AJCC 7th Edition Errata for 5th Reprint
Table 1
Manual

Updated July 1, 2011
Prostate

(Sarcomas and transitional cell carcinomas are not included)

At-A-Glance

SUMMARY OF CHANGES

- Extraprostatic invasion with microscopic bladder neck invasion (T4) is included with T3a
- Gleason Score now recognized as the preferred grading system
- Prognostic factors have been incorporated in the Anatomic Stage/Prognostic Groups
  - Gleason Score
  - Preoperative prostate-specific antigen (PSA)

ANATOMIC STAGE/PROGNOSTIC GROUPS*

<table>
<thead>
<tr>
<th>Group</th>
<th>T</th>
<th>N</th>
<th>M</th>
<th>PSA</th>
<th>Gleason</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>T1a – c</td>
<td>N0</td>
<td>M0</td>
<td>PSA &lt; 10</td>
<td>≤ 6</td>
</tr>
<tr>
<td>T2a</td>
<td>N0</td>
<td>M0</td>
<td>PSA &lt; 10</td>
<td>≤ 6</td>
<td></td>
</tr>
<tr>
<td>T1 – 2a</td>
<td>N0</td>
<td>M0</td>
<td>PSA X</td>
<td>≤ 6</td>
<td></td>
</tr>
<tr>
<td>IIA</td>
<td>T1a – c</td>
<td>N0</td>
<td>M0</td>
<td>PSA &lt; 20</td>
<td>7</td>
</tr>
<tr>
<td>T2a</td>
<td>N0</td>
<td>M0</td>
<td>PSA ≥ 10 &lt; 20</td>
<td>≤ 6</td>
<td></td>
</tr>
<tr>
<td>T2a</td>
<td>N0</td>
<td>M0</td>
<td>PSA &lt; 20</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>T2b</td>
<td>N0</td>
<td>M0</td>
<td>PSA &lt; 20</td>
<td>≤ 7</td>
<td></td>
</tr>
<tr>
<td>T2b</td>
<td>N0</td>
<td>M0</td>
<td>PSA X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>IIB</td>
<td>T2c</td>
<td>N0</td>
<td>M0</td>
<td>Any PSA</td>
<td>Any Gleason</td>
</tr>
<tr>
<td>T1 – 2</td>
<td>N0</td>
<td>M0</td>
<td>PSA ≥ 20</td>
<td>Any Gleason</td>
<td></td>
</tr>
<tr>
<td>T1 – 2</td>
<td>N0</td>
<td>M0</td>
<td>Any PSA</td>
<td>≥ 8</td>
<td></td>
</tr>
<tr>
<td>III</td>
<td>T3a – b</td>
<td>N0</td>
<td>M0</td>
<td>Any PSA</td>
<td>Any Gleason</td>
</tr>
<tr>
<td>IV</td>
<td>T4</td>
<td>N0</td>
<td>M0</td>
<td>Any PSA</td>
<td>Any Gleason</td>
</tr>
<tr>
<td>Any T</td>
<td>N1</td>
<td>M0</td>
<td>Any PSA</td>
<td>Any Gleason</td>
<td></td>
</tr>
<tr>
<td>Any T</td>
<td>Any N</td>
<td>Any M1</td>
<td>Any PSA</td>
<td>Any Gleason</td>
<td></td>
</tr>
</tbody>
</table>

ICD-O-3 TOPOGRAPHY CODES

C61.9 Prostate gland

ICD-O-3 HISTOLOGY CODE RANGES

8000–8110, 8140–8576, 8940–8950, 8980–8981

* When either PSA or Gleason is not available, grouping should be determined by T stage and/or either PSA or Gleason as available.

INTRODUCTION

Prostate cancer is the most common noncutaneous cancer in men, with increasing incidence in older age groups. Prostate cancer has a tendency to metastasize to bone. Earlier detection is possible with a blood test, prostate-specific antigen (PSA), and the diagnosis is generally made using transrectal ultrasound (TRUS) guided biopsy.

The incidence of both clinical and latent carcinoma increases with age. However, this cancer is rarely diagnosed clinically in men under 40 years of age. There are substantial limitations in the ability of both digital rectal examination (DRE) and TRUS to precisely define the size or local extent of disease; DRE is currently the most common modality used to define the local stage. Heterogeneity within the T1c category resulting from inherent limitations of either DRE or imaging to quantify the cancer may be balanced by the inclusion of other prognostic factors, such as histologic grade, PSA level, and possibly extent of cancer on needle biopsies that contain cancer. Diagnosis of clinically suspicious areas of the prostate can be confirmed histologically by needle biopsy. Less commonly, prostate cancer may be diagnosed by inspection of the

Updated July 1, 2011
DEFINITIONS OF TNM

Primary Tumor (T)

Clinical
TX  Primary tumor cannot be assessed
T0  No evidence of primary tumor
T1  Clinically inapparent tumor neither palpable nor visible by imaging
T1a  Tumor incidental histologic finding in 5% or less of tissue resected
T1b  Tumor incidental histologic finding in more than 5% of tissue resected
T1c  Tumor identified by needle biopsy (e.g., because of elevated PSA)
T2  Tumor confined within prostate*
T2a  Tumor involves one-half of one lobe or less
T2b  Tumor involves more than one-half of one lobe but not both lobes
T2c  Tumor involves both lobes
T3  Tumor extends through the prostate capsule**
T3a  Extracapsular extension (unilateral or bilateral)
T3b  Tumor invades seminal vesicle(s)
T4  Tumor is fixed or invades adjacent structures other than seminal vesicles such as external sphincter, rectum, bladder, levator muscles, and/or pelvic wall (Figure 41.1)

Pathologic (pT)*
pT2  Organ confined
pT2a  Unilateral, one-half of one side or less
pT2b  Unilateral, involving more than one-half of side but not both sides
pT2c  Bilateral disease
pT3  Extraprostatic extension
pT3a  Extraprostatic extension or microscopic invasion of bladder neck**
pT3b  Seminal vesicle invasion
pT4  Invasion of rectum, levator muscles, and/or pelvic wall

*Note: Tumor found in one or both lobes by needle biopsy, but not palpable or reliably visible by imaging, is classified as T1c.

**Note: Invasion into the prostatic apex or into (but not beyond) the prostatic capsule is classified not as T3 but as T2.

Regional Lymph Nodes (N)

Clinical
NX  Regional lymph nodes were not assessed
N0  No regional lymph node metastasis
N1  Metastasis in regional lymph node(s)

Pathologic
pNX  Regional nodes not sampled
pN0  No positive regional nodes
pN1  Metastases in regional node(s)

Distant Metastasis (M)*
M0  No distant metastasis
M1  Distant metastasis
M1a  Nonregional lymph node(s)
M1b  Bone(s)
M1c  Other site(s) with or without bone disease

*Note: When more than one site of metastasis is present, the most advanced category is used. pM1c is most advanced.

ANATOMIC STAGE/PROGNOSTIC GROUPS*

<table>
<thead>
<tr>
<th>Group</th>
<th>T</th>
<th>N</th>
<th>M</th>
<th>PSA</th>
<th>Gleason</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>T1a–c</td>
<td>N0</td>
<td>M0</td>
<td>PSA &lt; 10</td>
<td>Gleason ≤ 6</td>
</tr>
<tr>
<td>I</td>
<td>T2a</td>
<td>N0</td>
<td>M0</td>
<td>PSA &lt; 10</td>
<td>Gleason ≤ 6</td>
</tr>
<tr>
<td>I</td>
<td>T1–2a</td>
<td>N0</td>
<td>M0</td>
<td>PSA X</td>
<td>Gleason X</td>
</tr>
<tr>
<td>IIA</td>
<td>T1a–c</td>
<td>N0</td>
<td>M0</td>
<td>PSA &lt; 20</td>
<td>Gleason 7</td>
</tr>
<tr>
<td>IIA</td>
<td>T1a–c</td>
<td>N0</td>
<td>M0</td>
<td>PSA ≥ 10 &lt; 20</td>
<td>Gleason ≤ 6</td>
</tr>
<tr>
<td>IIA</td>
<td>T2a</td>
<td>N0</td>
<td>M0</td>
<td>PSA ≥ 10 &lt; 20</td>
<td>Gleason ≤ 6</td>
</tr>
<tr>
<td>IIA</td>
<td>T2a</td>
<td>N0</td>
<td>M0</td>
<td>PSA &lt; 20</td>
<td>Gleason 7</td>
</tr>
<tr>
<td>IIA</td>
<td>T2b</td>
<td>N0</td>
<td>M0</td>
<td>PSA &lt; 20</td>
<td>Gleason ≤ 7</td>
</tr>
<tr>
<td>IIA</td>
<td>T2b</td>
<td>N0</td>
<td>M0</td>
<td>PSA X</td>
<td>Gleason X</td>
</tr>
</tbody>
</table>

*Note: There is no pathologic T1 classification.

**Note: Positive surgical margin should be indicated by an R1 descriptor (residual microscopic disease).
Testis

At-A-Glance

SUMMARY OF CHANGES

- The definition of TNM and the Stage Grouping for this chapter have not changed from the Sixth Edition

<table>
<thead>
<tr>
<th>ANATOMIC STAGE/PROGNOSTIC GROUPS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Group</strong></td>
</tr>
<tr>
<td>----------------</td>
</tr>
<tr>
<td>Stage 0</td>
</tr>
<tr>
<td>Stage I</td>
</tr>
<tr>
<td>Stage IA</td>
</tr>
<tr>
<td>Stage IB</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Stage IS</td>
</tr>
<tr>
<td>Stage II</td>
</tr>
<tr>
<td>Stage IIA</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Stage IIB</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Stage IIC</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Stage III</td>
</tr>
<tr>
<td>Stage IIIA</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Stage IIIB</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Stage IIIC</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

ICD-O-3 TOPOGRAPHY CODES

- C62.0 Undescended testis
- C62.1 Descended testis
- C62.9 Testis, NOS

ICD-O-3 HISTOLOGY CODE RANGES


Updated July 1, 2011
**Regional Lymph Nodes (N)**

**Clinical**
- **NX** Regional lymph nodes cannot be assessed
- **N0** No regional lymph node metastasis
- **N1** Metastasis with a lymph node mass 2 cm or less in greatest dimension; or multiple lymph nodes, none more than 2 cm in greatest dimension
- **N2** Metastasis with a lymph node mass more than 2 cm but not more than 5 cm in greatest dimension; or multiple lymph nodes, any one mass greater than 2 cm but not more than 5 cm in greatest dimension
- **N3** Metastasis with a lymph node mass more than 5 cm in greatest dimension

**Pathologic (pN)**
- **pNX** Regional lymph nodes cannot be assessed
- **pN0** No regional lymph node metastasis
- **pN1** Metastasis with a lymph node mass 2 cm or less in greatest dimension and less than or equal to five nodes positive, none more than 2 cm in greatest dimension
- **pN2** Metastasis with a lymph node mass more than 2 cm but not more than 5 cm in greatest dimension; or more than five nodes positive, none more than 5 cm; or evidence of extranodal extension of tumor
- **pN3** Metastasis with a lymph node mass more than 5 cm in greatest dimension

**Distant Metastasis (M)**
- **M0** No distant metastasis
- **M1** Distant metastasis
- **M1a** Nonregional nodal or pulmonary metastasis
- **M1b** Distant metastasis other than to nonregional lymph nodes and lung

**ANATOMIC STAGE/PROGNOSTIC GROUPS**

<table>
<thead>
<tr>
<th>Group</th>
<th>T</th>
<th>N</th>
<th>M</th>
<th>S (Serum Tumor Markers)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage 0</td>
<td>pTis</td>
<td>N0</td>
<td>M0</td>
<td>S0</td>
</tr>
<tr>
<td>Stage I</td>
<td>pT1–4</td>
<td>N0</td>
<td>M0</td>
<td>SX</td>
</tr>
<tr>
<td>Stage IA</td>
<td>pT1</td>
<td>N0</td>
<td>M0</td>
<td>S0</td>
</tr>
<tr>
<td>Stage IB</td>
<td>pT2</td>
<td>N0</td>
<td>M0</td>
<td>S0</td>
</tr>
<tr>
<td></td>
<td>pT3</td>
<td>N0</td>
<td>M0</td>
<td>S0</td>
</tr>
<tr>
<td></td>
<td>pT4</td>
<td>N0</td>
<td>M0</td>
<td>S0</td>
</tr>
<tr>
<td>Stage IS</td>
<td>Any pT/Tx</td>
<td>N0</td>
<td>M0</td>
<td>S1–3</td>
</tr>
<tr>
<td>Stage II</td>
<td>Any pT/Tx</td>
<td>N1–3</td>
<td>M0</td>
<td>SX</td>
</tr>
</tbody>
</table>

**PROGNOSTIC FACTORS (SITE-SPECIFIC FACTORS)** (Recommended for Collection)

<table>
<thead>
<tr>
<th>Required for staging</th>
<th>Serum tumor markers (S)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SX</td>
<td>Marker studies not available or not performed</td>
</tr>
<tr>
<td>S0</td>
<td>Marker study levels within normal limits</td>
</tr>
<tr>
<td>S1</td>
<td>LDH &lt; 1.5 × N* and hCG (mlu/ml) &lt; 5,000 and AFP (ng/ml) &lt; 1,000</td>
</tr>
<tr>
<td>S2</td>
<td>LDH 1.5–10 × N or hCG (mlu/ml) 5,000–50,000 or AFP (ng/ml) 1,000–10,000</td>
</tr>
<tr>
<td>S3</td>
<td>LDH &gt; 10 × N or hCG (mlu/ml) &gt; 50,000 or AFP (ng/ml) &gt; 10,000</td>
</tr>
</tbody>
</table>

*N indicates the upper limit of normal for the LDH assay.

Serum tumor marker levels should be measured prior to orchiectomy, but levels after orchiectomy are used for assignment of S category, taking into account the half life of AFP and hCG. Stage grouping classification of Stage IS require persistent elevation of serum tumor markers following orchiectomy.

The Serum Tumor Markers (S) category comprises the following:

- Alpha fetoprotein (AFP) – half life 5–7 days
- Human chorionic gonadotropin (hCG) – half life 1–3 days
- Lactate dehydrogenase (LDH)

Clinically significant Size of largest metastases in lymph nodes Radical orchiectomy performed
Metastatic Sites. The metastatic sites include any site beyond the area of the regional lymph nodes. Tumor involvement of pelvic lymph nodes, including internal iliac, external iliac, and common iliac lymph nodes, is considered distant metastasis.

RULES FOR CLASSIFICATION

Clinical Staging. Cases should be classified as carcinoma of the vulva when the primary site of the growth is in the vulva. Tumors present on the vulva as secondary growths from either a genital or an extragenital site should be excluded. This classification does not apply to mucosal malignant melanoma. There should be histologic confirmation of the tumor.

Pathologic Staging. FIGO uses surgical/pathologic staging for vulvar cancer. Stage should be assigned at the time of definitive surgical treatment or prior to radiation or chemotherapy if either of these is the initial mode of therapy. The stage cannot be changed on the basis of disease progression or recurrence or on the basis of response to initial radiation or chemotherapy that precedes primary tumor resection.

PROGNOSTIC FEATURES

Vulvar cancer is a surgically staged malignancy. Surgical-pathologic staging provides specific information about primary tumor size and lymph node status, which are the most important prognostic factors in vulvar cancer. Other commonly evaluated items, such as histologic type, differentiation, DNA ploidy, and S-phase fraction analysis, as well as age, are not uniformly identified as important prognostic factors in vulvar cancer.

DEFINITIONS OF TNM

The definitions of the T categories correspond to the stages accepted by the Fédération Internationale de Gynécologie et d’Obstétrique (FIGO). Both systems are included for comparison.

<table>
<thead>
<tr>
<th>Primary Tumor (T)</th>
<th>TNM Categories</th>
<th>FIGO Stages</th>
</tr>
</thead>
<tbody>
<tr>
<td>TX</td>
<td>Regional lymph nodes cannot be assessed</td>
<td></td>
</tr>
<tr>
<td>T0</td>
<td>No regional lymph node metastasis</td>
<td></td>
</tr>
<tr>
<td>Tis*</td>
<td>One or two regional lymph nodes with the following features</td>
<td></td>
</tr>
<tr>
<td>T1a</td>
<td>1 or 2 lymph node metastases each 5 mm or less</td>
<td></td>
</tr>
<tr>
<td>T1b</td>
<td>One lymph node metastasis 5 mm or greater</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Regional lymph node metastasis with the following features</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Three or more lymph node metastases each less than 5 mm</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Two or more lymph node metastases 5 mm or greater</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lymph node metastasis with extracapsular spread</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fixed or ulcerated regional lymph node metastasis</td>
<td></td>
</tr>
</tbody>
</table>

An effort should be made to describe the site and laterality of lymph node metastases.

Regional Lymph Nodes (N)

<table>
<thead>
<tr>
<th>TNM Categories</th>
<th>FIGO Stages</th>
</tr>
</thead>
<tbody>
<tr>
<td>NX</td>
<td>Regional lymph nodes cannot be assessed</td>
</tr>
<tr>
<td>N0</td>
<td>No regional lymph node metastasis</td>
</tr>
<tr>
<td>N1</td>
<td>One or two regional lymph nodes with the following features</td>
</tr>
<tr>
<td>N1a</td>
<td>1 or 2 lymph node metastases each 5 mm or less</td>
</tr>
<tr>
<td>N1b</td>
<td>One lymph node metastasis 5 mm or greater</td>
</tr>
<tr>
<td>N2</td>
<td>Regional lymph node metastasis with the following features</td>
</tr>
<tr>
<td>N2a</td>
<td>Three or more lymph node metastases each less than 5 mm</td>
</tr>
<tr>
<td>N2b</td>
<td>Two or more lymph node metastases 5 mm or greater</td>
</tr>
<tr>
<td>N2c</td>
<td>Lymph node metastasis with extracapsular spread</td>
</tr>
<tr>
<td>N3</td>
<td>Fixed or ulcerated regional lymph node metastasis</td>
</tr>
</tbody>
</table>

Distant Metastasis (M)

<table>
<thead>
<tr>
<th>TNM Categories</th>
<th>FIGO Stages</th>
</tr>
</thead>
<tbody>
<tr>
<td>M0</td>
<td>No distant metastasis</td>
</tr>
<tr>
<td>M1</td>
<td>Distant metastasis (including pelvic lymph node metastasis)</td>
</tr>
</tbody>
</table>
Merkel Cell Carcinoma

(Staging for Merkel Cell of the eyelid [C44.1] is not included in this chapter – see Chap. 48, “Carcinoma of the Eyelid”)

At-A-Glance

SUMMARY OF CHANGES

- This is the first staging chapter specific for Merkel cell carcinoma. Merkel cell carcinoma was previously included in the “Carcinoma of the Skin” chapter

ANATOMIC STAGE/PROGNOSTIC GROUPS

Patients with primary Merkel cell carcinoma with no evidence of regional or distant metastases (either clinically or pathologically) are divided into two stages: Stage I for primary tumors ≤2 cm in size and Stage II for primary tumors >2 cm in size. Stages I and II are further divided into A and B substages based on method of nodal evaluation. Patients who have pathologically proven node negative disease (by microscopic evaluation of their draining lymph nodes) have improved survival (substaged as A) compared with those who are only evaluated clinically (substaged as B). Stage II has an additional substage (IIC) for tumors with extracutaneous invasion (T4) and negative node status regardless of whether the negative node status was established microscopically or clinically. Stage III is also divided into A and B categories for patients with microscopically positive and clinically occult nodes (IIIA) and macroscopic nodes (IIIB). There are no subgroups of Stage IV Merkel cell carcinoma.

<table>
<thead>
<tr>
<th>Stage 0</th>
<th>Tis</th>
<th>N0</th>
<th>M0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage IA</td>
<td>T1</td>
<td>pN0</td>
<td>M0</td>
</tr>
<tr>
<td>Stage IB</td>
<td>T1</td>
<td>cN0</td>
<td>M0</td>
</tr>
<tr>
<td>Stage IIA</td>
<td>T2/T3</td>
<td>pN0</td>
<td>M0</td>
</tr>
<tr>
<td>Stage IIB</td>
<td>T2/T3</td>
<td>cN0</td>
<td>M0</td>
</tr>
<tr>
<td>Stage IIC</td>
<td>T4</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>Stage IIIA</td>
<td>Any T</td>
<td>N1a</td>
<td>M0</td>
</tr>
<tr>
<td>Stage IIIB</td>
<td>Any T</td>
<td>cN1/N1b/N2</td>
<td>M0</td>
</tr>
<tr>
<td>Stage IV</td>
<td>Any T</td>
<td>Any N</td>
<td>M1</td>
</tr>
</tbody>
</table>

Note: Isolated tumor cells should be considered positive nodes, similar to melanoma (see Chapter 31).

ICD-O-3 TOPOGRAPHY CODES

- C44.0 Skin of lip, NOS
- C44.2 External ear
- C44.3 Skin of other and unspecified parts of face
- C44.4 Skin of scalp and neck
- C44.5 Skin of trunk
- C44.6 Skin of upper limb and shoulder
- C44.7 Skin of lower limb and hip
- C44.8 Overlapping lesion of skin
- C44.9 Skin, NOS
- C51.0 Labium majus
- C51.1 Labium minus
- C51.2 Clitoris
- C51.8 Overlapping lesion of vulva
- C51.9 Vulva, NOS
- C60.0 Prepuce
- C60.1 Glans penis
- C60.2 Body of penis
- C60.8 Overlapping lesion of penis
- C60.9 Penis, NOS
- C63.2 Scrotum, NOS

ICD-O-3 HISTOLOGY CODE RANGES

8247

Updated July 1, 2011
negative disease (by microscopic evaluation of their draining lymph nodes) have improved survival (substaged as A) compared to those who are only evaluated clinically (substaged as B). Stage II has an additional substage (IIC) for tumors with extracutaneous invasion (T4) and negative node status regardless of whether the negative node status was established microscopically or clinically. Stage III is also divided into A and B categories for patients with microscopically positive and clinically occult nodes (IIIA) and macroscopic nodes (IIIB). There are no subgroups of Stage IV Merkel cell carcinoma.

<table>
<thead>
<tr>
<th>Stage</th>
<th>T</th>
<th>N</th>
<th>M</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Tis</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>IA</td>
<td>T1</td>
<td>pN0</td>
<td>M0</td>
</tr>
<tr>
<td>IB</td>
<td>T1</td>
<td>cN0</td>
<td>M0</td>
</tr>
<tr>
<td>IIA</td>
<td>T2/T3</td>
<td>pN0</td>
<td>M0</td>
</tr>
<tr>
<td>IIB</td>
<td>T2/T3</td>
<td>cN0</td>
<td>M0</td>
</tr>
<tr>
<td>IIC</td>
<td>T4</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>IIIA</td>
<td>Any T</td>
<td>N1a</td>
<td>M0</td>
</tr>
<tr>
<td>IIIB</td>
<td>Any T</td>
<td>cN1/N1b/N2</td>
<td>M0</td>
</tr>
<tr>
<td>IV</td>
<td>Any T</td>
<td>Any N</td>
<td>M1</td>
</tr>
</tbody>
</table>

Note: Isolated tumor cells should be considered positive nodes, similar to melanoma (see Chapter 31).

**REFERENCES**


**PROGNOSTIC FACTORS (SITE-SPECIFIC FACTORS) (Recommended for Collection)**

- **Required for staging**: None
- **Clinically significant**:
  - Measured thickness (depth)
  - Tumor base transection status
  - Profound immune suppression
  - Tumor infiltrating lymphocytes in the primary tumor (TIL)
  - Growth pattern of primary tumor
  - Size of tumor nests in regional lymph nodes
  - Clinical status of regional lymph nodes
  - Regional lymph nodes pathological extracapsular extension
  - Isolated tumor cells in regional lymph node(s)

**HISTOLOGIC GRADE (G)**

Histologic grade is not used in the staging of Merkel cell carcinoma.

**HISTOPATHOLOGIC TYPE**

While several distinct morphologic patterns have been described for MCC, these have not been reproducibly found to be of prognostic significance. These histologic subtypes include: intermediate type (most common), small cell type (second most common), and trabecular type (least common but most characteristic pattern of MCC).
AJCC 7th Edition Errata for 5th Reprint
Table 2
Manual
with a significantly increased risk of local recurrence and should be classified as positive (Figure 14.3).

**Residual Tumor (R)** The completeness of resection is largely dependent on the status of the CRM, although the designation is global and would include the transverse margins and other disease observed but not removed at surgery. The resection (R) codes should be given for each procedure:

- **R0**—Complete tumor resection with all margins histologically negative
- **R1**—Incomplete tumor resection with microscopic surgical resection margin involvement (margins grossly uninvolved)
- **R2**—Incomplete tumor resection with gross residual tumor that was not resected (primary tumor, regional nodes, macroscopic margin involvement)

**Isolated Tumor Cells and Molecular Node Involvement.** As technology progresses and sentinel node biopsy or other procedures may become feasible in colon and rectal surgery, the issue of interpretation of very small amounts of detected tumor in regional lymph nodes will continue to be classified as pN0, and the universal terminology for these isolated tumor cells (ITC) will follow the terminology referenced in Chap. 1. The prognostic significance of ITCs, defined as single malignant cells or a few tumor cells in microclusters, identified in regional lymph nodes that otherwise would be considered to be negative is still unclear. Therefore, ITC identified the collection of data on ITC that may be generated by pathologists who use special immunohistochemical stains or molecular analysis procedures to identify ITC in nodes that might otherwise be considered negative for metastasis by standard hematoxylin and eosin (H&E). It should be noted that isolated tumor cells identified on H&E stains alone are also classified as ITC and are annotated in the same fashion as ITC seen on immunohistochemical stains (i.e., pN0(i+); “i” = “isolated tumor cells”).

**KRAS.** Analysis of multiple recent clinical trials has shown that the presence of a mutation in either codon 12 or 13 of KRAS (abnormal or “mutated” KRAS) is strongly associated with a lack of response to treatment with anti-EGFR antibodies in patients with metastatic colorectal carcinoma. It is recommended that patients with advanced colorectal carcinoma be tested for the presence of mutations in KRAS if treatment will include an anti-EGFR antibody. Where the status of KRAS is known, it should be recorded as a site-specific factor as either Normal (“Wild Type”) or Abnormal (“Mutated”).

**Anatomic Boundary.** The boundary between the rectum and anal canal most often has been equated with the dentate line, which is identified pathologically. However, with advances in sphincter-preservation surgery, defining the boundary between the rectum and the anus as the anorectal ring, which corresponds to the proximal border of the puborectalis muscle palpable on digital rectal examination, is more appropriate.

