

APPENDIX

Identification of Primary Site

C18.1

Histopathologic Type

Code	Description	Code	Description
8000*	<i>Neoplasm, malignant</i>	8140	Adenocarcinoma
8010*	<i>Carcinoma, NOS</i>	8154	Mixed neuroendocrine-non-neuroendocrine neoplasm (MiNEN)
8012*	<i>Large cell carcinoma, NOS</i>	8213	Serrated dysplasia, high grade [#]
8210*	<i>Adenocarcinoma in adenomatous polyp</i>	8243	Goblet cell adenocarcinoma
8244*	<i>Mixed adenoneuroendocrine carcinoma</i>	8246	Neuroendocrine carcinoma (NEC)
8245*	<i>Adenocarcinoid tumor</i>	8480	Low grade appendiceal mucinous neoplasm (LAMN)
8255*	<i>Adenocarcinoma with mixed subtypes</i>	8480	High grade appendiceal mucinous neoplasm (HAMN)
8440*	<i>Cystadenocarcinoma, NOS</i>	8480	Mucinous adenocarcinoma
8481*	<i>Mucin-producing adenocarcinoma</i>	8490	Signet ring cell carcinoma/adenocarcinoma
8013	Large cell neuroendocrine carcinoma (NEC)	8510	Medullary carcinoma
8020	Undifferentiated carcinoma	8560	Adenosquamous carcinoma
8041	Small cell neuroendocrine carcinoma (NEC)	8574	Adenocarcinoma with neuroendocrine differentiation
8070	Squamous cell carcinoma, NOS		

* Histology is not ideal for clinical use in patient care, as it describes an unspecified or outdated diagnosis. Data collectors may use code only if there is not enough information in the medical record to document a more specific diagnosis.

[#]This diagnosis is appropriate for certain pTis diagnoses.

Definition of Primary Tumor (T)

T Category	T Criteria
TX	Primary tumor cannot be assessed
	No evidence of primary tumor
Tis	Carcinoma <i>in situ</i> (intramucosal carcinoma; invasion of the lamina propria or extension into but not through the muscularis mucosae)
Tis(LAMN)	Low-grade appendiceal mucinous neoplasm confined to the muscularis propria; Acellular mucin or mucinous epithelium may invade into the muscularis propria T1 and T2 are not applicable to LAMN; Acellular mucin or mucinous epithelium that extends into the subserosa or serosa should be classified as T3 or T4a, respectively
T1	Tumor invades the submucosa (through the muscularis mucosa but not into the muscularis propria)
T2	Tumor invades the muscularis propria
T3	Tumor invades through the muscularis propria into the subserosa or the mesoappendix
T4	Tumor invades the visceral peritoneum, including the acellular mucin or mucinous epithelium involving the serosa of the appendix or mesoappendix, and/or directly invades adjacent organs or structures
T4a	Tumor invades the visceral peritoneum, including acellular mucin or mucinous epithelium involving the serosa of the appendix or serosa of the mesoappendix
T4b	Tumor directly invades or adheres to adjacent organs or structures

Definition of Regional Lymph Node (N)

N Category	N Criteria
NX	Regional lymph nodes cannot be assessed
N0	No tumor involvement of regional lymph node(s)
N1	Tumor involvement of one to three regional lymph nodes (tumor in lymph node measuring ≥ 0.2 mm) or any number of tumor deposits is present with no tumor involvement in all identifiable lymph nodes
N1a	Tumor involvement of one regional lymph node
N1b	Tumor involvement of two or three regional lymph nodes
N1c	No tumor involvement of regional lymph nodes, but there are tumor deposits in the subserosa or mesentery
N2	Tumor involvement of four or more regional lymph nodes

Definition of Distant Metastasis (M)

M Category	M Criteria
cM0	No distant metastasis
cM1	Distant metastasis
cM1c	Metastasis to sites other than peritoneum
pM1	Microscopic confirmation of distant metastasis
pM1a	Intraperitoneal acellular mucin, without identifiable tumor cells in the disseminated peritoneal mucinous deposits
pM1b	Intraperitoneal metastasis only, including peritoneal mucinous deposits containing tumor cells
pM1c	Microscopic confirmation of metastasis to sites other than peritoneum

Note : For specimens containing acellular mucin without identifiable tumor cells, efforts should be made to obtain additional tissue for thorough histologic examination to evaluate for cellularity.

Prognostic Factors Required for Stage Grouping

G	G Definition
GX	Grade cannot be assessed
G1	Well differentiated
G2	Moderately differentiated
G3	Poorly differentiated

Note : In rare cases of discordance in primary and metastatic histological grade, the grade of metastatic disease is utilized for stage group assignment.

AJCC PROGNOSTIC STAGE GROUPS

When T is...	And N is...	And M is...	And grade is...	Then the stage group is...
Tis	N0	M0	Any	0
Tis (LAMN)	N0	M0	Any	0
T1	N0	M0	Any	I
T2	N0	M0	Any	I
T3	N0	M0	Any	IIA
T4a	N0	M0	Any	IIB
T4b	N0	M0	Any	IIC
T1	N1	M0	Any	IIIA
T2	N1	M0	Any	IIIA
T3	N1	M0	Any	IIIB
T4	N1	M0	Any	IIIB
Any T	N2	M0	Any	IIIC
Any T	Any N	M1a	Any	IVA
Any T	Any N	M1b	G1	IVA
Any T	Any N	M1b	G2,G3, or GX	IVB
Any T	Any N	M1c	Any G	IVC

References :

<https://www.facs.org/quality-programs/cancer-programs/american-joint-committee-on-cancer/version-9/>

<https://www.facs.org/Quality-Programs/Cancer/news/ajcc-kindle-102920>

ANUS

Identification of Primary Site

C21.0, C21.1 and C21.8

Histopathologic Type

Code	Description	Code	Description
8000*	<i>Neoplasm, malignant</i>	8085	Squamous cell carcinoma, HPV-associated
8010*	<i>Carcinoma, NOS</i>	8086	Squamous cell carcinoma, HPV-independent
8013	Large cell neuroendocrine carcinoma (NEC)	8090	Basal cell carcinoma
8020	Undifferentiated carcinoma	8123	Basaloid carcinoma
8032	Spindle cell carcinoma	8124	Cloacogenic carcinoma
8033	Carcinoma with sarcomatoid component	8140	Adenocarcinoma
8041	Small cell neuroendocrine carcinoma (NEC)	8154	Mixed neuroendocrine-non-neuroendocrine neoplasm (MiNEN)
8051	Verrucous carcinoma	8215	Adenocarcinoma of anal glands
8070	Squamous cell carcinoma	8244	Mixed adenoneuroendocrine carcinoma (MANEC)
8071	Squamous cell carcinoma, keratinizing, NOS	8246	Neuroendocrine carcinoma (NEC)
8072	Squamous cell carcinoma, large cell, non-keratinizing, NOS	8480	Mucinous adenocarcinoma
8083	Basaloid squamous cell carcinoma	8490	Signet ring cell carcinoma

* Histology is not ideal for clinical use in patient care, as it describes an unspecified or outdated diagnosis. Data collectors may use code only if there is not enough information in the medical record to document a more specific diagnosis.

Definition of Primary Tumor (T)

T Category	T Criteria
TX	Primary tumor not assessed
T0	No evidence of primary tumor
T1	Tumor \leq 2 cm
T2	Tumor $>$ 2 cm but \leq 5 cm
T3	Tumor $>$ 5 cm
T4	Tumor of any size invading adjacent organ(s), such as the vagina, urethra, or bladder

Definition of Regional Lymph Node (N)

N Category	N Criteria
NX	Regional lymph nodes cannot be assessed
N0	No tumor involvement of regional lymph node(s)
N1	Tumor involvement of regional lymph node(s)
N1a	Tumor involvement of inguinal, mesorectal, superior rectal, internal iliac, or obturator lymph node(s)
N1b	Tumor involvement of external iliac lymph node(s)
N1c	Tumor involvement of N1b (external iliac) with any N1a node(s)

Definition of Distant Metastasis (M)

M Category	M Criteria
cM0	No distant metastasis
cM1	Distant metastasis
pM1	Microscopic confirmation of distant metastasis

AJCC PROGNOSTIC STAGE GROUPS

When T is...	And N is...	And M is...	Then the stage group is...
T1	N0	M0	I
T2	N0	M0	IIA
T1-T2	N1	M0	IIB
T3	N0-N1	M0	IIIA
T4	N0	M0	IIIB
T4	N1	M0	IIIC
Any T	Any N	M1	IV

References :

<https://www.facs.org/quality-programs/cancer-programs/american-joint-committee-on-cancer/version-9/>

<https://www.facs.org/Quality-Programs/Cancer/news/ajcc-kindle-102920>

BRAIN AND SPINAL CORD

Identification of Primary Site

C71.5 - C71.9

Histopathologic Type

Code	Description	Code	Description
9470	Medulloblastoma, histologically defined	9474	Anaplastic medulloblastoma
9471	Desmoplastic nodular medulloblastoma	9475	Medulloblastoma, WNT-activated
9471	Medulloblastoma with extensive nodularity	9476	Medulloblastoma, SHH-activated and TP53-mutant
9471	Medulloblastoma, SHH-activated and TP53-wildtype	9477	Medulloblastoma, non-WNT/non-SHH
9474	Large cell medulloblastoma		

Definition of primary Tumor (T)

There is no primary tumor (T) category.

Definition of Regional Lymph Node (N)

There is no regional lymph node (N) category.

Definition of Distant Metastasis (M)

The definitions of the M categories for **medulloblastoma** correspond to the Modified Chang system. Both systems are included for comparison.

M Category (AJCC)	Modified Chang	M Criteria (AJCC)
cM0	M0	No distant metastasis
cM1		Distant metastasis
cM1b	M2	Intracranial spread beyond primary site
cM1c	M3	Gross spinal subarachnoid seeding on MRI
cM1d	M4	Metastasis outside CNS (bone marrow, lungs)
pM1		Microscopic confirmation of distant metastasis
pM1a	M1	Microscopic confirmation of tumor cells present in CSF by cytology
pM1b	M2	Microscopic confirmation of intracranial spread beyond primary site
pM1c	M3	Microscopic confirmation of gross spinal subarachnoid seeding
pM1d	M4	Microscopic confirmation of metastasis outside CNS (bone marrow, lungs)

AJCC PROGNOSTIC STAGE GROUPS

No prognostic stage grouping is proposed at this time.

References :

<https://www.facs.org/quality-programs/cancer-programs/american-joint-committee-on-cancer/version-9/>
<https://www.facs.org/Quality-Programs/Cancer/news/ajcc-kindle-102920>

APPENDIX

Summary of Changes :

- Per WHO Classification of Tumors 2021 corrigendum **localized LAMN and HAMN represent /2** behavior codes, while any appendiceal mucinous neoplasm with **extra-appendiceal spread represents** a /3 behavior code.
- Goblet cell carcinoid has been replaced by **goblet cell adenocarcinoma** as per WHO classification of tumors.
- Mixed adenoneuroendocrine carcinoma has been replaced with mixed adenocarcinoma-neuroendocrine carcinoma as per WHO 2019 terminology; and is considered a form of **mixed neuroendocrine-non-neuroendocrine neoplasm (MiNEN)**.

Definition of Distant Metastasis (M) (紅字增修處)

M Category	M Criteria
cM0	No distant metastasis
cM1	Distant metastasis
cM1c	Metastasis to sites other than peritoneum
pM1	Microscopic confirmation of distant metastasis
pM1a	Intraperitoneal acellular mucin, without identifiable tumor cells in the disseminated peritoneal mucinous deposits
pM1b	Intraperitoneal metastasis only, including peritoneal mucinous deposits containing tumor cells
pM1c	Microscopic confirmation of metastasis to sites other than peritoneum

Note : For specimens containing acellular mucin without identifiable tumor cells, efforts should be made to obtain additional tissue for thorough histologic examination to evaluate for cellularity.

References :

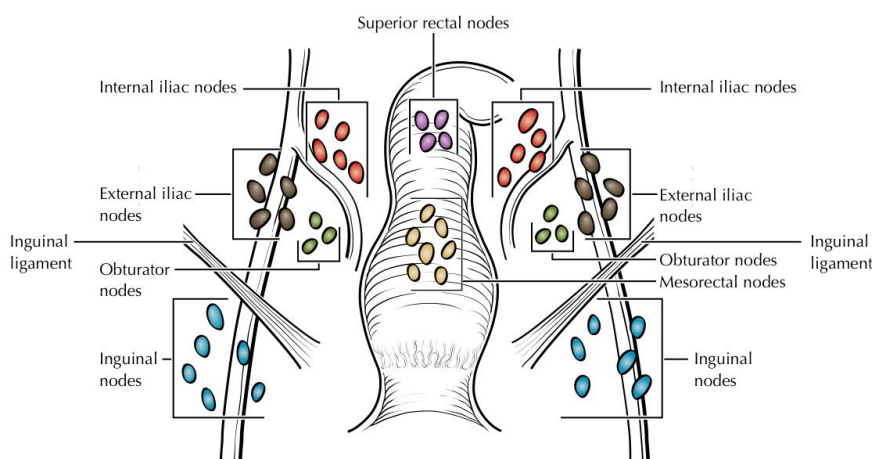
<https://www.facs.org/quality-programs/cancer-programs/american-joint-committee-on-cancer/version-9/>

<https://www.facs.org/Quality-Programs/Cancer/news/ajcc-kindle-102920>

ANUS

Summary of Changes :

- Removal of **Tis** from T category and **Stage group 0** from prognostic stage groups.
There are no reliable data on survival after treatment of Tis lesions. There is no routine, standard of care screening system for Tis lesions and reporting of these lesions is not reliable. Thus, in the AJCC Version 9 of the Anus Protocol, **Stage 0 has been removed**.
Of note, direct invasion of the rectal wall, perianal skin, subcutaneous tissue or the anal sphincter muscles is not classified as T4.
- **Obturator nodal regions** were added to the list of regional nodes. N1a is revised as metastasis in inguinal, mesorectal, **superior rectal**, internal iliac, or **obturator** lymph nodes.



AJCC PROGNOSTIC STAGE GROUPS (紅字增修處)

When T is...	And N is...	And M is...	Then the stage group is...
Tis	N0	M0	0
T1	N0	M0	I
T2	N0	M0	IIA
T1	N1	M0	IIA IIB
T2	N1	M0	IIA IIB
T3	N0	M0	IIA IIIA
T3	N1	M0	IIA IIIA
T4	N0	M0	IIIB
T4	N1	M0	IIIC
Any T	Any N	M1	IV

References :

<https://www.facs.org/quality-programs/cancer-programs/american-joint-committee-on-cancer/version-9/>
<https://www.facs.org/Quality-Programs/Cancer/news/ajcc-kindle-102920>

BRAIN AND SPINAL CORD

Summary of Changes :

- An M category is not pertinent to most CNS neoplasms because of the inherent biology that favors local recurrence and regional spread, rather than metastasis outside the CNS. In some instances, spread within the CNS or outside the CNS does alter treatment plans, and this issue has been addressed in the current 9th version for **medulloblastoma** (AJCC M category for staging).

Definition of Distant Metastasis (M) for Medulloblastoma (紅字增修處)

The definitions of the M categories for medulloblastoma correspond to the 「Modified Chang system」. Both systems are included for comparison.

