

DUODENUM AND AMPULLA NEUROENDOCRINE TUMOR

Note: For high-grade neuroendocrine carcinomas arising in the duodenum or ampulla, use the template for carcinomas from that site

Procedure:

Duodenum, segmental resection
 Pancreaticoduodenectomy (Whipple resection)
 Resection of ____

Tumor Site (select all that apply)

Duodenum
 Ampulla of Vater
 Other (specify): _____
 Cannot be determined

Tumor Size (greatest dimension): ____ cm

Specify size of largest tumor if multiple tumors are present

Tumor Focality

Unifocal
 Multifocal, number of tumors:
 Cannot be determined

Histologic Type and Grade:

G1: Well-differentiated neuroendocrine tumor
 G2: Well-differentiated neuroendocrine tumor
 G3: Well-differentiated neuroendocrine tumor
 GX: Well-differentiated neuroendocrine tumor, grade cannot be assessed

Grade	Mitotic rate (/10 HPF)	Ki67 index (%)
G1	<2	<3
G2	2-20	3-20
G3	>20	>20

Mitotic Rate:

<2 mitoses per 2 mm²
 2-20 mitoses per 2 mm²
 >20 mitoses per 2 mm²
 Cannot be determined (explain): _____

*Note: 10 HPF is defined as a 2 mm² area. AJCC recommends counting 10mm² and dividing by 5. The area will vary based on your eyepiece field number. If your field number is "22" (written on your eyepiece), using a 40x objective, **42 HPF = 10mm²** & **8.4 HPF = 2mm²***

Ki-67 Labeling Index:

AJCC recommends counting 500 to 2000 cells in area of highest labeling

- <3% in area of highest labeling
- 3-20% in area of highest labeling
- >20% in area of highest labeling
- Cannot be determined (explain): _____

Tumor Extension (for duodenal tumors): (select all that apply)

- Invades mucosa
- Invades submucosa
- Invades muscularis propria
- Invades pancreas
- Invades peripancreatic adipose tissue
- Penetrates visceral peritoneum (serosa)
- Invades other organs (specify): _____
- Cannot be assessed

Tumor Extension (for ampulla tumors): (select all that apply)

- Confined to sphincter of Oddi
- Invades through sphincter into duodenal submucosa
- Invades through sphincter into duodenal muscularis propria
- Invades the pancreas
- Invades peripancreatic soft tissues
- Penetrates visceral peritoneum (serosa)
- Invades other organs (specify): _____
- Cannot be assessed

Margins

- Negative (all margins including proximal, distal, and radial margins are uninvolved by tumor)
- Negative (all margins including proximal, distal, pancreatic parenchymal, bile duct, and retroperitoneal margins uninvolved by tumor)
- Involved by tumor (specify margin):
- Cannot be assessed

Lymphovascular Invasion

- Not identified
- Present
- Cannot be determined

Regional Lymph Nodes

- No lymph nodes submitted or found
- Number of lymph nodes involved / nodes examined:

Distant Metastasis:

Yes, site(s):

Unknown

Pathologic Stage Classification (AJCC 8th Edition)

TNM Descriptors (required only if applicable)

m (multiple primary tumors)

r (recurrent)

y (posttreatment)

Primary Tumor (pT)

T1: *Duodenal:* Tumor invades the mucosa or submucosa only and is ≤1 cm

Ampullary: Tumor is ≤1 cm and confined within the sphincter of Oddi

T2: *Duodenal:* Tumor invades the muscularis propria or >1 cm (duodenal)

Ampullary: Tumor invades through sphincter into duodenal submucosa or muscularis propria, or is >1 cm

T3: Tumor invades the pancreas or peripancreatic adipose tissue

T4: Tumor invades the visceral peritoneum (serosa) or other organs

Regional Lymph Nodes (pN)

N0: No regional lymph node involvement

N1: Regional lymph node involvement

Distant Metastasis (pM) (required only if confirmed pathologically in this case)

M1: Distant metastasis

M1a: Metastasis confined to liver

M1b: Metastasis in at least one extrahepatic site (eg, lung, ovary, nonregional lymph node, peritoneum, bone)

M1c: Both hepatic and extrahepatic metastases