**TNM Stage of Disease.** Since publication of the sixth edition, new prognostic data with regard to survival and disease relapse justifies further substaging of both Stages II and III (Tables 14.1–14.7) by anatomic criteria. Differential prognosis has been shown for patients with T4 lesions based on the extent of disease in SEER analyses for both rectal cancer (Tables 14.4 and 14.5) and colon cancer (Tables 14.6 and 14.7). Accordingly, for the seventh edition of AJCC, T4 lesions have been subdivided as T4a (tumor penetrates to the surface of the visceral peritoneum) and T4b (tumor directly invades or is adherent to other organs or structures). In addition, the number of nodes involved by metastasis has been shown to influence prognosis within both N1 and N2 groups, in separate analyses of SEER (rectal cancer, Tables 14.4–14.5, Figure 14.2; colon cancer, Tables 14.4–14.7; Figure 14.1). For the SEER analyses, both relative and observed survival are listed by TN category of disease (relative survival is survival corrected by age-related comorbidity; see Chap. 2 for more information). Also the total number of nodes examined has an important impact on survival in colon and rectal cancer (Figures 14.1 and 14.2). The impact of increased nodes examined in the resected specimen is clearly associated with better outcome in colon cancer for all combinations of T and N (Figure 14.1) whereas the association holds in T1–T3 lesions in rectal cancer but appears to be less important in T4a and T4b lesions, perhaps because of the greater use of preoperative radiation or concurrent chemoradiation of the smaller number of patients in the rectal carcinoma subgroups (Figure 14.2).
ANATOMIC STAGE/PROGNOSTIC GROUPS

0  Tis  N0  M0
I  T1  N0  M0
II  T2  N0  M0  T3  N0  M0
IIIA  T1  N1  M0  T2  N1  M0  T3  N1  M0  T4  N0  M0
IIIB  T4  N1  M0  Any T  N2  M0  Any T  N3  M0
IV  Any T  Any N  M1

PROGNOSTIC FACTORS (SITE-SPECIFIC FACTORS) (Recommended for Collection)

Required for staging  None
Clinically significant  HPV Status

HISTOLOGIC GRADE (G)

Grade is reported in registry systems by the grade value. A two-grade, three-grade, or four-grade system may be used. If a grading system is not specified, generally the following system is used:

GX  Grade cannot be assessed
G1  Well differentiated
G2  Moderately differentiated
G3  Poorly differentiated
G4  Undifferentiated

HISTOPATHOLOGIC TYPE

The staging system applies to all carcinomas arising in the anal canal, including carcinomas that arise within anorectal fistulas. Melanomas, carcinoid tumors, and sarcomas are excluded from this staging system. Most carcinomas of the anal canal are squamous cell carcinomas. The WHO classification of the types and subtypes of carcinomas of the anal canal is shown later. The terms transitional cell and cloacogenic carcinoma have been abandoned, because these tumors are now recognized as nonkeratinizing types of squamous cell carcinoma.

FIGURE 15.10. (A) N3 is defined as metastasis in perirectal and inguinal lymph nodes (as illustrated) and/or bilateral internal iliac and/or inguinal lymph nodes. (B) N3: metastases in bilateral internal iliac lymph nodes. (C) N3: metastases in bilateral internal iliac and inguinal lymph nodes.
Liver metastasis implies the presence of tumor inside the liver parenchyma as one or more nodules. Adherence to liver capsule, even if extensive, as sometimes seen in gastric GISTs, should not be considered liver metastasis.

PROGNOSTIC FEATURES

In some cases, patients have survived for a long time after a solitary intra-abdominal GIST metastasis. Tumors with mitotic rates in the lower end of “high mitotic rate” (6–10 mitoses/50 HPFs) may behave better than those with significantly elevated mitotic rates (>10 mitoses/50 HPFs).

There may be differences in behavior between GISTs with different types of KIT and PDGFRA mutations. Because of limitations of the universal application of mutation studies (most importantly, their limited availability), mutations are not considered in this staging system. Further research is needed to examine these and other prognostic factors in detail.

Tables 16.1 and 16.2 show the disease progression of gastric and small intestinal GISTs.

DEFINITIONS OF TNM (FOR GISTS AT ALL SITES)

<table>
<thead>
<tr>
<th>Primary Tumor (T)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TX: Primary tumor cannot be assessed</td>
</tr>
<tr>
<td>T0: No evidence for primary tumor</td>
</tr>
<tr>
<td>T1: Tumor 2 cm or less</td>
</tr>
<tr>
<td>T2: Tumor more than 2 cm but not more than 5 cm</td>
</tr>
<tr>
<td>T3: Tumor more than 5 cm but not more than 10 cm</td>
</tr>
<tr>
<td>T4: Tumor more than 10 cm in greatest dimension</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Regional Lymph Nodes (N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>N0: No regional lymph node metastasis*</td>
</tr>
<tr>
<td>N1: Regional lymph node metastasis</td>
</tr>
</tbody>
</table>

*If regional node status is unknown, use N0, not NX

<table>
<thead>
<tr>
<th>Distant Metastasis (M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>M0: No distant metastasis</td>
</tr>
<tr>
<td>M1: Distant metastasis</td>
</tr>
</tbody>
</table>

Table 16.1. Disease progression in gastric GISTs

<table>
<thead>
<tr>
<th>Stage</th>
<th>Tumor size (cm)</th>
<th>Mitotic rate</th>
<th>Prognostic group*</th>
<th>Observed rate of progressive disease*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage IA</td>
<td>≤5</td>
<td>Low</td>
<td>1, 2</td>
<td>0–2%</td>
</tr>
<tr>
<td>Stage IB</td>
<td>&gt;5–10</td>
<td>Low</td>
<td>3a</td>
<td>3–4%</td>
</tr>
<tr>
<td>Stage II</td>
<td>&gt;10</td>
<td>High</td>
<td>4</td>
<td>Insufficient data</td>
</tr>
<tr>
<td>Stage IIIA</td>
<td>&gt;5–10</td>
<td>High</td>
<td>5</td>
<td>15%</td>
</tr>
<tr>
<td>Stage IIIB</td>
<td>&gt;10</td>
<td>Low</td>
<td>3b</td>
<td>12%</td>
</tr>
<tr>
<td>Stage IV</td>
<td>&gt;10</td>
<td>High</td>
<td>6a</td>
<td>49%</td>
</tr>
<tr>
<td>IIIB</td>
<td>&gt;10</td>
<td>High</td>
<td>6b</td>
<td>86%</td>
</tr>
</tbody>
</table>

*From Miettinen M, Makhlouf HR, Sobin LH, Lasota J. Gastrointestinal stromal tumors (GISTs) of the jejunum and ileum – a clinicopathologic, immunohistochemical and molecular genetic study of 906 cases prior to imatinib with long-term follow-up. Am J Surg Pathol. 2006;30:477–89, with permission from Lippincott Williams & Wilkins.

Table 16.2. Disease progression in small intestinal GIST

<table>
<thead>
<tr>
<th>Stage</th>
<th>Tumor size (cm)</th>
<th>Mitotic rate</th>
<th>Prognostic group*</th>
<th>Observed rate of progressive disease*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage IA</td>
<td>≤5</td>
<td>Low</td>
<td>1, 2</td>
<td>0–2%</td>
</tr>
<tr>
<td>Stage IB</td>
<td>&gt;5–10</td>
<td>Low</td>
<td>3a</td>
<td>3–4%</td>
</tr>
<tr>
<td>Stage II</td>
<td>&gt;10</td>
<td>High</td>
<td>4</td>
<td>Insufficient data</td>
</tr>
<tr>
<td>Stage IIIA</td>
<td>&gt;5–10</td>
<td>High</td>
<td>5</td>
<td>15%</td>
</tr>
<tr>
<td>Stage IIIB</td>
<td>&gt;10</td>
<td>Low</td>
<td>3b</td>
<td>12%</td>
</tr>
<tr>
<td>Stage IV</td>
<td>&gt;10</td>
<td>High</td>
<td>6a</td>
<td>49%</td>
</tr>
</tbody>
</table>


HISTOPATHOLOGIC GRADE

Grading for GISTs is dependent on mitotic rate

Low mitotic rate: 5 or fewer per 50 HPF

High mitotic rate: over 5 per 50 HPF

ANATOMIC STAGE/PROGNOSTIC GROUPS

<table>
<thead>
<tr>
<th>Gastric GIST*</th>
<th>Group</th>
<th>T</th>
<th>N</th>
<th>M</th>
<th>Mitotic rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage I</td>
<td>T1 or T2</td>
<td>N0</td>
<td>M0</td>
<td>Low</td>
<td></td>
</tr>
<tr>
<td>Stage II</td>
<td>T1</td>
<td>N0</td>
<td>M0</td>
<td>High</td>
<td></td>
</tr>
<tr>
<td>Stage IIIA</td>
<td>T3</td>
<td>N0</td>
<td>M0</td>
<td>High</td>
<td></td>
</tr>
<tr>
<td>Stage IIIB</td>
<td>T4</td>
<td>N0</td>
<td>M0</td>
<td>High</td>
<td></td>
</tr>
<tr>
<td>Stage IV</td>
<td>Any T</td>
<td>N1</td>
<td>M0</td>
<td>Any rate</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Small Intestinal GIST**</th>
<th>Group</th>
<th>T</th>
<th>N</th>
<th>M</th>
<th>Mitotic rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage I</td>
<td>T1 or T2</td>
<td>N0</td>
<td>M0</td>
<td>Low</td>
<td></td>
</tr>
<tr>
<td>Stage II</td>
<td>T3</td>
<td>N0</td>
<td>M0</td>
<td>Low</td>
<td></td>
</tr>
<tr>
<td>Stage IIIA</td>
<td>T1</td>
<td>N0</td>
<td>M0</td>
<td>High</td>
<td></td>
</tr>
<tr>
<td>Stage IIIB</td>
<td>T4</td>
<td>N0</td>
<td>M0</td>
<td>High</td>
<td></td>
</tr>
<tr>
<td>Stage IV</td>
<td>Any T</td>
<td>N1</td>
<td>M0</td>
<td>Any rate</td>
<td></td>
</tr>
</tbody>
</table>

*Note: Also to be used for omentum.

**Note: Also to be used for esophagus, colorectal, mesentery, and peritoneum.
ANATOMY

Primary Site. The gallbladder is a pear-shaped saccular organ located under the liver situated in line with the physiologic division of the right and left lobes of the liver (Cantlie’s line). It straddles Couinaud segments IVb and V. The organ can be divided into three parts: a fundus, a body, and a neck, which tapers into the cystic duct (Figure 20.1). The wall is considerably thinner than that of other hollow organs and lacks a submucosal layer. Its make up consists of a mucosa, a muscular layer, perimuscular connective tissue, and a serosa on one side (serosa is lacking on the side embedded in the liver). An important anatomic consideration is that the serosa along the liver edge is more densely adherent to the liver (cystic plate) and much of this is often left behind at the time of cholecystectomy. For this reason, partial hepatic resection incorporating portions of segments IVb and V is undertaken for some cases. Primary carcinomas of the cystic duct are included in this staging classification schema.

Regional Lymph Nodes. For accurate staging, all nodes removed at operation should be assessed for metastasis. Regional lymph nodes are limited to the hepatic hilus (including nodes along the common bile duct, hepatic artery, portal vein, and cystic duct). Celiac and superior mesenteric artery node involvement is now considered distant metastatic disease.

Metastatic Sites. Cancers of the gallbladder usually metastasize to the peritoneum and liver and occasionally to the lungs and pleura.

RULES FOR CLASSIFICATION

Gallbladder cancers are staged primarily on the basis of surgical exploration or resection, but not all patients with gallbladder cancer undergo surgical resection. Many in situ and early-stage carcinomas are not recognized grossly. They are usually staged pathologically on histologic examination of the resected specimen. The T classification depends on the depth of tumor penetration into the wall of the gallbladder, on the presence or absence of tumor invasion into the liver, hepatic artery, or portal vein, and on the presence or absence of adjacent organ involvement. Direct tumor extension into the liver is not considered distant metastasis (M). Likewise, direct invasion of other adjacent organs, including colon, duodenum, stomach, common bile duct, abdominal wall, and diaphragm, is not considered distant metastasis but is classified in the T category (T3 or T4). Tumor confined to the gallbladder is classified as either T1 or T2, depending on the depth of invasion. It must be noted that because there is no serosa on the gallbladder on the side attached to the liver, a simple cholecystectomy may not completely remove a T2 tumor, even though such tumors are considered to be confined to the gallbladder.

Validation. Validation of stage grouping is based on multivariate analyses of outcome and survival data of the National Cancer Database (totaling 10,705 patients nationwide, Figure 20.2).

Clinical Staging. Clinical evaluation usually depends on the results of ultrasonography, computed tomography, and magnetic resonance cholangiopancreatography. Clinical staging may also be based on findings from surgical exploration (laparoscopic or open) when the main tumor mass is not resected.

Pathologic Staging. Pathologic staging is based on examination of the surgical resection specimen.

The extent of resection (R0, complete resection with grossly and microscopically negative margins of resection; R1, grossly negative but microscopically positive margins of resection; R2, grossly and microscopically positive margins of resection) is a descriptor in the TNM staging system and is
DEFINITIONS OF TNM

Primary Tumor (T)

TX Primary tumor cannot be assessed, or tumor proven by the presence of malignant cells in sputum or bronchial washings but not visualized by imaging or bronchoscopy
T0 No evidence of primary tumor
Tis Carcinoma in situ
T1 Tumor 3 cm or less in greatest dimension, surrounded by lung or visceral pleura, without bronchoscopic evidence of invasion more proximal than the lobar bronchus (i.e., not in the main bronchus)*
T1a Tumor more than 3 cm but 5 cm or less in greatest dimension
T1b Tumor more than 5 cm but 7 cm or less in greatest dimension
T2 Tumor more than 7 cm or one that directly invades any of the following features (T2 tumors with these features are classified T2a if 5 cm or less); Involves main bronchus, 2 cm or more distal to the carina; Invades visceral pleura (PL1 or PL2); Associated with atelectasis or obstructive pneumonitis that extends to the hilar region but does not involve the entire lung
T2a Tumor more than 3 cm but 5 cm or less in greatest dimension
T2b Tumor more than 5 cm but 7 cm or less in greatest dimension
T3 Tumor of any size that invades any of the following: mediastinum, heart, great vessels, trachea, recurrent laryngeal nerve, esophagus, vertebral body, carina, separate tumor nodule(s) in a different ipsilateral lobe
T4 Tumor of any size that invades any of the following: mediastinum, heart, great vessels, trachea, recurrent laryngeal nerve, esophagus, vertebral body, carina, separate tumor nodule(s) in the same lobe

Regional Lymph Nodes (N)

NX Regional lymph nodes cannot be assessed
N0 No regional lymph node metastases
N1 Metastasis in ipsilateral peribronchial and/or ipsilateral hilar lymph nodes and intrapulmonary nodes, including involvement by direct extension
N2 Metastasis in ipsilateral mediastinal and/or subcarinal lymph node(s)
N3 Metastasis in contralateral mediastinal, contralateral hilar, ipsilateral or contralateral scalene, or supraclavicular lymph node(s)

Distant Metastasis (M)

M0 No distant metastasis
M1 Distant metastasis
M1a Separate tumor nodule(s) in a contralateral lobe tumor with pleural nodules or malignant pleural (or pericardial) effusion*
M1b Distant metastasis (in extrathoracic organs)

*Most pleural (and pericardial) effusions with lung cancer are due to tumor. In a few patients, however, multiple cytopathologic examinations of pleural (pericardial) fluid are negative for tumor, and the fluid is nonbloody and is not an exudate. Where these elements and clinical judgment dictate that the effusion is not related to the tumor, the effusion should be excluded as a staging element and the patient should be classified as M0.

ANATOMIC STAGE/PROGNOSTIC GROUPS

<table>
<thead>
<tr>
<th>Occult carcinoma</th>
<th>TX</th>
<th>N0</th>
<th>M0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage 0</td>
<td>Tis</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>Stage IA</td>
<td>T1a</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td></td>
<td>T1b</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>Stage IB</td>
<td>T2a</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>Stage IIA</td>
<td>T2b</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td></td>
<td>T1a</td>
<td>N1</td>
<td>M0</td>
</tr>
<tr>
<td></td>
<td>T1b</td>
<td>N1</td>
<td>M0</td>
</tr>
<tr>
<td></td>
<td>T2a</td>
<td>N1</td>
<td>M0</td>
</tr>
<tr>
<td>Stage IIB</td>
<td>T2b</td>
<td>N1</td>
<td>M0</td>
</tr>
<tr>
<td></td>
<td>T3</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>Stage IIIA</td>
<td>T1a</td>
<td>N2</td>
<td>M0</td>
</tr>
<tr>
<td></td>
<td>T1b</td>
<td>N2</td>
<td>M0</td>
</tr>
<tr>
<td></td>
<td>T2a</td>
<td>N2</td>
<td>M0</td>
</tr>
<tr>
<td></td>
<td>T2b</td>
<td>N2</td>
<td>M0</td>
</tr>
<tr>
<td></td>
<td>T3</td>
<td>N1</td>
<td>M0</td>
</tr>
<tr>
<td></td>
<td>T3</td>
<td>N2</td>
<td>M0</td>
</tr>
<tr>
<td></td>
<td>T4</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td></td>
<td>T4</td>
<td>N1</td>
<td>M0</td>
</tr>
<tr>
<td>Stage IIIB</td>
<td>T1a</td>
<td>N3</td>
<td>M0</td>
</tr>
<tr>
<td></td>
<td>T1b</td>
<td>N3</td>
<td>M0</td>
</tr>
<tr>
<td></td>
<td>T2a</td>
<td>N3</td>
<td>M0</td>
</tr>
<tr>
<td></td>
<td>T2b</td>
<td>N3</td>
<td>M0</td>
</tr>
<tr>
<td></td>
<td>T3</td>
<td>N3</td>
<td>M0</td>
</tr>
<tr>
<td></td>
<td>T4</td>
<td>N2</td>
<td>M0</td>
</tr>
<tr>
<td></td>
<td>T4</td>
<td>N3</td>
<td>M0</td>
</tr>
<tr>
<td>Stage IV</td>
<td>Any T</td>
<td>Any N</td>
<td>M1a</td>
</tr>
<tr>
<td></td>
<td>Any T</td>
<td>Any N</td>
<td>M1b</td>
</tr>
</tbody>
</table>


Updated July 1, 2011
INTRODUCTION

This classification is used for all primary malignant tumors of bone except primary malignant lymphoma and multiple myeloma. These tumors are relatively rare, representing less than 0.2% of all malignancies. Osteosarcoma (35%), chondrosarcoma (30%), and Ewing’s sarcoma (16%) are the three most common forms of primary bone cancer. Osteosarcoma and Ewing’s sarcoma develop mainly in children and young adults, whereas chondrosarcoma is usually found in middle aged and older adults. Data from these three histologies analyzed at multiple institutions, predominantly influence this staging system. Staging of bone sarcomas is the process whereby patients are evaluated with regard to histology, as well as the local and distant extent of disease. Bone sarcomas are staged based on grade, size, and the presence and location of metastases. The system is designed to help stratify patients according to known risk factors.

ANATOMY

Primary Site. All bones of the skeleton are included in this system. The current staging system does not take into account anatomic site. However, anatomic site is known to influence outcome, and therefore outcome data should be reported specifying site.

Site groups for bone sarcoma:

- Extremity
- Pelvis
- Spine

Regional Lymph Nodes. Regional lymph metastases from bone tumors are extremely rare.

Metastatic Sites. A metastatic site includes any site beyond the regional lymph nodes of the primary site. Pulmonary metastases are the most frequent site for all bone sarcomas. Extra pulmonary metastases occur infrequently, and may include secondary bone metastases, for example.

RULES FOR CLASSIFICATION

Clinical Staging. Clinical staging includes all relevant data prior to primary definitive therapy, including physical examination, imaging, and biopsy. It is dependent on the T, N, M characteristics of the identified tumor. T is divided into lesions of maximum dimension 8 cm or less (T1), and lesions greater than 8 cm (T2). T3 has been redefined to include only high-grade tumors, discontinuous, within the same bone. Metastatic disease should be evaluated for and described. In general, the minimum clinical staging workup of a bone sarcoma should include axial imaging using MRI and/or CT, CT scan of the chest, and technetium scintigraphy of the entire skeleton.

The radiograph remains the mainstay in determining whether a lesion of bone requires staging and usually is the modality that permits reliable prediction of the probable histology of a lesion of bone.

Local staging of all bone sarcomas is most accurately achieved by magnetic resonance (MR) imaging. Axial imaging, complemented by either coronal or sagittal imaging planes using T1- and T2-weighted SPIN-echo sequences, most often provides accurate depiction of intra- and extrasosseous tumor. To improve conspicuity in locations such as the pelvis or vertebrae, these sequences could be augmented by fat-suppressed pulse sequences. The maximum dimension of the tumor must be measured prior to any treatment. The decision to use intravenous contrast should be based upon medical appropriateness.

Computerized tomography (CT) has a limited role in local staging of tumors. In those situations, where characterization of a lesion by radiography may be incomplete or difficult because of inadequate visualization of the matrix of a lesion, CT may be preferred to MR imaging. The role of CT in these circumstances is to characterize the lesion and determine whether it is potentially malignant or not, and the obtained CT images may suffice for local staging. CT remains the examination of choice for evaluating the presence or absence of pulmonary metastases.

Technetium scintigraphy is the examination of choice for evaluating the entire skeleton to determine whether there are multiple bony lesions. The role of positron emission tomography (PET) in the evaluation and staging of bone sarcomas remains incompletely defined. Reports indicate usefulness in detecting extrapulmonary metastases, evaluating response to chemotherapy, and determining local recurrence adjacent to prosthetic implants.

Biopsy. Biopsy of the tumor completes the staging process, and the location of the biopsy must be carefully planned to allow for eventual en bloc resection of the entire biopsy tract together with a malignant neoplasm. Staging of the lesion should precede biopsy. Imaging the tumor after biopsy may compromise the accuracy of the staging process.

Pathologic Staging. The pathologic diagnosis is based on the microscopic examination of tissue, correlated with imaging studies. Pathologic staging pTNM includes pathologic data obtained from examination of a resected specimen sufficient to evaluate the highest T category, histopathologic type and grade, regional lymph nodes as appropriate, or distant metastasis. Because regional lymph node involvement from bone tumors is rare, the pathologic stage grouping includes any of the following combinations: pT pG pN pM, or pT pG cN cM, or cT cN pM. Grade should be assigned to all bone sarcomas. Based upon published outcomes data, the current staging system accommodates a two-tiered system (low vs. high grade) for recording grade.

Restaging of Recurrent Tumors. The same staging should be used when a patient requires restaging of sarcoma recurrence. Such reports should specify whether patients have
to be associated with significantly better overall and event-free survival than patients lacking HLA class I expression in osteosarcoma. Finally, telomerase expression in osteosarcoma is associated with decreased progression free survival and overall survival.

Investigation to identify molecular markers in chondrosarcoma has progressed at a slower pace. Rozeman et al. investigated a variety of markers, none of which had prognostic importance independent of histologic grade. Decreased Indian Hedgehog signaling and loss of INK4A/p16 has been found to be important in the progression of peripheral chondrosarcoma and enchondroma, respectively.

**DEFINITIONS OF TNM**

**Primary Tumor (T)**
- TX: Primary tumor cannot be assessed
- T0: No evidence of primary tumor
- T1: Tumor 8 cm or less in greatest dimension
- T2: Tumor more than 8 cm in greatest dimension
- T3: Discontinuous tumors in the primary bone site

**Regional Lymph Nodes (N)**
- NX: Regional lymph nodes cannot be assessed
- N0: No regional lymph node metastasis
- N1: Regional lymph node metastasis

**Distant Metastasis (M)**
- M0: No distant metastasis
- M1: Distant metastasis
  - M1a: Lung
  - M1b: Other distant sites

**ANATOMIC STAGE/PROGNOSTIC GROUPS**

<table>
<thead>
<tr>
<th>Stage</th>
<th>T1</th>
<th>N0</th>
<th>M0</th>
<th>G1,2 Low grade, GX</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage IB</td>
<td>T2</td>
<td>N0</td>
<td>M0</td>
<td>G1,2 Low grade, GX</td>
</tr>
<tr>
<td></td>
<td>T3</td>
<td>N0</td>
<td>M0</td>
<td>G1,2 Low grade, GX</td>
</tr>
<tr>
<td>Stage IIA</td>
<td>T1</td>
<td>N0</td>
<td>M0</td>
<td>G3,4 High grade</td>
</tr>
<tr>
<td>Stage IIB</td>
<td>T1</td>
<td>N0</td>
<td>M0</td>
<td>G3,4 High grade</td>
</tr>
<tr>
<td>Stage III</td>
<td>T3</td>
<td>N0</td>
<td>M0</td>
<td>G3,4 High grade</td>
</tr>
<tr>
<td>Stage IVA</td>
<td>Any T</td>
<td>N0</td>
<td>M1a</td>
<td>Any G</td>
</tr>
<tr>
<td>Stage IVB</td>
<td>Any T</td>
<td>N1</td>
<td>Any M</td>
<td>Any G</td>
</tr>
<tr>
<td></td>
<td>Any N</td>
<td>Any M</td>
<td>Any M1b</td>
<td>Any G</td>
</tr>
</tbody>
</table>

**PROGNOSTIC FACTORS (SITE-SPECIFIC FACTORS) (Recommended for Collection)**

- Required: Grade for staging
- Clinically significant: Three dimensions of tumor size
- Percentage necrosis post neoadjuvant systemic therapy from pathology report
- Number of resected pulmonary metastases from pathology report

**HISTOLOGIC GRADE (G)**

Grade is reported in registry systems by the grade value. A two-grade, three-grade, or four-grade system may be used. If a grading system is not specified, generally the following system is used:

- GX: Grade cannot be assessed
- G1: Well differentiated – low grade
- G2: Moderately differentiated – low grade
- G3: Poorly differentiated
- G4: Undifferentiated

**Note:** Ewing’s sarcoma is classified as G4.

**HISTOPATHOLOGIC TYPE**

**Classification of Primary Malignant Bone Tumors**

1. Osteosarcoma
   - Intramedullary high grade
     - Osteoblastic
     - Chondroblastic
     - Fibroblastic
     - Mixed
     - Small cell
     - Other (telangiectatic, epithelioid, chondromyxoid fibroma-like, chondroblastoma-like, osteoblastoma-like, giant cell rich)
   - Intramedullary low grade
   - Juxtacortical high grade (high grade surface osteosarcoma)
   - Juxtacortical intermediate grade chondroblastic (periosteal osteosarcoma)
   - Juxtacortical low grade (parosteal osteosarcoma)

2. Chondrosarcoma
   - Intramedullary
     - Conventional (hyaline/myxoid)
     - Clear cell
     - Dedifferentiated
     - Mesenchymal
   - Juxtacortical

3. Primitive neuroectodermal tumor/Ewing’s sarcoma

4. Angiosarcoma
   - Conventional
   - Epithelioid hemangioendothelioma
however, Lindelof and colleagues report that most lethal cSCCs in their study were 5–19 mm in diameter. They also point out that focusing on tumor size may be misleading in immunosuppressed populations because small tumors can behave very aggressively. For centers prospectively studying cSCC, recording of presence and type of immunosuppression is recommended.