M Category	<i>Modified Chang</i>	M Criteria (AJCC)
cM0	M0	No distant metastasis
cM1		Distant metastasis
cM1b	M2	Intracranial spread beyond primary site
cM1c	M3	Gross spinal subarachnoid seeding on MRI
cM1d	M4	Metastasis outside CNS (bone marrow, lungs)
pM1		Microscopic confirmation of distant metastasis
pM1a	M1	Microscopic confirmation of tumor cells present in CSF by cytology
pM1b	M2	Microscopic confirmation of intracranial spread beyond primary site
pM1c	M3	Microscopic confirmation of gross spinal subarachnoid seeding
pM1d	M4	Microscopic confirmation of metastasis outside CNS (bone marrow, lungs)

AJCC Prognostic Stage Groups

No prognostic stage grouping is proposed at this time.

References :

<https://www.facs.org/quality-programs/cancer-programs/american-joint-committee-on-cancer/version-9/>

<https://www.facs.org/Quality-Programs/Cancer/news/ajcc-kindle-102920>

Neuroendocrine Tumors of the Stomach

Identification of Primary Site

C16.0, C16.1, C16.2, C16.3, C16.4, C16.5, C16.6, C16.8, and C16.9

Histopathologic Type

Code	Description
8240	Neuroendocrine tumor, NOS
8240	Neuroendocrine tumor, grade 1
8249	Neuroendocrine tumor, grade 2
8249	Neuroendocrine tumor, grade 3
8153	Gastrin-producing (G-cell) neuroendocrine tumor
8241	Serotonin-producing enterochromaffin-cell (EC-cell) neuroendocrine tumor
8242	Histamine-producing enterochromaffin-like-cell (ECL-cell) neuroendocrine tumor
8156	Somatostatinoma, NOS (D-cell neuroendocrine tumor)

Grade

G	G Definition
GX	Grade cannot be assessed
G1	Mitotic count (per 2 mm ²)* < 2 and Ki-67 index (%)** < 3
G2	Mitotic count (per 2 mm ²)* = 2-20 or Ki-67 index (%)** = 3-20
G3	Mitotic count (per 2 mm ²)* > 20 or Ki-67 index (%)** > 20

*2 mm² equals 10 high-power fields at 40x magnification and an ocular field diameter of 0.5 mm; the number of high-power field for 10 mm² is different using microscopes with different field diameter; at least 10 mm² must be evaluated in areas of highest mitotic density.

**MIB1 antibody; % of 500-2000 cells in areas of highest nuclear labeling.

The final grade is determined by whichever (mitotic count and Ki-67 index) places the tumor in higher grade category.

Definition of Primary Tumor (T)

T Category	T Criteria
TX	Primary tumor cannot be assessed
T0	No evidence of primary tumor
T1	Tumor invades the mucosa or submucosa, and ≤ 1 cm in greatest dimension
T2	Tumor invades the muscularis propria or > 1 cm in greatest dimension
T3	Tumor invades through the muscularis propria into subserosal tissue without penetration of overlying serosa
T4	Tumor invades visceral peritoneum (serosa) or other organs or adjacent structures

Note: Multiple tumors should be designated as such (the largest tumor should be used to assign T category):

- Use T(#); c.g., pT3(4) N0 M0, or
- Use the *m* suffix, T(m); e.g., pT3(m) N0 M0

Definition of Regional Lymph Node (N)

N Category	N Criteria
NX	Regional lymph nodes cannot be assessed
N0	No tumor involvement of regional lymph node(s)
N1	Tumor involvement of regional lymph node(s)

Definition of Distant Metastasis (M)

M Category	M Criteria
cM0	No distant metastasis
cM1	Distant metastasis
cM1a	Metastasis confined to liver
cM1b	Metastases in at least one extrahepatic site (e.g., lung, ovary, nonregional lymph node, peritoneum, bone)
cM1c	Both hepatic and extrahepatic metastases
pM1	Microscopic confirmation of distant metastasis
pM1a	Microscopic confirmation of metastasis confined to liver
pM1b	Microscopic confirmation of metastases in at least one extrahepatic site (e.g., lung, ovary, nonregional lymph node, peritoneum, bone)
pM1c	Microscopic confirmation of both hepatic and extrahepatic metastases

AJCC Prognostic Stage Groups

When T is...	And N is...	And M is...	Then the stage group is...
T1	NX, N0	M0	I
T2, T3	N0	M0	II
T4	N0	M0	III
Any T	N1	M0	III
Any T	Any N	M1	IV

References :

<https://www.facs.org/quality-programs/cancer-programs/american-joint-committee-on-cancer/version-9/>

<https://www.facs.org/Quality-Programs/Cancer/news/ajcc-kindle-102920>

Neuroendocrine Tumors of the Duodenum and Ampulla of Vater

Cancers Staged Using This Staging System

This staging system applies only to **well-differentiated neuroendocrine tumors** of the duodenum and ampulla of Vater (**NET G1, G2, and G3**).

Cancers NOT Staged Using This Staging System

- *Carcinomas of the ampulla of Vater, including **neuroendocrine carcinoma (NEC) and mixed adenocarcinoma-neuroendocrine carcinoma** should be staged according to the classification for ampulla of Vater.*
- *Carcinomas of the duodenum, including **neuroendocrine carcinoma (NEC) and mixed adenocarcinoma-neuroendocrine carcinoma** should be staged according to the classification for small intestine.*
- ***Neuroendocrine tumors of the small intestine including jejunum and ileum** should be staged according to the classification for **neuroendocrine tumors of the jejunum and ileum**.*

Identification of Primary Site

C17.0, and C24.1

Histopathologic Type

Code	Description
8240	Neuroendocrine tumor, NOS
8240	Neuroendocrine tumor, grade 1
8249	Neuroendocrine tumor, grade 2
8249	Neuroendocrine tumor, grade 3
8153	Gastrinoma (G-cell neuroendocrine tumor)
8156	Somatostatinoma, NOS (D-cell neuroendocrine tumor)
8241	Enterochromaffin-cell (EC-cell) neuroendocrine tumor
8683	Composite gangliocytoma/neuroma and neuroendocrine tumor

Grade

G	G Definition
GX	Grade cannot be assessed
G1	Mitotic count (per 2 mm ²)* < 2 and Ki-67 index (%)** < 3
G2	Mitotic count (per 2 mm ²)* = 2-20 or Ki-67 index (%)** = 3-20
G3	Mitotic count (per 2 mm ²)* > 20 or Ki-67 index (%)** > 20

*2 mm² equals 10 high-power fields at 40x magnification and an ocular field diameter of 0.5 mm; the number of high-power field for 10 mm² is different using microscopes with different field diameter; at least 10 mm² must be evaluated in areas of highest mitotic density.

**MIB1 antibody; % of 500-2000 cells in areas of highest nuclear labeling.

The final grade is determined by whichever (mitotic count and Ki-67 index) places the tumor in higher grade category.

Definition of Primary Tumor (T)

T Category	T Criteria
TX	Primary tumor cannot be assessed
T1	Tumor invades the mucosa or submucosa only, and is ≤ 1 cm in greatest dimension (duodenal tumors); Tumor ≤ 1 cm in greatest dimension and confined within the sphincter of Oddi (ampullary tumors)
T2	Tumor invades the muscularis propria or is > 1 cm in greatest dimension (duodenal tumors); Tumor invades through sphincter into duodenal submucosa or muscularis propria, or is > 1 cm in greatest dimension (ampullary tumors)
T3	Tumor invades the pancreas or peripancreatic adipose tissue
T4	Tumor invades the visceral peritoneum (serosa) or other organs

Note: Multiple tumors should be designated as such (the largest tumor should be used to assign T category):

- Use T(#); c.g., pT3(4) N0 M0, or
- Use the *m* suffix, T(m); e.g., pT3(m) N0 M0

Definition of Regional Lymph Nodes (N)

N Category	N Criteria
NX	Regional lymph nodes cannot be assessed
N0	No tumor involvement of regional lymph node(s)
N1	Tumor involvement of regional lymph node(s)

Definition of Distant Metastasis (M)

M Category	M Criteria
cM0	No distant metastasis
cM1	Distant metastasis
cM1a	Metastasis confined to liver
cM1b	Metastases in at least one extrahepatic site (e.g., lung, ovary, nonregional lymph node, peritoneum, bone)
cM1c	Both hepatic and extrahepatic metastases
pM1	Microscopic confirmation of distant metastasis
pM1a	Microscopic confirmation of metastasis confined to liver
pM1b	Microscopic confirmation of metastases in at least one extrahepatic site (e.g., lung, ovary, nonregional lymph node, peritoneum, bone)
pM1c	Microscopic confirmation of both hepatic and extrahepatic metastases

AJCC Prognostic Stage Groups

When T is...	And N is...	And M is...	Then the stage group is...
T1	NX, N0	M0	I
T2, T3	N0	M0	II
T4	N0	M0	III
Any T	N1	M0	III
Any T	Any N	M1	IV

References :

<https://www.facs.org/quality-programs/cancer-programs/american-joint-committee-on-cancer/version-9/>
<https://www.facs.org/Quality-Programs/Cancer/news/ajcc-kindle-102920>

Neuroendocrine Tumors of the Jejunum and Ileum

Cancers Staged Using This Staging System

This staging system applies only to **well-differentiated neuroendocrine tumors** of the jejunum and ileum (**NET G1, G2, and G3**).

Cancers NOT Staged Using This Staging System

- Carcinomas of the jejunum and ileum, including **neuroendocrine carcinoma (NEC) and mixed adenocarcinoma-neuroendocrine carcinoma** should be staged according to the classification for small intestine.
- **Neuroendocrine tumors of the duodenum (C17.0) and ampulla of Vater (C24.I)** should be staged according to the classification for **neuroendocrine tumors of the duodenum and ampulla of Vater**.

Identification of Primary Site

C17.1, C17.2, C17.8, and C17.9

Histopathologic Type

Code	Description
8240	Neuroendocrine tumor, NOS
8240	Neuroendocrine tumor, grade 1
8249	Neuroendocrine tumor, grade 2
8249	Neuroendocrine tumor, grade 3
8241	Enterochromaffin-cell (EC-cell) neuroendocrine tumor

Grade

G	G Definition
GX	Grade cannot be assessed
G1	Mitotic count (per 2 mm ²)* < 2 and Ki-67 index (%)** < 3
G2	Mitotic count (per 2 mm ²)* = 2-20 or Ki-67 index (%)** = 3-20
G3	Mitotic count (per 2 mm ²)* > 20 or Ki-67 index (%)** > 20

*2 mm² equals 10 high-power fields at 40x magnification and an ocular field diameter of 0.5 mm; the number of high-power field for 10 mm² is different using microscopes with different field diameter; at least 10 mm² must be evaluated in areas of highest mitotic density.

**MIB1 antibody; % of 500-2000 cells in areas of highest nuclear labeling.

The final grade is determined by whichever (mitotic count and Ki-67 index) places the tumor in higher grade category.

Definition of Primary Tumor (T)

T Category	T Criteria
TX	Primary tumor cannot be assessed
T0	No evidence of primary tumor
T1	Tumor invades the mucosa or submucosa, and ≤ 1 cm in greatest dimension
T2	Tumor invades the muscularis propria or > 1 cm in greatest dimension with invasion of the mucosa or submucosa
T3	Tumor invades through the muscularis propria into subserosal tissue without penetration of overlying serosa
T4	Tumor invades the visceral peritoneum (serosa), or other organs or adjacent structures

Note: Multiple tumors should be designated as such (the largest tumor should be used to assign T category):

- Use T(#); c.g., pT3(4) N0 M0, or
- Use the *m* suffix, T(m); e.g., pT3(m) N0 M0

Definition of Regional Lymph Node (N)

N Category	N Criteria
NX	Regional lymph nodes cannot be assessed
N0	No tumor involvement of regional lymph node(s)
N1	Tumor involvement of less than 12 regional lymph nodes
N2	Tumor involvement of large mesenteric masses (> 2 cm) and/or extensive nodal deposits (12 or greater), especially those that encase the superior mesenteric vessels <i>Note:</i> Mesenteric masses ≤ 2 cm should be stated in the pathology report as being present and collected by registrars but do not affect stage.

Definition of Distant Metastasis (M)

M Category	M Criteria
cM0	No distant metastasis
cM1	Distant metastasis
cM1a	Metastasis confined to liver
cM1b	Metastases in at least one extrahepatic site (e.g., lung, ovary, nonregional lymph node, peritoneum, bone)
cM1c	Both hepatic and extrahepatic metastases
pM1	Microscopic confirmation of distant metastasis
pM1a	Microscopic confirmation of metastasis confined to liver
pM1b	Microscopic confirmation of metastases in at least one extrahepatic site (e.g., lung, ovary, nonregional lymph node, peritoneum, bone)
pM1c	Microscopic confirmation of both hepatic and extrahepatic metastases

AJCC Prognostic Stage Groups

When T is...	And N is...	And M is...	Then the stage group is...
T1	N0	M0	I
T2, T3	N0	M0	II
T4	N0	M0	III
Any T	N1, N2	M0	III
Any T	Any N	M1	IV

References :

<https://www.facs.org/quality-programs/cancer-programs/american-joint-committee-on-cancer/version-9/>
<https://www.facs.org/Quality-Programs/Cancer/news/ajcc-kindle-102920>

Neuroendocrine Tumors of the Appendix

Cancers Staged Using This Staging System

This staging system applies only to well-differentiated neuroendocrine tumors of the appendix (NET G1, G2, and G3).

Cancers NOT Staged Using This Staging System

High-grade neuroendocrine carcinoma (NEC), Goblet cell adenocarcinoma and mixed adenocarcinoma-NET/NEC should be staged according to the classification for appendix.

Identification of Primary Site

C18.1

Histopathologic Type

Code	Description
8240	Neuroendocrine tumor, NOS
8240	Neuroendocrine tumor, grade 1
8249	Neuroendocrine tumor, grade 2
8249	Neuroendocrine tumor, grade 3
8152	L-cell neuroendocrine tumor
8152	Glucagon-like peptide producing neuroendocrine tumor
8152	PP/PPY-producing tumor
8241	Enterochromaffin-cell (EC-cell) neuroendocrine tumor
8241	Serotonin-producing neuroendocrine tumor

Grade (G)

G	G Definition
GX	Grade cannot be assessed
G1	Mitotic count (per 2 mm ²)* < 2 and Ki-67 index (%)** < 3
G2	Mitotic count (per 2 mm ²)* = 2-20 or Ki-67 index (%)** = 3-20
G3	Mitotic count (per 2 mm ²)* > 20 or Ki-67 index (%)** > 20

*2 mm² equals 10 high-power fields at 40x magnification and an ocular field diameter of 0.5 mm; the number of high-power field for 10 mm² is different using microscopes with different field diameter; at least 10 mm² must be evaluated in areas of highest mitotic density.

**MIB1 antibody; % of 500-2000 cells in areas of highest nuclear labeling.

The final grade is determined by whichever (mitotic count and Ki-67 index) places the tumor in higher grade category.

