

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* Histology is not ideal for clinical use in patient care, as it describes an unspecified or outdated diagnosis.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 ≤ 2 cm
T2	Tumor > 2 cm but ≤ 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.

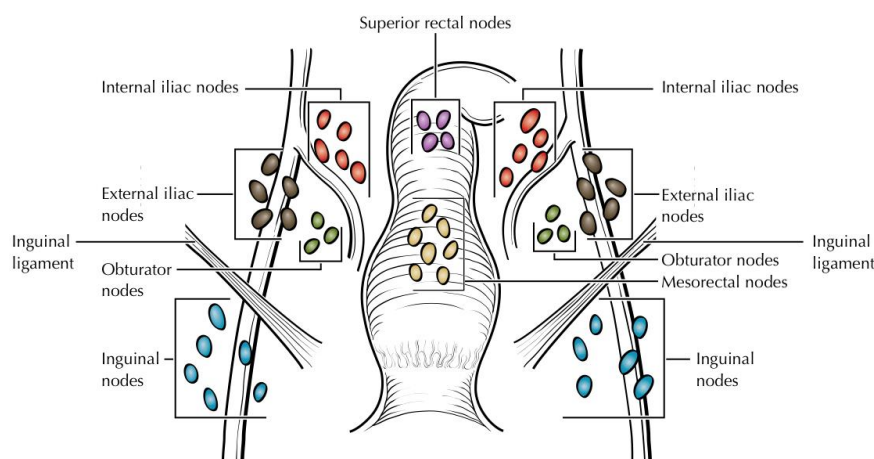
References :

<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	IIIB IIIA
T3	N1	M0	IIIC 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
<p>*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.</p> <p>**MIB1 antibody; % of 500-2000 cells in areas of highest nuclear labeling.</p> <p>The final grade is determined by whichever (mitotic count and Ki-67 index) places the tumor in higher grade category.</p>	

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
<i>Note:</i> Multiple tumors should be designated as such (the largest tumor should be used to assign T category): <ul style="list-style-type: none">• Use T(#); c.g., pT3(4) N0 M0, or• Use the <i>m</i> 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
<p>*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.</p> <p>**MIB1 antibody; % of 500-2000 cells in areas of highest nuclear labeling.</p> <p>The final grade is determined by whichever (mitotic count and Ki-67 index) places the tumor in higher grade category.</p>	

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
<p><i>Note:</i> Multiple tumors should be designated as such (the largest tumor should be used to assign T category):</p> <ul style="list-style-type: none"> • Use T(#); c.g., pT3(4) N0 M0, or • Use the <i>m</i> 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 mm ² 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 mm ² is different using microscopes with different field diameter; at least 10 mm ² 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
<i>Note:</i> Multiple tumors should be designated as such (the largest tumor should be used to assign T category): <ul style="list-style-type: none">• Use T(#); c.g., pT3(4) N0 M0, or• Use the <i>m</i> 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
<p>*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.</p> <p>**MIB1 antibody; % of 500-2000 cells in areas of highest nuclear labeling.</p> <p>The final grade is determined by whichever (mitotic count and Ki-67 index) places the tumor in higher grade category.</p>	

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
<i>Note:</i> Multiple tumors should be designated as such (the largest tumor should be used to assign T category): <ul style="list-style-type: none"> • 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 mm ² 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 mm ² is different using microscopes with different field diameter; at least 10 mm ² 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
<p><i>Note:</i> Multiple tumors should be designated as such (the largest tumor should be used to assign T category):</p> <ul style="list-style-type: none"> • 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-O). 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
<p>*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.</p> <p>**MIB1 antibody; % of 500-2000 cells in areas of highest nuclear labeling.</p> <p>The final grade is determined by whichever (mitotic count and Ki-67 index) places the tumor in higher grade category.</p>	

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)
<p>*<i>Limited to the pancreas</i> 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.</p> <p><i>Note:</i> Multiple tumors should be designated as such (the largest tumor should be used to assign T category):</p> <ul style="list-style-type: none">• 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.
- TINXM0 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.
- TINXM0 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) (紅字増修處)

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 pancreastatin 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) (紅字増修處)

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) (紅字増修處)

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 Note: 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

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 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 (紅字増修處)

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) (紅字増修處)

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. Chromogranin A (CgA) 5. Functionality 6. <i>DAXX/ATRX</i> 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 :

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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) (紅字増修處)

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/proximal two thirds 1/3 of the urethra, lower/proximal two thirds 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 (紅字増修處)

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>