**CONCLUSIONS**

The seventh edition of the AJCC Staging Manual features MCC as a separate chapter and cSCC is staged in this chapter entitled “Cutaneous Squamous Cell and Other Carcinomas.” The remainder of NMSC tumors (such as appendageal tumors and BCC) will also be included within the cSCC chapter since those tumors can rarely be advanced and are occasionally described to undergo metastasis. As the first published staging system devoted specifically to cSCC prognosis, this represents an important step for better understanding and studying the prognosis of this potentially metastatic tumor. Additionally, since many cSCC tumors occur on the head and neck, the seventh edition cSCC staging system is congruent with Head and Neck Cancer staging system. Furthermore, the new T staging definitions for the seventh edition cSCC now capture additional features believed to correlate with high-risk cSCC in order to more meaningfully stratify patients based on prospective systematic data. Certainly there is still a need for multivariate data analysis, particularly to determine the relative contributions of the various described T factors influencing cSCC prognosis. Finally, the new N staging definitions are congruent with Head and Neck staging and reflect recent data that suggests that prognosis is inversely correlated with increasing nodal disease.

**DEFINITIONS OF TNM**

Definitions for clinical (cTNM) and pathologic (pTNM) classifications are the same. Patients with cSCC in situ are categorized as Tis. Carcinomas that are indeterminate or cannot be staged should be category TX. Carcinomas 2 cm or less in diameter are T1, if they have fewer than two high-risk features. Clinical high-risk features include primary site on ear or hair-bearing lip. Histologic high-risk features include depth >2 mm, Clark level ≥IV/V, poor differentiation, and the presence of perineural invasion. Tumors greater than 2 cm in diameter are classified as T2. Tumors 2 cm or less in diameter are classified as T2 if the tumor has two or more high-risk features. Invasion into facial bones is classified as T3, while invasion to base of skull or axial skeleton is classified as T4.

Local and regional metastases most commonly present in the regional lymph nodes. The actual status of nodal metastases identified by clinical inspection or imaging and the status and number of positive and total nodes by pathologic analysis must be reported for staging purposes. In instances where lymph node status is not recorded, a designation of NX is used. A solitary parotid or regional lymph node metastasis measuring 3 cm or less in size is given a N1 designation. Several different lymph node states are classified as N2: N2a represents a single ipsilateral lymph node, more than 3 cm but not more than 6 cm in greatest dimension; N2b is defined by multiple ipsilateral lymph nodes, none more than 6 cm in greatest dimension; N2c includes bilateral or contralateral lymph nodes, none more than 6 cm in greatest dimension. Nodal metastases more than 6 cm in greatest dimension are classified as N3.

Distant metastases are staged primarily by the presence (M1) or absence (M0) of metastases in distant organs or sites outside of the regional lymph nodes.

<table>
<thead>
<tr>
<th>Primary Tumor (T)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>TX</td>
</tr>
<tr>
<td>T0</td>
</tr>
<tr>
<td>Tis</td>
</tr>
<tr>
<td>T1</td>
</tr>
<tr>
<td>T2</td>
</tr>
<tr>
<td>T2</td>
</tr>
<tr>
<td>T3</td>
</tr>
<tr>
<td>T4</td>
</tr>
</tbody>
</table>

*Excludes cSCC of the eyelid (see Chap. 48).

**High-risk features for the primary tumor (T) staging

<table>
<thead>
<tr>
<th>Depth/invasion</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;2 mm thickness</td>
</tr>
<tr>
<td>Clark level ≥IV</td>
</tr>
<tr>
<td>Perineural invasion</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Anatomic location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary site ear</td>
</tr>
<tr>
<td>Primary site hair-bearing lip</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Differentiation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poorly differentiated or undifferentiated</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Regional Lymph Nodes (N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NX</td>
</tr>
<tr>
<td>N0</td>
</tr>
<tr>
<td>N1</td>
</tr>
<tr>
<td>N2</td>
</tr>
<tr>
<td>N2a</td>
</tr>
<tr>
<td>N2b</td>
</tr>
<tr>
<td>N2c</td>
</tr>
<tr>
<td>N3</td>
</tr>
</tbody>
</table>
Merkel Cell Carcinoma

(Staging for Merkel Cell of the eyelid [C44.1] is not included in this chapter – see Chap. 48, “Carcinoma of the Eyelid”)

At-A-Glance

SUMMARY OF CHANGES

- This is the first staging chapter specific for Merkel cell carcinoma. Merkel cell carcinoma was previously included in the “Carcinoma of the Skin” chapter

ANATOMIC STAGE/PROGNOSTIC GROUPS

Patients with primary Merkel cell carcinoma with no evidence of regional or distant metastases (either clinically or pathologically) are divided into two stages: Stage I for primary tumors ≤2 cm in size and Stage II for primary tumors >2 cm in size. Stages I and II are further divided into A and B substages based on method of nodal evaluation. Patients who have pathologically proven node negative disease (by microscopic evaluation of their draining lymph nodes) have improved survival (substaged as A) compared with those who are only evaluated clinically (substaged as B). Stage II has an additional substage (IIC) for tumors with extracutaneous invasion (T4) and negative node status regardless of whether the negative node status was established microscopically or clinically. Stage III is also divided into A and B categories for patients with microscopically positive and clinically occult nodes (IIIA) and macroscopic nodes (IIIB). There are no subgroups of Stage IV Merkel cell carcinoma.

<table>
<thead>
<tr>
<th>Stage</th>
<th>T</th>
<th>pN</th>
<th>cN</th>
<th>N</th>
<th>M</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage 0</td>
<td>Tis</td>
<td>N0</td>
<td></td>
<td></td>
<td>M0</td>
</tr>
<tr>
<td>Stage I</td>
<td>T1</td>
<td>pN0</td>
<td>cN0</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>Stage II</td>
<td>T2/T3</td>
<td>pN0</td>
<td>cN0</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>Stage IIIC</td>
<td>T4</td>
<td></td>
<td></td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>Stage IIIA</td>
<td>Any T</td>
<td>N1a</td>
<td></td>
<td></td>
<td>M0</td>
</tr>
<tr>
<td>Stage IIIB</td>
<td>Any T</td>
<td>cN1/N1b/N2</td>
<td></td>
<td></td>
<td>M0</td>
</tr>
<tr>
<td>Stage IV</td>
<td>Any T</td>
<td>Any N</td>
<td></td>
<td></td>
<td>M1</td>
</tr>
</tbody>
</table>

Note: Isolated tumor cells should be considered positive nodes, similar to melanoma (see Chapter 31).

ICD-O-3 TOPOGRAPHY CODES

- C44.0 Skin of lip, NOS
- C44.2 External ear
- C44.3 Skin of other and unspecified parts of face
- C44.4 Skin of scalp and neck
- C44.5 Skin of trunk
- C44.6 Skin of upper limb and shoulder
- C44.7 Skin of lower limb and hip
- C44.8 Overlapping lesion of skin
- C44.9 Skin, NOS
- C51.0 Labium majus
- C51.1 Labium minus
- C51.2 Clitoris
- C51.8 Overlapping lesion of vulva
- C51.9 Vulva, NOS
- C60.0 Prepuce
- C60.1 Glans penis
- C60.2 Body of penis
- C60.8 Overlapping lesion of penis
- C60.9 Penis, NOS
- C63.2 Scrotum, NOS

ICD-O-3 HISTOLOGY CODE RANGE

- 8247

Updated July 1, 2011
than 5 cm (T3). Extracutaneous invasion by the primary tumor into bone, muscle, fascia, or cartilage is classified as T4. Inclusion of 2 cm MCC tumors as T1 is consistent with the prior AJCC staging system but differs from other frequently used MCC staging systems that categorize 2 cm tumors as T2. The breakdown of T category is conserved from the prior version of AJCC staging for “Carcinoma of the Skin.”

Regional metastases most commonly present in the regional lymph nodes. A second staging definition is related to nodal tumor burden: microscopic vs. macroscopic. Therefore, patients without clinical or radiologic evidence of lymph node metastases but who have pathologically documented nodal metastases are defined by convention as exhibiting “microscopic” or “clinically occult” nodal metastases. In contrast, MCC patients with both clinical evidence of nodal metastases and pathologic examination confirming nodal metastases are defined by convention as having “macroscopic” or “clinically apparent” nodal metastases. Nodes clinically positive by exam and negative by pathology would be classified as pN0. Clinically positive nodes in the draining nodal basin that are assumed to be involved with Merkel cell carcinoma but are without pathologic confirmation (no pathology performed) should be classified as N1b and the pathologic classification would be NX. Then in determining the stage grouping, it would be Stage IIIIB defaulting to the higher N category.

Distant metastases are defined as metastases that have spread beyond the draining lymph node basin, including cutaneous, nodal, and visceral sites.

**Regional Lymph Nodes (N)**

- NX Regional lymph nodes cannot be assessed
- N0 No regional lymph node metastasis
- cN0 Nodes negative by clinical exam* (no pathologic node exam performed)
- pN0 Nodes negative by pathologic exam
- N1 Metastasis in regional lymph node(s)
- N1a Micrometastasis**
- N1b Macrometastasis***
- N2 In transit metastasis****

*Clinical detection of nodal disease may be via inspection, palpation, and/or imaging.

**Isolated tumor cells in a lymph node are classified as micrometastases (N1a) and the presence of isolated tumor cells recorded using the prognostic factor. Micrometastases are diagnosed after sentinel or elective lymphadenectomy.

***Macrometastases are defined as clinically detectable nodal metastases confirmed by therapeutic lymphadenectomy or needle biopsy.

****In transit metastasis: a tumor distinct from the primary lesion and located either (1) between the primary lesion and the draining regional lymph nodes or (2) distal to the primary lesion.

**ANATOMIC STAGE/PROGNOSTIC GROUPS**

Patients with primary Merkel cell carcinoma with no evidence of regional or distant metastases (either clinically or pathologically) are divided into two stages: Stage I for primary tumors ≤2 cm in size and Stage II for primary tumors >2 cm in size. Stages I and II are further divided into A and B substages based on method of nodal evaluation. Patients who have pathologically proven node-negative lymph nodes are classified as N0.

**Primary Tumor (T)**

| T0 | No evidence of primary tumor (e.g., nodal/metastatic presentation without associated primary) |
| Tis | In situ primary tumor |
| T1 | Less than or equal to 2 cm maximum tumor dimension |
| T2 | Greater than 2 cm but not more than 5 cm maximum tumor dimension |
| T3 | Over 5 cm maximum tumor dimension |
| T4 | Primary tumor invades bone, muscle, fascia, or cartilage |

**Distant Metastasis (M)**

| M0 | No distant metastasis |
| M1 | Metastasis beyond regional lymph nodes |
| M1a | Metastasis to skin, subcutaneous tissues or distant lymph nodes |
| M1b | Metastasis to lung |
| M1c | Metastasis to all other visceral sites |
negative disease (by microscopic evaluation of their draining lymph nodes) have improved survival (substaged as A) compared to those who are only evaluated clinically (substaged as B). Stage II has an additional substage (IIC) for tumors with extracutaneous invasion (T4) and negative node status regardless of whether the negative node status was established microscopically or clinically. Stage III is also divided into A and B categories for patients with microscopically positive and clinically occult nodes (IIIA) and macroscopic nodes (IIIB). There are no subgroups of Stage IV Merkel cell carcinoma.

Stage 0  Tis  N0  M0
Stage IA  T1  pN0  M0
Stage IB  T1  cN0  M0
Stage IIA  T2/T3  pN0  M0
Stage IIB  T2/T3  cN0  M0
Stage IIC  T4  N0  M0
Stage IIIA  Any T  N1a  M0
Stage IIIB  Any T  cN1/N1b/N2  M0
Stage IV  Any T  Any N  M1

Note: Isolated tumor cells should be considered positive nodes, similar to melanoma (see Chapter 31).

PROGNOSTIC FACTORS (SITE-SPECIFIC FACTORS) (Recommended for Collection)

Required for staging None
Clinically significant Measured thickness (depth) Tumor base transection status Profound immune suppression Tumor infiltrating lymphocytes in the primary tumor (TIL) Growth pattern of primary tumor Size of tumor nests in regional lymph nodes Clinical status of regional lymph nodes Regional lymph nodes pathological extra-capsular extension Isolated tumor cells in regional lymph node(s)

HISTOLOGIC GRADE (G)

Histologic grade is not used in the staging of Merkel cell carcinoma.

HISTOPATHOLOGIC TYPE

While several distinct morphologic patterns have been described for MCC, these have not been reproducibly found to be of prognostic significance. These histologic subtypes include: intermediate type (most common), small cell type (second most common), and trabecular type (least common but most characteristic pattern of MCC).

REFERENCES

**Histopathology: Degree of Differentiation.** Cases of carcinoma of the corpus uteri should be grouped according to the degree of differentiation of the adenocarcinoma as follows:

G1  5% or less of a nonsquamous or nonmorular solid growth pattern
G2  6–50% of a nonsquamous or nonmorular solid growth pattern
G3  More than 50% of a nonsquamous or nonmorular solid growth pattern

**Notes on Pathologic Grading**

1. Notable nuclear atypia, which exceeds that which is routinely expected for the architectural grade, increases the tumor grade by 1.
2. Serous, clear cell, and mixed mesodermal tumors are high risk and considered Grade 3.
3. Adenocarcinomas with benign squamous elements (squamous metaplasia) are graded according to the nuclear grade of the glandular component.

**Uterine Sarcomas.** (Includes Leiomyosarcoma, Endometrial Stromal Sarcoma, Adenosarcoma)

**Leiomyosarcoma and Endometrial Stromal Sarcoma**

<table>
<thead>
<tr>
<th>Primary Tumor (T)</th>
<th>TNM Categories</th>
<th>FIGO Stages</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>TX</td>
<td>TX</td>
<td>Primary tumor cannot be assessed</td>
<td></td>
</tr>
<tr>
<td>T0</td>
<td>T0</td>
<td>No evidence of primary tumor</td>
<td></td>
</tr>
<tr>
<td>T1</td>
<td>I</td>
<td>Tumor limited to the uterus</td>
<td></td>
</tr>
<tr>
<td>T1a</td>
<td>IA</td>
<td>Tumor 5 cm or less in greatest dimension</td>
<td></td>
</tr>
<tr>
<td>T1b</td>
<td>IB</td>
<td>Tumor more than 5 cm</td>
<td></td>
</tr>
<tr>
<td>T2</td>
<td>II</td>
<td>Tumor extends beyond the uterus, within the pelvis</td>
<td></td>
</tr>
<tr>
<td>T2a</td>
<td>IIA</td>
<td>Tumor involves adnexa</td>
<td></td>
</tr>
<tr>
<td>T2b</td>
<td>IIIB</td>
<td>Tumor involves other pelvic tissues</td>
<td></td>
</tr>
<tr>
<td>T3</td>
<td>III*</td>
<td>Tumor infiltrates abdominal tissues</td>
<td></td>
</tr>
<tr>
<td>T3a</td>
<td>IIIA</td>
<td>One site</td>
<td></td>
</tr>
<tr>
<td>T3b</td>
<td>IIIB</td>
<td>More than one site</td>
<td></td>
</tr>
<tr>
<td>T4</td>
<td>IVA</td>
<td>Tumor invades bladder or rectum</td>
<td></td>
</tr>
</tbody>
</table>

**Regional Lymph Nodes (N)**

<table>
<thead>
<tr>
<th>Regional Lymph Nodes (N)</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>NX</td>
<td>Regional lymph nodes cannot be assessed</td>
</tr>
<tr>
<td>N0</td>
<td>No regional lymph node metastasis</td>
</tr>
<tr>
<td>N1</td>
<td>Regional lymph node metastasis</td>
</tr>
</tbody>
</table>

**Distant Metastasis (M)**

<table>
<thead>
<tr>
<th>Distant Metastasis (M)</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>M0</td>
<td>No distant metastasis</td>
</tr>
<tr>
<td>M1</td>
<td>Distant metastasis (excluding adnexa, pelvic and abdominal tissues)</td>
</tr>
</tbody>
</table>

**Note:** Simultaneous tumors of the uterine corpus and ovary/pelvis in association with ovarian/pelvic endometriosis should be classified as independent primary tumors.

*In this stage lesions must infiltrate abdominal tissues and not just protrude into the abdominal cavity.

**Adenosarcoma**

<table>
<thead>
<tr>
<th>Primary Tumor (T)</th>
<th>TNM Categories</th>
<th>FIGO Stages</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>TX</td>
<td>TX</td>
<td>Primary tumor cannot be assessed</td>
<td></td>
</tr>
<tr>
<td>T0</td>
<td>T0</td>
<td>No evidence of primary tumor</td>
<td></td>
</tr>
<tr>
<td>T1</td>
<td>I</td>
<td>Tumor limited to the uterus</td>
<td></td>
</tr>
<tr>
<td>T1a</td>
<td>IA</td>
<td>Tumor limited to the endometrium/endo cervix</td>
<td></td>
</tr>
<tr>
<td>T1b</td>
<td>IB</td>
<td>Tumor invades to less than half of the myometrium</td>
<td></td>
</tr>
<tr>
<td>T1c</td>
<td>IC</td>
<td>Tumor invades more than half of the myometrium</td>
<td></td>
</tr>
<tr>
<td>T2</td>
<td>II</td>
<td>Tumor extends beyond the uterus, within the pelvis</td>
<td></td>
</tr>
<tr>
<td>T2a</td>
<td>IIA</td>
<td>Tumor involves adnexa</td>
<td></td>
</tr>
<tr>
<td>T2b</td>
<td>IIB</td>
<td>Tumor involves other pelvic tissues</td>
<td></td>
</tr>
<tr>
<td>T3</td>
<td>III*</td>
<td>Tumor involves other pelvic tissues</td>
<td></td>
</tr>
<tr>
<td>T3a</td>
<td>IIIA</td>
<td>One site</td>
<td></td>
</tr>
<tr>
<td>T3b</td>
<td>IIIB</td>
<td>More than one site</td>
<td></td>
</tr>
<tr>
<td>T4</td>
<td>IVA</td>
<td>Tumor invades bladder or rectum</td>
<td></td>
</tr>
</tbody>
</table>

**Regional Lymph Nodes (N)**

<table>
<thead>
<tr>
<th>Regional Lymph Nodes (N)</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>NX</td>
<td>Regional lymph nodes cannot be assessed</td>
</tr>
<tr>
<td>N0</td>
<td>No regional lymph node metastasis</td>
</tr>
<tr>
<td>N1</td>
<td>Regional lymph node metastasis</td>
</tr>
</tbody>
</table>

**Distant Metastasis (M)**

<table>
<thead>
<tr>
<th>Distant Metastasis (M)</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>M0</td>
<td>No distant metastasis</td>
</tr>
<tr>
<td>M1</td>
<td>Distant metastasis (excluding adnexa, pelvic and abdominal tissues)</td>
</tr>
</tbody>
</table>

**Note:** Simultaneous tumors of the uterine corpus and ovary/pelvis in association with ovarian/pelvic endometriosis should be classified as independent primary tumors.

*In this stage lesions must infiltrate abdominal tissues and not just protrude into the abdominal cavity.

**Uterine Sarcomas**

**ANATOMIC STAGE/PROGNOSTIC GROUPS**

<table>
<thead>
<tr>
<th>Stage I</th>
<th>T1</th>
<th>N0</th>
<th>M0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage IA*</td>
<td>T1a</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>Stage IB*</td>
<td>T1b</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>Stage IC**</td>
<td>T1c</td>
<td>N0</td>
<td>M0</td>
</tr>
</tbody>
</table>
factor scoring system. The prognostic scores are 0, 1, 2, and 4 for the individual risk factors. The current prognostic scoring system eliminates the ABO blood group risk factors that were featured in the WHO scoring system and upgrades the risk factor for liver metastasis from 2 to 4, the highest category. Low risk is a score of 6 or less, and high risk is a score of 7 or greater.

**PROGNOSTIC FEATURES**

**Outcomes Results.** Gestational trophoblastic tumors may require only uterine evacuation for treatment, but even when chemotherapy is required, cure rates approach 100%. Prognostic factors are listed in the Prognostic Scoring Index. Patients with low-risk disease are usually treated with single-agent chemotherapy, whereas combined, multiple-agent chemotherapy usually results in a cure for high-risk patients.

**DEFINITIONS OF TNM**

**Primary Tumor (T)**

<table>
<thead>
<tr>
<th>TNM Categories</th>
<th>FIGO Stages</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>TX</td>
<td></td>
<td>Primary tumor cannot be assessed</td>
</tr>
<tr>
<td>T0</td>
<td>I</td>
<td>No evidence of primary tumor</td>
</tr>
<tr>
<td>T1</td>
<td>II</td>
<td>Tumor confined to uterus</td>
</tr>
<tr>
<td>T2</td>
<td>II</td>
<td>Tumor extends to other genital structures (ovary, tube, vagina, broad ligaments) by metastasis or direct extension</td>
</tr>
</tbody>
</table>

**Distant Metastasis (M)**

<table>
<thead>
<tr>
<th>TNM Categories</th>
<th>FIGO Stages</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>M0</td>
<td></td>
<td>No distant metastasis</td>
</tr>
<tr>
<td>M1</td>
<td>III</td>
<td>Distant metastasis</td>
</tr>
<tr>
<td>M1a</td>
<td>IV</td>
<td>Lung metastasis</td>
</tr>
<tr>
<td>M1b</td>
<td></td>
<td>All other distant metastasis</td>
</tr>
</tbody>
</table>

**ANATOMIC STAGE/PROGNOSTIC GROUPS**

<table>
<thead>
<tr>
<th>Group</th>
<th>T</th>
<th>M</th>
<th>Risk Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage I</td>
<td>T1</td>
<td>M0</td>
<td>Unknown</td>
</tr>
<tr>
<td>Stage IA</td>
<td>T1</td>
<td>M0</td>
<td>Low risk</td>
</tr>
<tr>
<td>Stage IB</td>
<td>T1</td>
<td>M0</td>
<td>High risk</td>
</tr>
<tr>
<td>Stage II</td>
<td>T2</td>
<td>M0</td>
<td>Unknown</td>
</tr>
<tr>
<td>Stage IIA</td>
<td>T2</td>
<td>M0</td>
<td>Low risk</td>
</tr>
<tr>
<td>Stage IIB</td>
<td>T2</td>
<td>M0</td>
<td>High risk</td>
</tr>
<tr>
<td>Stage III</td>
<td>Any T</td>
<td>M1a</td>
<td>Unknown</td>
</tr>
</tbody>
</table>

**PROGNOSTIC FACTORS (SITE-SPECIFIC FACTORS) (Recommended for Collection)**

- Required: Risk factors (Table 39.1)
- Clinically significant: FIGO Stage

**HISTOLOGIC GRADE (G)**

Grade is reported in registry systems by the grade value. A two-grade, three-grade, or four-grade system may be used. If a grading system is not specified, generally the following system is used:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GX</td>
<td>Grade cannot be assessed</td>
</tr>
<tr>
<td>G1</td>
<td>Well differentiated</td>
</tr>
<tr>
<td>G2</td>
<td>Moderately differentiated</td>
</tr>
<tr>
<td>G3</td>
<td>Poorly differentiated</td>
</tr>
<tr>
<td>G4</td>
<td>Undifferentiated</td>
</tr>
</tbody>
</table>

**HISTOPATHOLOGIC TYPE**

- Hydatidiform mole
  - Complete
  - Partial
- Invasive hydatidiform mole
- Choriocarcinoma
- Placental site trophoblastic tumors

**BIBLIOGRAPHY**


Clinical Staging

**Primary Tumor.** Clinical examination by palpation should be performed. Penile imaging studies may occasionally be useful. Histologic confirmation provided by an adequate excisional-incisional biopsy to determine the extent of anatomic invasion, tumor grade, and the presence of lymphovascular invasion is required.

**Regional Lymph Nodes.** Clinical examination by palpation of the inguinal region is required. Computed tomography is a useful adjunct to palpation in patients with palpable inguinal adenopathy or those in whom palpation is unreliable (i.e., obese, prior inguinal surgery)

**Distant Metastasis.** Clinical examination along with cross-sectional imaging and chest radiography should be performed as appropriate.

**Pathologic Staging.** Complete resection of the primary site with appropriate margins is required. Lymphadenectomy is performed in those patients felt to be at significant risk for metastasis by virtue of palpable adenopathy or histopathologic features of the primary tumor. Pathologic confirmation can also be achieved via lymph node biopsy of clinically suspicious lymph nodes. The definitions of primary tumor (T) for Ta, T1, T2, T3, and T4 are illustrated in Figures 40.1–40.5.