Definition of Primary Tumor (T) (Note T)

T Category	T Criteria
TX	Primary tumor cannot be assessed
T0	No evidence of primary tumor
T1	Tumor \leq 2 cm in greatest dimension
T2	Tumor > 2 cm but \leq 4 cm in greatest dimension
T3	Tumor > 4 cm in greatest dimension, or with subserosal invasion, or involvement of the mesoappendix
T4	Tumor perforates the peritoneum, or directly invades other adjacent organs or structures (excluding direct mural extension to adjacent subserosa of adjacent bowel), e.g., abdominal wall and skeletal muscle

Note: Multiple tumors should be designated as such (the largest tumor should be used to assign T category):

- Use T(#); e.g., pT3(4) N0 M0, or
- Use the m suffix, T(m); e.g., pT3(m) N0 M0

Definition of Regional Lymph Node (N) (Note N)

N Category	N Criteria
NX	Regional lymph nodes cannot be assessed
N0	No tumor involvement of regional lymph node(s)
N1	Tumor involvement of regional lymph nodes(s)

Definition of Distant Metastasis (M) (Note M)

M Category	M Criteria
cM0	No distant metastasis
cM1	Distant metastasis
cM1a	Metastasis confined to liver
cM1b	Metastases in at least one extrahepatic site (e.g., lung, ovary, nonregional lymph node, peritoneum, bone)
cM1c	Both hepatic and extrahepatic metastases
pM1	Microscopic confirmation of distant metastasis
pM1a	Microscopic confirmation of metastasis confined to liver
pM1b	Microscopic confirmation of metastasis in at least one extrahepatic site (e.g., lung, ovary, nonregional lymph node, peritoneum, bone)
pM1c	Microscopic confirmation of both hepatic and extrahepatic metastasis

AJCC Prognostic Stage Groups

When T is...	And N is...	And M is...	Then the stage group is...
T1	NX, N0	M0	I
T2	NX, N0	M0	II
T3	N0	M0	II
T4	N0	M0	III
Any T	N1	M0	III
Any T	Any N	M1	IV

References :

<https://www.facs.org/quality-programs/cancer-programs/american-joint-committee-on-cancer/version-9/>
<https://www.facs.org/Quality-Programs/Cancer/news/ajcc-kindle-102920>

Neuroendocrin Tumors of the Colon and Rectum

Cancers Staged Using This Staging System

*This staging system applies only to **well-differentiated neuroendocrine tumors** of the colon and rectum (NET G1, G2, and G3).*

Cancers NOT Staged Using This Staging System

Poorly differentiated neuroendocrine carcinoma (NEC) and mixed neuroendocrine non-neuroendocrine (MiNEN) neoplasms should be staged according to the classification for colon and rectum.

Identification of Primary Site

C18.0, C18.2-C18.9, C19.9, and C20.9

Histopathologic Type

Code	Description
8240	Neuroendocrine tumor, NOS
8240	Neuroendocrine tumor, grade 1
8249	Neuroendocrine tumor, grade 2
8249	Neuroendocrine tumor, grade 3
8152	L-cell neuroendocrine tumor
8152	Glucagon-like peptide-producing neuroendocrine tumor
8152	PP/PYY-producing neuroendocrine tumor
8241	Enterochromaffin-cell (EC-cell) neuroendocrine tumor
8241	Serotonin-producing neuroendocrine tumor

Grade (G)

G	G Definition
GX	Grade cannot be assessed
G1	Mitotic count (per 2 mm ²)* < 2 and Ki-67 index (%)** < 3
G2	Mitotic count (per 2 mm ²)* = 2-20 or Ki-67 index (%)** = 3-20
G3	Mitotic count (per 2 mm ²)* > 20 or Ki-67 index (%)** > 20

*2 mm² equals 10 high-power fields at 40x magnification and an ocular field diameter of 0.5 mm; the number of high-power field for 10 mm² is different using microscopes with different field diameter; at least 10 mm² must be evaluated in areas of highest mitotic density.

**MIB1 antibody; % of 500-2000 cells in areas of highest nuclear labeling.

The final grade is determined by whichever (mitotic count and Ki-67 index) places the tumor in higher grade category.

Definition of Primary Tumor (T)

T Category	T Criteria
TX	Primary tumor cannot be assessed
T0	No evidence of primary tumor
T1	Tumor invades the mucosa or submucosa, and ≤ 2 cm in greatest dimension
T1a	Tumor <1 cm in greatest dimension
T1b	Tumor > 1 cm but ≤ 2 cm in greatest dimension
T2	Tumor invades the muscularis propria, or is > 2 cm in greatest dimension with invasion of the mucosa or submucosa
T3	Tumor invades through the muscularis propria into subserosal tissue without penetration of overlying serosa
T4	Tumor invades the visceral peritoneum (serosa), or other organs or adjacent structures

Note: Multiple tumors should be designated as such (the largest tumor should be used to assign T category):

- Use T(#); e.g., pT3(4) N0 M0, or
- Use the m suffix, T(m); e.g., pT3(m) N0 M0

Definition of Regional Lymph Node (N)

N Category	N Criteria
NX	Regional lymph nodes cannot be assessed
N0	No tumor involvement of regional lymph node(s)
N1	Tumor involvement of regional lymph node(s)

Definition of Distant Metastasis (M)

M Category	M Criteria
cM0	No distant metastasis
cM1	Distant metastasis
cM1a	Metastasis confined to liver
cM1b	Metastases in at least one extrahepatic site (e.g., lung, ovary, nonregional lymph node, peritoneum, bone)
cM1c	Both hepatic and extrahepatic metastases
pM1	Microscopic confirmation of distant metastasis
pM1a	Microscopic confirmation of metastasis confined to liver
pM1b	Microscopic confirmation of metastases in at least one extrahepatic site (e.g., lung, ovary, nonregional lymph node, peritoneum, bone)
pM1c	Microscopic confirmation of both hepatic and extrahepatic metastases

AJCC Prognostic Stage Groups

When T is...	And N is...	And M is...	Then the stage group is...
T1	NX, N0	M0	I
T2	N0	M0	IIA
T3	N0	M0	IIB
T4	N0	M0	IIIA
Any T	N1	M0	IIIB
Any T	Any N	M1	IV

References :

<https://www.facs.org/quality-programs/cancer-programs/american-joint-committee-on-cancer/version-9/>

<https://www.facs.org/Quality-Programs/Cancer/news/ajcc-kindle-102920>

Neuroendocrine Tumors of the Pancreas

Cancers Staged Using This Staging System

This staging system applies only to *well-differentiated neuroendocrine tumors of the pancreas (NET G1, G2, and G3)*.

Cancers NOT Staged Using This Staging System

- *Carcinomas of the pancreas, including poorly differentiated neuroendocrine carcinoma (NEC) and mixed neuroendocrine non-neuroendocrine (MiNEN) neoplasms should be staged according to the classification for exocrine pancreas.*
- *Well-differentiated neuroendocrine tumors of the duodenum (C17.0) or ampulla of Vater (C24.1) should be staged according to the classification for neuroendocrine tumors of the duodenum and ampulla of Vater.*

Identification of Primary Site

C25.0 C25.1 C25.2 C25.4 C25.7 C25.8, and C25.9

Histopathologic Type

Code	Description
8240	Neuroendocrine tumor, NOS
8240	Neuroendocrine tumor, grade 1
8249	Neuroendocrine tumor, grade 2
8249	Neuroendocrine tumor, grade 3
8150	Pancreatic neuroendocrine tumor, non-functioning
8151	Insulinoma
8152	Glucagonoma
8153	Gastrinoma
8155	VIPoma
8156	Somatostatinoma
8158	ACTH-producing neuroendocrine tumor
8241	Serotonin-producing neuroendocrine tumor
8272	GH-producing neuroendocrine tumor

This list includes histology codes and preferred terms from the WHO Classification of Tumours and the International Classification of Diseases for Oncology (ICD-0). Most of the terms in this list represent malignant behavior.

Grade (G)

G	G Definition
GX	Grade cannot be assessed
G1	Mitotic count (per 2 mm ²)* < 2 and Ki-67 index (%)** < 3
G2	Mitotic count (per 2 mm ²)* = 2-20 or Ki-67 index (%)** = 3-20
G3	Mitotic count (per 2 mm ²)* > 20 or Ki-67 index (%)** > 20

*2 mm² equals 10 high-power fields at 40x magnification and an ocular field diameter of 0.5 mm; the number of high-power field for 10 mm² is different using microscopes with different field diameter; at least 10 mm² must be evaluated in areas of highest mitotic density.

**MIB1 antibody; % of 500-2000 cells in areas of highest nuclear labeling.

The final grade is determined by whichever (mitotic count and Ki-67 index) places the tumor in higher grade category.

Definition of Primary Tumor (T)

T Category	T Criteria
TX	Tumor cannot be assessed
T1	Tumor limited to the pancreas*, ≤ 2 cm in greatest dimension
T2	Tumor limited to the pancreas*, > 2 cm but ≤ 4 cm in greatest dimension
T3	Tumor limited to the pancreas*, > 4 cm in greatest dimension; or tumor invading the duodenum, ampulla of Vater, or common bile duct
T4	Tumor invading adjacent organs (stomach, spleen, colon, adrenal gland) or the wall of large vessels (celiac axis, superior mesenteric artery/vein, splenic artery/vein, gastroduodenal artery/vein, portal vein)

**Limited to the pancreas* means there is no invasion of adjacent organs (stomach, spleen, colon, adrenal gland) or the wall of large vessels (celiac axis or the superior mesenteric artery). Extension of tumor into peripancreatic adipose tissue is NOT a basis for staging.

Note: Multiple tumors should be designated as such (the largest tumor should be used to assign T category):

- Use T(#); e.g., pT3(4) N0 M0, or
- Use the m suffix, T(m); e.g., pT3(m) N0 M0

Definition of Regional Lymph Node (N)

N Category	N Criteria
NX	Regional lymph nodes cannot be assessed
N0	No tumor involvement of regional lymph node(s)
N1	Tumor involvement of regional lymph node(s)

Definition of Distant Metastasis (M)

M Category	M Criteria
cM0	No distant metastasis
cM1	Distant metastasis
cM1a	Metastasis confined to liver
cM1b	Metastases in at least one extrahepatic site (e.g., lung, ovary, nonregional lymph node, peritoneum, bone)
cM1c	Both hepatic and extrahepatic metastases
pM1	Microscopic confirmation of distant metastasis
pM1a	Microscopic confirmation of metastasis confined to liver
pM1b	Microscopic confirmation of metastases in at least one extrahepatic site (e.g., lung, ovary, nonregional lymph node, peritoneum, bone)
pM1c	Microscopic confirmation of both hepatic and extrahepatic metastases

AJCC Prognostic Stage Groups

When T is...	And N is...	And M is...	Then the stage group is...
T1	N0	M0	I
T2, T3	N0	M0	II
T4	N0	M0	III
Any T	N1	M0	III
Any T	Any N	M1	IV

References :

<https://www.facs.org/quality-programs/cancer-programs/american-joint-committee-on-cancer/version-9/>

<https://www.facs.org/Quality-Programs/Cancer/news/ajcc-kindle-1029>

Vulva

Identification of Primary Site

C51.0, C51.1, C51.2, C51.8 and C51.9

Histopathologic Type

Code	Description
8085	Squamous cell carcinoma, HPV-associated
8086	Squamous cell carcinoma, HPV-independent
8070	Squamous cell carcinoma, NOS
8090	Basal cell carcinoma, NOS
9020	Phyllodes tumor, malignant
8500	Adenocarcinoma of anogenital mammary-like glands
8200	Adenoid cystic carcinoma
8020	Carcinoma, poorly differentiated, NOS
8560	Adenosquamous carcinoma
8240	Neuroendocrine tumor, NOS
8249	Neuroendocrine tumor, grade 2
8041	Small cell neuroendocrine carcinoma
8982	Myoepithelial carcinoma
8562	Epithelial-myoepithelial carcinoma
8542	Paget disease, extramammary
8400	Sweat gland adenocarcinoma
8401	Apocrine adenocarcinoma
8413	Eccrine adenocarcinoma
8409	Porocarcinoma, NOS
8144	Adenocarcinoma, intestinal type
9064	Germ cell tumor, NOS
9071	Yolk sac tumor, NOS
8000*	<i>Neoplasm, malignant</i>
8010*	<i>Carcinoma, NOS</i>
8140*	<i>Adenocarcinoma, NOS</i>
8051*	<i>Squamous cell carcinoma, verrucous</i>
8054*	<i>Squamous cell carcinoma, warty</i>
8071*	<i>Squamous cell carcinoma, keratinizing</i>
8072*	<i>Squamous cell carcinoma, non-keratinizing</i>
8076*	<i>Squamous cell carcinoma, micro invasive</i>
8083*	<i>Squamous cell carcinoma, basaloid</i>
8097*	<i>Basal cell carcinoma, nodular</i>

* Histology is not ideal for clinical use in patient care, as it describes an unspecified or outdated diagnosis. Data collectors may use this code only if there is not enough information in the medical record to document a more specific diagnosis.

Definition of Primary Tumor (T)

T Category	FIGO Stage	T Criteria
TX		Primary tumor cannot be assessed
T0		No evidence of primary tumor
T1	I	Tumor confined to the vulva
T1a	IA	Tumor size \leq 2 cm in greatest dimension and stromal invasion \leq 1 mm Note: Depth of invasion is measured from the basement membrane of the deepest adjacent tumor-free rete ridge to the deepest point of invasion.
T1b	IB	Tumor size $>$ 2 cm in greatest dimension or stromal invasion $>$ 1 mm Note: Depth of invasion is measured from the basement membrane of the deepest adjacent tumor-free rete ridge to the deepest point of invasion.
T2	II	Tumor of any size with extension to lower 1/3 of urethra, lower 1/3 of vagina, or anus
T3	IIIA	Tumor of any size with disease extension to upper 2/3 of urethra, upper 2/3 of vagina, bladder mucosa, rectal mucosa
T4	IVA	Tumor fixed to pelvic bone

Definition of Regional Lymph Node (N)

N Category	FIGO Stage	N Criteria
NX		Regional lymph nodes cannot be assessed
N0		No regional lymph node metastasis
N0(i+)		Isolated tumor cells in regional lymph node(s) \leq 0.2 mm, or single cells or clusters of cells \leq 200 cells in a single lymph node cross-section
N1	III	Tumor involvement of non-fixed, non-ulcerated regional lymph nodes
N1mi	IIIA	Tumor involvement $>$ 0.2 mm but \leq 2.0 mm in diameter of regional lymph nodes
N1a	IIIA	Tumor involvement $>$ 2.0 mm but \leq 5mm of regional lymph nodes
N1b	IIIB	Tumor involvement $>$ 5 mm of regional lymph nodes
N1c	IIIC	Tumor involvement of regional lymph nodes with extranodal extension (ENE)
N2	IVA	Tumor involvement of fixed or ulcerated regional lymph nodes

Definition of Distant Metastasis (M)

M Category	FIGO Stage	M Criteria
cM0		No distant metastasis
cM1	IVB	Distant metastasis
pM1	IVB	Microscopic confirmation of distant metastasis

AJCC Prognostic Stage Groups

When T is...	And N is...	And M is...	Then the stage group is...
T1	N0	M0	I
T1a	N0	M0	IA
T1b	N0	M0	IB
T2	N0	M0	II
TX-T3	N1	M0	III
T3	N0	M0	IIIA
TX-T3	N1mi, N1a	M0	IIIA
TX-T3	N1b	M0	IIIB
TX-T3	N1c	M0	IIIC
T4	Any N	M0	IVA
Any T	N2	M0	IVA
Any T	Any N	M1	IVB

References :

<https://www.facs.org/quality-programs/cancer-programs/american-joint-committee-on-cancer/version-9/>
<https://www.facs.org/Quality-Programs/Cancer/news/ajcc-kindle-102920>

Neuroendocrine Tumors of the Stomach

Summary of Changes :

- Histopathologic type updated according to the WHO Classification of Tumors, 5th Ed.
- New section on modalities and imaging used for diagnosis and staging.
- New table describing diagnostic workup.
- New table describing pathological staging with endoscopic resection highlighted as a surgical specimen.
- TINXMO has been added to stage I.
- Removed chromogranin A and added types of gastric neuroendocrine tumor.
- Non-tumor factors have been added.
- Clinical history of proton pump inhibitor use has been added.

