 8th Edition Published October 6, 2016
• Prostate is Chapter #58
• Effective for all cases diagnosed on or after January 1, 2018
• Review site-specific information & rules

• Clinical Staging

  Based on information before treatment
  Used to select treatment options

• Pathological Staging

  Based on clinical data PLUS operative findings
  resected specimen pathology report
  Used to evaluate end-results (survival)
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-Key Changes

• Definition of Primary Tumor (T): Pathological organ-confined disease (after radical prostatectomy) is now all pT2 and not subdivided into pT2a, pT2b, or pT2c

• Histologic Grade (G): The Gleason score (2014 criteria) and the Grade Group (1-5) should both be reported.

• AJCC Prognostic Stage Groups: Stage III includes select organ-confined disease tumors based on prostate-specific antigen (PSA) and Gleason/Grade Group status.
In the 8th Edition, clinical T-category should still be based only on the digital rectal examination (DRE) findings.

Neither imaging information or tumor laterally information from the prostate biopsy should be used for clinical T category.

A tumor that is found in one or both sides by needle biopsy, but is not palpable is classified as T1c.

Clinical T category should always reflect DRE findings only.

Although imaging, particularly multi-parametric prostate MRI, has improved, imaging should NOT be used for T-category assessment.
Pathological Stage is defined after a radical prostatectomy.

The old 7th Edition AJCC divided pathologic stage T2 into three groups: pT2a, pT2b, and pT2c.

The new 8th Edition AJCC has all organ-confined post surgical cases as pT2.

Tumor detected in apex/distal margin is pT2.

There is no pT1 category.

Clinical staging retains the three tier system (cT2a, cT2b, cT2c).

pT3a: unilateral or bilateral extra-prostatic extension.

pT3b: tumor invading the seminal vesicle(s).

Margin status is technically NOT part of current AJCC staging.
Prostate-AJCC TNM Staging 8th Edition: Grade Groups

- Group 1: Gleason <=6
- Group 2: Gleason 3+4=7
- Group 3: Gleason 4+3=7
- Group 4: Gleason 8
- Group 5: Gleason 9 or 10

Grade group is prognostic for PSA recurrence and prostate cancer mortality (AJCC Level of Evidence: I)
Prostate-specific Antigen (PSA) blood test
Protein produced by cells of the prostate gland
The KEY tumor marker for screening and management
The higher the PSA, the greater the risk of diagnosis and mortality of prostate cancer
PSA< 10: “low” or “low risk”
PSA 10-20: “intermediate” or “Intermediate risk”
PSA>20: “High” or “High Risk”
PSA>100: without clinical metastases is associated with much poorer survival (AJCC Level of Evidence: I)
• Primary Tumor: T-category, Serum PSA, Grade Group (1-5) with Gleason score, Number and percentage of positive biopsy regions (i.e. biopsy “cores”)

• Regional Lymph Nodes/Distant Metastases: performance status, M0 versus M1 category; Extranodal extension of cancer, M1b (bone) versus M1c (lung, liver, brain, with or without bone)
• Nodal disease below the Pelvic brim is N1 and NOT M1.

• Modern PET scanning is detecting nodal disease more accurately

• Clinical importance for new Rx for M0 castrate resistant prostate cancer (Apalutamide, Enzalutamide)
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- https://cancerstaging.org
- Ordering information: Cancerstaging.net
- Submit questions to AJCC Forum: http://cancerbulletin.facs.org/forums/
- Twitter: @AJCCancer
- Thank you very much! Judd.moul@duke.edu