---

**DEFINITIONS OF TNM**

<table>
<thead>
<tr>
<th>Tumor</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>TX</td>
<td>Primary tumor cannot be assessed</td>
</tr>
<tr>
<td>T0</td>
<td>No evidence of primary tumor</td>
</tr>
<tr>
<td>Tis</td>
<td>Carcinoma in situ</td>
</tr>
<tr>
<td>Ta</td>
<td>Noninvasive verrucous carcinoma*</td>
</tr>
<tr>
<td>T1a</td>
<td>Tumor invades subepithelial connective tissue without lymph vascular invasion and is not poorly differentiated (i.e., grade 3–4)</td>
</tr>
<tr>
<td>T1b</td>
<td>Tumor invades subepithelial connective tissue with lymph vascular invasion or is poorly differentiated</td>
</tr>
<tr>
<td>T2</td>
<td>Tumor invades corpus spongiosum or cavernosum</td>
</tr>
<tr>
<td>T3</td>
<td>Tumor invades urethra</td>
</tr>
<tr>
<td>T4</td>
<td>Tumor invades other adjacent structures</td>
</tr>
</tbody>
</table>

---

*Updated July 1, 2011*
INTRODUCTION

Cancers of the testis are usually found in young adults and account for less than 1% of all malignancies in males. However, during the twentieth century, the incidence has more than doubled. Cryptorchidism is a predisposing condition, and other associations include atypical germ cells and multiple atypical nevi. Germ cell tumors of the testis are categorized into two main histologic types: seminomas and nonseminomas. The latter group is composed of either individual or combinations of histologic subtypes, including embryonal carcinoma, teratoma, choriocarcinoma, and yolk sac tumor. The presence of elevation in serum tumor markers, including alpha-fetoprotein (AFP), human chorionic gonadotropin (hCG), and lactate dehydrogenase (LDH), is frequent in this disease. Staging and prognostication are based on determination of the extent of disease and assessment of serum tumor markers. The TNM staging system for male germ cell tumors incorporates serum tumor maker elevation as a separate category of staging information. Cancer of the testis is highly curable, even in cases with advanced, metastatic disease.

Since the sixth edition of the AJCC Cancer Staging Manual, there are no changes in anatomic or tumor marker staging that require a change in the AJCC staging for testis cancer.

ANATOMY

Primary Site. The testes are composed of convoluted seminiferous tubules with a stroma containing functional endocrine interstitial cells. Both are encased in a dense capsule, the tunica albuginea, with fibrous septa extending into the testis and separating it into lobules. The tubules converge and exit at the mediastinum of the testis into the rete testis and efferent ducts, which join a single duct. This duct – the epididymis – coils outside the upper and lower poles of the testicle and then joins the vas deferens, a muscular conduit that accompanies the vessels and lymphatic channels of the spermatic cord. The major route for local extension of cancer is through the lymphatic channels. The tumor emerges from the mediastinum of the testis and courses through the spermatic cord. Occasionally, the epididymis is invaded early, and then the external iliac nodes may become involved. If there has been previous scrotal or inguinal surgery or if invasion of the scrotal wall is found (though this is rare), then the lymphatic spread may be to inguinal nodes.

Regional Lymph Nodes. The following nodes are considered regional:

- Interaortocaval
- Para-aortic (periaortic)
- Paracaval
- Preaortic

The left and right testicles demonstrate different patterns of primary drainage that mirror the differences in venous drainage. The left testicle primarily drains to the paraaortic lymph nodes and the right testicle primarily drains to the interaortocaval lymph nodes. The intrapelvic, external iliac, and inguinal nodes are considered regional only after scrotal or inguinal surgery prior to the presentation of the testis tumor. All nodes outside the regional nodes are distant. Nodes along the spermatic vein are considered regional.

Metastatic Sites. Distant spread of testicular tumors occurs most commonly to the lymph nodes, followed by metastases to the lung, liver, bone, and other visceral sites. Stage is dependent on the extent of disease and on the determination of serum tumor markers. Extent of disease includes assessment for involvement and size of regional lymph nodes, evidence of disease in nonregional lymph nodes, and metastases to pulmonary and nonpulmonary visceral sites. The stage is subdivided on the basis of the presence and degree of elevation of serum tumor markers. Serum tumor markers are measured immediately after orchiectomy and, if elevated, should be measured serially after orchiectomy to determine whether normal decay curves are followed. The physiological half-life of AFP is 5–7 days, and the half-life of HCG is 24–48 h. The presence of prolonged half-life times implies the presence of residual disease after orchiectomy. It should be noted that in some cases, tumor marker release may occur (e.g., in response to chemotherapy or handling of a primary tumor intraoperatively) and may cause artificial elevation of circulating tumor marker levels. The serum level of LDH has prognostic value in patients with metastatic disease and is included for staging.

RULES FOR CLASSIFICATION

Clinical Staging. Staging of testis tumors includes determination of the T, N, M, and S categories. Clinical examination and histologic assessment are required for clinical staging. Radiographic assessment of the chest, abdomen, and pelvis is necessary to determine the N and M status of disease. Serum tumor markers, including AFP, hCG, and LDH, should be obtained prior to orchiectomy, but levels after orchiectomy are used to complete the status of the serum tumor markers (S), taking into account the half life of AFP and hCG. Stage grouping classification of Stage IS requires persistent elevation of serum tumor markers following orchiectomy.

Pathologic Staging. Histologic evaluation of the radical orchiectomy specimen must be used for the pT classification. The gross size of the tumor should be recorded. Careful gross examination should determine whether
### Regional Lymph Nodes (N)

#### Clinical
- **NX**: Regional lymph nodes cannot be assessed
- **N0**: No regional lymph node metastasis
- **N1**: Metastasis with a lymph node mass 2 cm or less in greatest dimension; or multiple lymph nodes, none more than 2 cm in greatest dimension
- **N2**: Metastasis with a lymph node mass more than 2 cm but not more than 5 cm in greatest dimension; or multiple lymph nodes, any one mass greater than 2 cm but not more than 5 cm in greatest dimension
- **N3**: Metastasis with a lymph node mass more than 5 cm in greatest dimension

#### Pathologic (pN)
- **pNX**: Regional lymph nodes cannot be assessed
- **pN0**: No regional lymph node metastasis
- **pN1**: Metastasis with a lymph node mass 2 cm or less in greatest dimension and less than or equal to five nodes positive, none more than 2 cm in greatest dimension
- **pN2**: Metastasis with a lymph node mass more than 2 cm but not more than 5 cm in greatest dimension; or more than five nodes positive, none more than 5 cm; or evidence of extranodal extension of tumor
- **pN3**: Metastasis with a lymph node mass more than 5 cm in greatest dimension

### Distant Metastasis (M)

- **M0**: No distant metastasis
- **M1**: Distant metastasis
- **M1a**: Nonregional nodal or pulmonary metastasis
- **M1b**: Distant metastasis other than to nonregional lymph nodes and lung

### Anatomic Stage/Prognostic Groups

<table>
<thead>
<tr>
<th>Group</th>
<th>T</th>
<th>N</th>
<th>M</th>
<th>S (Serum Tumor Markers)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage 0</td>
<td>pTis</td>
<td>N0</td>
<td>M0</td>
<td>S0</td>
</tr>
<tr>
<td>Stage I</td>
<td>pT1–4</td>
<td>N0</td>
<td>M0</td>
<td>SX</td>
</tr>
<tr>
<td>Stage IA</td>
<td>pT1</td>
<td>N0</td>
<td>M0</td>
<td>S0</td>
</tr>
<tr>
<td>Stage IB</td>
<td>pT2</td>
<td>N0</td>
<td>M0</td>
<td>S0</td>
</tr>
<tr>
<td></td>
<td>pT3</td>
<td>N0</td>
<td>M0</td>
<td>S0</td>
</tr>
<tr>
<td></td>
<td>pT4</td>
<td>N0</td>
<td>M0</td>
<td>S0</td>
</tr>
<tr>
<td>Stage IS</td>
<td>Any pT/Tx</td>
<td>N0</td>
<td>M0</td>
<td>S1–3</td>
</tr>
<tr>
<td>Stage II</td>
<td>Any pT/Tx</td>
<td>N1–3</td>
<td>M0</td>
<td>SX</td>
</tr>
</tbody>
</table>

### Prognostic Factors (Site-Specific Factors)

**Recommended for Collection**

- **Required**
  - Serum tumor markers (S)
  - **SX**: Marker studies not available or not performed
  - **S0**: Marker study levels within normal limits
  - **S1**: LDH < 1.5 × N* and hCG (mlu/ml) < 5,000 and AFP (ng/ml) < 1,000
  - **S2**: LDH 1.5–10 × N or hCG (mlu/ml) 5,000–50,000 or AFP (ng/ml) 1,000–10,000
  - **S3**: LDH > 10 × N or hCG (mlu/ml) > 50,000 or AFP (ng/ml) > 10,000

* N indicates the upper limit of normal for the LDH assay.

Serum tumor marker levels should be measured prior to orchiectomy, but levels after orchiectomy are used for assignment of S category, taking into account the half life of AFP and hCG. Stage grouping classification of Stage IS require persistent elevation of serum tumor markers following orchiectomy.

The Serum Tumor Markers (S) category comprises the following:

- **Alpha fetoprotein (AFP)** – half life 5–7 days
- **Human chorionic gonadotropin (hCG)** – half life 1–3 days
- **Lactate dehydrogenase (LDH)**

Clinically significant

- Size of largest metastases in lymph nodes
- Radical orchiectomy performed

---

**ANATOMIC STAGE/PROGNOSTIC GROUPS**

**Group** | **T** | **N** | **M** | **S (Serum Tumor Markers)**
---|---|---|---|---
**Stage 0** | pTis | N0 | M0 | S0
**Stage I** | pT1–4 | N0 | M0 | SX
**Stage IA** | pT1 | N0 | M0 | S0
**Stage IB** | pT2 | N0 | M0 | S0
|      | pT3 | N0 | M0 | S0
|      | pT4 | N0 | M0 | S0
**Stage IS** | Any pT/Tx | N0 | M0 | S1–3
**Stage II** | Any pT/Tx | N1–3 | M0 | SX
FIGURE 43.6. (A) (Left) T3a: Invasion into perirenal and/or renal sinus fat but not beyond Gerota’s fascia. (Right) T3a: In addition to perirenal and/or renal sinus fat, tumor grossly invades into the renal vein. (B) T3b: Tumor grossly extends into the vena cava below the diaphragm. (C) T3c: Tumor grossly extends into vena cava above diaphragm or invades the wall of the vena cava.

FIGURE 43.7. (A) T4: Invasion beyond Gerota’s fascia. (B) T4: Invasion into ipsilateral adrenal gland.
T1b  Tumor limited to the iris more than 3 clock hours in size
T1c  Tumor limited to the iris with secondary glaucoma
T2  Tumor confluent with or extending into the ciliary body, choroid, or both
T2a  Tumor confluent with or extending into the ciliary body, choroid, or both, with secondary glaucoma
T3  Tumor confluent with or extending into the ciliary body, choroid, or both, with scleral extension
T3a  Tumor confluent with or extending into the ciliary body, choroid, or both, with scleral extension and secondary glaucoma
T4  Tumor with extrascleral extension
T4a  Tumor with extrascleral extension less than or equal to 5 mm in diameter
T4b  Tumor with extrascleral extension more than 5 mm in diameter

*Note: In clinical practice, the largest tumor basal diameter may be estimated in optic disc diameters (dd, average: 1 dd = 1.5 mm). Tumor thickness may be estimated in diopters (average: 2.5 diopters = 1 mm). However, techniques such as ultrasonography and fundus photography are used to provide more accurate measurements. Ciliary body involvement can be evaluated by the slit-lamp, ophthalmoscopy, gonioscopy, and transillumination. However, high-frequency ultrasonography (ultrasound biomicroscopy) is used for more accurate assessment. Extension through the sclera is evaluated visually before and during surgery, and with ultrasonography, computed tomography, or magnetic resonance imaging.

**Note: When histopathologic measurements are recorded after fixation, tumor diameter and thickness may be underestimated because of tissue shrinkage.

***Note: Iris melanomas originate from, and are predominantly located in, this region of the uvea. If less than half of the tumor volume is located within the iris, the tumor may have originated in the ciliary body and consideration should be given to classifying it accordingly.

Ciliary Body and Choroid
Primary ciliary body and choroidal melanomas, as defined in Figure 51.1, are classified according to the four tumor size categories below:

T1  Tumor size category 1
T1a  Tumor size category 1 without ciliary body involvement and extrascleral extension
T1b  Tumor size category 1 with ciliary body involvement
T1c  Tumor size category 1 without ciliary body involvement but with extrascleral extension less than or equal to 5 mm in diameter
T1d  Tumor size category 1 with ciliary body involvement and extrascleral extension less than or equal to 5 mm in diameter

T2  Tumor size category 2
T2a  Tumor size category 2 without ciliary body involvement and extrascleral extension
T2b  Tumor size category 2 with ciliary body involvement
T2c  Tumor size category 2 without ciliary body involvement but with extrascleral extension less than or equal to 5 mm in diameter
T2d  Tumor size category 2 with ciliary body involvement and extrascleral extension less than or equal to 5 mm in diameter
T3  Tumor size category 3
T3a  Tumor size category 3 without ciliary body involvement and extrascleral extension
T3b  Tumor size category 3 with ciliary body involvement
T3c  Tumor size category 3 without ciliary body involvement but with extrascleral extension less than or equal to 5 mm in diameter
T3d  Tumor size category 3 with ciliary body involvement and extrascleral extension less than or equal to 5 mm in diameter
T4  Tumor size category 4
T4a  Tumor size category 4 without ciliary body involvement and extrascleral extension
T4b  Tumor size category 4 with ciliary body involvement
T4c  Tumor size category 4 without ciliary body involvement but with extrascleral extension less than or equal to 5 mm in diameter
T4d  Tumor size category 4 with ciliary body involvement and extrascleral extension less than or equal to 5 mm in diameter
T4e  Any tumor size category with extrascleral extension more than 5 mm in diameter

Regional Lymph Nodes (N)
NX  Regional lymph nodes cannot be assessed
N0  No regional lymph node metastasis
N1  Regional lymph node metastasis

Distant Metastasis (M)
M0  No distant metastasis
M1  Distant metastasis
M1a  Largest diameter of the largest metastasis 3 cm or less
M1b  Largest diameter of the largest metastasis 3.1–8.0 cm
M1c  Largest diameter of the largest metastasis 8.1 cm or more

Updated July 1, 2011
HISTOPATHOLOGIC TYPE

The major malignant primary epithelial tumors include the following:

Low Grade

- Carcinoma ex pleomorphic adenoma (where the carcinoma is noninvasive or minimally invasive as defined by the WHO classification (extension ≤1.5 mm beyond the capsule – into surrounding tissue))
- Polymorphous low-grade carcinoma
- Mucoepidermoid carcinoma, grades 1 and 2
- Epithelial-myoepithelial carcinoma
- Cystadenocarcinoma and papillary cystadenocarcinoma
- Acinic cell carcinoma
- Basal cell adenocarcinoma
- Mucinous adenocarcinoma

High Grade

- Carcinoma ex pleomorphic adenoma (malignant mixed tumor) that includes adenocarcinoma and adenoid cystic carcinoma arising in a pleomorphic adenoma (where the carcinoma is invasive as defined by the WHO classification (extension >1.5 mm beyond the capsule – into surrounding tissue))
- Adenoid cystic carcinoma, not otherwise specified
- Adenocarcinoma, not otherwise specified
- Mucoepidermoid carcinoma, grade 3
- Ductal adenocarcinoma
- Squamous cell carcinoma
- Sebaceous adenocarcinoma
- Myoepithelial carcinoma
- Lymphoepithelial carcinoma

Other Rare and Unclassifiable Carcinomas

BIBLIOGRAPHY

AJCC 7th Edition Errata for 5th Reprint
Table 3
Manual

Updated July 1, 2011
Larynx

(Nonepithelial tumors such as those of lymphoid tissue, soft tissue, bone, and cartilage are not included)

At-A-Glance

SUMMARY OF CHANGES

- T4 lesions have been divided into T4a (moderately advanced local disease) and T4b (very advanced local disease), leading to the stratification of Stage IV into Stage IVA (moderately advanced local/regional disease), Stage IVB (very advanced local/regional disease), and Stage IVC (distant metastatic disease)

ANATOMIC STAGE/PROGNOSTIC GROUPS

<table>
<thead>
<tr>
<th>Stage</th>
<th>Tis</th>
<th>N0</th>
<th>M0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage 0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stage I</td>
<td>T1</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>Stage II</td>
<td>T2</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>Stage III</td>
<td>T3</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>Stage IVA</td>
<td>T4a</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td></td>
<td>T4a</td>
<td>N1</td>
<td>M0</td>
</tr>
<tr>
<td></td>
<td>T1</td>
<td>N2</td>
<td>M0</td>
</tr>
<tr>
<td></td>
<td>T2</td>
<td>N2</td>
<td>M0</td>
</tr>
<tr>
<td></td>
<td>T3</td>
<td>N2</td>
<td>M0</td>
</tr>
<tr>
<td></td>
<td>T4a</td>
<td>N2</td>
<td>M0</td>
</tr>
<tr>
<td>Stage IVB</td>
<td>T4b</td>
<td>Any N</td>
<td>M0</td>
</tr>
<tr>
<td></td>
<td>Any T</td>
<td>N3</td>
<td>M0</td>
</tr>
<tr>
<td>Stage IVC</td>
<td>Any T</td>
<td>Any N</td>
<td>M1</td>
</tr>
</tbody>
</table>

ICD-O-3 TOPOGRAPHY CODES

C10.1 Anterior (lingual) surface of epiglottis
C32.0 Glottis
C32.1 Supraglottis (laryngeal surface)
C32.2 Subglottis
C32.8* Overlapping lesion of larynx
C32.9* Larynx, NOS
*Stage by location of tumor bulk or epicenter

ICD-O-3 HISTOLOGY CODE RANGES

8000–8576, 8940–8950, 8980–8981

ANATOMY

Primary Site. The following anatomic definition of the larynx allows classification of carcinomas arising in the encompassed mucous membranes but excludes cancers arising on the lateral or posterior pharyngeal wall, pyriform fossa, postcricoid area, or base of tongue.

The anterior limit of the larynx is composed of the anterior or lingual surface of the suprahypoid epiglottis, the thyrohyoid membrane, the anterior commissure, and the anterior wall of the subglottic region, which is composed of the thyroid cartilage, the cricothyroid membrane, and the anterior arch of the cricoid cartilage.

The posterior and lateral limits include the laryngeal aspect of the aryepiglottic folds, the arytenoid region, the interarytenoid space, and the posterior surface of the subglottic space, represented by the mucous membrane covering the surface of the cricoid cartilage.

The superolateral limits are composed of the tip and the lateral borders of the epiglottis. The inferior limits are made up of the plane passing through the inferior edge of the cricoid cartilage.
Mucosal Melanoma of the Head and Neck

At-A-Glance

SUMMARY OF CHANGES

• This is a new chapter for classification of this rare tumor

ANATOMIC STAGE/PROGNOSTIC GROUPS

<table>
<thead>
<tr>
<th>Stage</th>
<th>T</th>
<th>N</th>
<th>M</th>
</tr>
</thead>
<tbody>
<tr>
<td>III</td>
<td>T3</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>IVA</td>
<td>T4a</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>IVB</td>
<td>T4b</td>
<td>Any N</td>
<td>M0</td>
</tr>
<tr>
<td>IVC</td>
<td>Any T</td>
<td>Any N</td>
<td>M1</td>
</tr>
</tbody>
</table>

ICD-O-3 TOPOGRAPHY CODES

For a complete description of codes, refer to the appropriate anatomic site chapter based on the location of the mucosal melanoma (see Chapters 3–6).

Additionally, mucosal melanomas are staged for the following topography codes; however, no staging exists for nonmucosal melanoma in the same anatomic site:

C14.0 Pharynx, NOS
C14.2 Waldeyer’s ring
C14.8 Overlapping lesion of lip, oral cavity and pharynx

The following topography codes are excluded:

C07.9 Parotid gland
C08.0 Submandibular gland
C08.1 Sublingual gland
C08.8 Overlapping lesion of major salivary glands
C08.9 Major salivary glands, NOS
C30.1 Middle ear
C73.9 Thyroid

ICD-O-3 HISTOLOGY CODE RANGES

8720–8790

INTRODUCTION

Mucosal melanoma is an aggressive neoplasm that warrants separate consideration. Approximately two-thirds of these lesions arise in the nasal cavity and paranasal sinuses; one quarter are found in the oral cavity and the remainder occur only sporadically in other mucosal sites of the head and neck. Even small cancers behave aggressively with high rates of recurrence and death. To reflect this aggressive behavior, primary cancers limited to the mucosa are considered T3 lesions.

Updated July 1, 2011
INTRODUCTION

Previous stage groupings of esophageal cancer were based on a simple, orderly arrangement of increasing pathologic anatomic T, then N, and then M classifications. In contrast, this revision is data driven, based on a risk-adjusted random-snowfall-forest analysis of worldwide data. The previous system was neither consistent with these data nor biologically plausible. Some explanations for the discrepancy relate to the interplay among T, N, and M, histopathologic type, biologic activity of the tumor (histologic grade), and location.

The unique lymphatic anatomy of the esophagus links N to T, permitting lymph node metastases from superficial cancers (pT1); this renders prognosis similar to that of more advanced (higher pT) N0 cancers. Similarly, advanced cancers (higher pT) with a few positive nodes may have a similar prognosis to those of less advanced cancers (lower pT) with more positive nodes. Biologic activity of the cancer, reflected by histologic grade (G), modulates stage such that prognosis of well-differentiated (G1) higher-pT cancers is similar to that of less well-differentiated (G2–G4) lower-pT cancers. Previous staging recommendations ignored histopathologic type, but availability of data on a large mixture of adenocarcinoma and squamous cell carcinomas from around the world has permitted assessing the association of histopathologic type with survival.

Although at first glance these multiple trade-offs seem to create a less orderly arrangement of cancer classifications within and among stage groupings compared with previous stage groupings, when viewed from the perspective of the interplay of these important prognostic factors, the new staging system becomes biologically compelling and consistent with a number of other cancers.

A limitation of this data-driven approach is that staging is based only on pTNM from esophageal cancers treated by esophagectomy alone, without induction or postoperative chemotherapy or radiotherapy; patients not offered operation, deemed inoperable, or undergoing exploratory surgery without esophagectomy were not represented in the data. In addition, patients undergoing surgery alone with pT4 and pM1 cancers represent a select population; placing them into stage groups, therefore, required either combining some classifications or using literature as a supplement. Patients with cervical esophageal cancer, sometimes treated as a head-and-neck tumor, were also poorly represented.

ANATOMY

Primary Site. The location of the primary tumor is defined by the position of the upper end of the cancer in the esophagus. This is best expressed as the distance from the incisors to the proximal edge of the tumor and conventionally by its location within broad regions of the esophagus. ICD coding recognizes three anatomic compartments traversed by the esophagus: cervical, thoracic, and abdominal. It also arbitrarily divides the esophagus into equal thirds: upper, middle, and lower (Table 10.1). However, clinical importance of primary site of esophageal cancer is less related to its position in the esophagus than to its relation to adjacent structures (Figure 10.1).

Cervical Esophagus. Anatomically, the cervical esophagus lies in the neck, bordered superiorly by the hypopharynx and inferiorly by the thoracic inlet, which lies at the level of the sternal notch. It is subtended by the trachea, carotid sheaths,
INTRODUCTION

Gastric cancer remains the fourth most common cancer worldwide and the second leading cause of cancer deaths (700,000 deaths annually worldwide). The highest rates of this disease continue to be in areas of Asia and Eastern Europe. Although gastric adenocarcinoma has declined significantly in the USA over the past 70 years, during the early twenty-first century an estimated 22,000 patients develop the disease each year, and of these patients, 13,000 will die, mainly because of nodal and metastatic disease present at the time of initial diagnosis. Trends in survival rates from the 1970s to the 1990s have unfortunately shown very little improvement. During the 1990s, 20% of gastric carcinoma cases were diagnosed while localized to the gastric wall, whereas 30% had evidence of regional nodal disease. Disease resulting from metastasis to other solid organs within the abdomen, as well as to extraabdominal sites, represents 35% of all cases. Although overall 5-year survival is approximately 15–20%, the 5-year survival is approximately 55% when disease is localized to the stomach (Figure 11.1).

The involvement of regional nodes reduces the 5-year survival to approximately 20%.

A notable shift in the site of gastric cancer reflects a proportionate increase in disease of the proximal stomach over the past several decades. Previously, there was a predominance of distal gastric cancers presenting as mass lesions or ulceration. Although other malignancies occur in the stomach, approximately 90% of all gastric neoplasms are adenocarcinomas. Tumors of the esophagogastric junction (EGJ) may be difficult to stage as either a gastric or an esophageal primary, especially in view of the increased incidence of adenocarcinoma in the esophagus that presumably results from acid reflux disease.

ANATOMY

Primary Site. The stomach is the first division of the abdominal portion of the alimentary tract, beginning at the esophagogastric junction and extending to the pylorus. The proximal stomach is located immediately below the diaphragm and is termed the cardia. The remaining portions are the fundus and body of the stomach, and the distal portion of the stomach is known as the antrum. The pylorus is a muscular ring that controls the flow of food content from the stomach into the first portion of the duodenum. The medial and lateral curvatures of the stomach are known as the lesser and greater curvatures, respectively. Histologically, the wall of the stomach has five layers: mucosal, submucosal, muscular, subserosal, and serosal.

The arbitrary 10-cm segment encompassing the distal 5 cm of the esophagus and proximal 5 cm of the stomach (cardia), with the EGJ in the middle, is an area of contention. Cancers arising in this segment have been variably staged as esophageal or gastric tumors, depending on orientation of the treating physician. In this edition, cancers whose midpoint is in the lower thoracic esophagus, EGJ, or within the proximal 5 cm of the stomach (cardia) that extend into the EGJ or esophagus (Siewert III) are staged as adenocarcinoma of the esophagus (see Chap. 10). All other cancers with a midpoint in the stomach lying more than 5 cm distal to the EGJ, or those within 5 cm of the EGJ but not extending into
Small Intestine
(Lymphomas, carcinoid tumors, and visceral sarcomas are not included)

At-A-Glance

SUMMARY OF CHANGES

- T1 lesions have been divided into T1a (invasion of lamina propria) and T1b (invasion of submucosa) to facilitate comparison with tumors of other gastrointestinal sites
- Stage II has been subdivided into Stage IIA and Stage IIB
- The N1 category has been changed to N1 (1–3 positive lymph nodes) and N2 (four or more positive lymph nodes), leading to the division of Stage III into Stage IIIA and Stage IIIB

ANATOMIC STAGE/PROGNOSTIC GROUPS

<table>
<thead>
<tr>
<th>Stage</th>
<th>Tis</th>
<th>N0</th>
<th>M0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage 0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stage I</td>
<td>T1</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td></td>
<td>T2</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>Stage IIA</td>
<td>T3</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>Stage IIB</td>
<td>T4</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>Stage IIIA</td>
<td>Any T</td>
<td>N1</td>
<td>M0</td>
</tr>
<tr>
<td>Stage IIIB</td>
<td>Any T</td>
<td>N2</td>
<td>M0</td>
</tr>
<tr>
<td>Stage IV</td>
<td>Any T</td>
<td>Any N</td>
<td>M1</td>
</tr>
</tbody>
</table>

ICD-O-3 TOPOGRAPHY CODES

- C17.0 Duodenum
- C17.1 Jejunum
- C17.2 Ileum
- C17.8 Overlapping lesion of small intestine
- C17.9 Small intestine, NOS

ICD-O-3 HISTOLOGY CODE RANGES


INTRODUCTION

Although the small intestine accounts for one of the largest surface areas in the human body, it is one of the least common cancer sites in the digestive system, accounting for less than 2% of all malignant tumors of the gastrointestinal tract. A variety of tumors occur in the small intestine, with approximately 25–50% of the primary malignant tumors being adenocarcinomas, depending upon the population surveyed. At the beginning of the twenty-first century, approximately 5,600 new cases of cancer involving the small intestine are seen annually in the USA. The 1,100 deaths predicted to occur from small intestinal cancer are divided almost equally between men and women. Over 60% of tumors occur in the duodenum, followed by jejunum (20%) and ileum (15%).