Definition of Primary Tumor (T) (紅字増修處)

T Category	T Criteria
TX	Primary tumor cannot be assessed
T0	No evidence of primary tumor
T1	Tumor invades the lamina propria mucosa or submucosa, and ≤ 1 cm in greatest dimension
T2	Tumor invades the muscularis propria or > 1 cm in greatest dimension
T3	Tumor invades through the muscularis propria into subserosal tissue without penetration of overlying serosa
T4	Tumor invades visceral peritoneum (serosa) or other organs or adjacent structures

Note: Multiple tumors should be designated as such (the largest tumor should be used to assign T category):

- Use T(#); c.g., pT3(4) N0 M0, or
- Use the *m* suffix, T(m); e.g., pT3(m) N0 M0

Definition of Distant Metastasis (M) (紅字増修處)

M Category	M Criteria
cM0	No distant metastasis
cM1	Distant metastasis
cM1a	Metastasis confined to liver
cM1b	Metastases in at least one extrahepatic site (e.g., lung, ovary, nonregional lymph node, peritoneum, bone)
cM1c	Both hepatic and extrahepatic metastases
pM1	Microscopic confirmation of distant metastasis
pM1a	Microscopic confirmation of metastasis confined to liver
pM1b	Microscopic confirmation of metastases in at least one extrahepatic site (e.g., lung, ovary, nonregional lymph node, peritoneum, bone)
pM1c	Microscopic confirmation of both hepatic and extrahepatic metastases

AJCC Prognostic Stage Groups (紅字増修處)

When T is...	And N is...	And M is...	Then the stage group is...
T1	NX , N0	M0	I
T2, T3	N0	M0	II
T4	N0	M0	III
Any T	N1	M0	III
Any T	Any N	M1	IV

References :

<https://www.facs.org/quality-programs/cancer-programs/american-joint-committee-on-cancer/version-9/>

<https://www.facs.org/Quality-Programs/Cancer/news/ajcc-kindle-102920>

Neuroendocrine Tumors of the Duodenum and Ampulla of Vater

Summary of Changes :

- Histopathologic type updated according to the WHO Classification of Tumors, 5th Ed.
- New section on modalities and imaging used for diagnosis and staging highlight endoscopic management for small duodenal NETs.
- New section highlights endoscopic resection.
- TINXMO has been added to stage I to reflect lesions undergoing endoscopic resection.
- Associated genetic syndrome and chromogranin A have been removed.
- Non-tumor factors have been added.

Definition of Primary Tumor (T) (紅字增修處)

T Category	T Criteria
TX	Primary tumor cannot be assessed
T1	Tumor invades the mucosa or submucosa only and is ≤ 1 cm in greatest dimension (duodenal tumors); Tumor ≤ 1 cm in greatest dimension and confined within the sphincter of Oddi (ampullary tumors)
T2	Tumor invades the muscularis propria or is > 1 cm in greatest dimension (duodenal tumors); Tumor invades through sphincter into duodenal submucosa or muscularis propria, or is > 1 cm in greatest dimension (ampullary tumors)
T3	Tumor invades the pancreas or peripancreatic adipose tissue
T4	Tumor invades the visceral peritoneum (serosa) or other organs

Note: Multiple tumors should be designated as such (the largest tumor should be used to assign T category):

- Use T(#); c.g., pT3(4) N0 M0, or
- Use the *m* suffix, T(m); e.g., pT3(m) N0 M0

Definition of Distant Metastasis (M) (紅字増修處)

M Category	M Criteria
cM0	No distant metastasis
cM1	Distant metastasis
cM1a	Metastasis confined to liver
cM1b	Metastases in at least one extrahepatic site (e.g., lung, ovary, nonregional lymph node, peritoneum, bone)
cM1c	Both hepatic and extrahepatic metastases
pM1	Microscopic confirmation of distant metastasis
pM1a	Microscopic confirmation of metastasis confined to liver
pM1b	Microscopic confirmation of metastases in at least one extrahepatic site (e.g., lung, ovary, nonregional lymph node, peritoneum, bone)
pM1c	Microscopic confirmation of both hepatic and extrahepatic metastases

AJCC Prognostic Stage Groups (紅字増修處)

When T is...	And N is...	And M is...	Then the stage group is...
T1	NX , N0	M0	I
T2, T3	N0	M0	II
T4	N0	M0	III
AnyT	N1	M0	III
AnyT	Any N	M1	IV

References :

<https://www.facs.org/quality-programs/cancer-programs/american-joint-committee-on-cancer/version-9/>

<https://www.facs.org/Quality-Programs/Cancer/news/ajcc-kindle-102920>

Neuroendocrine Tumors of the Jejunum and Ileum

Summary of Changes :

- Included tumors overlapping the jejunum and ileum as well as small intestine, NOS.
- Histopathologic type updated according to the WHO Classification of Tumors, 5th Ed.
- New section on modalities used for diagnosis and staging
- Deleted chromogranin A, plasma panreastatin and plasma serotonin level; added mesenteric fibrosis.
- Included age and patient comorbidities unrelated to the NET.
- Included somatostatin receptor type 2 positivity.

Definition of Primary Tumor (T) (紅字增修處)

T Category	T Criteria
TX	Primary tumor cannot be assessed
T0	No evidence of primary tumor
T1	Tumor invades lamina propria the mucosa or submucosa, and less than or equal to 1 cm in size ≤ 1 cm in greatest dimension
T2	Tumor invades the muscularis propria or greater than 1 cm in size > 1 cm in greatest dimension with invasion of the mucosa or submucosa
T3	Tumor invades through the muscularis propria into subserosal tissue without penetration of overlying serosa
T4	Tumor invades visceral peritoneum (serosal) or other organs or adjacent structures

Note: Multiple tumors should be designated as such (the largest tumor should be used to assign T category):

- Use T(#); c.g., pT3(4) N0 M0, or
- Use the *m* suffix, T(m); e.g., pT3(m) N0 M0

Definition of Regional Lymph Node (N) (紅字增修處)

N Category	N Criteria
NX	Regional lymph nodes cannot be assessed
N0	No tumor involvement of regional lymph node(s)
N1	Tumor involvement of less than 12 regional lymph nodes
N2	Tumor involvement of large mesenteric masses(> 2 cm) and/or extensive nodal deposits (12 or greater), especially those that encase the superior mesenteric vessels <i>Note:</i> Mesenteric masses ≤ 2 cm should be stated in the pathology report as being present and collected by registrars but do not affect stage.

Definition of Distant Metastasis (M) (紅字增修處)

M Category	M Criteria
cM0	No distant metastasis
cM1	Distant metastasis
cM1a	Metastasis confined to liver
cM1b	Metastases in at least one extrahepatic site (e.g., lung, ovary, nonregional lymph node, peritoneum, bone)
cM1c	Both hepatic and extrahepatic metastases
pM1	Microscopic confirmation of distant metastasis
pM1a	Microscopic confirmation of metastasis confined to liver
pM1b	Microscopic confirmation of metastases in at least one extrahepatic site (e.g., lung, ovary, nonregional lymph node, peritoneum, bone)
pM1c	Microscopic confirmation of both hepatic and extrahepatic metastases

References :

<https://www.facs.org/quality-programs/cancer-programs/american-joint-committee-on-cancer/version-9/>

<https://www.facs.org/Quality-Programs/Cancer/news/ajcc-kindle-102920>

Neuroendocrine Tumors of the Appendix

Summary of Changes :

- Histopathologic Type updated according to WHO Classification of Tumors, 5th Ed.
- New section on modalities used for diagnosis and staging
- Included age and patient comorbidities unrelated to the NET.
- Included somatostatin receptor type 2 positivity.
- Discussed against routine use of chromogranin A and added data on emerging prognostic tools: PPQ and Clinical Score.
- T1NXM0 has been added to Stage I, and T2NXM0 has been added to Stage II.

Definition of Distant Metastasis (M) (紅字增修處)

M Category	M Criteria
cM0	No distant metastasis
cM1	Distant metastasis
cM1a	Metastasis confined to liver
cM1b	Metastases in at least one extrahepatic site (e.g., lung, ovary, nonregional lymph node, peritoneum, bone)
cM1c	Both hepatic and extrahepatic metastases
pM1	Microscopic confirmation of distant metastasis
pM1a	Microscopic confirmation of metastasis confined to liver
pM1b	Microscopic confirmation of metastasis in at least one extrahepatic site (e.g., lung, ovary, nonregional lymph node, peritoneum, bone)
pM1c	Microscopic confirmation of metastasis to sites other than peritoneum

AJCC Prognostic Stage Groups (紅字增修處)

When T is...	And N is...	And M is...	Then the stage group is...
T1	NX , N0	M0	I
T2	NX , N0	M0	II
T3	N0	M0	II
T4	N0	M0	III
Any T	N1	M0	III
Any T	Any N	M1	IV

References :

<https://www.facs.org/quality-programs/cancer-programs/american-joint-committee-on-cancer/version-9/>

<https://www.facs.org/Quality-Programs/Cancer/news/ajcc-kindle-102920>

Neuroendocrine Tumors of the Colon and Rectum

Summary of Changes :

- T1NXM0 has been added to Stage I.
- New section on modalities and imaging used for diagnosis and staging.
- New table describing diagnostic workup.
- New table describing pathological staging with information provided by the pathologist and staging by the managing physician.
- New section with staging rules for common staging scenarios.
- Updated prognostic tumor characteristics and added non-tumor factors.

Definition of Primary Tumor (T) (紅字增修處)

T Category	T Criteria
TX	Primary tumor cannot be assessed
T0	No evidence of primary tumor
T1	Tumor invades the mucosa or submucosa, and ≤ 2 cm in greatest dimension
T1a	Tumor <1 cm in greatest dimension
T1b	Tumor > 1 cm but ≤ 2 cm in greatest dimension
T2	Tumor invades the muscularis propria, or is > 2 cm in greatest dimension with invasion of the mucosa or submucosa
T3	Tumor invades through the muscularis propria into subserosal tissue without penetration of overlying serosa
T4	Tumor invades the visceral peritoneum (serosa), or other organs or adjacent structures

Note: Multiple tumors should be designated as such (the largest tumor should be used to assign T category):

- Use T(#); e.g., pT3(4) N0 M0, or
- Use the m suffix, T(m); e.g., pT3(m) N0 M0

Definition of Distant Metastasis (M) (紅字増修處)

M Category	M Criteria
cM0	No distant metastasis
cM1	Distant metastasis
cM1a	Metastasis confined to liver
cM1b	Metastases in at least one extrahepatic site (e.g., lung, ovary, nonregional lymph node, peritoneum, bone)
cM1c	Both hepatic and extrahepatic metastases
pM1	Microscopic confirmation of distant metastasis
pM1a	Microscopic confirmation of metastasis confined to liver
pM1b	Microscopic confirmation of metastases in at least one extrahepatic site (e.g., lung, ovary, nonregional lymph node, peritoneum, bone)
pM1c	Microscopic confirmation of both hepatic and extrahepatic metastases

AJCC Prognostic Stage Groups (紅字増修處)

When T is...	And N is...	And M is...	Then the stage group is...
T1	NX , N0	M0	I
T2	N0	M0	IIA
T3	N0	M0	IIB
T4	N0	M0	IIIA
Any T	N1	M0	IIIB
Any T	Any N	M1	IV

References :

<https://www.facs.org/quality-programs/cancer-programs/american-joint-committee-on-cancer/version-9/>

<https://www.facs.org/Quality-Programs/Cancer/news/ajcc-kindle-102920>

Neuroendocrine Tumors of the Pancreas

Summary of Changes :

- Histopathologic type updated according to the WHO Classification of Tumors, 5th Ed.
- Included *DAXX/ATRX*, *ARX* and *PDX1* as potential biomarkers and several clinicopathologic factors for non-tumor factors.

Prognostic Tumor Characteristics	Non-Tumor Factors
1. Mitotic count 2. Ki-67 index 3. Associated genetic syndrome 4. Chomogranin A (CgA) 5. Functionality 6. <i>DAXX/ATRX</i> st 7. <i>ARX</i> , <i>PDX1</i> expression	1. Age 2. Family history of cancer 3. Smoking 4. Alcohol consumption 5. Increased body mass index 6. Diabetes 7. <i>MEN1</i> and other rarer heritable gene conditions (neurofibromatosis type I, Cowden syndrome, tuberous sclerosis, von Rippel-Lindau syndrome)

- Included **DOTA PET scans** in imaging used for diagnosis and the new clinical staging and workup table.
- Introduction discussed latest epidemiological data and treatment options including PRRT, capecitabine in combination with temozolomide (chemotherapy regimens).

Definition of Distant Metastasis (M) (紅字增修處)

M Category	M Criteria
cM0	No distant metastasis
cM1	Distant metastasis
cM1a	Metastasis confined to liver
cM1b	Metastases in at least one extrahepatic site (e.g., lung, ovary, nonregional lymph node, peritoneum, bone)
cM1c	Both hepatic and extrahepatic metastases
pM1	Microscopic confirmation of distant metastasis
pM1a	Microscopic confirmation of metastasis confined to liver
pM1b	Microscopic confirmation of metastases in at least one extrahepatic site (e.g., lung, ovary, nonregional lymph node, peritoneum, bone)
pM1c	Microscopic confirmation of both hepatic and extrahepatic metastases

References :

<https://www.facs.org/quality-programs/cancer-programs/american-joint-committee-on-cancer/version-9/>
<https://www.facs.org/Quality-Programs/Cancer/news/ajcc-kindle-102920>

Vulva

Summary of Changes :

- New definition of depth of invasion measurement.
Depth of invasion is measured from the basement membrane of the deepest adjacent tumor-free rete ridge to the deepest point of invasion.
- New T category, T4-Tumor fixed to pelvic bone.
- N category is reduced from 3 (N1-N3) categories to 2 categories (N1-N2).
- Imaging findings are allowed to be incorporated into T, N and M categories.

Definition of primary Tumor (T) (紅字增修處)

T Category	FIGO Stage	T Criteria
TX		Primary tumor cannot be assessed
T0		No evidence of primary tumor
T1	I	Tumor confined to the vulva and/or perineum Multifocal lesions should be designated as such. The largest lesion or the lesion with the greatest depth of invasion will be the target lesion identified to address the highest pT stage. 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
T1a	IA	Tumor size Lesions 2 cm or less, confined to the vulva and/or perineum , and with stromal invasion of 1.0 mm or less Note: Depth of invasion is measured from the basement membrane of the deepest adjacent tumor-free rete ridge to the deepest point of invasion.
T1b	IB	Tumor size Lesions more than 2 cm, or any size with stromal invasion of more than 1.0 mm, confined to the vulva and/or perineum Note: Depth of invasion is measured from the basement membrane of the deepest adjacent tumor-free rete ridge to the deepest point of invasion.
T2	II	Tumor of any size with extension to adjacent perineal structures (lower/distal third 1/3 of the urethra, lower/distal third 1/3 of the vagina, or anus anal involvement)
T3	IIIA IVA	Tumor of any size with disease extension to any of the following— upper/ proximal two thirds 2/3 of the urethra, upper/ proximal two thirds 2/3 of the vagina, bladder mucosa, or rectal mucosa —or fixed to the pelvic bone
T4	IVA	Tumor fixed to pelvic bone

Definition of Regional Lymph Node (N) (紅字增修處)

N Category	FIGO Stage	N Criteria
NX		Regional lymph nodes cannot be assessed
N0		No regional lymph node metastasis
N0(i+)		Isolated tumor cells in regional lymph node(s) no greater than 0.2 mm, or single cells or clusters of cells ≤ 200 cells in a single lymph node cross-section
N1	III	Tumor involvement of non-fixed, non-ulcerated regional lymph nodes Regional lymph node metastasis with one or two lymph node metastases each less than 5 mm, or one lymph node metastasis greater than or equal to 5 mm
N1mi	IIIA	Tumor involvement > 0.2 mm but ≤ 2.0 mm in diameter of regional lymph nodes
N1a*	IIIA	Tumor involvement > 2.0 mm but ≤ 5 mm of regional lymph nodes One or two lymph node metastases each less than 5 mm
N1b	IIIB	Tumor involvement > 5 mm of regional lymph nodes
N1c	IIIC	One lymph node metastasis greater than or equal to 5 mm Tumor involvement of regional lymph nodes with extranodal extension (ENE)
N2	IVA	Tumor involvement of fixed or ulcerated regional lymph nodes Regional lymph node metastasis with three or more lymph node metastases each less than 5 mm, or two or more lymph node metastases greater than or equal to 5 mm, or lymph node(s) with extranodal extension
N2a*	IIIB	Three or more lymph node metastases each less than 5 mm
N2b	IIIB	Two or more lymph node metastases greater than or equal to 5 mm
N2c	IIIC	Lymph node(s) with extranodal extension
N3	IVA	Fixed or ulcerated regional lymph node metastasis

*Includes micrometastasis, N1mi and N2mi.

Definition of Distant Metastasis (M) (紅字增修處)

M Category	FIGO Stage	M Criteria
cM0		No distant metastasis (no pathological M0 ; use clinical M to complete stage group)
cM1	IVB	Distant metastasis (including pelvic lymph node metastasis)
pM1	IVB	Microscopic confirmation of distant metastasis

AJCC Prognostic Stage Groups (紅字增修處)

When T is...	And N is...	And M is...	Then the stage group is...
T1	N0	M0	I
T1a	N0	M0	IA
T1b	N0	M0	IB
T2	N0	M0	II
TX-T3 T1-T2	N1-N2c	M0	III
T3	N0	M0	IIIA
TX-T3 T1-T2	N1mi, N1a	M0	IIIA
TX-T3 T1-T2	N1b N2a, N2b	M0	IIIB
TX-T3 T1-T2	N1c N2c	M0	IIIC
T1-T3	N3	M0-M1	IV
T4 T1-T2	Any N N3	M0	IVA
Any T T3	N2 Any N	M0	IVA
Any T	Any N	M1	IVB

References :

<https://www.facs.org/quality-programs/cancer-programs/american-joint-committee-on-cancer/version-9/>

<https://www.facs.org/Quality-Programs/Cancer/news/ajcc-kindle-102920>

Lung

Cancers Staged Using This Staging System

*This classification applies **carcinomas** of the lung, including **non-small cell** and **small cell carcinomas**, and **bronchopulmonary carcinoid (neuroendocrine) tumors**.*

Cancers NOT Staged Using This Staging System

***Sarcomas of the lung** should be staged according to the classification for **Soft Tissue Sarcoma of the Abdomen and Thoracic Visceral Organs**.*

Identification of Primary Site

C34.0, C34.1, C34.2, C34.3, C34.8, and C34.9

Histopathologic Type

Code	Description
8010	Non-small cell carcinoma, NOS
8012	Large cell carcinoma
8013	Large cell neuroendocrine carcinoma
	Combined large cell neuroendocrine carcinoma
8022	Pleomorphic carcinoma
8023	NUT carcinoma
8031	Giant cell carcinoma
8032	Spindle cell carcinoma
8041	Small cell carcinoma
8044	Thoracic SMARCA4- deficient undifferentiated tumor
8045	Combined small cell carcinoma
8070	Squamous cell carcinoma
	Squamous cell carcinoma in situ
8071	Keratinizing squamous cell carcinoma
8072	Non-keratinizing squamous cell carcinoma
8082	Lymphoepithelial-like carcinoma
8083	Basaloid squamous cell carcinoma
8140	Adenocarcinoma
8144	Enteric adenocarcinoma
8200	Adenoid cystic carcinoma
8230	Solid adenocarcinoma
8240	Carcinoid tumor, NOS/neuroendocrine tumor, NOS
	Typical carcinoid/neuroendocrine tumor, grade 1
8249	Atypical carcinoid/neuroendocrine tumor, grade 2
8250	Adenocarcinoma in situ, non-mucinous

8250	Lepidic adenocarcinoma
8253	Invasive mucinous adenocarcinoma
	Adenocarcinoma in situ, mucinous
8254	Mixed invasive mucinous and non-mucinous adenocarcinoma
8256	Minimally invasive adenocarcinoma, non-mucinous
8257	Minimally invasive adenocarcinoma, mucinous
8260	Papillary adenocarcinoma
8265	Micropapillary adenocarcinoma
8310	Hyalinizing clear cell carcinoma
8333	Fetal adenocarcinoma
8430	Mucoepidermoid carcinoma
8480	Colloid adenocarcinoma
8551	Acinar adenocarcinoma
8560	Adenosquamous carcinoma
8562	Epithelial-myoeplithelial carcinoma
8972	Pulmonary blastoma
8980	Carcinosarcoma
8982	Myoepithelial carcinoma
8000*	<i>Neoplasm, malignant</i>
8010*	<i>Carcinoma, NOS</i>

* Histology is not ideal for clinical use in patient care, as it describes an unspecified or outdated diagnosis. Data collectors may use this code only if there is not enough information in the medical record to document a more specific diagnosis.

Grade (G)

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

Definition of Primary Tumor (T)

T Category	T Criteria
TX	Primary tumor cannot be assessed Includes tumors 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 <i>in situ</i> Squamous cell carcinoma <i>in situ</i> (SCIS) Adenocarcinoma <i>in situ</i> (AIS): adenocarcinoma with pure lepidic pattern, ≤ 3 cm in greatest dimension
T1	Tumor ≤ 3 cm in greatest dimension surrounded by lung or visceral pleura, or in a lobar or more peripheral bronchus
T1mi	Minimally invasive adenocarcinoma: adenocarcinoma (≤ 3 cm in greatest dimension) with a predominantly lepidic pattern and ≤ 5 mm invasion in greatest dimension
T1a	Tumor ≤ 1 cm in greatest dimension OR Tumor of any size whose invasive component is limited to the bronchial wall and may extend proximal to the main bronchus, this is an uncommon superficial, spreading tumor
T1b	Tumor > 1 cm but ≤ 2 cm in greatest dimension
T1c	Tumor > 2 cm but ≤ 3 cm in greatest dimension
T2	Tumor > 3 cm but ≤ 5 cm in greatest dimension OR Tumor ≤ 4 cm with one or more of the following features: <ul style="list-style-type: none"> • Invades visceral pleura • Invades an adjacent lobe • Involves main bronchus (up to but not including the carina) or associated with atelectasis or obstructive pneumonitis, extending to the hilar regions, involving either part of or the entire lung
T2a	Tumor > 3 cm but ≤ 4 cm in greatest dimension OR Tumor ≤ 4 cm in greatest dimension with one or more of the following features: <ul style="list-style-type: none"> • Invades visceral pleura • Invades an adjacent lobe • Involves main bronchus (up to but not including the carina) or associated with atelectasis or obstructive pneumonitis, extending to the hilar regions, involving either part of or the entire lung
T2b	Tumor > 4 cm but ≤ 5 cm in greatest dimension with or without any of the following features: <ul style="list-style-type: none"> • Invades visceral pleura • Invades an adjacent lobe

	<ul style="list-style-type: none"> Involves main bronchus (up to but not including the carina) or associated with atelectasis or obstructive pneumonitis, extending to the hilar regions, involving either part of or the entire lung
T3	<p>Tumor > 5 cm but ≤ 7 cm in greatest dimension OR Tumor ≤ 7 cm with one or more of the following features:</p> <ul style="list-style-type: none"> Invades parietal pleura or chest wall Invades pericardium, phrenic nerve or azygos vein Although these structures lie within the mediastinum, the degree of mediastinal penetration by the tumor needed to invade these structures is not counted as T4 Invades thoracic nerve roots (i.e., T1, T2) or stellate ganglion Separate tumor nodule(s) in the same lobe as the primary
T4	<p>Tumor > 7 cm in greatest dimension OR Tumor of any size with one or more of the following features:</p> <ul style="list-style-type: none"> Invades mediastinum (except structures listed in T3), thymus, trachea, carina, recurrent laryngeal nerve, vagus nerve, esophagus or diaphragm Invades heart, great vessels (aorta, superior/inferior vena cava, intrapericardial pulmonary arteries/veins), supra-aortic arteries or brachiocephalic veins Invades subclavian vessels, vertebral body, lamina, spinal canal, cervical nerve roots or brachial plexus (i.e., trunks, divisions, cords or terminal nerves) Separate tumor nodule(s) in a different ipsilateral lobe than that of the primary

Definition of Regional Lymph Node (N)

N Category	N Criteria
NX	Regional lymph nodes cannot be assessed
N0	No tumor involvement of regional lymph node(s)
N1	Tumor involvement of ipsilateral peribronchial and/or ipsilateral hilar and/or ipsilateral intrapulmonary lymph node station(s), including involvement by direct extension
N2	Tumor involvement of ipsilateral mediastinal nodal station(s) and/or subcarinal lymph node station
N2a	Tumor involvement of a single ipsilateral mediastinal nodal station or of the subcarinal nodal station
N2b	Tumor involvement of multiple ipsilateral mediastinal nodal stations with or without involvement of the subcarinal nodal station
N3	Tumor involvement of contralateral mediastinal, contralateral hilar, ipsilateral/contralateral scalene, or ipsilateral/contralateral supraclavicular lymph node station(s)

Definition of Distant Metastasis (M)

M Category	M Criteria
cM0	No distant metastasis
cM1	Distant metastasis
cM1a	Metastasis in pleural or pericardial nodules, and/or malignant pleural or pericardial effusions, and/or separate tumor nodule(s) in a contralateral lobe Note: Most pleural (pericardial) effusions with lung cancer are a result of the tumor. In a few patients, however, multiple microscopic examinations of pleural (pericardial) fluid are negative for tumor, and the fluid is non-bloody and not an exudate. If these elements and clinical judgment dictate that the effusion is not related to the tumor, the effusion should be excluded as a staging descriptor
cM1b	Single extrathoracic metastasis in a single organ system (including involvement of a single non-regional node)
cM1c	Multiple extrathoracic metastases in a single or multiple organ system(s)
cM1c1	Multiple extrathoracic metastases in a single organ system For example, the skeleton is considered one organ. Several metastases in a single bone or several metastases in several bones are classified as M1c1
cM1c2	Multiple extrathoracic metastases in multiple organ systems
pM1	Microscopic confirmation of distant metastasis
pM1a	Microscopic confirmation of metastasis in pleural or pericardial nodules, and/or malignant pleural or pericardial effusions, and/or separate tumor nodule(s) in a contralateral lobe Note: Most pleural (pericardial) effusions with lung cancer are a result of the tumor. In a few patients, however, multiple microscopic examinations of pleural (pericardial) fluid are negative for tumor, and the fluid is non-bloody and not an exudate. If these elements and clinical judgment dictate that the effusion is not related to the tumor, the effusion should be excluded as a staging descriptor
pM1b	Microscopic confirmation of single extrathoracic metastasis in a single organ system (including involvement of a single non-regional node)
pM1c	Microscopic confirmation of multiple extrathoracic metastases in a single or multiple organ system(s)
pM1c1	Microscopic confirmation of multiple extrathoracic metastases in a single organ system For example, the skeleton is considered one organ. Several metastases in a single bone or several metastases in several bones are classified as M1c1
pM1c2	Microscopic confirmation of multiple extrathoracic metastases in multiple organ systems

AJCC Prognostic Stage Groups

When T is...	And N is...	And M is...	Then the stage group is...
TX	N0	M0	Occult carcinoma
Tis	N0	M0	0
T1mi-T1a	N0	M0	IA1
T1b	N0	M0	IA2
T1c	N0	M0	IA3
T2a	N0	M0	IB
T2b	N0	M0	IIA
T1	N1	M0	IIA
T1	N2a	M0	IIB
T2a-T2b	N1	M0	IIB
T3	N0	M0	IIB
T4	N0	M0	IIIA
T3-T4	N1	M0	IIIA
T1	N2b	M0	IIIA
T2-T3	N2a	M0	IIIA
T2-T3	N2b	M0	IIIB
T4	N2a-N2b	M0	IIIB
T1-T2	N3	M0	IIIB
T3-T4	N3	M0	IIIC
Any T	Any N	M1a-M1b	IVA
Any T	Any N	M1c1-M1c2	IVB

References :

<https://www.facs.org/quality-programs/cancer-programs/american-joint-committee-on-cancer/version-9/>
<https://www.facs.org/Quality-Programs/Cancer/news/ajcc-kindle-102920>

Thymus

Cancers Staged Using This Staging System

This classification applies to all thymic epithelial tumors (TET), including thymomas and thymic carcinomas, and thymic neuroendocrine neoplasms (T-NEN) which are collectively referred to as thymic malignancies in this protocol.

Cancers NOT Staged Using This Staging System

Not applicable.

Identification of Primary Site

C37.9

Histopathologic Type

Code	Description
Epithelial tumors	
<i>Thymomas</i>	
8580	Thymoma, NOS
8581	Type A thymoma, including atypical variant
8582	Type AB thymoma
8583	Type B1 thymoma
8584	Type B2 thymoma
8585	Type B3 thymoma
8580	Micronodular thymoma with lymphoid stroma
8580	Metaplastic thymoma
<i>Thymic Carcinomas</i>	
<i>Squamous carcinomas</i>	
8070	Squamous cell carcinoma, NOS
8123	Basaloid carcinoma
8082	Lymphoepithelial carcinoma
<i>Adenocarcinomas</i>	
8140	Adenocarcinoma, NOS
8260	Low grade papillary adenocarcinoma
8200	Thymic carcinoma with adenoid cystic carcinoma-like features
8144	Adenocarcinoma, enteric type
<i>Adenosquamous carcinomas</i>	
8560	Adenosquamous carcinomas
<i>NUT carcinomas</i>	
8023	NUT carcinomas

<i>Salivary gland-like carcinomas</i>	
8430	Mucoepidermoid carcinoma
8310	Clear cell carcinoma
<i>Other thymic carcinoma</i>	
8033	Sarcomatoid carcinoma
8980	Carcinosarcoma
8020	Carcinoma, undifferentiated, NOS
8586	Thymic carcinoma, NOS
Thymic neuroendocrine neoplasms	
<i>Neuroendocrine tumors</i>	
8240	Carcinoid tumor, NOS/neuroendocrine tumor, NOS
	Typical carcinoid/neuroendocrine tumor, grade 1
8249	Atypical carcinoid/neuroendocrine tumor, grade 2
<i>Neuroendocrine carcinomas</i>	
8041	Small cell carcinoma
8045	Combined small cell carcinoma
8013	Large cell neuroendocrine carcinoma

* Source: WHO Classification of Tumours Editorial Board. Thoracic tumours. Lyon (France) : International Agency for Research on Cancer, 2021. (WHO Classification of Tumours series, 5th ed,; vol. 5).