An increased incidence of second malignancies has been noted in patients with primary small bowel adenocarcinoma, a finding related in part to the significantly increased risk for this malignancy in patients with hereditary nonpolyposis colorectal cancer. Crohn's disease and celiac disease are also associated with an increased risk for small intestinal carcinomas and lymphomas.

The patterns of local, regional, and metastatic spread for adenocarcinomas of the small intestine are comparable to those of similar histologic malignancies in other areas of the gastrointestinal tract. The classification and stage grouping described in this chapter are used for both clinical and pathologic staging of carcinomas of the small bowel and do not apply to other types of malignant small bowel tumors. Well-differentiated neuroendocrine tumors (carcinoid tumors)
INTRODUCTION

The TNM classification for carcinomas of the colon and rectum provides more detail than other staging systems. Compatible with the Dukes' system, the TNM adds greater precision in the identification of prognostic subgroups. TNM staging is based on the depth of tumor invasion into or beyond the wall of the colorectum (T), invasion of or adherence to adjacent organs or structures (T), the number of regional lymph nodes involved (N), and the presence or absence of distant metastasis (M). The TNM classification applies to both clinical and pathologic staging. Most cancers of the colon and many cancers of the rectum are staged after pathologic examination of a resected specimen. However, patients with high-risk rectal cancers are commonly receiving preoperative adjuvant treatment prior to surgical resection and pathological stage annotation should employ the y prefix in such cases. This staging system applies to all carcinomas arising in the colon or rectum. Adenocarcinomas of the vermiform appendix are classified according to the TNM staging system for appendix (see Chap. 13), whereas cancers that occur in the anal canal are staged according to the classification used for the anus (see Chap. 15). Well-differentiated neuroendocrine carcinomas (carcinoid tumors) of the colorectum are classified according to the TNM staging system for gastric, small bowel, and colonic and rectal carcinoid tumors (well-differentiated neuroendocrine tumors and well-differentiated neuroendocrine carcinomas) as described in Chap. 17.

ANATOMY

The divisions of the colon and rectum are as follows:

- Cecum
- Ascending colon
- Hepatic flexure
- Transverse colon
- Splenic flexure
- Descending colon

Note: cTNM is the clinical classification, pTNM is the pathologic classification. The y prefix is used for those cancers that are classified after neoadjuvant pretreatment (e.g., ypTNM). Patients who have a complete pathologic response are ypT0N0cM0 that may be similar to Stage Group 0 or I. The r prefix is to be used for those cancers that have recurred after a disease-free interval (rTNM).

* Dukes B is a composite of better (T3 N0 M0) and worse (T4 N0 M0) prognostic groups, as is Dukes C (Any TN1 M0 and Any T N2 M0). MAC is the modified Astler-Coller classification.
Gastrointestinal Stromal Tumor

At-A-Glance

SUMMARY OF CHANGES

• This staging system is new for the seventh edition

<table>
<thead>
<tr>
<th>ANATOMIC STAGE/PROGNOSTIC GROUPS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gastric GIST</strong>*</td>
</tr>
<tr>
<td>Group</td>
</tr>
<tr>
<td>Stage IA</td>
</tr>
<tr>
<td>Stage IB</td>
</tr>
<tr>
<td>Stage II</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Stage IIIA</td>
</tr>
<tr>
<td>Stage IIIB</td>
</tr>
<tr>
<td>Stage IV</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

| **Small Intestinal GIST**** |
| Group    | T       | N       | M       | Mitotic rate |
| Stage I  | T1 or T2| N0      | M0      | Low          |
| Stage II | T3      | N0      | M0      | Low          |
| Stage IIIA | T1   | N0      | M0      | High         |
|          | T4      | N0      | M0      | Low          |
| Stage IIIB | T2   | N0      | M0      | High         |
|          | T3      | N0      | M0      | High         |
|          | T4      | N0      | M0      | High         |
| Stage IV | Any T   | N1      | M0      | Any rate     |
|          | Any T   | Any N   | M1      | Any rate     |

ICD-O-3 TOPOGRAPHY CODES

- C15.0–C15.9 Esophagus
- C16.0–C16.9 Stomach
- C17.0–C17.2, C17.8–C17.9 Small intestine
- C18.0–C18.9 Colon
- C19.9 Rectosigmoid junction
- C20.9 Rectum
- C48.0–C48.8 Retroperitoneum & Peritoneum

ICD-O-3 HISTOLOGY CODE RANGES

- 8935, 8936

*Note: Also to be used for omentum.

**Note: Also to be used for esophagus, colorectal, mesentery, and peritoneum.

INTRODUCTION

Gastrointestinal stromal tumor (GIST) is the most common mesenchymal tumor in the gastrointestinal tract. The designation of GIST refers to a specific tumor type that is generally immunohistochemically KIT-positive and is driven by KIT or PDGFRA activating mutations.

In terms of biologic potential, GISTs encompass a continuum. They include minute or small, paucicellular, mitotically inactive, obviously benign-looking tumors previously often designated as leiomyomas. At the other end of the spectrum there are larger tumors many of which contain significant mitotic activity and are histologically sarcomatous, previously often called leiomyosarcomas. In the middle,
Neuroendocrine Tumors

(Gastric, small bowel, colonic, rectal, and ampulla of vater carcinoid tumors [well-differentiated neuroendocrine tumors and well-differentiated neuroendocrine carcinomas]; carcinoid tumors of the appendix [see Chap. 13] and neuroendocrine tumors of the pancreas [see Chap. 24] are not included.)

At-A-Glance

SUMMARY OF CHANGES

• This staging system is new for the 7th edition

ANATOMIC STAGE/PROGNOSTIC GROUPS

<table>
<thead>
<tr>
<th>Stage</th>
<th>T</th>
<th>N</th>
<th>M</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Tis*</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>I</td>
<td>T1</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>IIA</td>
<td>T2</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>IIB</td>
<td>T3</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>IIIA</td>
<td>T4</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>IIIB</td>
<td>Any T</td>
<td>N1</td>
<td>M0</td>
</tr>
<tr>
<td>IV</td>
<td>Any T</td>
<td>Any N</td>
<td>M1</td>
</tr>
</tbody>
</table>

*Note: Tis applies only to stomach.

ICD-O-3 TOPOGRAPHY CODES

- C16.0–C16.9 Stomach
- C17.0–C17.9 Small intestine
- C18.0, C18.2–C18.9 Colon
- C19.9 Rectosigmoid junction
- C20.9 Rectum
- C24.1 Ampulla of Vater

ICD-O-3 HISTOLOGY CODE RANGES

- 8153, 8240–8242, 8246, 8249

INTRODUCTION

Neuroendocrine tumors (NETs) arise from the diffuse neuroendocrine system, which comprises neuroendocrine cells spread as a single cell or clusters of cells throughout the entire gastrointestinal tract, the bronchopulmonary system, and the urogenital tract. These lesions are often referred to generically using the archaic term carcinoid in deference to the original report of 1907 by Oberndorfer. In the past the “traditional” classification of carcinoids (1963 Sandler/Williams) was based upon their presumed embryonic origin and comprised foregut (lung, thymus, stomach, pancreas, and duodenum), midgut (from duodenum beyond the Treitz ligament to the proximal transverse colon), and hindgut carcinoids (distal colon and rectum). Although this classification is used, a tumor-based classification introduced by the World Health Organization (WHO) in 2000 has far greater scientific and clinical applicability. This classification utilizes the more generic term NET, and classification of the lesions is variously based upon size, proliferative rate, localization, differentiation, and hormone production. However, the term carcinoid is still in widespread use in the clinical setting and in data collected by tumor registries.

Investigation of the Surveillance Epidemiology and End Results (SEER) data base, 1973–2004, demonstrates that the incidence of gastric NETs in the US population in 2004 was 0.34/100,000, and since 1973 the annual increase in incidence has been approximately 9%. For small intestinal NETs, the annual increase in incidence since 1973 is 3.51%, and the incidence in the US population for duodenal NETs is 2.06/100,000, jejunal 0.36/100,000, and ileal 4.06/100,000 in 2004. Furthermore, NETs comprised 1.25% of all malignancies in 2004 compared to only 0.75% of all malignancies in 1994. The reason for
At-A-Glance

SUMMARY OF CHANGES

- The definition of TNM and the Stage Grouping for this chapter have changed from the Sixth Edition and reflect new staging adopted by the International Federation of Gynecology and Obstetrics (FIGO) (2008)

ANATOMIC STAGE/PROGNOSTIC GROUPS

<table>
<thead>
<tr>
<th>Stage</th>
<th>Tis</th>
<th>N0</th>
<th>M0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage I</td>
<td>T1</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>Stage IA</td>
<td>T1a</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>Stage IB</td>
<td>T1b</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>Stage II</td>
<td>T2</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>Stage IIIA</td>
<td>T1, T2</td>
<td>N1a, N1b</td>
<td>M0</td>
</tr>
<tr>
<td>Stage IIIB</td>
<td>T1, T2</td>
<td>N2a, N2b</td>
<td>M0</td>
</tr>
<tr>
<td>Stage IIIC</td>
<td>T1, T2</td>
<td>N2c</td>
<td>M0</td>
</tr>
<tr>
<td>Stage IVA</td>
<td>T1, T2</td>
<td>N3</td>
<td>M0</td>
</tr>
<tr>
<td>Stage IVB</td>
<td>Any T</td>
<td>Any N</td>
<td>M1</td>
</tr>
</tbody>
</table>

*Note: FIGO no longer includes Stage 0 (Tis).

ICD-O-3 TOPOGRAPHY CODES

- C51.0 Labium majus
- C51.1 Labium minus
- C51.2 Clitoris
- C51.8 Overlapping lesion of vulva
- C51.9 Vulva, NOS

ICD-O-3 HISTOLOGY CODE RANGES

- 8000–8246, 8248–8576, 8940–8950, 8980–8981

ANATOMY

Primary Site. The vulva is the anatomic area immediately external to the vagina. It includes the labia and the perineum. The tumor may extend to involve the vagina, urethra, or anus. It may be fixed to the pubic bone. Changes to the staging classification reflect a belief that tumor size independent of other factors (spread to adjacent structures, nodal metastases) is less important in predicting survival.

Regional Lymph Nodes. The femoral and inguinal nodes are the sites of regional spread. For pN, histologic examination of regional lymphadenectomy specimens will ordinarily include six or more lymph nodes. For TNM staging, cases with fewer than six resected nodes should be classified using the TNM pathologic classification according to the status of those nodes (e.g., pN0; pN1) as per the general rules of TNM. The number of resected and positive nodes should be recorded (note that FIGO classifies cases with less than six nodes resected as pNX). The concept of sentinel lymph node mapping where only one or two key nodes are removed is currently being investigated. In most cases, a surgical assessment of regional lymph nodes (inguinal-femoral lymphadenectomy) is performed. Rarely, assessment of lymph nodes will be made by radiologic guided fine-needle aspiration or use of imaging techniques [computerized tomography (CT), magnetic resonance imaging (MRI), or positron emission tomography (PET)]. The current revisions to staging adopted reflect a recognition that the number and size of lymph node metastases more accurately reflect prognosis.
Ovary and Primary Peritoneal Carcinoma

At-A-Glance

SUMMARY OF CHANGES

• The definition of TNM and the Stage Grouping for this chapter have not changed from the Sixth Edition
• Primary peritoneal carcinoma has been included in this chapter

ANATOMIC STAGE/PROGNOSTIC GROUPS

<table>
<thead>
<tr>
<th>Stage</th>
<th>T</th>
<th>N</th>
<th>M</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage I</td>
<td>T1</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>Stage IA</td>
<td>T1a</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>Stage IB</td>
<td>T1b</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>Stage IC</td>
<td>T1c</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>Stage II</td>
<td>T2</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>Stage IIA</td>
<td>T2a</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>Stage IIB</td>
<td>T2b</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>Stage IIC</td>
<td>T2c</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>Stage III</td>
<td>T3</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>Stage IIIA</td>
<td>T3a</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>Stage IIIB</td>
<td>T3b</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>Stage IIIC</td>
<td>T3c</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td></td>
<td>Any T</td>
<td>Any N</td>
<td>M1</td>
</tr>
</tbody>
</table>

ICD-O-3 TOPOGRAPHY CODES

- C56.9 Ovary
- C48.1 Specified parts of peritoneum (female only)
- C48.2 Peritoneum (female only)
- C48.8 Overlapping lesion of retroperitoneum and peritoneum (female only)

ICD-O-3 HISTOLOGY CODE RANGES

- 8000–8576, 8590–8671, 8930–9110 (C56.9 only)
- 8000–8576, 8590–8671, 8930–8934, 8940–9110 (C48.1–C48.8 only)

ANATOMY

Primary Site. The ovaries are a pair of solid, flattened ovoids 2–4 cm in diameter that are connected by a peritoneal fold to the broad ligament and by the infundibulopelvic ligament to the lateral wall of the pelvis. They are attached medially to the uterus by the utero-ovarian ligament.

In some cases, an adenocarcinoma is primary in the peritoneum. The ovaries are not involved or are only involved with minimal surface implants. The clinical presentation, surgical therapy, chemotherapy, and prognosis of these peritoneal tumors mirror those of papillary serous carcinoma of the ovary. Patients who undergo prophylactic oophorectomy for a familial history of ovarian cancer appear to retain a 1–2% chance of developing peritoneal adenocarcinoma, which is histopathologically and clinically similar to primary ovarian cancer.

Regional Lymph Nodes. The lymphatic drainage occurs by the infundibulopelvic and round ligament trunks and an external iliac accessory route into the following regional nodes:

- External iliac
- Internal iliac (hypogastric)
- Obturator
- Common iliac
- Para-aortic
Carcinoma of the Lacrimal Gland

At-A-Glance

SUMMARY OF CHANGES

The staging system for lacrimal gland carcinomas has been made consistent with that for salivary gland carcinomas by:

- Proposing changes in the size cutoffs between T1, T2, and T3
- By subdividing T4
- By expanding the histologic categories to those used for salivary gland malignancies, since all of these have been reported in the lacrimal gland
- Lacrimal sac tumors have been removed from this section

ANATOMIC STAGE/PROGNOSTIC GROUPS

No stage grouping is presently recommended

ICD-O-3 TOPOGRAPHY CODES

C69.5  Lacrimal gland (excluding lacrimal sac)

ICD-O-3 HISTOLOGY CODE RANGES

8000–8576, 8940–8950, 8980–8981

INTRODUCTION

The retrospective study of 265 epithelial tumors of the lacrimal gland conducted by the Armed Forces Institute of Pathology (AFIP) improved our understanding of the histologic classification and clinical behavior of epithelial tumors of the lacrimal gland. The historic works of Forrest (1954) and Zimmerman (1962) alleviated confusion by applying to epithelial tumors of the lacrimal gland the histopathologic classification of salivary gland tumors. The histologic classification used herein is a modification of the World Health Organization (WHO) classification of salivary gland tumors and is similar to that used in the most recent AFIP fascicle on Tumors of the Eye and Ocular Adnexa (2006).

ANATOMY

Primary Site. In the normal, fully developed orbit, the lacrimal gland is clinically impalpable and is situated in the lacrimal fossa posterior to the superotemporal orbital rim. The gland is not truly encapsulated and is divided into the deep orbital and the superficial palpebral lobes by the levator aponeurosis.

Regional Lymph Nodes. The regional lymph nodes include the following:

- Preauricular (parotid)
- Submandibular
- Cervical

For pN, histologic examination of a regional lymphadenectomy specimen, if performed, will include one or more regional lymph nodes.

Metastatic Sites. The lung is the most common metastatic site, followed by bone and remote viscera.

RULES FOR CLASSIFICATION

Clinical Staging. This includes a complete history (with emphasis on duration of symptoms, pain, or dysesthesia)
Sarcoma of the Orbit

At-A-Glance

SUMMARY OF CHANGES

- A listing of site-specific categories is now included in T4
- The anatomy description was expanded
- Regional lymph nodes were defined

ANATOMIC STAGE/PROGNOSTIC GROUPS

No stage grouping is presently recommended

ICD-O-3 TOPOGRAPHY CODES

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>C69.6</td>
<td>Orbit, NOS</td>
</tr>
<tr>
<td>C69.8</td>
<td>Overlapping lesion of eye and adnexa</td>
</tr>
</tbody>
</table>

ICD-O-3 HISTOLOGY CODE RANGES


INTRODUCTION

The commonly encountered primary malignant neoplasms of the orbit include soft tissue sarcomas (rhabdomyosarcoma, osteogenic sarcoma, leiomyosarcoma, etc.), lymphoproliferative tumors (lymphoma, plasma cell tumors, etc.), and melanocytic tumors.

ANATOMY

The orbit is a cone-shaped bony structure with a volume of 30 ml in which the 7-ml globe is positioned centrally and anteriorly. All the support systems of the globe, including the optic nerve and its meninges, lacrimal gland and lymphoid tissue, extraocular muscles, fibroadipose tissue, peripheral nerves, ganglionic tissue, and blood vessels are designed to be confined within approximately 25 ml of space surrounding the eyeball. Many types of tissues are crowded in this limited space and give origin to a variety of primary carcinomatous, sarcomatous, lymphoid and melanocytic tumors. Secondary neoplasia (from adjacent structures such as paranasal sinuses, conjunctiva, globe, etc.) as well as metastatic tumors from distant organs are encountered in the orbit. Also, and because of their immediate proximity, the orbital primary tumors often present invasions into CNS, nasal cavity, and paranasal sinuses. Orbit has two unique histopathological features that may have some influence on tumor dissemination to and from this location. Orbit does not contain a lymphatic vascular network and its venous channels do not have valves.

Primary Site. Orbital sarcomas originate from fat (liposarcoma), striated muscle (rhabdomyosarcoma), smooth muscle (leiomyosarcoma), cartilage (chondrosarcoma), bone (osteogenic sarcoma), fibroconnective tissue (fibrosarcoma, fibrous histiocytoma), vascular tissues (angiosarcoma, hemangiopericytoma), peripheral nerve (Schwannoma, paraganglioma), and optic nerve tissues (glioma, meningioma) as well as from primitive mesenchymal cells within the orbit.

Regional Lymph Nodes. Although there is no organized lymphatic network behind the orbital septum, the drainage of the orbit is into the submandibular, parotid, and cervical lymph nodes through vascular anastomosis. The venous drainage of the orbit is primarily into the cavernous sinus. Preauricular, submandibular, and cervical nodes may receive drainage secondarily from orbit via the lymphatics of conjunctiva and eyelids. For pN, the examination of a regional lymphadenectomy specimen would ordinarily include one or more lymph node(s).
Illustration
Indicate on diagram primary tumor and regional nodes involved.

1.  2.  3.  4.  5.  6.

(continued from previous page)
Illustration
Indicate on diagram primary tumor and regional nodes involved.

<table>
<thead>
<tr>
<th>Hospital Name/Address</th>
<th>Patient Name/Information</th>
</tr>
</thead>
</table>

(continued from previous page)
Illustration
Indicate on diagram primary tumor and regional nodes involved.
Illustration

Indicate on diagram primary tumor and regional nodes involved.
<table>
<thead>
<tr>
<th>CLINICAL</th>
<th>STAGE CATEGORY DEFINITIONS</th>
<th>PATHOLOGIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extent of disease before any treatment</td>
<td>Extent of disease through completion of definitive surgery</td>
<td></td>
</tr>
</tbody>
</table>

- **Tumor Size:** _____________
- **Laterality:**
  - □ left
  - □ right
  - □ bilateral

- **Primary Tumor (T)**
  - TX: Primary tumor cannot be assessed
  - T0: No evidence of primary tumor
  - T1: Tumor 2 cm or less in greatest dimension without extraparenchymal extension*
  - T2: Tumor more than 2 cm but not more than 4 cm in greatest dimension without extraparenchymal extension*
  - T3: Tumor more than 4 cm and/or tumor having extraparenchymal extension*
  - T4a: Moderately advanced disease
    - Tumor invades skin, mandible, ear canal, and/or facial nerve
  - T4b: Very advanced disease
    - Tumor invades skull base and/or pterygoid plates and/or encases carotid artery

*Note: Extraparenchymal extension is clinical or macroscopic evidence of invasion of soft tissues. Microscopic evidence alone does not constitute extraparenchymal extension for classification purposes.

- **Regional Lymph Nodes (N)**
  - NX: Regional lymph nodes cannot be assessed
  - N0: No regional lymph node metastasis
  - N1: Metastasis in a single ipsilateral lymph node, 3 cm or less in greatest dimension
  - N2: Metastasis in a single ipsilateral lymph node, more than 3 cm but not more than 6 cm in greatest dimension, or in multiple ipsilateral lymph nodes, none more than 6 cm in greatest dimension, or in bilateral or contralateral lymph nodes, none more than 6 cm in greatest dimension
  - N2a: Metastasis in a single ipsilateral lymph node, more than 3 cm but not more than 6 cm in greatest dimension
  - N2b: Metastasis in multiple ipsilateral lymph nodes, none more than 6 cm in greatest dimension
  - N2c: Metastasis in bilateral or contralateral lymph nodes, none more than 6 cm in greatest dimension
  - N3: Metastasis in a lymph node, more than 6 cm in greatest dimension

- **Distant Metastasis (M)**
  - M0: No distant metastasis (no pathologic M0; use clinical M to complete stage group)
  - M1: Distant metastasis

---

Hospital Name/Address

Patient Name/Information

(continued on next page)
Illustration
Indicate on diagram primary tumor and regional nodes involved.
Illustration
Indicate on diagram primary tumor and regional nodes involved.

Hospital Name/Address

Patient Name/Information

(continued from previous page)
### APPENDIX STAGING FORM

<table>
<thead>
<tr>
<th>CLINICAL</th>
<th>STAGE CATEGORY DEFINITIONS</th>
<th>PATHOLOGIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extent of disease before any treatment</td>
<td>Extent of disease through completion of definitive surgery</td>
<td></td>
</tr>
<tr>
<td>y clinical – staging completed after neoadjuvant therapy but before subsequent surgery</td>
<td>y pathologic – staging completed after neoadjuvant therapy AND subsequent surgery</td>
<td></td>
</tr>
</tbody>
</table>

**TUMOR SIZE:**

- □ left
- □ right
- □ bilateral

**LATERALITY:**

- □ left
- □ right
- □ bilateral

#### PRIMARY TUMOR (T)

<table>
<thead>
<tr>
<th>Stage Code</th>
<th>Stage Name</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>TX</td>
<td>Primary tumor cannot be assessed</td>
<td></td>
</tr>
<tr>
<td>T0</td>
<td>No evidence of primary tumor</td>
<td></td>
</tr>
<tr>
<td>Tis</td>
<td>Carcinoma in situ: intraepithelial or invasion of lamina propria</td>
<td></td>
</tr>
<tr>
<td>T1</td>
<td>Tumor invades submucosa</td>
<td></td>
</tr>
<tr>
<td>T2</td>
<td>Tumor invades muscularis propria</td>
<td></td>
</tr>
<tr>
<td>T3</td>
<td>Tumor invades through muscularis propria into subserosa or into mesoappendix</td>
<td></td>
</tr>
<tr>
<td>T4</td>
<td>Tumor penetrates visceral peritoneum, including mucinous peritoneal tumor within the right lower quadrant and/or directly invades other organs or structures</td>
<td></td>
</tr>
<tr>
<td>T4a</td>
<td>Tumor penetrates visceral peritoneum, including mucinous peritoneal tumor within the right lower quadrant</td>
<td></td>
</tr>
<tr>
<td>T4b</td>
<td>Tumor directly invades other organs or structures</td>
<td></td>
</tr>
</tbody>
</table>

- * Tis includes cancer cells confined within the glandular basement membrane (intraepithelial) or lamina propria (intramucosal) with no extension through muscularis mucosae into submucosa.
- ** Direct invasion in T4 includes invasion of other segments of the colorectum by way of the serosa, e.g., invasion of ileum.
- *** Tumor that is adherent to other organs or structures, grossly, is classified cT4b. However, if no tumor is present in the adhesion, microscopically, the classification should be pT1-3 depending on the anatomical depth of wall invasion.

#### CARCINOID

<table>
<thead>
<tr>
<th>Stage Code</th>
<th>Stage Name</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>TX</td>
<td>Primary tumor cannot be assessed</td>
<td></td>
</tr>
<tr>
<td>T0</td>
<td>No evidence of primary tumor</td>
<td></td>
</tr>
<tr>
<td>T1</td>
<td>Tumor 2 cm or less in greatest dimension</td>
<td></td>
</tr>
<tr>
<td>T1a</td>
<td>Tumor 1 cm or less in greatest dimension</td>
<td></td>
</tr>
<tr>
<td>T1b</td>
<td>Tumor more than 1 cm but not more than 2 cm</td>
<td></td>
</tr>
<tr>
<td>T2</td>
<td>Tumor more than 2 cm but not more than 4 cm or with extension to the cecum</td>
<td></td>
</tr>
<tr>
<td>T3</td>
<td>Tumor more than 4 cm or with extension to the ileum</td>
<td></td>
</tr>
<tr>
<td>T4</td>
<td>Tumor directly invades other adjacent organs or structures, e.g., abdominal wall and skeletal muscle</td>
<td></td>
</tr>
</tbody>
</table>

Note: Tumor that is adherent to other organs or structures, grossly, is classified cT4. However, if no tumor is present in the adhesion, microscopically, the classification should be classified pT1-3 depending on the anatomical depth of wall invasion.

*Penetration of the mesoappendix does not seem to be as important a prognostic factor as the size of the primary tumor and is not separately categorized.

#### REGIONAL LYMPH NODES (N)

<table>
<thead>
<tr>
<th>Stage Code</th>
<th>Stage Name</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>NX</td>
<td>Regional lymph nodes cannot be assessed</td>
<td></td>
</tr>
<tr>
<td>N0</td>
<td>No regional lymph node metastasis</td>
<td></td>
</tr>
<tr>
<td>N1</td>
<td>Metastasis in 1 to 3 regional lymph nodes</td>
<td></td>
</tr>
<tr>
<td>N2</td>
<td>Metastasis in 4 or more regional lymph nodes</td>
<td></td>
</tr>
</tbody>
</table>

**HOSPITAL NAME/ADDRESS**

**PATIENT NAME/INFORMATION**

(continued on next page)
<table>
<thead>
<tr>
<th>PRIMARY TUMOR (T)</th>
<th>Tumor Size</th>
<th>LATERALITY:</th>
</tr>
</thead>
<tbody>
<tr>
<td>TX</td>
<td>Primary tumor cannot be assessed</td>
<td></td>
</tr>
<tr>
<td>T0</td>
<td>No evidence of primary tumor</td>
<td></td>
</tr>
<tr>
<td>Tis</td>
<td>Carcinoma in situ: intraepithelial or invasion of lamina propria*</td>
<td></td>
</tr>
<tr>
<td>T1</td>
<td>Tumor invades submucosa</td>
<td></td>
</tr>
<tr>
<td>T2</td>
<td>Tumor invades muscularis propria</td>
<td></td>
</tr>
<tr>
<td>T3</td>
<td>Tumor invades through the muscularis propria into pericolectal tissues</td>
<td></td>
</tr>
<tr>
<td>T4a</td>
<td>Tumor penetrates to the surface of the visceral peritoneum**</td>
<td></td>
</tr>
<tr>
<td>T4b</td>
<td>Tumor directly invades or is adherent to other organs or structures**,<strong>,</strong>*</td>
<td></td>
</tr>
</tbody>
</table>

*Note: Tis includes cancer cells confined within the glandular basement membrane (intraepithelial) or mucosal lamina propria (intramucosal) with no extension through the muscularis mucosae into the submucosa.

**Note: Direct invasion in T4 includes invasion of other organs or other segments of the colorectum as a result of direct extension through the serosa, as confirmed on microscopic examination (for example, invasion of the sigmoid colon by a carcinoma of the cecum) or, for cancers in a retro-peritoneal or subperitoneal location, direct invasion of other organs or structures by virtue of extension beyond the muscularis propria (i.e., respectively, a tumor on the posterior wall of the descending colon invading the left kidney or lateral abdominal wall, or a mid or distal rectal cancer with invasion of prostate, seminal vesicles, cervix or vagina).

***Note: Tumor that is adherent to other organs or structures, grossly, is classified cT4b. However, if no tumor is present in the adhesion, microscopically, the classification should be pT1-4a depending on the anatomical depth of wall invasion. The V and L classifications should be used to identify the presence or absence of vascular or lymphatic invasion whereas the PN site-specific factor should be used for perineural invasion.

<table>
<thead>
<tr>
<th>REGIONAL LYMPH NODES (N)</th>
<th>Tumor Size</th>
<th>LATERALITY:</th>
</tr>
</thead>
<tbody>
<tr>
<td>NX</td>
<td>Regional lymph nodes cannot be assessed</td>
<td></td>
</tr>
<tr>
<td>N0</td>
<td>No regional lymph node metastasis</td>
<td></td>
</tr>
<tr>
<td>N1</td>
<td>Metastasis in 1 to 3 regional lymph nodes</td>
<td></td>
</tr>
<tr>
<td>N1a</td>
<td>Metastasis in 1 regional lymph node</td>
<td></td>
</tr>
<tr>
<td>N1b</td>
<td>Metastasis in 2-3 regional lymph nodes</td>
<td></td>
</tr>
<tr>
<td>N1c</td>
<td>Tumor deposit(s) in the subserosa, mesentry, or non-peritonealized pericolic or perirectal tissues without regional nodal metastasis</td>
<td></td>
</tr>
<tr>
<td>N2</td>
<td>Metastasis in 4 or more regional lymph nodes</td>
<td></td>
</tr>
<tr>
<td>N2a</td>
<td>Metastasis in 4 to 6 regional lymph nodes</td>
<td></td>
</tr>
<tr>
<td>N2b</td>
<td>Metastasis in 7 or more regional lymph nodes</td>
<td></td>
</tr>
</tbody>
</table>

Note: A satellite peritumoral nodule in the pericolectal adipose tissue of a primary carcinoma without histologic evidence of residual lymph node in the nodule may represent discontinuous spread, venous invasion with extravascular spread (V1/2) or a totally replaced lymph node (N1/2). Replaced nodes should be counted separately as positive nodes in the N category, whereas discontinuous spread or venous invasion should be classified and counted in the Site-Specific Factor category Tumor Deposits (TD).
### Gastrointestinal Stromal Tumor Staging Form

<table>
<thead>
<tr>
<th>Extent of disease before any treatment</th>
<th>Stage Category Definitions for GIST at All Sites</th>
<th>Extent of disease during and from surgery</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ y clinical – staging completed after neoadjuvant therapy but before subsequent surgery</td>
<td><strong>TUMOR SIZE:</strong> ________________</td>
<td>☐ y pathologic – staging completed after neoadjuvant therapy AND subsequent surgery</td>
</tr>
<tr>
<td>☐ TX</td>
<td>Primary tumor cannot be assessed</td>
<td>☐ TX</td>
</tr>
<tr>
<td>☐ T0</td>
<td>No evidence of primary tumor</td>
<td>☐ T0</td>
</tr>
<tr>
<td>☐ T1</td>
<td>Tumor 2 cm or less</td>
<td>☐ T1</td>
</tr>
<tr>
<td>☐ T2</td>
<td>Tumor more than 2 cm but not more than 5 cm</td>
<td>☐ T2</td>
</tr>
<tr>
<td>☐ T3</td>
<td>Tumor more than 5 cm but not more than 10 cm</td>
<td>☐ T3</td>
</tr>
<tr>
<td>☐ T4</td>
<td>Tumor more than 10 cm in greatest dimension</td>
<td>☐ T4</td>
</tr>
<tr>
<td>☐ N0</td>
<td>No regional lymph node metastasis*</td>
<td>☐ N0</td>
</tr>
<tr>
<td>☐ N1</td>
<td>Regional lymph node metastasis</td>
<td>☐ N1</td>
</tr>
<tr>
<td>☐ M0</td>
<td>No distant metastasis (no pathologic M0; use clinical M to complete stage group)</td>
<td>☐ M1</td>
</tr>
<tr>
<td>☐ M1</td>
<td>Distant metastasis</td>
<td>☐ M1</td>
</tr>
</tbody>
</table>

#### Anatomic Stage • Prognostic Groups – Gastric GIST
(also to be used for omentum)

<table>
<thead>
<tr>
<th>GROUP</th>
<th>T N M</th>
<th>Mitotic Rate</th>
<th>Mitotic Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>IA</td>
<td>T1 or T2 N0 M0</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>IB</td>
<td>T3 N0 M0</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>II</td>
<td>T1 T2 N0 M0</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>IIIA</td>
<td>T3 N0 M0</td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td>IIIB</td>
<td>T4 N0 M0</td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td>IV</td>
<td>Any T N1 M0</td>
<td>Any rate</td>
<td>Any rate</td>
</tr>
<tr>
<td>Stage unknown</td>
<td>Any T Any N M1</td>
<td>Any rate</td>
<td>Any rate</td>
</tr>
</tbody>
</table>

#### Anatomic Stage • Prognostic Groups – Small Intestinal GIST
(also to be used for esophagus, colorectal, mesentery, and peritoneum)

<table>
<thead>
<tr>
<th>GROUP</th>
<th>T N M</th>
<th>Mitotic Rate</th>
<th>Mitotic Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>T1 or T2 N0 M0</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>II</td>
<td>T3 N0 M0</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>IIIA</td>
<td>T1 T4 N0 M0</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>IIIB</td>
<td>T2 N0 M0</td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td>IV</td>
<td>Any T N1 M0</td>
<td>Any rate</td>
<td>Any rate</td>
</tr>
<tr>
<td>Stage unknown</td>
<td>Any T Any N M1</td>
<td>Any rate</td>
<td>Any rate</td>
</tr>
</tbody>
</table>

---

Hospital Name/Address

Patient Name/Information

(continued on next page)
<table>
<thead>
<tr>
<th>PRIMARY TUMOR (T)</th>
<th>LATERALITY: □ left □ right □ bilateral</th>
</tr>
</thead>
<tbody>
<tr>
<td>T0</td>
<td>□ T0</td>
</tr>
<tr>
<td>Tis</td>
<td>□ Tis</td>
</tr>
<tr>
<td>T1</td>
<td>□ T1</td>
</tr>
<tr>
<td>T1a</td>
<td>□ T1a</td>
</tr>
<tr>
<td>T1b</td>
<td>□ T1b</td>
</tr>
<tr>
<td>T2</td>
<td>□ T2</td>
</tr>
<tr>
<td>T2a</td>
<td>□ T2a</td>
</tr>
<tr>
<td>T2b</td>
<td>□ T2b</td>
</tr>
<tr>
<td>T3</td>
<td>□ T3</td>
</tr>
<tr>
<td>T4</td>
<td>□ T4</td>
</tr>
<tr>
<td>NX</td>
<td>□ NX</td>
</tr>
<tr>
<td>N0</td>
<td>□ N0</td>
</tr>
<tr>
<td>N1</td>
<td>□ N1</td>
</tr>
<tr>
<td>N2</td>
<td>□ N2</td>
</tr>
<tr>
<td>N3</td>
<td>□ N3</td>
</tr>
<tr>
<td>M0</td>
<td>□ M0</td>
</tr>
<tr>
<td>M1</td>
<td>□ M1</td>
</tr>
<tr>
<td>M1a</td>
<td>□ M1a</td>
</tr>
<tr>
<td>M1b</td>
<td>□ M1b</td>
</tr>
</tbody>
</table>

**REGIONAL LYMPH NODES (N)**
- Regional lymph nodes cannot be assessed
- No regional lymph node metastasis
- Metastasis in ipsilateral peribronchial and/or ipsilateral hilar lymph nodes and intrapulmonary nodes, including involvement by direct extension
- Metastasis in ipsilateral mediastinal and/or subcarinal lymph node(s)
- Metastasis in contralateral mediastinal, contralateral hilar, ipsilateral or contralateral scalene, or supraclavicular lymph node(s)

**DISTANT METASTASIS (M)**
- No distant metastasis (no pathologic M0; use clinical M to complete stage group)
- Distant metastasis
- Separate tumor node(s) in a contralateral lobe; tumor with pleural nodules or malignant pleural (or pericardial) effusion
- Distant metastasis (in extrathoracic organs)

**Most pleural (and pericardial) effusions with lung cancer are due to tumor. In a few patients, however, multiple cytopathologic examinations of pleural (pericardial) fluid are negative for tumor, and the fluid is nonbloody and is not an exudate. Where**
The IASLC lymph node map shown with the proposed amalgamation of lymph node levels into zones.
(© Memorial Sloan-Kettering Cancer Center, 2009.)
**Bone Staging Form**

<table>
<thead>
<tr>
<th>Clinical</th>
<th>Stage Category Definitions</th>
<th>Pathologic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extent of disease before any treatment</td>
<td>Tumor Size: _____________</td>
<td>Extent of disease during and from surgery</td>
</tr>
<tr>
<td>y clinical – staging completed after neoadjuvant therapy but before subsequent surgery</td>
<td>Laterality:</td>
<td>y pathologic – staging completed after neoadjuvant therapy AND subsequent surgery</td>
</tr>
<tr>
<td>□ TX</td>
<td>Primary tumor cannot be assessed</td>
<td>□ TX</td>
</tr>
<tr>
<td>□ T0</td>
<td>No evidence of primary tumor</td>
<td>□ T0</td>
</tr>
<tr>
<td>□ T1</td>
<td>Tumor 8 cm or less in greatest dimension</td>
<td>□ T1</td>
</tr>
<tr>
<td>□ T2</td>
<td>Tumor more than 8 cm in greatest dimension</td>
<td>□ T2</td>
</tr>
<tr>
<td>□ T3</td>
<td>Discontinuous tumors in the primary bone site</td>
<td>□ T3</td>
</tr>
<tr>
<td>□ NX</td>
<td>Regional lymph nodes cannot be assessed</td>
<td>□ NX</td>
</tr>
<tr>
<td>□ N0</td>
<td>No regional lymph node metastasis</td>
<td>□ N0</td>
</tr>
<tr>
<td>□ N1</td>
<td>Regional lymph node metastasis</td>
<td>□ N1</td>
</tr>
</tbody>
</table>

**Regional Lymph Nodes (N)**

| M0 | No distant metastasis (no pathologic M0; use clinical M to complete stage group) |
| M1 | Distant metastasis |
| M1a | Lung |
| M1b | Other distant sites |

**Distant Metastasis (M)**

| M1a | Any T N M1a Any G |
| M1b | Any T N M1b Any G |

<table>
<thead>
<tr>
<th>Clinical</th>
<th>Pathologic</th>
</tr>
</thead>
</table>

**Prognostic Factors (Site-Specific Factors)**

**Required for Staging:** Grade ____________

**Clinically Significant:**

- Three dimensions of tumor size ______ x ______ x ______
- Percentage necrosis post neoadjuvant systemic therapy from pathology report: ______
- Number of resected pulmonary metastases from pathology report: ______

**General Notes:**

- For identification of special cases of TNM or pTNM classifications, the “m” suffix and “y,” “r,” and “a” prefixes are used. Although they do not affect the stage grouping, they indicate cases needing separate analysis.
- The "m" suffix indicates the presence of multiple primary tumors in a single site and is recorded in parentheses: pT(m)NM.
<table>
<thead>
<tr>
<th>PRIMARY TUMOR (T)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>TX</td>
</tr>
<tr>
<td>T0</td>
</tr>
<tr>
<td>Tis</td>
</tr>
<tr>
<td>T1</td>
</tr>
<tr>
<td>T2</td>
</tr>
<tr>
<td>T3</td>
</tr>
<tr>
<td>T4</td>
</tr>
</tbody>
</table>

- Primary tumor cannot be assessed
- No evidence of primary tumor
- Tis Carcinoma in situ
- Tumor 2 cm or less in greatest dimension with less than two high risk features**
- Tumor greater than 2 cm in greatest dimension or Tumor any size with two or more high risk features**
- Tumor with invasion of maxilla, orbit, or temporal bone
- Tumor with invasion of skeleton (axial or appendicular) or perineural invasion of skull base

* Excludes cSCC of the eyelid – See Chapter 48.
**High Risk Features for the Primary Tumor (T) Staging:
  - Depth/Invasion: >2 mm thickness, Clark level ≥ IV, Perineural invasion
  - Anatomic Location: Primary site ear, Primary site hair-bearing lip
  - Differentiation: Poorly differentiated or undifferentiated

<table>
<thead>
<tr>
<th>REGIONAL LYMPH NODES (N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NX</td>
</tr>
<tr>
<td>N0</td>
</tr>
<tr>
<td>N1</td>
</tr>
<tr>
<td>N2</td>
</tr>
<tr>
<td>N2a</td>
</tr>
<tr>
<td>N2b</td>
</tr>
<tr>
<td>N2c</td>
</tr>
<tr>
<td>N3</td>
</tr>
</tbody>
</table>

- Regional lymph nodes cannot be assessed
- No regional lymph node metastasis
- Metastasis in a single ipsilateral lymph node, 3 cm or less in greatest dimension
- Metastasis in a single ipsilateral lymph node, more than 3 cm but not more than 6 cm in greatest dimension; or in multiple ipsilateral lymph nodes, none more than 6 cm in greatest dimension; or in bilateral or contralateral lymph nodes, none more than 6 cm in greatest dimension
- Metastasis in a single ipsilateral lymph node, more than 3 cm but not more than 6 cm in greatest dimension
- Metastasis in multiple ipsilateral lymph nodes, none more than 6 cm in greatest dimension
- Metastasis in bilateral or contralateral lymph nodes, none more than 6 cm in greatest dimension
- Metastasis in a lymph node, more than 6 cm in greatest dimension

<table>
<thead>
<tr>
<th>DISTANT METASTASIS (M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>M0</td>
</tr>
<tr>
<td>M1</td>
</tr>
</tbody>
</table>

- No distant metastasis (no pathologic M0; use clinical M to complete stage group)
- Distant metastasis

(continued on next page)
### Merkel Cell Carcinoma Staging Form

#### Extent of disease before any treatment
- **Clinical:** staging completed after neoadjuvant therapy but before subsequent surgery
- **Pathologic:** staging completed after neoadjuvant therapy AND subsequent surgery

#### Stage Category Definitions

<table>
<thead>
<tr>
<th>PRIMARY TUMOR (T)</th>
<th>REGIONAL LYMPH NODES (N)</th>
<th>DISTANT METASTASIS (M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>T0</td>
<td>Tis</td>
<td>M0</td>
</tr>
<tr>
<td>T1</td>
<td>N1</td>
<td>M1</td>
</tr>
<tr>
<td>T2</td>
<td>N2</td>
<td>M1a</td>
</tr>
<tr>
<td>T3</td>
<td>N1a</td>
<td>M1b</td>
</tr>
<tr>
<td>T4</td>
<td>N1b</td>
<td>M1c</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tumor Size:</th>
<th>Laterality:</th>
<th>Clinical–Staging Completed after Neoadjuvant Therapy but before subsequent surgery</th>
</tr>
</thead>
<tbody>
<tr>
<td>____________</td>
<td>left</td>
<td>right</td>
</tr>
<tr>
<td>____________</td>
<td>left</td>
<td>right</td>
</tr>
</tbody>
</table>

#### Notes:
- Isolated tumor nodes should be considered positive nodes.
- Stage unknown

#### Updated:
- July 1, 2011
### Melanoma of the Skin Staging Form

#### Anatomic Stage • Prognostic Groups

**Clinical**

<table>
<thead>
<tr>
<th>GROUP</th>
<th>T</th>
<th>N</th>
<th>M</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Tis</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>IA</td>
<td>T1a</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>IB</td>
<td>T1b</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>T2a</td>
<td>N0</td>
<td>M0</td>
<td></td>
</tr>
<tr>
<td>IIA</td>
<td>T2b</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>T3a</td>
<td>N0</td>
<td>M0</td>
<td></td>
</tr>
<tr>
<td>IIIB</td>
<td>T3b</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>T4a</td>
<td>N0</td>
<td>M0</td>
<td></td>
</tr>
<tr>
<td>III</td>
<td>Any T</td>
<td>≥N1</td>
<td>M0</td>
</tr>
<tr>
<td>IV</td>
<td>Any T</td>
<td>Any N</td>
<td>M1</td>
</tr>
</tbody>
</table>

* Clinical staging includes microstaging of the primary melanoma and clinical/radiologic evaluation for metastases. By convention, it should be used after complete excision of the primary melanoma with clinical assessment for regional and distant metastases.

**Pathologic**

<table>
<thead>
<tr>
<th>GROUP</th>
<th>T</th>
<th>N</th>
<th>M</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Tis</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>IA</td>
<td>T1a</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>IB</td>
<td>T1b</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>T2a</td>
<td>N0</td>
<td>M0</td>
<td></td>
</tr>
<tr>
<td>IIA</td>
<td>T2b</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>T3a</td>
<td>N0</td>
<td>M0</td>
<td></td>
</tr>
<tr>
<td>IIIB</td>
<td>T3b</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>T4a</td>
<td>N0</td>
<td>M0</td>
<td></td>
</tr>
<tr>
<td>III</td>
<td>Any T</td>
<td>N1a</td>
<td>M0</td>
</tr>
<tr>
<td>IIIB</td>
<td>T1–4a</td>
<td>N2a</td>
<td>M0</td>
</tr>
<tr>
<td>T1–4b</td>
<td>N1a</td>
<td>M0</td>
<td></td>
</tr>
<tr>
<td>T1–4b</td>
<td>N2a</td>
<td>M0</td>
<td></td>
</tr>
<tr>
<td>T1–4a</td>
<td>N1b</td>
<td>M0</td>
<td></td>
</tr>
<tr>
<td>T1–4a</td>
<td>N2b</td>
<td>M0</td>
<td></td>
</tr>
<tr>
<td>T1–4a</td>
<td>N2c</td>
<td>M0</td>
<td></td>
</tr>
<tr>
<td>IIIIC</td>
<td>T1–4b</td>
<td>N1b</td>
<td>M0</td>
</tr>
<tr>
<td>T1–4b</td>
<td>N2b</td>
<td>M0</td>
<td></td>
</tr>
<tr>
<td>T1–4b</td>
<td>N2c</td>
<td>M0</td>
<td></td>
</tr>
<tr>
<td>IV</td>
<td>Any T</td>
<td>N3</td>
<td>M0</td>
</tr>
</tbody>
</table>

+ Pathologic staging includes microstaging of the primary melanoma and pathologic information about the regional lymph nodes after partial or complete lymphadenectomy. Pathologic Stage 0 or Stage IA patients are the exception; they do not require pathologic evaluation of their lymph nodes.

- Stage unknown

#### Prognostic Factors (Site-Specific Factors)

**Required for Staging:** None

**Clinically Significant:**
- Measured thickness (depth)
- Ulceration
- Serum lactate dehydrogenase (LDH)
- Mitotic rate
- Tumor infiltrating lymphocytes (TIL)
- Level of invasion
- Vertical growth plate
- Regression

**Histologic Grade (G) (also known as overall grade)**

Histologic grading is not used in the staging of Melanoma.

**General Notes:**

For identification of special cases of TNM or pTNM classifications, the "m" suffix and "y," "r," and "a" prefixes are used. Although they do not affect the stage grouping, they indicate cases needing separate analysis.

- m suffix indicates the presence of multiple primary tumors in a single site and is recorded in parentheses: pT(m)NM.
- y prefix indicates those cases in which classification is performed during or following initial multimodality therapy. The cTNM or pTNM category is identified by a "y" prefix. The ycTNM or ypTNM categorizes the extent of tumor actually present at the time of that examination. The "y" categorization is not an estimate of tumor prior to multimodality therapy.

**Hospital Name/Address**

**Patient Name/Information**

(continued from previous page)
Illustration
Indicate on diagram primary tumor and regional nodes involved.
### Vulva Staging Form

<table>
<thead>
<tr>
<th>Clinical</th>
<th>Stage Category Definitions</th>
<th>Pathologic</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Extent of disease before any treatment</strong></td>
<td><strong>Tumor Size:</strong></td>
<td><strong>Laterality:</strong></td>
</tr>
<tr>
<td>☐ y clinical – staging completed after neoadjuvant therapy but before subsequent surgery</td>
<td></td>
<td>☐ left ☐ right ☐ bilateral</td>
</tr>
</tbody>
</table>

#### PRIMARY TUMOR (T)

<table>
<thead>
<tr>
<th>TNM FIGO CATEGORY</th>
<th>FIGO STAGE</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>T0</td>
<td>Tis</td>
<td>No evidence of primary tumor</td>
</tr>
<tr>
<td>T1a</td>
<td>IA</td>
<td>Carcinoma in situ (preinvasive carcinoma)</td>
</tr>
<tr>
<td>T1b</td>
<td>IB</td>
<td>Lesions ≤2 cm in size, confined to the vulva or perineum and with stromal invasion ≤1.0 mm**</td>
</tr>
<tr>
<td>T2***</td>
<td>II</td>
<td>Tumor of any size with extension to adjacent perineal structures (Lower/distal 1/3 urethra, lower/distal 1/3 vagina, anal involvement)</td>
</tr>
<tr>
<td>T3****</td>
<td>IVA</td>
<td>Tumor of any size with extension to any of the following: upper/proximal 2/3 of urethra, upper/proximal 2/3 vagina, bladder mucosa, rectal mucosa, or fixed to pelvic bone,</td>
</tr>
</tbody>
</table>

* FIGO staging no longer includes Stage 0 (Tis).

** The depth of invasion is defined as the measurement of the tumor from the epithelial-stromal junction of the adjacent most superficial dermal papilla to the deepest point of invasion.

*** FIGO uses the classification T2/T3. This is defined as T2 in TNM.

**** FIGO uses the classification T4. This is defined as T3 in TNM.

#### REGIONAL LYMPH NODES (N)

<table>
<thead>
<tr>
<th>TNM FIGO CATEGORY</th>
<th>FIGO STAGE</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>N0</td>
<td>N0</td>
<td>No regional lymph node metastasis</td>
</tr>
<tr>
<td>N1</td>
<td>N1a IIIA</td>
<td>One or two regional lymph node metastasis each 5 mm or less</td>
</tr>
<tr>
<td>N1b</td>
<td>IIIA</td>
<td>One lymph node metastases 5 mm or greater</td>
</tr>
<tr>
<td>N2a</td>
<td>IIIB</td>
<td>Regional lymph node metastasis with the following features:</td>
</tr>
<tr>
<td>N2b</td>
<td>IIIB</td>
<td>Three or more lymph node metastases each less than 5 mm</td>
</tr>
<tr>
<td>N2c</td>
<td>IIIC</td>
<td>Lymph node metastasis with extracapsular spread</td>
</tr>
<tr>
<td>N3</td>
<td>IVA</td>
<td>Fixed or ulcerated regional lymph node metastasis</td>
</tr>
</tbody>
</table>

An effort should be made to describe the site and laterality of lymph node metastases.