Definition of Primary Tumor (T)

T Category	T Criteria
TX	Primary tumor cannot be assessed
T0	No evidence of primary tumor
T1	Tumor limited to the thymus with or without encapsulation, or directly invades into the mediastinal fat only, or directly invades the mediastinal pleura but does not involve any other mediastinal structure
T1a	Tumor ≤ 5 cm in greatest dimension with either: <ul style="list-style-type: none"> • Limited to the thymus with or without encapsulation • Directly invades into the mediastinal fat only • Directly invades the mediastinal pleura but does not involve any other mediastinal structure
T1b	Tumor > 5 cm in greatest dimension with either: <ul style="list-style-type: none"> • Limited to the thymus with or without encapsulation • Directly invades into the mediastinal fat only • Directly invades the mediastinal pleura but does not involve any other mediastinal structure
T2	Tumor with direct invasion of the pericardium (either partial or full thickness), or the lung, or the phrenic nerve
T3	Tumor with direct invasion into any of the following: brachiocephalic vein, superior vena cava, chest wall, or extrapericardial pulmonary arteries or veins
T4	Tumor with direct invasion into any of the following: aorta (ascending, arch, or descending), arch vessels, intrapericardial pulmonary artery or veins, myocardium, traches, esophagus

Primary Tumor Suffix

__(m) Multiple synchronous primary tumors

Definition of Regional Lymph Node (N)

N Category	N Criteria
NX	Regional lymph nodes cannot be assessed
N0	No tumor involvement of regional lymph node(s)
N1	Tumor involvement of anterior (perithymic) lymph nodes
N2	Tumor involvement of deep intrathoracic or cervical lymph nodes (e.g., paratracheal, subcarinal, aortopulmonary window, hilar, jugular, and/or supraclavicular nodes)

Regional Lymph Nodes Suffix

__(f) FNA or core needle biopsy

Definition of Distant Metastasis (M)

M Category	M Criteria
cM0	No distant metastasis
cM1	Distant metastasis
cM1a	Separate pleural or pericardial nodule(s)
cM1b	Pulmonary intraparenchymal nodule or other distant metastasis
pM1	Microscopic confirmation of distant metastasis
pM1a	Microscopic confirmation of separate pleural or pericardial nodule(s)
pM1b	Microscopic confirmation of pulmonary intraparenchymal nodule or other distant metastasis

AJCC Prognostic Stage Groups

When T is...	And N is...	And M is...	Then the stage group is...
T1a-T1b	N0	M0	I
T2	N0	M0	II
T3	N0	M0	IIIA
T4	N0	M0	IIIB
Any T	N1	M0	IVA
Any T	N0-N1	M1a	IVA
Any T	N2	M0-M1a	IVB
Any T	Any N	M1b	IVB

References :

<https://www.facs.org/quality-programs/cancer-programs/american-joint-committee-on-cancer/version-9/>

<https://www.facs.org/Quality-Programs/Cancer/news/ajcc-kindle-102920>

Diffuse Pleural Mesothelioma

Cancers Staged Using This Staging System

This classification applies to diffuse pleural mesotheliomas.

Cancers NOT Staged Using This Staging System

<i>These histopathologic types of cancer...</i>	<i>Are staged according to the classification for...</i>
<i>Localized pleural mesotheliomas</i>	<i>No AJCC staging system</i>
<i>Mesothelioma in situ</i>	<i>No AJCC staging system</i>
<i>Other primary tumors of the pleura</i>	<i>No AJCC staging system</i>

Identification of Primary Site

C38.4

Histopathologic Type (Note HT)

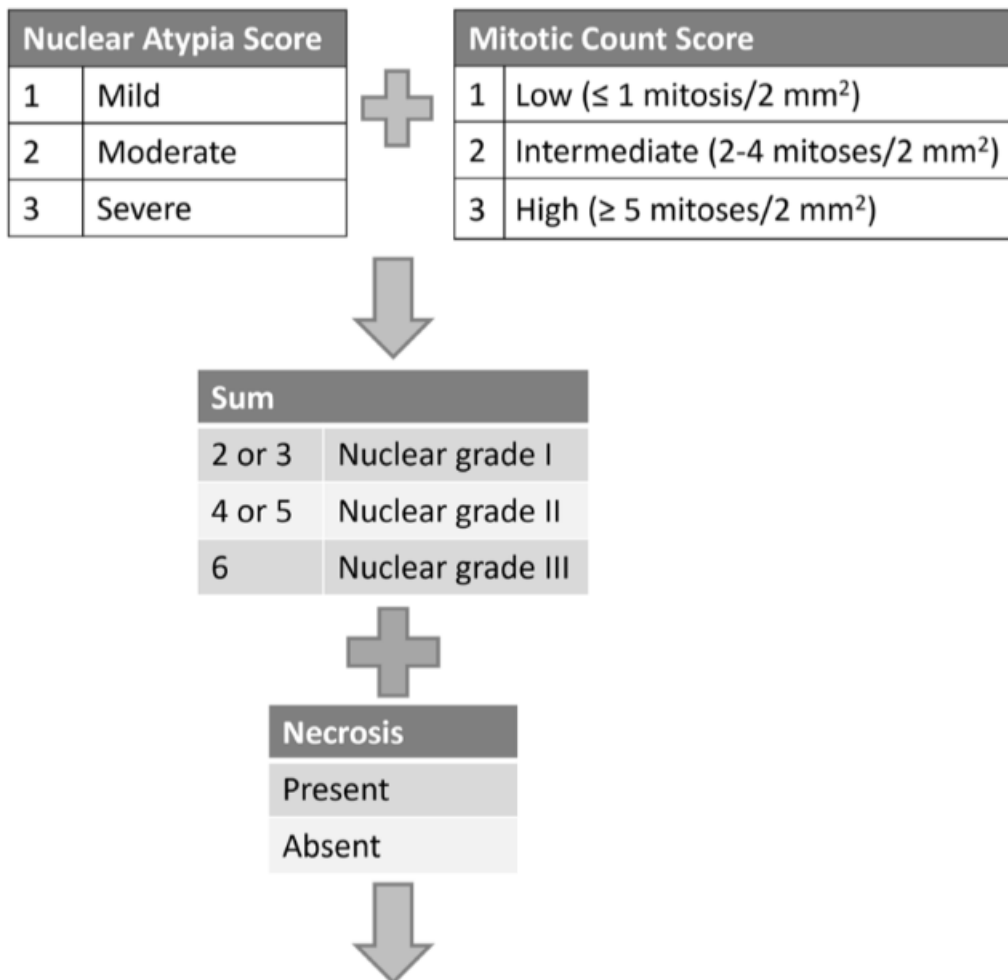
Code	Description
9050	Diffuse mesothelioma, NOS
9051	Sarcomatoid mesothelioma
	Desmoplastic mesothelioma
9052	Epithelioid mesothelioma
9053	Biphasic mesothelioma

Sources: WHO Classification of Tumours Editorial Board. Thoracic Tumours. Lyon (France): International Agency for Research on Cancer, 2021. (WHO Classification of Tumours series, 5th ed.; vol. 5).

Grade (G)

New grading system for epithelioid mesothelioma

Grading of Epithelioid Mesothelioma



G	G Definition
LG (Low Grade)	Nuclear grade I with or without necrosis OR Nuclear grade II without necrosis
HG (High Grade)	Nuclear grade II with necrosis OR Nuclear grade III with or without necrosis

Definition of Primary Tumor (T)**Clinical T (cT)**

T Category	T Criteria
TX	Primary tumor cannot be assessed
T0	No evidence of primary tumor
T1	Tumor limited to the ipsilateral pleura with Psum* ≤ 12 mm and no involvement of the fissure (Fmax** ≤ 5 mm)
T2	Tumor involving the ipsilateral pleura with Psums* ≤ 12 mm, and with any of the following: <ul style="list-style-type: none"> • involvement of the fissure (Fmax** > 5 mm) • mediastinal fat invasion • solitary area of chest wall soft tissue invasion <p>OR</p> Tumor involving the ipsilateral pleura with Psum* > 12 mm but ≤ 30 mm, with or without: <ul style="list-style-type: none"> • involvement of the fissure (Fmax** > 5 mm) • mediastinal fat invasion • solitary area of chest wall soft tissue invasion
T3	Tumor involving the ipsilateral pleura with Psum* > 30 mm, with or without: <ul style="list-style-type: none"> • involvement of the fissure (Fmax** > 5 mm) • mediastinal fat invasion • solitary area of chest wall soft tissue invasion
T4	Tumor with invasion of any of the following (any Psum*): <ul style="list-style-type: none"> • chest wall bony invasion (rib) • mediastinal organs (heart, spine, esophagus, trachea, great vessels) • diffuse chest wall invasion • direct tumor extension through the diaphragm or pericardium • direct extension to the contralateral pleura • presence of malignant pericardial effusion

***Psum** = pmax1+pmax2+pmax3 (sum of 3 measurements of maximal pleural thickness measured on axial images along the chest wall or mediastinum in each of the three divisions of the chest - upper, middle and lower divided by two lines; one at the top of the aortic arch and the second drawn at the top of the left atrium)

****Fmax** = maximal thickness of pleural tumor along the fissures measured on sagittal images

Pathological T (pT)

T Category	T Criteria
TX	Primary tumor cannot be assessed
T0	No evidence of primary tumor
T1	Tumor limited to the ipsilateral pleura with no involvement of the fissure
T2	Tumor involving the ipsilateral pleura and with any of the following: <ul style="list-style-type: none"> • involvement of the fissure • ipsilateral lung parenchyma invasion • diaphragm (non-transmural) invasion
T3	Tumor limited to the ipsilateral pleura (with or without fissure involvement) and with invasion of any of the following: <ul style="list-style-type: none"> • mediastinal fat • surface of pericardium • endothoracic fascia • solitary area of chest wall soft tissue
T4	Tumor with invasion of any of the following: <ul style="list-style-type: none"> • chest wall bony invasion (rib) • mediastinal organs (heart, spine, esophagus, trachea, great vessels) • diffuse chest wall invasion • transmural invasion of the diaphragm or pericardium • direct extension to the contralateral pleura • presence of malignant pericardial effusion

Primary Tumor Suffix

_ (m) Multiple synchronous primary tumors

Definition of Regional Lymph Nodes (N)

N Category	N Criteria
NX	Regional lymph nodes cannot be assessed
N0	No tumor involvement of regional lymph node(s)
N1	Tumor involvement of ipsilateral bronchopulmonary, hilar, or mediastinal (including the internal mammary, peridiaphragmatic, pericardial fat pad, or intercostal lymph nodes) regional lymph nodes
N2	Tumor involvement of contralateral mediastinal, ipsilateral or contralateral supraclavicular lymph nodes

Regional Lymph Nodes Suffix

_ (sn) Sentinel node procedure

_ (f) FNA or core needle biopsy

Definition of Distant Metastasis (M)

M Category	M Criteria
cM0	No distant metastasis
cM1	Distant metastasis
pM1	Microscopic confirmation of distant metastasis

AJCC Prognostic Stage Groups

When T is...	And N is...	And M is...	Then the stage group is...
T1	N0	M0	I
T2	N0	M0	II
T1	N1	M0	II
T2	N1	M0	IIIA
T3	N0-N1	M0	IIIA
T1-T3	N2	M0	IIIA
T4	Any N	M0	IIIB
Any T	Any N	M1	IV

References :

<https://www.facs.org/quality-programs/cancer-programs/american-joint-committee-on-cancer/version-9/>
<https://www.facs.org/Quality-Programs/Cancer/news/ajcc-kindle-102920>

Nasopharynx

Cancers Staged Using This Staging System

Epithelial tumors of the nasopharynx are staged using this staging system.

Cancers NOT Staged Using This Staging System

<i>These histopathologic types of cancer...</i>	<i>Are staged according to the classification for...</i>
<i>Mucosal melanoma</i>	<i>Mucosal melanoma of the head and neck</i>
<i>Lymphoma</i>	<i>Hodgkin and non-Hodgkin lymphoma</i>
<i>Sarcoma of soft tissue</i>	<i>Soft tissue sarcoma of the head and neck</i>
<i>Bone and cartilage</i>	<i>Bone</i>
<i>Salivary type tumors</i>	<i>Salivary glands</i>

Identification of Primary Site

C11.0, C11.1, C11.2, C11.3, C11.8, and C11.9

Histopathologic Type

Code	Description
8260	Low-grade nasopharyngeal papillary adenocarcinoma
8071	Squamous cell carcinoma, keratinizing, NOS
8072	Squamous cell carcinoma, non-keratinizing, NOS
8083	Basaloid squamous cell carcinoma

Source: WHO Classification of Tumours Editorial Board. *Head and neck tumours*. Lyon (France): International Agency for Research on Cancer, 2022. (WHO Classification of Tumours series, 5th ed.; vol. 9).

Definition of Primary Tumor (T)

T Category	T Criteria
TX	Primary tumor cannot be assessed
T0	No evidence of primary tumor, but EBV-positive cervical node(s) involvement
Tis	Carcinoma <i>in situ</i>
T1	Tumor confined to nasopharynx OR Tumor with extension to any of the following without parapharyngeal involvement: <ul style="list-style-type: none"> • oropharynx • nasal cavity
T2	Tumor with extension to any of the following: <ul style="list-style-type: none"> • parapharyngeal space • adjacent soft tissue involvement of medial pterygoid, lateral pterygoid, prevertebral muscles
T3	Tumor with unequivocal infiltration into any of the following bony structures: <ul style="list-style-type: none"> • skull base (including pterygoid structures) • paranasal sinuses • cervical vertebrae
T4	Tumor with any of the following: <ul style="list-style-type: none"> • intracranial extension • unequivocal radiological and/or clinical involvement of cranial nerves • involvement of hypopharynx • involvement of orbit (including inferior orbital fissure) • involvement of parotid gland • extensive soft tissue infiltration beyond the anterolateral surface of the lateral pterygoid muscle

Primary Tumor Suffix

__(m) Multiple synchronous primary tumors

Definition of Regional Lymph Node (N)

N Category	N Criteria
NX	Regional lymph nodes cannot be assessed
N0	No tumor involvement of regional lymph node(s)
N1	Tumor involvement of any of the following: <ul style="list-style-type: none"> • unilateral cervical lymph node(s) • unilateral or bilateral retropharyngeal lymph node(s) AND all of the following: <ul style="list-style-type: none"> • ≤ 6 cm in greatest dimension • above the caudal border of cricoid cartilage • without advanced extranodal extension
N2	Tumor involvement of bilateral cervical lymph nodes, AND all of the following: <ul style="list-style-type: none"> • ≤ 6 cm in greatest dimension • above the caudal border of cricoid cartilage • without advanced extranodal extension
N3	Tumor involvement of unilateral or bilateral cervical lymph node(s), AND any of the following: <ul style="list-style-type: none"> • > 6 cm in greatest dimension • extension below the caudal border of cricoid cartilage • advanced radiologic extranodal extension with involvement of adjacent muscles, skin, and/or neurovascular bundle

Regional Lymph Nodes Suffix

_ (sn) Sentinel node procedure

_ (f) FNA or core needle biopsy

Definition of Distant Metastasis (M)