#### DISTANT METASTASIS (M)

<table>
<thead>
<tr>
<th>TNM FIGO CATEGORY</th>
<th>FIGO STAGE</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>M0</td>
<td>M0</td>
<td>No distant metastasis (no pathologic M0; use clinical M to complete stage group)</td>
</tr>
<tr>
<td>M1</td>
<td>IVB</td>
<td>Distant metastasis (including pelvic lymph node metastasis)</td>
</tr>
</tbody>
</table>

(continued on next page)
### Vagina Staging Form

#### Clinical Extent of Disease Before Any Treatment

<table>
<thead>
<tr>
<th>TNM</th>
<th>FIGO</th>
<th>CATEGORY</th>
<th>STAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>TX</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tis</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T1</td>
<td>I</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T2</td>
<td>II</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T3</td>
<td>III</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T4</td>
<td>IVA</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Tumor Size: [ ]

#### Laterality:

- [ ] left
- [ ] right
- [ ] bilateral

#### Pathologic Extent of Disease During and from Surgery

<table>
<thead>
<tr>
<th>TNM</th>
<th>FIGO</th>
<th>CATEGORY</th>
<th>STAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>TX</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tis</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T1</td>
<td>I</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T2</td>
<td>II</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T3</td>
<td>III</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T4</td>
<td>IVA</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Regional Lymph Nodes (N)

<table>
<thead>
<tr>
<th>TNM</th>
<th>FIGO</th>
<th>CATEGORY</th>
<th>STAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>NX</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N1</td>
<td>III</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Distant Metastasis (M)

<table>
<thead>
<tr>
<th>TNM</th>
<th>FIGO</th>
<th>CATEGORY</th>
<th>STAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>M0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M1</td>
<td>IVB</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Anatomic Stage • Prognostic Group

<table>
<thead>
<tr>
<th>GROUP</th>
<th>T</th>
<th>N</th>
<th>M</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Tis</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>I</td>
<td>T1</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>II</td>
<td>T2</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>III</td>
<td>T1–T3</td>
<td>N1</td>
<td>M0</td>
</tr>
<tr>
<td>IVA</td>
<td>T4</td>
<td>Any N</td>
<td>M0</td>
</tr>
<tr>
<td>IVB</td>
<td>Any T</td>
<td>Any N</td>
<td>M1</td>
</tr>
</tbody>
</table>

- [ ] Stage unknown

*FIGO staging no longer includes Stage 0 (Tis).*

### Hospital Name/Address

<table>
<thead>
<tr>
<th>Patient Name/Information</th>
</tr>
</thead>
</table>

(continued on next page)
## Cervix Uteri Staging Form

### Anatomic Stage • Prognostic Groups (FIGO 2008)

<table>
<thead>
<tr>
<th>GROUP</th>
<th>T</th>
<th>N</th>
<th>M</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage 0*</td>
<td>Tis</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>Stage I</td>
<td>T1</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>Stage IA</td>
<td>T1a</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>Stage IA1</td>
<td>T1a1</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>Stage IA2</td>
<td>T1a2</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>Stage IB</td>
<td>T1b</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>Stage IB1</td>
<td>T1b1</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>Stage IB2</td>
<td>T1b2</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>Stage II</td>
<td>T2</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>Stage IIa</td>
<td>T2a</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>Stage IIa1</td>
<td>T2a1</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>Stage IIa2</td>
<td>T2a2</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>Stage IIb</td>
<td>T2b</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>Stage III</td>
<td>T3</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>Stage IIIa</td>
<td>T3a</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>Stage IIIa1</td>
<td>T3a1</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>Stage IIIa2</td>
<td>T3a2</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>Stage IIIb</td>
<td>T3b</td>
<td>Any N</td>
<td>M0</td>
</tr>
<tr>
<td>Stage IIIa</td>
<td>T2b</td>
<td>Any T</td>
<td>M0</td>
</tr>
<tr>
<td>Stage IVa</td>
<td>T4</td>
<td>Any N</td>
<td>M0</td>
</tr>
<tr>
<td>Stage IVb</td>
<td>Any T</td>
<td>Any N</td>
<td>M1</td>
</tr>
</tbody>
</table>

*FIGO no longer includes Stage 0 (Tis)

### Clinical Prognostic Factors (Site-Specific Factors)

**REQUIRED FOR STAGING:** None

**CLINICALLY SIGNIFICANT:**

- FIGO Stage: __________
- Pelvic nodal status and method of assessment:
- Paraaortic nodal status and method of assessment:
- Distant (mediastinal, scalene) nodal status and method of assessment:

### Histologic Grade (G) (also known as overall grade)

<table>
<thead>
<tr>
<th>Grading system</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 grade system</td>
<td>Grade I or 1</td>
</tr>
<tr>
<td>3 grade system</td>
<td>Grade II or 2</td>
</tr>
<tr>
<td>4 grade system</td>
<td>Grade III or 3</td>
</tr>
<tr>
<td>No 2, 3, or 4 grade system is available</td>
<td>Grade IV or 4</td>
</tr>
</tbody>
</table>

### General Notes:

For identification of special cases of TNM or pTNM classifications, the "m" suffix and "y," "r," and "a" prefixes are used. Although they do not affect the stage grouping, they indicate cases needing separate analysis.

- **m** suffix indicates the presence of multiple primary tumors in a single site and is recorded in parentheses: pT(m)NM.
- **y** prefix indicates those cases in which classification is performed during or following initial multimodality therapy. The cTNM or pTNM category is identified by a "y" prefix. The ycTNM or ypTNM categorizes the extent of tumor actually present at the time of classification. The "y" categorization is not an estimate of tumor prior to multimodality therapy.
### Anatomic Stage • Prognostic Groups

#### Clinical Stage

<table>
<thead>
<tr>
<th>GROUP</th>
<th>T</th>
<th>N</th>
<th>M</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Tis</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>I</td>
<td>T1</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>IA</td>
<td>T1a</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>IB</td>
<td>T1b</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>II</td>
<td>T2</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>III</td>
<td>T3</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>IIIA</td>
<td>T3a</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>IIIB</td>
<td>T3b</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>IIIC1</td>
<td>T1-T3</td>
<td>N1</td>
<td>M0</td>
</tr>
<tr>
<td>IIIC2</td>
<td>T1-T3</td>
<td>N2</td>
<td>M0</td>
</tr>
<tr>
<td>IVA</td>
<td>T4</td>
<td>Any N</td>
<td>M0</td>
</tr>
<tr>
<td>IVB</td>
<td>Any T</td>
<td>Any N</td>
<td>M1</td>
</tr>
</tbody>
</table>

*FIGO no longer includes Stage 0 (Tis)*

Carcinosarcomas should be staged as carcinomas.

Stage unknown

#### Pathologic Stage

<table>
<thead>
<tr>
<th>GROUP</th>
<th>T</th>
<th>N</th>
<th>M</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Tis</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>I</td>
<td>T1</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>IA</td>
<td>T1a</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>IB</td>
<td>T1b</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>II</td>
<td>T2</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>III</td>
<td>T3</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>IIIA</td>
<td>T3a</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>IIIB</td>
<td>T3b</td>
<td>N0</td>
<td>M0</td>
</tr>
<tr>
<td>IIIC1</td>
<td>T1-T3</td>
<td>N1</td>
<td>M0</td>
</tr>
<tr>
<td>IIIC2</td>
<td>T1-T3</td>
<td>N2</td>
<td>M0</td>
</tr>
<tr>
<td>IVA</td>
<td>T4</td>
<td>Any N</td>
<td>M0</td>
</tr>
<tr>
<td>IVB</td>
<td>Any T</td>
<td>Any N</td>
<td>M1</td>
</tr>
</tbody>
</table>

*FIGO no longer includes Stage 0 (Tis)*

Carcinosarcomas should be staged as carcinomas.

Stage unknown

### Prognostic Factors (Site-Specific Factors)

#### Clinically Significant

**FIGO Stage:**

Peritoneal cytology results:

Pelvic nodal dissection with number of nodes positive/examined:

Para-aortic nodal dissection with number of nodes positive/examined:

Percentage of non-endometrioid cell type in mixed histology tumors:

Omentectomy performed:

#### Histologic Grade (G) (also known as overall grade)

**Grading system**

- 2 grade system
- 3 grade system
- 4 grade system
- No 2, 3, or 4 grade system is available

**Grade**

- Grade I or 1
- Grade II or 2
- Grade III or 3
- Grade IV or 4

Endometrioid adenocarcinomas should be graded according to the degree of differentiation of the adenocarcinoma as follows:

- **G1**: 5% or less of a non-squamous or non-morular solid growth pattern
- **G2**: 6% to 50% of a non-squamous or non-morular solid growth pattern
- **G3**: More than 50% of a non-squamous or non-morular solid growth pattern

**Notes on Pathologic Grading**

1. Notable nuclear atypia, inappropriate for the architectural grade, raises the grade by one.
2. Serous, clear cell, and mixed mesodermal tumors are Grade 3.

### General Notes:

- For identification of special cases of TNM or pTNM classifications, the "m" suffix and "y," "r," and "a" prefixes are used. Although they do not affect the stage grouping, they indicate cases needing separate analysis.

**m** suffix: indicates the presence of multiple primary tumors in a single site and is recorded in parentheses: pT(m)NM.

**y** prefix: indicates those cases in which classification is performed during or following initial multimodality therapy. The cTNM or pTNM category is identified by a "y" prefix. The ycTNM or ypTNM categorizes the extent of tumor actually present at the time of that examination. The "y" categorization is not an estimate of tumor prior to multimodality therapy.

**r** prefix: indicates a recurrent tumor when staged after a disease-free interval, and is identified by the "r" prefix: rTNM.

**a** prefix: designates the stage determined at autopsy: aTNM.

**surgical margins** is data field recorded by registrars describing the surgical margins of the resected primary site specimen as determined only by the pathology report.

<table>
<thead>
<tr>
<th>Hospital Name/Address</th>
<th>Patient Name/Information</th>
</tr>
</thead>
</table>

(continued from previous page)
## Ovary Staging Form

<table>
<thead>
<tr>
<th>Clinical</th>
<th>Stage Category Definitions</th>
<th>Pathologic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extent of disease before any treatment</td>
<td>Extent of disease through completion of definitive surgery</td>
<td></td>
</tr>
</tbody>
</table>

- **Tumor Size:** ____________
- **Laterality:**
  - □ left
  - □ right
  - □ bilateral

### PRIMARY TUMOR (T)

<table>
<thead>
<tr>
<th>TNM FIGO Category</th>
<th>FIGO Stage</th>
</tr>
</thead>
<tbody>
<tr>
<td>TX</td>
<td></td>
</tr>
<tr>
<td>T0</td>
<td></td>
</tr>
<tr>
<td>T1 I</td>
<td></td>
</tr>
<tr>
<td>T1a IA</td>
<td></td>
</tr>
<tr>
<td>T1b IB</td>
<td></td>
</tr>
<tr>
<td>T1c IC</td>
<td></td>
</tr>
<tr>
<td>T2 II</td>
<td></td>
</tr>
<tr>
<td>T2a IIA</td>
<td></td>
</tr>
<tr>
<td>T2b IIB</td>
<td></td>
</tr>
<tr>
<td>T2c IIC</td>
<td></td>
</tr>
<tr>
<td>T3 III</td>
<td></td>
</tr>
<tr>
<td>T3a IIIA</td>
<td></td>
</tr>
<tr>
<td>T3b IIIB</td>
<td></td>
</tr>
<tr>
<td>T3c IIIC</td>
<td></td>
</tr>
</tbody>
</table>

### REGIONAL LYMPH NODES (N)

<table>
<thead>
<tr>
<th>TNM FIGO Category</th>
<th>FIGO Stage</th>
</tr>
</thead>
<tbody>
<tr>
<td>NX</td>
<td></td>
</tr>
<tr>
<td>N0</td>
<td></td>
</tr>
<tr>
<td>N1 IIIC</td>
<td></td>
</tr>
</tbody>
</table>

### DISTANT METASTASIS (M)

<table>
<thead>
<tr>
<th>TNM FIGO Category</th>
<th>FIGO Stage</th>
</tr>
</thead>
<tbody>
<tr>
<td>M0</td>
<td></td>
</tr>
<tr>
<td>M1 IV</td>
<td></td>
</tr>
</tbody>
</table>

### TNM FIGO CATEGORY STAGE

| Primary tumor cannot be assessed |
| No evidence of primary tumor |
| Tumor limited to ovaries (one or both) |
| Tumor limited to one ovary; capsule intact, no tumor on ovarian surface. No malignant cells in ascites or peritoneal washings |
| Tumor limited to both ovaries; capsules intact, no tumor on ovarian surface. No malignant cells in ascites or peritoneal washings |
| Tumor limited to one or both ovaries with any of the following: capsule ruptured, tumor on ovarian surface, malignant cells in ascites or peritoneal washings |
| Extension and/or implants on uterus and/or tube(s). No malignant cells in ascites or peritoneal washings |
| Extension to and/or implants on other pelvic tissues. No malignant cells in ascites or peritoneal washings |
| Pelvic extension and/or implants (T2a or T2b) with malignant cells in ascites or peritoneal washings |
| Tumor involves one or both ovaries with microscopically confirmed peritoneal metastasis outside the pelvis |
| Microscopic peritoneal metastasis beyond pelvis (no macroscopic tumor) |
| Macroscopic peritoneal metastasis beyond pelvis 2 cm or less in greatest dimension |
| Peritoneal metastasis beyond pelvis more than 2 cm in greatest dimension and/or regional lymph node metastasis |

Note: Liver capsule metastasis (T3/Stage III); liver parenchymal metastasis (M1/Stage IV). Pleural effusion must have positive cytology for M1/Stage IV.

### TNM FIGO CATEGORY STAGE

<table>
<thead>
<tr>
<th>TX</th>
<th>T0</th>
</tr>
</thead>
<tbody>
<tr>
<td>T1 I</td>
<td>T1a IA</td>
</tr>
<tr>
<td>T1b IB</td>
<td>T1c IC</td>
</tr>
<tr>
<td>T2 II</td>
<td>T2a IIA</td>
</tr>
<tr>
<td>T2b IIB</td>
<td>T2c IIC</td>
</tr>
<tr>
<td>T3 III</td>
<td>T3a IIIA</td>
</tr>
<tr>
<td>T3b IIIB</td>
<td>T3c IIIC</td>
</tr>
<tr>
<td>M0</td>
<td>M1 IV</td>
</tr>
</tbody>
</table>

### TNM FIGO CATEGORY STAGE

| N0 |
| N1 IIIC |

### TNM FIGO CATEGORY STAGE

| M0 |
| M1 IV |

### Hospital Name/Address

### Patient Name/Information

(continued on next page)
### Clinical Extent of Disease Before Any Treatment

<table>
<thead>
<tr>
<th>TNM FIGO Category</th>
<th>Stage</th>
</tr>
</thead>
<tbody>
<tr>
<td>TX</td>
<td></td>
</tr>
<tr>
<td>T0</td>
<td></td>
</tr>
<tr>
<td>Tis *</td>
<td></td>
</tr>
<tr>
<td>T1</td>
<td>I</td>
</tr>
<tr>
<td>T1a I</td>
<td></td>
</tr>
<tr>
<td>T1b IB</td>
<td></td>
</tr>
<tr>
<td>T1c IC</td>
<td></td>
</tr>
<tr>
<td>T2</td>
<td>II</td>
</tr>
<tr>
<td>T2a IA</td>
<td></td>
</tr>
<tr>
<td>T2b IIB</td>
<td></td>
</tr>
<tr>
<td>T2c IIC</td>
<td></td>
</tr>
<tr>
<td>T3</td>
<td>III</td>
</tr>
<tr>
<td>T3a IIIA</td>
<td></td>
</tr>
<tr>
<td>T3b IIIB</td>
<td></td>
</tr>
<tr>
<td>T3c IIIC</td>
<td></td>
</tr>
</tbody>
</table>

#### Tumor Size

- Primary tumor cannot be assessed
- No evidence of primary tumor
- Carcinoma in situ (limited to tubal mucosa)
- Tumor limited to the fallopian tube(s)
- Tumor limited to one tube, without penetrating the serosal surface; no ascites
- Tumor limited to both tubes, without penetrating the serosal surface; no ascites
- Tumor limited to one or both tubes with extension onto or through the tubal serosa, or with malignant cells in ascites or peritoneal washings
- Tumor involves one or both fallopian tubes with pelvic extension
- Extension and/or metastasis to the uterus and/or ovaries
- Extension to other pelvic structures
- Pelvic extension with malignant cells in ascites or peritoneal washings
- Tumor involves one or both fallopian tubes, with peritoneal implants outside the pelvis
- Microscopic peritoneal metastasis outside the pelvis
- Macroscopic peritoneal metastasis outside the pelvis 2 cm or less in greatest dimension
- Peritoneal metastasis outside the pelvis and more than 2 cm in diameter

* FIGO no longer includes Stage 0 (Tis)

Note: Liver capsule metastasis is T3/Stage III; liver parenchymal metastasis M1/Stage IV. Pleural effusion must have positive cytology for M1/Stage IV.

### Pathologic Extent of Disease Through Completion of Definitive Surgery

<table>
<thead>
<tr>
<th>TNM FIGO Category</th>
<th>Stage</th>
</tr>
</thead>
<tbody>
<tr>
<td>TX</td>
<td></td>
</tr>
<tr>
<td>T0</td>
<td></td>
</tr>
<tr>
<td>Tis *</td>
<td></td>
</tr>
<tr>
<td>T1</td>
<td>I</td>
</tr>
<tr>
<td>T1a I</td>
<td></td>
</tr>
<tr>
<td>T1b IB</td>
<td></td>
</tr>
<tr>
<td>T1c IC</td>
<td></td>
</tr>
<tr>
<td>T2</td>
<td>II</td>
</tr>
<tr>
<td>T2a IA</td>
<td></td>
</tr>
<tr>
<td>T2b IIB</td>
<td></td>
</tr>
<tr>
<td>T2c IIC</td>
<td></td>
</tr>
<tr>
<td>T3</td>
<td>III</td>
</tr>
<tr>
<td>T3a IIIA</td>
<td></td>
</tr>
<tr>
<td>T3b IIIB</td>
<td></td>
</tr>
<tr>
<td>T3c IIIC</td>
<td></td>
</tr>
</tbody>
</table>

### Regional Lymph Nodes (N)

- Regional lymph nodes cannot be assessed
- No regional lymph node metastasis
- Regional lymph node metastasis

<table>
<thead>
<tr>
<th>TNM FIGO Category</th>
<th>Stage</th>
</tr>
</thead>
<tbody>
<tr>
<td>NX</td>
<td></td>
</tr>
<tr>
<td>N0</td>
<td></td>
</tr>
<tr>
<td>N1 IIIC</td>
<td></td>
</tr>
</tbody>
</table>

### Distant Metastasis (M)

- No distant metastasis (no pathologic M0; use clinical M to complete stage group)
- Distant metastasis (excludes metastasis within the peritoneal cavity)

<table>
<thead>
<tr>
<th>TNM FIGO Category</th>
<th>Stage</th>
</tr>
</thead>
<tbody>
<tr>
<td>M0</td>
<td>IV</td>
</tr>
<tr>
<td>M1</td>
<td>IV</td>
</tr>
</tbody>
</table>
### Gestational Trophoblastic Tumors Staging Form

<table>
<thead>
<tr>
<th>CLINICAL</th>
<th>STAGE CATEGORY DEFINITIONS</th>
<th>PATHOLOGIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extent of disease before any treatment</td>
<td>PRIMARY TUMOR (T)</td>
<td>Extent of disease through completion of definitive surgery</td>
</tr>
<tr>
<td>y clinical – staging completed after neoadjuvant therapy but before subsequent surgery</td>
<td>Tumor Size: _____________</td>
<td>y pathologic – staging completed after neoadjuvant therapy AND subsequent surgery</td>
</tr>
<tr>
<td>LATERALITY:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>□ left</td>
<td>□ right</td>
<td>□ bilateral</td>
</tr>
<tr>
<td>TNM FIGO CATEGORY</td>
<td>STAGE</td>
<td></td>
</tr>
<tr>
<td>TX</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T1 I</td>
<td>Primary tumor cannot be assessed</td>
<td></td>
</tr>
<tr>
<td>T2 II</td>
<td>No evidence of primary tumor</td>
<td></td>
</tr>
<tr>
<td>T1 M0</td>
<td>Tumor confined to uterus</td>
<td></td>
</tr>
<tr>
<td>T2 M0</td>
<td>Tumor extends to other genital structures (ovary, tube, vagina, broad ligaments) by metastasis or direct extension</td>
<td></td>
</tr>
<tr>
<td>M0</td>
<td>No distant metastasis (no pathologic M0; use clinical M to complete stage group)</td>
<td></td>
</tr>
<tr>
<td>M1</td>
<td>Distant metastasis</td>
<td></td>
</tr>
<tr>
<td>M1a III</td>
<td>Lung metastasis</td>
<td></td>
</tr>
<tr>
<td>M1b IV</td>
<td>All other distant metastasis</td>
<td></td>
</tr>
</tbody>
</table>

### REGIONAL LYMPH NODES (N)
There is no regional nodal designation in the staging of these tumors. Nodal metastases should be classified as metastatic (M1) disease.

<table>
<thead>
<tr>
<th>TNM FIGO CATEGORY</th>
<th>STAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>TX</td>
<td></td>
</tr>
<tr>
<td>T0</td>
<td></td>
</tr>
<tr>
<td>T1 I</td>
<td></td>
</tr>
<tr>
<td>T2 II</td>
<td></td>
</tr>
</tbody>
</table>

### DISTANT METASTASIS (M)

<table>
<thead>
<tr>
<th>TNM FIGO CATEGORY</th>
<th>STAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>M1</td>
<td></td>
</tr>
<tr>
<td>M1a III</td>
<td></td>
</tr>
<tr>
<td>M1b IV</td>
<td></td>
</tr>
</tbody>
</table>

### ANATOMIC STAGE • PROGNOSTIC GROUPS

<table>
<thead>
<tr>
<th>GROUP</th>
<th>T</th>
<th>N</th>
<th>M</th>
<th>RISK SCORE</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>T1</td>
<td>M0</td>
<td>Unknown</td>
<td></td>
</tr>
<tr>
<td>IA</td>
<td>T1</td>
<td>M0</td>
<td>Low risk</td>
<td></td>
</tr>
<tr>
<td>IB</td>
<td>T1</td>
<td>M0</td>
<td>High risk</td>
<td></td>
</tr>
<tr>
<td>II</td>
<td>T2</td>
<td>M0</td>
<td>Unknown</td>
<td></td>
</tr>
<tr>
<td>IIA</td>
<td>T2</td>
<td>M0</td>
<td>Low risk</td>
<td></td>
</tr>
<tr>
<td>IIB</td>
<td>T2</td>
<td>M0</td>
<td>High risk</td>
<td></td>
</tr>
<tr>
<td>III</td>
<td>Any T</td>
<td>M1a</td>
<td>Unknown</td>
<td></td>
</tr>
<tr>
<td>IIIA</td>
<td>Any T</td>
<td>M1a</td>
<td>Low risk</td>
<td></td>
</tr>
<tr>
<td>IIIB</td>
<td>Any T</td>
<td>M1a</td>
<td>High risk</td>
<td></td>
</tr>
<tr>
<td>IV</td>
<td>Any T</td>
<td>M1b</td>
<td>Unknown</td>
<td></td>
</tr>
<tr>
<td>IVB</td>
<td>Any T</td>
<td>M1b</td>
<td>Low risk</td>
<td></td>
</tr>
<tr>
<td>IVA</td>
<td>Any T</td>
<td>M1b</td>
<td>High risk</td>
<td></td>
</tr>
<tr>
<td>Stage unknown</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>GROUP</th>
<th>T</th>
<th>N</th>
<th>M</th>
<th>RISK SCORE</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>T1</td>
<td>M0</td>
<td>Unknown</td>
<td></td>
</tr>
<tr>
<td>IA</td>
<td>T1</td>
<td>M0</td>
<td>Low risk</td>
<td></td>
</tr>
<tr>
<td>IB</td>
<td>T1</td>
<td>M0</td>
<td>High risk</td>
<td></td>
</tr>
<tr>
<td>II</td>
<td>T2</td>
<td>M0</td>
<td>Unknown</td>
<td></td>
</tr>
<tr>
<td>IIA</td>
<td>T2</td>
<td>M0</td>
<td>Low risk</td>
<td></td>
</tr>
<tr>
<td>IIB</td>
<td>T2</td>
<td>M0</td>
<td>High risk</td>
<td></td>
</tr>
<tr>
<td>III</td>
<td>Any T</td>
<td>M1a</td>
<td>Unknown</td>
<td></td>
</tr>
<tr>
<td>IIIA</td>
<td>Any T</td>
<td>M1a</td>
<td>Low risk</td>
<td></td>
</tr>
<tr>
<td>IIIB</td>
<td>Any T</td>
<td>M1a</td>
<td>High risk</td>
<td></td>
</tr>
<tr>
<td>IV</td>
<td>Any T</td>
<td>M1b</td>
<td>Unknown</td>
<td></td>
</tr>
<tr>
<td>IVA</td>
<td>Any T</td>
<td>M1b</td>
<td>Low risk</td>
<td></td>
</tr>
<tr>
<td>IVB</td>
<td>Any T</td>
<td>M1b</td>
<td>High risk</td>
<td></td>
</tr>
<tr>
<td>Stage unknown</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Hospital Name/Address

### Patient Name/Information

(continued on next page)
### Penis Staging Form

<table>
<thead>
<tr>
<th><strong>CLINICAL</strong></th>
<th><strong>PATHOLOGIC</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Extent of disease before any treatment</td>
<td>Extent of disease through completion of definitive surgery</td>
</tr>
</tbody>
</table>

#### PRIMARY TUMOR (T)

- T0: No evidence of primary tumor
- Tis: Carcinoma in situ
- Ta: Noninvasive verrucous carcinoma*
- T1a: Tumor invades subepithelial connective tissue without lymph vascular invasion and is not poorly differentiated (i.e., grade 3-4)
- T1b: Tumor invades subepithelial connective tissue with LVI or is poorly differentiated
- T2: Tumor invades corpus spongiosum or cavernosum
- T3: Tumor invades urethra
- T4: Tumor invades other adjacent structures

*Note: Broad pushing penetration (invasion) is permitted - destructive invasion is against this diagnosis*

#### REGIONAL LYMPH NODES (N)

- N0: No palpable or visibly enlarged inguinal lymph nodes*
- N1: Palpable mobile unilateral inguinal lymph node*
- N2: Palpable mobile multiple or bilateral inguinal lymph nodes*
- N3: Palpable fixed inguinal nodal mass or pelvic lymphadenopathy unilateral or bilateral*

*Based upon palpation, imaging
**Based upon biopsy, or surgical excision

#### DISTANT METASTASIS (M)

- M0: No distant metastasis (no pathologic M0; use clinical M to complete stage group)
- M1: Distant metastasis*

*Note: Lymph node metastasis outside of the true pelvis in addition to visceral or bone sites.

---

Hospital Name/Address

Patient Name/Information

(continued on next page)
### Distant Metastasis (M)

- **M0**: No distant metastasis
- **M1**: Distant metastasis
- **M1a**: Non-regional lymph node(s)
- **M1b**: Bone(s)
- **M1c**: Other site(s) with or without bone disease

*Note: When more than one site of metastasis is present, the most advanced category is used. pM1c is most advanced.*

### Anatomic Stage • Prognostic Groups

<table>
<thead>
<tr>
<th>GROUP</th>
<th>T</th>
<th>N</th>
<th>M</th>
<th>PSA</th>
<th>Gleason</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 I</td>
<td></td>
<td></td>
<td>M0</td>
<td>PSA &lt;10</td>
<td>Gleason ≤ 6</td>
</tr>
<tr>
<td>1 T1a-c</td>
<td>N0</td>
<td>M0</td>
<td>PSA &lt;10</td>
<td>Gleason ≤ 6</td>
<td></td>
</tr>
<tr>
<td>1 T2a</td>
<td>N0</td>
<td>M0</td>
<td>PSA &lt;10</td>
<td>Gleason ≤ 6</td>
<td></td>
</tr>
<tr>
<td>1 T1–2a</td>
<td>N0</td>
<td>M0</td>
<td>PSA X</td>
<td>Gleason X</td>
<td></td>
</tr>
<tr>
<td>1 IA</td>
<td>T1a-c</td>
<td>N0</td>
<td>M0</td>
<td>PSA &lt; 20</td>
<td>Gleason 7</td>
</tr>
<tr>
<td>1 T1a-c</td>
<td>N0</td>
<td>M0</td>
<td>PSA ≥10 &lt; 20</td>
<td>Gleason ≤ 6</td>
<td></td>
</tr>
<tr>
<td>1 T2a</td>
<td>N0</td>
<td>M0</td>
<td>PSA ≥10 &lt; 20</td>
<td>Gleason ≤ 6</td>
<td></td>
</tr>
<tr>
<td>1 T2a</td>
<td>N0</td>
<td>M0</td>
<td>PSA &lt; 20</td>
<td>Gleason 7</td>
<td></td>
</tr>
<tr>
<td>1 T2b</td>
<td>N0</td>
<td>M0</td>
<td>PSA &lt; 20</td>
<td>Gleason 7</td>
<td></td>
</tr>
<tr>
<td>1 T2b</td>
<td>N0</td>
<td>M0</td>
<td>PSA X</td>
<td>Gleason X</td>
<td></td>
</tr>
<tr>
<td>1 IB</td>
<td>T2c</td>
<td>N0</td>
<td>M0</td>
<td>Any PSA</td>
<td>Any Gleason</td>
</tr>
<tr>
<td>1 T1–2</td>
<td>N0</td>
<td>M0</td>
<td>PSA ≥ 20</td>
<td>Any Gleason</td>
<td></td>
</tr>
<tr>
<td>1 T1–2</td>
<td>N0</td>
<td>M0</td>
<td>Any PSA</td>
<td>Any Gleason</td>
<td></td>
</tr>
<tr>
<td>1 IIA</td>
<td>T3a–b</td>
<td>N0</td>
<td>M0</td>
<td>Any PSA</td>
<td>Any Gleason</td>
</tr>
<tr>
<td>1 IV</td>
<td>T4</td>
<td>N0</td>
<td>M0</td>
<td>Any PSA</td>
<td>Any Gleason</td>
</tr>
<tr>
<td>Any T</td>
<td>N1</td>
<td>M0</td>
<td>Any PSA</td>
<td>Any Gleason</td>
<td></td>
</tr>
<tr>
<td>Any T</td>
<td>Any N</td>
<td>M1</td>
<td>Any PSA</td>
<td>Any Gleason</td>
<td></td>
</tr>
</tbody>
</table>

*When either PSA or Gleason is not available, grouping should be determined by T stage and/or either PSA or Gleason as available.*

<table>
<thead>
<tr>
<th>GROUP</th>
<th>T</th>
<th>N</th>
<th>M</th>
<th>PSA</th>
<th>Gleason</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 I</td>
<td></td>
<td></td>
<td>M0</td>
<td>PSA &lt;10</td>
<td>Gleason ≤ 6</td>
</tr>
<tr>
<td>1 T1a-c</td>
<td>N0</td>
<td>M0</td>
<td>PSA &lt;10</td>
<td>Gleason ≤ 6</td>
<td></td>
</tr>
<tr>
<td>1 T2a</td>
<td>N0</td>
<td>M0</td>
<td>PSA &lt;10</td>
<td>Gleason ≤ 6</td>
<td></td>
</tr>
<tr>
<td>1 T1–2a</td>
<td>N0</td>
<td>M0</td>
<td>PSA X</td>
<td>Gleason X</td>
<td></td>
</tr>
<tr>
<td>1 IA</td>
<td>T1a-c</td>
<td>N0</td>
<td>M0</td>
<td>PSA &lt; 20</td>
<td>Gleason 7</td>
</tr>
<tr>
<td>1 T1a-c</td>
<td>N0</td>
<td>M0</td>
<td>PSA ≥10 &lt; 20</td>
<td>Gleason ≤ 6</td>
<td></td>
</tr>
<tr>
<td>1 T2a</td>
<td>N0</td>
<td>M0</td>
<td>PSA ≥10 &lt; 20</td>
<td>Gleason ≤ 6</td>
<td></td>
</tr>
<tr>
<td>1 T2a</td>
<td>N0</td>
<td>M0</td>
<td>PSA &lt; 20</td>
<td>Gleason 7</td>
<td></td>
</tr>
<tr>
<td>1 T2b</td>
<td>N0</td>
<td>M0</td>
<td>PSA &lt; 20</td>
<td>Gleason 7</td>
<td></td>
</tr>
<tr>
<td>1 T2b</td>
<td>N0</td>
<td>M0</td>
<td>PSA X</td>
<td>Gleason X</td>
<td></td>
</tr>
<tr>
<td>1 IB</td>
<td>T2c</td>
<td>N0</td>
<td>M0</td>
<td>Any PSA</td>
<td>Any Gleason</td>
</tr>
<tr>
<td>1 T1–2</td>
<td>N0</td>
<td>M0</td>
<td>PSA ≥ 20</td>
<td>Any Gleason</td>
<td></td>
</tr>
<tr>
<td>1 T1–2</td>
<td>N0</td>
<td>M0</td>
<td>Any PSA</td>
<td>Any Gleason</td>
<td></td>
</tr>
<tr>
<td>1 IIA</td>
<td>T3a–b</td>
<td>N0</td>
<td>M0</td>
<td>Any PSA</td>
<td>Any Gleason</td>
</tr>
<tr>
<td>1 IV</td>
<td>T4</td>
<td>N0</td>
<td>M0</td>
<td>Any PSA</td>
<td>Any Gleason</td>
</tr>
<tr>
<td>Any T</td>
<td>N1</td>
<td>M0</td>
<td>Any PSA</td>
<td>Any Gleason</td>
<td></td>
</tr>
<tr>
<td>Any T</td>
<td>Any N</td>
<td>M1</td>
<td>Any PSA</td>
<td>Any Gleason</td>
<td></td>
</tr>
</tbody>
</table>

*When either PSA or Gleason is not available, grouping should be determined by T stage and/or either PSA or Gleason as available.*

### Prognostic Factors (Site-Specific Factors)

**Required for Staging:**
- Prostate Specific Antigen: _______________
- Gleason score: _______________

**Clinically Significant:**
- Gleason primary and secondary patterns:
- Gleason Tertiary Pattern:
- Clinical Staging procedures performed:
- Number of biopsy cores examined:
- Number of biopsy cores positive for cancer:

### General Notes:
For identification of special cases of TNM or pTNM classifications, the "m" suffix and "y," "r," and "a" prefixes are used. Although they do not affect the stage grouping, they indicate cases needing separate analysis. The "m" suffix indicates the presence of multiple primary tumors in a single site and is recorded in parentheses: pT(m)NM.
<table>
<thead>
<tr>
<th><strong>CLINICAL</strong> Extent of disease before any treatment</th>
<th><strong>STAGE CATEGORY DEFINITIONS</strong></th>
<th><strong>PATHOLOGIC</strong> Extent of disease through completion of definitive surgery</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ y clinical – staging completed after neoadjuvant therapy but before subsequent surgery</td>
<td><strong>TUMOR SIZE:</strong> _______________ ☐ left ☐ right ☐ bilateral</td>
<td>☐ y pathologic – staging completed after neoadjuvant therapy AND subsequent surgery</td>
</tr>
</tbody>
</table>

**PRIMARY TUMOR (T)**

- **pTX**
  - Primary tumor cannot be assessed
- **pT0**
  - No evidence of primary tumor (e.g., histologic scar in testis)
- **pTis**
  - Intratubular germ cell neoplasia (carcinoma in situ)
- **pT1**
  - Tumor limited to the testis and epididymis without vascular/lymphatic invasion; tumor may invade into the tunica albuginea but not the tunica vaginalis
- **pT2**
  - Tumor limited to the testis and epididymis with vascular/lymphatic invasion, or tumor extending through the tunica albuginea with involvement of the tunica vaginalis
- **pT3**
  - Tumor invades the spermatic cord with or without vascular/lymphatic invasion
  - Tumor invades the scrotum with or without vascular/lymphatic invasion

* Except for pTis and pT4, extent of primary tumor is classified by radical orchiectomy. TX may be used for other categories in the absence of radical orchiectomy.

**REGIONAL LYMPH NODES (N)**

- **NX**
  - Regional lymph nodes cannot be assessed
- **N0**
  - No regional lymph node metastasis
- **N1**
  - Metastasis with a lymph node mass 2 cm or less in greatest dimension; or multiple lymph nodes, none more than 2 cm in greatest dimension
    - Metastasis with a lymph node mass 2 cm or less in greatest dimension and less than or equal to 5 nodes positive, none more than 2 cm in greatest dimension
    - Metastasis with a lymph node mass more than 2 cm but not more than 5 cm in greatest dimension; or multiple lymph nodes, any one mass greater than 2 cm but not more than 5 cm in greatest dimension
- **N2**
  - Metastasis with a lymph node mass more than 2 cm but not more than 5 cm in greatest dimension; or multiple lymph nodes, any one mass greater than 2 cm but not more than 5 cm in greatest dimension
    - Metastasis with a lymph node mass more than 2 cm but not more than 5 cm in greatest dimension; or more than 5 nodes positive, none more than 5 cm; or evidence of extranodal extension of tumor
- **N3**
  - Metastasis with a lymph node mass more than 5 cm in greatest dimension
    - Metastasis with a lymph node mass more than 5 cm in greatest dimension

**DISTANT METASTASIS (M)**

- **M0**
  - No distant metastasis
- **M1**
  - Distant metastasis (nonregional nodal or pulmonary metastasis)
- **M1a**
  - Nonregional nodal or pulmonary metastasis
- **M1b**
  - Distant metastasis other than to non-regional lymph nodes and lung

HOSPITAL NAME/ADDRESS

PATIENT NAME/INFORMATION

(continued on next page)
## Testis Staging Form

### ANATOMIC STAGE • PROGNOSTIC GROUPS

<table>
<thead>
<tr>
<th>GROUP</th>
<th>T</th>
<th>N</th>
<th>M</th>
<th>S (serum tumor markers)</th>
<th>GROUP</th>
<th>T</th>
<th>N</th>
<th>M</th>
<th>S (serum tumor markers)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>pT1–4</td>
<td>N0</td>
<td>M0</td>
<td>SX</td>
<td>I</td>
<td>pT1–4</td>
<td>N0</td>
<td>M0</td>
<td>SX</td>
</tr>
<tr>
<td>IA</td>
<td>pT1</td>
<td>N0</td>
<td>M0</td>
<td>S0</td>
<td>IA</td>
<td>pT1</td>
<td>N0</td>
<td>M0</td>
<td>S0</td>
</tr>
<tr>
<td>IB</td>
<td>pT2</td>
<td>N0</td>
<td>M0</td>
<td>S0</td>
<td>IB</td>
<td>pT2</td>
<td>N0</td>
<td>M0</td>
<td>S0</td>
</tr>
<tr>
<td>pT3</td>
<td>N0</td>
<td>M0</td>
<td>S0</td>
<td></td>
<td>pT3</td>
<td>N0</td>
<td>M0</td>
<td>S0</td>
<td></td>
</tr>
<tr>
<td>pT4</td>
<td>N0</td>
<td>M0</td>
<td>S0</td>
<td></td>
<td>pT4</td>
<td>N0</td>
<td>M0</td>
<td>S0</td>
<td></td>
</tr>
<tr>
<td>IS</td>
<td>Any pT/Tx</td>
<td>N0</td>
<td>M0</td>
<td>S1–3</td>
<td>IS</td>
<td>Any pT/Tx</td>
<td>N0</td>
<td>M0</td>
<td>S1–3</td>
</tr>
<tr>
<td>II</td>
<td>Any pT/Tx</td>
<td>N1–3</td>
<td>M0</td>
<td>SX</td>
<td>II</td>
<td>Any pT/Tx</td>
<td>N1–3</td>
<td>M0</td>
<td>SX</td>
</tr>
<tr>
<td>IIA</td>
<td>Any pT/Tx</td>
<td>N1</td>
<td>M0</td>
<td>S0</td>
<td>IIA</td>
<td>Any pT/Tx</td>
<td>N1</td>
<td>M0</td>
<td>S0</td>
</tr>
<tr>
<td>IIB</td>
<td>Any pT/Tx</td>
<td>N2</td>
<td>M0</td>
<td>S0</td>
<td>IIB</td>
<td>Any pT/Tx</td>
<td>N2</td>
<td>M0</td>
<td>S0</td>
</tr>
<tr>
<td>IIC</td>
<td>Any pT/Tx</td>
<td>N3</td>
<td>M0</td>
<td>S0</td>
<td>IIC</td>
<td>Any pT/Tx</td>
<td>N3</td>
<td>M0</td>
<td>S0</td>
</tr>
<tr>
<td>III</td>
<td>Any pT/Tx Any N M1</td>
<td>SX</td>
<td></td>
<td>III</td>
<td>Any pT/Tx Any N M1</td>
<td>SX</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IIIA</td>
<td>Any pT/Tx Any N M1a</td>
<td>S0</td>
<td></td>
<td>IIIA</td>
<td>Any pT/Tx Any N M1a</td>
<td>S0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IIIB</td>
<td>Any pT/Tx N1–3</td>
<td>M0</td>
<td>S2</td>
<td>IIIB</td>
<td>Any pT/Tx N1–3</td>
<td>M0</td>
<td>S2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IIIC</td>
<td>Any pT/Tx N1–3</td>
<td>M0</td>
<td>S3</td>
<td>IIIC</td>
<td>Any pT/Tx N1–3</td>
<td>M0</td>
<td>S3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Any pT/Tx Any N M1b</td>
<td>Any S</td>
<td></td>
<td>Any pT/Tx Any N M1b</td>
<td>Any S</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stage unknown</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Stage unknown</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### PROGNOSTIC FACTORS (SITE-SPECIFIC FACTORS)

**REQUIRED FOR STAGING:** Serum Tumor Markers (S)
- SX Marker studies not available or not performed
- S0 Marker study levels within normal limits
- S1 LDH < 1.5 X N* AND hCG (mlu/ml) < 5000 AND AFP (ng/ml) < 1000
- S2 LDH 1.5–10 X N OR hCG (mlu/ml) 5000–50,000 OR AFP (ng/ml) 1000–10,000
- S3 LDH > 10 X N OR hCG (mlu/ml) > 50,000 OR AFP (ng/ml) > 10,000

*N indicates the upper limit of normal for the LDH assay.

Serum tumor marker levels should be measured prior to orchiectomy, but levels after orchiectomy are used for assignment of S category, taking into account the half life of AFP and hCG. Stage grouping classification of Stage IS requires persistent elevation of serum tumor markers following orchiectomy.

The Serum Tumor Markers (S) category is comprised of the following:
- Alpha Fetoprotein (AFP) — half life 5–7 days
- Human Chorionic Gonadotropin (hCG) — half life 1–3 days
- Lactate Dehydrogenase (LDH)

**CLINICALLY SIGNIFICANT:**
- Size of Largest Metastases in Lymph Nodes
- Radical Orchiectomy Performed

### General Notes:
For identification of special cases of TNM or pTNM classifications, the “m” suffix and “y,” “r,” and “a” prefixes are used. Although they do not affect the stage grouping, they indicate cases needing separate analysis.

*m* suffix indicates the presence of multiple primary tumors in a single site and is recorded in parentheses: pT(m)NM.

**HOSPITAL NAME/ADDRESS**

**PATIENT NAME/INFORMATION**
### PROGNOSTIC FACTORS (SITE-SPECIFIC FACTORS)

**REQUIRED FOR STAGING:** None

**CLINICALLY SIGNIFICANT:**

- Invasion beyond capsule into fat or perisinus tissues: ________________________________________
- Venous involvement: _________________________________________________________________
- Adrenal Extension: ___________________________________________________________________
- Fuhrman Grade: _____________________________________________________________________
- Sarcomatoid features: _________________________________________________________________
- Histologic tumor necrosis: ______________________________________________________________
- Extranodal extension: _________________________________________________________________
- Size of metastasis in lymph nodes: _____________________________________________________

#### Histologic Grade (G) (also known as overall grade)

<table>
<thead>
<tr>
<th>Grading system</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 grade system</td>
<td>Grade I or 1</td>
</tr>
<tr>
<td>3 grade system</td>
<td>Grade II or 2</td>
</tr>
<tr>
<td>4 grade system</td>
<td>Grade III or 3</td>
</tr>
<tr>
<td>No 2, 3, or 4 grade system is available</td>
<td>Grade IV or 4</td>
</tr>
</tbody>
</table>

#### ADDITIONAL DESCRIPTORS

**Lymphatic Vessel Invasion (L) and Venous Invasion (V)** have been combined into Lymph-Vascular Invasion (LVI) for collection by cancer registrars. The College of American Pathologists' (CAP) Checklist should be used as the primary source. Other sources may be used in the absence of a Checklist. Priority is given to positive results.

- Lymph-Vascular Invasion Not Present (absent)/Not Identified
- Lymph-Vascular Invasion Present/Identified
- Not Applicable
- Unknown/Indeterminate

**Residual Tumor (R)**

The absence or presence of residual tumor after treatment. In some cases treated with surgery and/or with neoadjuvant therapy there will be residual tumor at the primary site after treatment because of incomplete resection or local and regional disease that extends beyond the limit of ability of resection.

- RX Presence of residual tumor cannot be assessed
- R0 No residual tumor
- R1 Microscopic residual tumor
- R2 Macroscopic residual tumor

- Clinical stage was used in treatment planning (describe): ______________________________________
- National guidelines were used in treatment planning
  - ☐ NCCN
  - ☐ Other (describe): ______________________________________

---

**General Notes:**
For identification of special cases of TNM or pTNM classifications, the "m" suffix and "y," "r," and "a" prefixes are used. Although they do not affect the stage grouping, they indicate cases needing separate analysis.

- **m suffix** indicates the presence of multiple primary tumors in a single site and is recorded in parentheses: pT(m)NM.
- **y prefix** indicates those cases in which classification is performed during or following initial multimodality therapy. The cTNM or pTNM category is identified by a "y" prefix. The ycTNM or ypTNM categorizes the extent of tumor actually present at the time of that examination. The "y" categorization is not an estimate of tumor prior to multimodality therapy.
- **r prefix** indicates a recurrent tumor when staged after a disease-free interval, and is identified by the "r" prefix: rTNM.
- **a prefix** designates the stage determined at autopsy: aTNM.

**surgical margins** is data field recorded by registrars describing the surgical margins of the resected primary site specimen as determined only by the pathology report.

**neoadjuvant treatment** is radiation therapy or systemic therapy (consisting of chemotherapy, hormone therapy, or immunotherapy) administered prior to a definitive surgical procedure. If the surgical procedure is not performed, the administered therapy no longer meets the definition of neoadjuvant therapy.
### Carcinoma of the Eyelid Staging Form

#### Prognostic Factors (Site-Specific Factors)

**Required for Staging:** None

**Clinically Significant:**
- Sentinel Lymph Node Biopsy (SLNB) results: ___________________________________________
- Regional nodes identified on clinical or radiographic examination: _______________________
- Perineural invasion: __________________________________________________________________
- Tumor necrosis: _____________________________
- Pagetoid spread: _______________________________________________________________
- More than 3 Mohs micrographic surgical layers required: _____________________________
- Immunosuppression – patient has HIV: ______________________________________________
- Immunosuppression – history of solid organ transplant or leukemia: ____________________
- Prior radiation to the tumor field: __________________________________________________
- Excluding skin cancer, patient has history of two or more carcinomas: _________________
- Patient has Muir-Torre syndrome: _________________________________________________
- Patient has xeroderma pigmentosa: _______________________________________________

For Eyelid Cutaneous Squamous Cell Carcinoma only (see cSCC, Chapter 29):

**Required for Staging:**
- Tumor thickness (in mm): ___________________________________________
- Clark’s Level: _____________________________________________________________
- Presence / absence of perineural invasion: _____________________________
- Primary site location on ear or non-glabrous lip: ___________________________
- Histologic grade: _________________________________________________________
- Size of largest lymph node metastasis: _____________________________________

#### Histologic Grade (G) (also known as overall grade)

<table>
<thead>
<tr>
<th>Grading system</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 grade system</td>
<td>Grade I or 1</td>
</tr>
<tr>
<td>3 grade system</td>
<td>Grade II or 2</td>
</tr>
<tr>
<td>4 grade system</td>
<td>Grade III or 3</td>
</tr>
<tr>
<td>No 2, 3, or 4 grade system is available</td>
<td>Grade IV or 4</td>
</tr>
</tbody>
</table>

#### Additional Descriptors

**Lymphatic Vessel Invasion (L) and Venous Invasion (V)** have been combined into Lymph-Vascular Invasion (LVI) for collection by cancer registrars. The College of American Pathologists’ (CAP) Checklist should be used as the primary source. Other sources may be used in the absence of a Checklist. Priority is given to positive results.

- Lymph-Vascular Invasion Not Present (absent)/Not Identified
- Lymph-Vascular Invasion Present/Identified
- Not Applicable
- Unknown/Indeterminate

**Residual Tumor (R)**

The absence or presence of residual tumor after treatment. In some cases treated with surgery and/or with neoadjuvant therapy there will be residual tumor at the primary site after treatment because of incomplete resection or local and regional disease that extends beyond the limit of ability of resection.

- RX Presence of residual tumor cannot be assessed
- R0 No residual tumor
- R1 Microscopic residual tumor
- R2 Macroscopic residual tumor

### General Notes:

For identification of special cases of TNM or pTNM classifications, the “m” suffix and “y,” “r,” and “a” prefixes are used. Although they do not affect the stage grouping, they indicate cases needing separate analysis.

- **m suffix** indicates the presence of multiple primary tumors in a single site and is recorded in parentheses: pT(m)NM.
- **y prefix** indicates those cases in which classification is performed during or following initial multimodality therapy. The ctTNM or ptTNM category is identified by a “y” prefix. The ycTNM or ypTNM categorizes the extent of tumor actually present at the time of that examination. The “y” categorization is not an estimate of tumor prior to multimodality therapy.
- **r prefix** indicates a recurrent tumor when staged after a disease-free interval, and is identified by the “r” prefix: rTNM.
- **a prefix** designates the stage determined at autopsy: aTNM.

**Surgical margins** is data field recorded by registrars describing the surgical margins of the resected primary site specimen as determined only by the pathology report.

**Neoadjuvant treatment** is radiation therapy or systemic therapy (consisting of chemotherapy, hormone therapy, or immunotherapy) administered prior to a definitive surgical procedure. If the surgical procedure is not performed, the administered therapy no longer meets the definition of neoadjuvant therapy.
### MALIGNANT MELANOMA OF THE UVEA STAGING FORM

<table>
<thead>
<tr>
<th>Tumor Size Category</th>
<th>Clinical Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>T3b</td>
<td>Tumor size category 3 with ciliary body involvement</td>
</tr>
<tr>
<td>T3c</td>
<td>Tumor size category 3 without ciliary body involvement but with extraocular extension less than or equal to 5 mm in diameter</td>
</tr>
<tr>
<td>T3d</td>
<td>Tumor size category 3 with ciliary body involvement and extraocular extension less than or equal to 5 mm in diameter</td>
</tr>
<tr>
<td>T4</td>
<td>Tumor size category 4</td>
</tr>
<tr>
<td>T4a</td>
<td>Tumor size category 4 without ciliary body involvement and extraocular extension</td>
</tr>
<tr>
<td>T4b</td>
<td>Tumor size category 4 with ciliary body involvement</td>
</tr>
<tr>
<td>T4c</td>
<td>Tumor size category 4 without ciliary body involvement but with extraocular extension less than or equal to 5 mm in diameter</td>
</tr>
<tr>
<td>T4d</td>
<td>Tumor size category 4 with ciliary body involvement and extraocular extension less than or equal to 5 mm in diameter</td>
</tr>
<tr>
<td>T4e</td>
<td>Any tumor size category with extraocular extension more than 5 mm in diameter</td>
</tr>
</tbody>
</table>

*Clinical*: In clinical practice, the largest tumor basal diameter may be estimated in optic disc diameters (dd, average: 1 dd = 1.5 mm). Tumor thickness may be estimated in diopters (average: 2.5 diopters = 1 mm). However, techniques such as ultrasonography and fundus photography are used to provide more accurate measurements. Ciliary body involvement can be evaluated by the slit-lamp, ophthalmoscopy, gonioscopy and transillumination. However, high frequency ultrasonography (ultrasound biomicroscopy) is used for more accurate assessment. Extension through the sclera is evaluated visually before and during surgery, and with ultrasonography, computed tomography or magnetic resonance imaging.

*Pathologic*: When histopathologic measurements are recorded after fixation, tumor diameter and thickness may be underestimated because of tissue shrinkage.

<table>
<thead>
<tr>
<th>Regional Lymph Nodes (N)</th>
<th>Clinical Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>NX</td>
<td>Regional lymph nodes cannot be assessed</td>
</tr>
<tr>
<td>N0</td>
<td>No regional lymph node metastasis</td>
</tr>
<tr>
<td>N1</td>
<td>Regional lymph node metastasis</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Distant Metastasis (M)</th>
<th>Clinical Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>M0</td>
<td>No distant metastasis (no pathologic M0; use clinical M to complete stage group)</td>
</tr>
<tr>
<td>M1</td>
<td>Distant metastasis</td>
</tr>
<tr>
<td>M1a</td>
<td>Largest diameter of the largest metastasis ≤3 cm</td>
</tr>
<tr>
<td>M1b</td>
<td>Largest diameter of the largest metastasis 3.1-8.0 cm</td>
</tr>
<tr>
<td>M1c</td>
<td>Largest diameter of the largest metastasis 8.1 cm or more</td>
</tr>
</tbody>
</table>

Classification for ciliary body and choroid uveal melanoma based on thickness and diameter.