M Category	M Criteria
cM0	No distant metastasis
cM1	Distant metastasis
cM1a	≤ 3 metastatic lesions in one or more organs/sites
cM1b	> 3 metastatic lesions in one or more organs/sites
pM1	Microscopic confirmation of distant metastasis
pM1a	Microscopic confirmation of ≤ 3 metastatic lesions in one or more organs/sites
pM1b	Microscopic confirmation of > 3 metastatic lesions in one or more organs/sites

AJCC Prognostic Stage Groups

When T is...	And N is...	And M is...	Then the stage group is...
Tis	N0	M0	0
T1-T2	N0	M0	IA
T0-T2	N1	M0	IB
T0-T2	N2	M0	II
T3	N0-N2	M0	II
T4	Any N	M0	III
Any T	N3	M0	III
Any T	Any N	M1a	IVA
Any T	Any N	M1b	IVB

References :

<https://www.facs.org/quality-programs/cancer-programs/american-joint-committee-on-cancer/version-9/>

<https://www.facs.org/Quality-Programs/Cancer/news/ajcc-kindle-102920>

Lung

Summary of Changes :

- Invasion of adjacent lobe has been added as a T2a category criteria
- Azygos vein, thoracic nerve roots (i.e., T1, T2) and stellate ganglion added as a T3 category criteria
- Thymus, vagus nerve, supra-aortic arteries, brachiocephalic veins, subclavian vessels, vertebral body, lamina, spinal canal, cervical nerve roots, brachial plexus (i.e., trunks, divisions, cords or terminal nerves) are specified as T4 category criteria
- N2 subdivided into **N2a (involvement of a single N2 nodal station)** and **N2b (involvement of multiple N2 nodal stations)**
- M1c subdivided into **M1c1 (multiple extrathoracic metastases in a single organ system)** and **M1c2 (multiple extrathoracic metastases in multiple organ systems)**
- T1 N1 M0 changed from stage IIB to stage IIA
- T1 N2a M0 assigned to stage IIB
- T2 N2b M0 assigned to stage IIIB
- T3 N2a M0 assigned to stage IIIA
- Spread through air spaces (STAS) introduced as an additional histologic descriptor together with the already existing vascular invasion (V), lymphatic permeation (L) and perineural invasion (Pn)

Definition of Primary Tumor (T) (紅字增修處)

T Category	T Criteria
TX	Primary tumor cannot be assessed. Includes tumors 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 <i>in situ</i> Squamous cell carcinoma <i>in situ</i> (SCIS) Adenocarcinoma <i>in situ</i> (AIS): adenocarcinoma with pure lepidic pattern, ≤ 3 cm in greatest dimension
T1	Tumor ≤ 3 cm 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) or in a lobar or more peripheral bronchus.
T1mi	Minimally invasive adenocarcinoma: adenocarcinoma (≤ 3 cm in greatest dimension) with a predominantly lepidic pattern and ≤ 5 mm invasion in greatest dimension
T1a	Tumor ≤ 1 cm in greatest dimension OR Tumor of any size whose invasive component is limited to the bronchial wall and may extend proximal to the main bronchus, this is an uncommon superficial, spreading tumor
T1b	Tumor > 1 cm but ≤ 2 cm in greatest dimension
T1c	Tumor > 2 cm but ≤ 3 cm in greatest dimension
T2	Tumor > 3 cm but ≤ 5 cm in greatest dimension OR Tumor ≤ 4 cm with one or more of the following features: <ul style="list-style-type: none"> • Invades visceral pleura • Invades an adjacent lobe • Involves main bronchus regardless of distance to the carina, but without involvement of the carina (up to but not including the carina) or associated with atelectasis or obstructive pneumonitis, extending to the hilar regions, involving either part of or the entire lung
T2a	Tumor > 3 cm but ≤ 4 cm in greatest dimension OR Tumor ≤ 4 cm in greatest dimension with one or more of the following features: <ul style="list-style-type: none"> • Invades visceral pleura • Invades an adjacent lobe • Involves main bronchus regardless of distance to the carina, but without involvement of the carina (up to but not including the carina) or associated with atelectasis or obstructive pneumonitis, extending to the hilar regions, involving either part of or the entire lung

T2b	<p>Tumor > 4 cm but ≤ 5 cm in greatest dimension with or without any of the following features:</p> <ul style="list-style-type: none"> • Invades visceral pleura • Invades an adjacent lobe • Involves main bronchus regardless of distance to the carina, but without involvement of the carina (up to but not including the carina) <p>or</p> <p>associated with atelectasis or obstructive pneumonitis, extending to the hilar regions, involving either part of or the entire lung</p>
T3	<p>Tumor > 5 cm but ≤ 7 cm in greatest dimension</p> <p>OR</p> <p>Tumor ≤ 7 cm with one or more of the following features:</p> <ul style="list-style-type: none"> • Invades parietal pleura or chest wall • Invades pericardium, phrenic nerve or azygos vein Although these structures lie within the mediastinum, the degree of mediastinal penetration by the tumor needed to invade these structures is not counted as T4 • Invades thoracic nerve roots (i.e., T1, T2) or stellate ganglion • Separate tumor nodule(s) in the same lobe as the primary
T4	<p>Tumor > 7 cm in greatest dimension</p> <p>OR</p> <p>Tumor of any size with one or more of the following features:</p> <ul style="list-style-type: none"> • Invades mediastinum (except structures listed in T3), thymus, trachea, carina, recurrent laryngeal nerve, vagus nerve, esophagus or diaphragm • Invades heart, great vessels (aorta, superior/inferior vena cava, intrapericardial pulmonary arteries/veins), supra-aortic arteries or brachiocephalic veins • Invades subclavian vessels, vertebral body, lamina, spinal canal, cervical nerve roots or brachial plexus (i.e., trunks, divisions, cords or terminal nerves) • Separate tumor nodule(s) in a different ipsilateral lobe than that of the primary

Definition of Regional Lymph Node (N) (紅字增修處)

T Category	T Criteria
NX	Regional lymph nodes cannot be assessed
N0	No tumor involvement of regional lymph node(s) metastasis
N1	Tumor involvement of ipsilateral peribronchial and/or ipsilateral hilar and/or ipsilateral intrapulmonary lymph node station(s), including involvement by direct extension
N2	Tumor involvement of ipsilateral mediastinal nodal station(s) and/or subcarinal lymph node station
N2a	Tumor involvement of a single ipsilateral mediastinal nodal station or of the subcarinal nodal station
N2b	Tumor involvement of multiple ipsilateral mediastinal nodal stations with or without involvement of the subcarinal nodal station
N3	Tumor involvement of contralateral mediastinal, contralateral hilar, ipsilateral/contralateral scalene, or ipsilateral/contralateral supraclavicular lymph node station(s)

Definition of Distant Metastasis (M) (紅字增修處)

M Category	M Criteria
cM0	No distant metastasis
cM1	Distant metastasis
cM1a	<p>Separate tumor nodule(s) in a contralateral lobe; tumor with pleural or pericardial nodules or malignant pleural or pericardial effusion. Most pleural (pericardial) effusions with lung cancer are a result of the tumor. In a few patients, however, multiple microscopic examinations of pleural (pericardial) fluid are negative for tumor, and the fluid is nonbloody and not an exudate. If these elements and clinical judgment dictate that the effusion is not related to the tumor, the effusion should be excluded as a staging descriptor.</p> <p>Metastasis in pleural or pericardial nodules, and/or malignant pleural or pericardial effusions, and/or separate tumor nodule(s) in a contralateral lobe</p> <p>Note: Most pleural (pericardial) effusions with lung cancer are a result of the tumor. In a few patients, however, multiple microscopic examinations of pleural (pericardial) fluid are negative for tumor, and the fluid is non-bloody and not an exudate. If these elements and clinical judgment dictate that the effusion is not related to the tumor, the effusion should be excluded as a staging descriptor.</p>
cM1b	Single extrathoracic metastasis in a single organ system (including involvement of a single non-regional node)
cM1c	Multiple extrathoracic metastases in a single organ or multiple organ system(s)
cM1c1	Multiple extrathoracic metastases in a single organ system For example, the skeleton is considered one organ. Several metastases in a single bone or several metastases in several bones are classified as M1c1
cM1c2	Multiple extrathoracic metastases in multiple organ systems

pM1	Microscopic confirmation of distant metastasis
pM1a	<p>Separate tumor nodule(s) in a contralateral lobe; tumor with pleural or pericardial nodules or malignant pleural or pericardial effusion. Most pleural (pericardial) effusions with lung cancer are a result of the tumor. In a few patients, however, multiple microscopic examinations of pleural (pericardial) fluid are negative for tumor, and the fluid is nonbloody and not an exudate. If these elements and clinical judgment dictate that the effusion is not related to the tumor, the effusion should be excluded as a staging descriptor.</p> <p>Microscopic confirmation of metastasis in pleural or pericardial nodules, and/or malignant pleural or pericardial effusions, and/or separate tumor nodule(s) in a contralateral lobe</p>
	<p>Note: Most pleural (pericardial) effusions with lung cancer are a result of the tumor. In a few patients, however, multiple microscopic examinations of pleural (pericardial) fluid are negative for tumor, and the fluid is non-bloody and not an exudate. If these elements and clinical judgment dictate that the effusion is not related to the tumor, the effusion should be excluded as a staging descriptor.</p>
pM1b	Microscopic confirmation of single extrathoracic metastasis in a single organ system (including involvement of a single non-regional node)
pM1c	Microscopic confirmation of multiple extrathoracic metastases in a single organ or multiple organ system(s)
pM1c1	<p>Microscopic confirmation of multiple extrathoracic metastases in a single organ system</p> <p>For example, the skeleton is considered one organ. Several metastases in a single bone or several metastases in several bones are classified as M1c1</p>
pM1c2	Microscopic confirmation of multiple extrathoracic metastases in multiple organ systems

AJCC Prognostic Stage Groups (紅字增修處)

When T is...	And N is...	And M is...	Then the stage group is...
TX	N0	M0	Occult carcinoma
Tis	N0	M0	0
T1mi-T1a	N0	M0	IA1
T1b	N0	M0	IA2
T1c	N0	M0	IA3
T2a	N0	M0	IB
T2b	N0	M0	IIA
T1	N1	M0	IIA
T3	N0	M0	IIB
T1	N2a	M0	IIB
T2a-T2b	N1	M0	IIB
T4	N0	M0	IIIA
T3-T4	N1	M0	IIIA
T1	N2b	M0	IIIA
T2-T3	N2a	M0	IIIA
T2-T3	N2b	M0	IIB
T4	N2a-N2b	M0	IIB
T1-T2	N3	M0	IIB
T3-T4	N3	M0	IIIC
Any T	Any N	M1a-M1b	IVA
Any T	Any N	M1c1-M1c2	IVB

8th Ed TNM Categories

8 th Ed TNM Categories		N0	N1	N2	N3
T1	T1a	IA1	IIB	IIIA	IIIB
	T1b	IA2	IIB	IIIA	IIIB
	T1c	IA3	IIB	IIIA	IIIB
T2	T2a Inv	IB	IIB	IIIA	IIIB
	T2a >3-4	IB	IIB	IIIA	IIIB
	T2b >4-5	IIA	IIB	IIIA	IIIB
T3	T3 >5-7	IIB	IIIA	IIIB	IIIC
	T3 Inv	IIB	IIIA	IIIB	IIIC
	T3 Same Lobe Nod	IIB	IIIA	IIIB	IIIC
T4	T4 >7	IIIA	IIIA	IIIB	IIIC
	T4 Inv	IIIA	IIIA	IIIB	IIIC
	T4 Ipsi Nod	IIIA	IIIA	IIIB	IIIC
M1	M1a PI Dissem	IVA	IVA	IVA	IVA
	M1a Contr Nod	IVA	IVA	IVA	IVA
	M1b Single Les	IVA	IVA	IVA	IVA
	M1c Mult Les	IVB	IVB	IVB	IVB

Proposed 9th Ed TNM Categories

Proposed 9 th Ed TNM Categories		N0	N1	N2		N3
T/M	Description			N2a	N2b	
T1	T1a ≤1 cm	IA1	IIA	IIB	IIIA	IIIB
	T1b >1 to ≤2 cm	IA2	IIA	IIB	IIIA	IIIB
	T1c >2 to ≤3 cm	IA3	IIA	IIB	IIIA	IIIB
T2	T2a Visceral pleura / central invasion	IB	IIB	IIIA	IIIB	IIIB
	T2a >3 to ≤4 cm	IB	IIB	IIIA	IIIB	IIIB
	T2b >4 to ≤5 cm	IIA	IIB	IIIA	IIIB	IIIB
T3	T3 >5 to ≤7 cm	IIB	IIIA	IIIA	IIIB	IIIC
	T3 Invasion	IIB	IIIA	IIIA	IIIB	IIIC
	T3 Same lobe tumor nodule	IIB	IIIA	IIIA	IIIB	IIIC
T4	T4 >7 cm	IIIA	IIIA	IIIB	IIIB	IIIC
	T4 Invasion	IIIA	IIIA	IIIB	IIIB	IIIC
	T4 Ipsilateral tumor nodule	IIIA	IIIA	IIIB	IIIB	IIIC
M1	M1a Pleural / pericardial dissemination	IVA	IVA	IVA	IVA	IVA
	M1a Contralateral tumor nodule	IVA	IVA	IVA	IVA	IVA
	M1b Single extrathoracic lesion	IVA	IVA	IVA	IVA	IVA
	M1c1 Multiple lesions, 1 organ system	IVB	IVB	IVB	IVB	IVB
	M1c2 Multiple lesions, >1 organ system	IVB	IVB	IVB	IVB	IVB

References :

<https://www.facs.org/quality-programs/cancer-programs/american-joint-committee-on-cancer/version-9/>

<https://www.facs.org/Quality-Programs/Cancer/news/ajcc-kindle-10292>

Thymus

Summary of Changes :

- T1 is now subdivided based on tumor size, previously subdivided by involvement of the mediastinal pleura
- T2 added direct invasion of the lung or the phrenic nerve
- T3 removed direct invasion of the lung and phrenic nerve

Definition of primary Tumor (T) (紅字增修處)

T Category	T Criteria
TX	Primary tumor cannot be assessed
T0	No evidence of primary tumor
T1	Tumor limited to the thymus with or without encapsulation, or directly invades into the mediastinal fat only, or directly invades the mediastinal pleura but does not involve any other mediastinal structure
T1a	Tumor ≤ 5 cm in greatest dimension with either: <ul style="list-style-type: none"> • Limited to the thymus with or without encapsulation • Directly invades into the mediastinal fat only • Directly invades the mediastinal pleura but does not involve any other mediastinal structure
T1b	Tumor > 5 cm in greatest dimension with either: <ul style="list-style-type: none"> • Limited to the thymus with or without encapsulation • Directly invades into the mediastinal fat only • Directly invades the mediastinal pleura but does not involve any other mediastinal structure
T2	Tumor with direct invasion of the pericardium (either partial or full thickness), or the lung, or the phrenic nerve
T3	Tumor with direct invasion into any of the following : brachiocephalic vein, superior vena cava, chest wall, or extrapericardial pulmonary arteries or veins
T4	Tumor with direct invasion into any of the following : aorta (ascending, arch, or descending), arch vessels, intrapericardial pulmonary artery or veins, myocardium, trachea, esophagus

Definition of Regional Lymph Node (N) (Note N) (紅字增修處)

N Category	N Criteria
NX	Regional lymph nodes cannot be assessed
N0	No tumor involvement of regional lymph node(s)
N1	Tumor involvement of anterior (perithymic) lymph nodes
N2	Tumor involvement of deep intrathoracic or cervical lymph nodes (e.g., paratracheal, subcarinal, aortopulmonary window, hilar, jugular, and/or supraclavicular nodes)

Definition of Distant Metastasis (M) (紅字增修處)

M Category	M Criteria
cM0	No distant metastasis
cM1	Distant metastasis
cM1a	Separate pleural or pericardial nodule(s)
cM1b	Pulmonary intraparenchymal nodule or other distant metastasis
pM1	Microscopic confirmation of distant metastasis
pM1a	Microscopic confirmation of separate pleural or pericardial nodule(s)
pM1b	Microscopic confirmation of pulmonary intraparenchymal nodule or other distant metastasis

AJCC PROGNOSTIC STAGE GROUPS

When T is...	And N is...	And M is...	Then the stage group is...
T1a-T1b	N0	M0	I
T2	N0	M0	II
T3	N0	M0	IIIA
T4	N0	M0	IIIB
Any T	N1	M0	IVA
Any T	N0-N1	M1a	IVA
Any T	N2	M0-M1a	IVB
Any T	Any N	M1b	IVB

References :

<https://www.facs.org/quality-programs/cancer-programs/american-joint-committee-on-cancer/version-9/>
<https://www.facs.org/Quality-Programs/Cancer/news/ajcc-kindle-102920>

Diffuse Pleural Mesothelioma

Summary of Changes :

- Quantitative pleural thickness measurements added to modified qualitative T criteria for definitions of **clinical T1-3**; modified qualitative criteria only retained for **pathological T** categories
- Revisions of stage groups prompted by revisions in clinical T categories (stages IA and IB merged into **stage I** that includes only **T1N0M0**; **T1N1M0** and **T2N0M0** are classified as **stage II**; **T1N2M0**, **T2N1-2M0** and **T3N0-2M0** are now classified as stage **IIIA**)
- **New grading system for epithelioid mesothelioma**

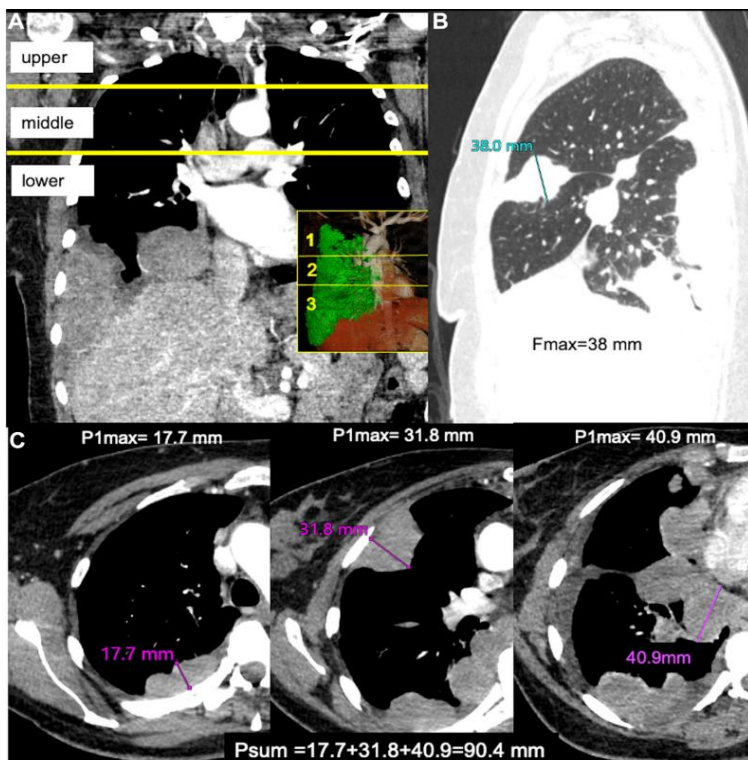
Definition of primary Tumor (cT) (紅字增修處)

T Category	T Criteria
TX	Primary tumor cannot be assessed
T0	No evidence of primary tumor
T1	Tumor limited to the ipsilateral parietal pleural with $P_{sum}^{\dagger} \leq 12$ mm or without and no involvement of the fissure ($F_{max}^{\ddagger} \leq 5$ mm) • visceral pleura • mediastinal pleura • diaphragmatic pleura
T2	Tumor involving each of the ipsilateral pleural surfaces (parietal, mediastinal, diaphragmatic, and visceral pleura) with $P_{sum}^{\dagger} \leq 12$ mm, and with any at least one of the following features : <ul style="list-style-type: none"> • involvement of the fissure ($F_{max}^{\ddagger} > 5$ mm) diaphragmatic muscle • mediastinal fat invasion • solitary area of chest wall soft tissue invasion • extension of tumor from visceral pleura into the underlying pulmonary parenchyma OR Tumor involving the ipsilateral pleura with $P_{sum}^{\dagger} > 12$ mm but ≤ 30 mm, with or without: <ul style="list-style-type: none"> • involvement of the fissure ($F_{max}^{\ddagger} > 5$ mm) • mediastinal fat invasion • solitary area of chest wall soft tissue invasion
T3	Describes locally advanced but potentially resectable tumor. Tumor involving all the ipsilateral pleural surfaces (parietal, mediastinal, diaphragmatic, and visceral pleura) with $P_{sum}^{\dagger} > 30$ mm, with or without: at least one of the following features : <ul style="list-style-type: none"> • involvement of the fissure ($F_{max}^{\ddagger} > 5$ mm) • mediastinal fat invasion • solitary area of chest wall soft tissue invasion

	<ul style="list-style-type: none"> •solitary, completely resectable focus of tumor extending into the soft tissues of the chest wall •involvement of the endothoracic fascia •extension into the mediastinal fat •nontransmural involvement of the pericardium
T4	<p>Describes locally advanced technically unresectable tumor. Tumor involving all the ipsilateral pleural surfaces (parietal, mediastinal, diaphragmatic, and visceral pleura) with at least one of the following features:</p> <p>Tumor with invasion of any of the following (any Psum[‡]):</p> <ul style="list-style-type: none"> • chest wall bony invasion (rib) • diffuse chest wall invasion •diffuse extension or multifocal masses of tumor in the chest wall, with or without associated rib destruction • mediastinal organs (heart, spine, esophagus, trachea, great vessels) •direct extension of tumor to mediastinal organs •direct extension of tumor into the spine • direct extension to the contralateral pleura • direct tumor extension through the diaphragm or pericardium • presence of malignant pericardial effusion •tumor extending through to the internal surface of the pericardium with or without a pericardial effusion; or tumor involving the myocardium •direct transdiaphragmatic extension of tumor to the peritoneum

[‡]Psum= pmax1+pmax2+pmax3 (sum of 3 measurements of maximal pleural thickness measured on axial images along the chest wall or mediastinum in each of the three divisions of the chest - upper, middle and lower divided by two lines; one at the top of the aortic arch and the second drawn at the top of the left atrium)

^{**}Fmax = maximal thickness of pleural tumor along the fissures measured on sagittal images



Source from :
 IASLC Mesothelioma Staging Project :
 T Descriptors Revision Proposal.
 Journal of Thoracic Oncology 2024. Vol. 19
 No. 9.

Definition of primary Tumor (pT) (紅字增修處)

T Category	T Criteria
TX	Primary tumor cannot be assessed
T0	No evidence of primary tumor
T1	Tumor limited to the ipsilateral pleural with no involvement of the fissure
T2	Tumor involving each of the ipsilateral pleural surfaces (parietal, mediastinal, diaphragmatic, and visceral pleura) with at least one and with any of the following features: <ul style="list-style-type: none"> • involvement of the fissure diaphragmatic muscle • ipsilateral lung parenchyma invasion • diaphragm (non-transmural) invasion • extension of tumor from visceral pleura into the underlying pulmonary parenchyma
T3	Describes locally advanced but potentially resectable tumor. Tumor limited to involving all the ipsilateral pleural (with or without fissure involvement) and surfaces (parietal, mediastinal, diaphragmatic, and visceral pleura) with invasion of any at least one of the following features: <ul style="list-style-type: none"> • extension into the mediastinal fat • nontransmural involvement of the surface of pericardium • involvement of the endothoracic fascia • solitary area of chest wall soft tissue • solitary, completely resectable focus of tumor extending into the soft tissues of the chest wall
T4	Describes locally advanced technically unresectable tumor. Tumor involving all the ipsilateral pleural surfaces (parietal, mediastinal, diaphragmatic, and visceral pleura) with at least one of the following features: Tumor with invasion of any of the following: <ul style="list-style-type: none"> • chest wall bony invasion (rib) • diffuse chest wall invasion • diffuse extension or multifocal masses of tumor in the chest wall, with or without associated rib destruction • mediastinal organs (heart, spine, esophagus, trachea, great vessels) • direct extension of tumor to mediastinal organs • direct extension of tumor into the spine • direct tumor extension through transmural invasion of the diaphragm or pericardium • direct extension to the contralateral pleura • presence of malignant pericardial effusion • tumor extending through to the internal surface of the pericardium with or without a pericardial effusion; or tumor involving the myocardium • direct transdiaphragmatic extension of tumor to the peritoneum

Definition of Regional Lymph Node (N) (紅字增修處)

N Category	N Criteria
NX	Regional lymph nodes cannot be assessed
N0	No regional lymph node metastasis No tumor involvement of regional lymph node(s)
N1	Tumor involvement of Metastases in the ipsilateral bronchopulmonary, hilar, or mediastinal (including the internal mammary, peridiaphragmatic, pericardial fat pad, or intercostal lymph nodes) regional lymph nodes
N2	Tumor involvement of Metastases in the contralateral mediastinal, ipsilateral or contralateral supraclavicular lymph nodes

Definition of Distant Metastasis (M) (紅字增修處)

M Category	M Criteria
cM0	No distant metastasis
cM1	Distant metastasis present
pM1	Microscopic confirmation of distant metastasis present

AJCC Prognostic Stage Groups (紅字增修處)

When T is...	And N is...	And M is...	Then the stage group is...
T1	N0	M0	I
T2	N0	M0	II
T1	N1	M0	II
T2	N1	M0	IIIA
T3	N0-N1	M0	IIIA
T1-T3	N2	M0	IIIA
T4	Any N	M0	IIIB
Any T	Any N	M1	IV

References :

<https://www.facs.org/quality-programs/cancer-programs/american-joint-committee-on-cancer/version-9/>
<https://www.facs.org/Quality-Programs/Cancer/news/ajcc-kindle-102920>

Nasopharynx

Summary of Changes :

- T3 clarification:
Skull base involvement should be unequivocal, and bony sclerosis alone on MRI and CT does not qualify as T3
- T4 clarification:
 - Involvement of orbit includes inferior orbital fissure
 - Cranial nerve involvement may be unequivocal radiological and/or clinical involvement
- Addition of advanced radiologic and/or clinical extranodal extension as N3 criterion. Advanced radiologic ENE is unequivocal evidence of tumor invasion through the nodal capsule into one or more adjacent structures: muscle, skin, or neurovascular structures.
- Subdivision of M1 into **M1a (≤ 3 metastatic lesions)** and **M1b (> 3 metastatic lesions)**
- Non-metastatic patients are re-grouped into **Stages I-III** instead of Stages I-IVA
- Stage I is revised from T1 N0 M0 to **T0-2 N0-1 M0**, and subdivided into **IA (T1-2 N0 M0)** and **IB (T0-2 N1 M0)**
- Stage III is revised to **Stage II (T0-2 N2 M0 or T3 N0-2 M0)**
- Stage IVA is revised to **Stage III (T4 or N3 with M0)**
- Stage IVB is revised to **Stage IVA (M1a) and IVB (M1b)**
- Minor salivary gland tumors are not included in the nasopharynx staging system.

Definition of Primary Tumor (T) (紅字增修處)

T Category	T Criteria
TX	Primary tumor cannot be assessed
T0	No evidence of primary tumor, but EBV-positive cervical node(s) involvement
Tis	Carcinoma in situ
T1	Tumor confined to nasopharynx OR Tumor with extension to any of the following without parapharyngeal involvement: <ul style="list-style-type: none"> • oropharynx • nasal cavity
T2	Tumor with extension to any of the following: <ul style="list-style-type: none"> • parapharyngeal space • adjacent soft tissue involvement of medial pterygoid, lateral pterygoid, prevertebral muscles
T3	Tumor with unequivocal infiltration into any of the following bony structures: <ul style="list-style-type: none"> • skull base (including pterygoid structures) • paranasal sinuses • cervical vertebrae
T4	Tumor with any of the following: <ul style="list-style-type: none"> • intracranial extension • unequivocal radiological and/or clinical involvement of cranial nerves • involvement of hypopharynx • involvement of orbit (including inferior orbital fissure) • involvement of parotid gland • extensive soft tissue infiltration beyond the anterolateral surface of the lateral pterygoid muscle

Definition of Regional Lymph Node (N) (紅字增修處)

N Category	N Criteria
NX	Regional lymph nodes cannot be assessed
N0	No tumor involvement of regional lymph node(s)
N1	Tumor involvement of any of the following: <ul style="list-style-type: none"> • unilateral cervical lymph node(s) • unilateral or bilateral retropharyngeal lymph node(s) AND all of the following: <ul style="list-style-type: none"> • ≤ 6 cm in greatest dimension • above the caudal border of cricoid cartilage • without advanced extranodal extension
N2	Tumor involvement of bilateral cervical lymph nodes AND all of the following: <ul style="list-style-type: none"> • ≤ 6 cm in greatest dimension • above the caudal border of cricoid cartilage • without advanced extranodal extension

N3	Tumor involvement of unilateral or bilateral cervical lymph node(s), AND any of the following: <ul style="list-style-type: none"> • > 6 cm in greatest dimension • extension below the caudal border of cricoid cartilage • advanced radiologic extranodal extension with involvement of adjacent muscles, skin, and/or neurovascular bundle
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Definition of Distant Metastasis (M) (紅字增修處)

M Category	M Criteria
cM0	No distant metastasis
cM1	Distant metastasis
cM1a	≤ 3 metastatic lesions in one or more organs/sites
cM1b	> 3 metastatic lesions in one or more organs/sites
pM1	Microscopic confirmation of distant metastasis
pM1a	Microscopic confirmation of ≤ 3 metastatic lesions in one or more organs/ sites
pM1b	Microscopic confirmation of > 3 metastatic lesions in one or more organs/ sites

AJCC Prognostic Stage Groups (紅字增修處)

When T is...	And N is...	And M is...	Then the stage group is...
Tis	N0	M0	0
T1-T2	N0	M0	IA
T0-T2	N1	M0	IB
T0-T2	N2	M0	II
T3	N0-2	M0	II
T4	Any N	M0	III
Any T	N3	M0	III
Any T	Any N	M1a	IVA
Any T	Any N	M1b	IVB

A

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		T1	T2	T3	T4
M0	N0	I	II	III	IVA
	N1	II	II	III	IVA
	N2	III	III	III	IVA
	N3	IVA	IVA	IVA	IVA
M1	Any N	IVB			

B

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		T1	T2	T3	T4
M0	N0	IA	IA	II	III
	N1	IB	IB	II	III
	N2	II	II	II	III
	N3	III	III	III	III
M1	M1a	IVA			
	M1b	IVB			

References :

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<https://www.facs.org/Quality-Programs/Cancer/news/ajcc-kindle-102920>