

Q&A

- Please submit all questions concerning the webinar content through the Q&A panel.
- If you have participants watching this webinar at your site, please collect their names and emails.
- We will be distributing a Q&A document in about one week. This document will fully answer questions asked during the webinar and will contain any corrections that we may discover after the webinar.

FABULOUS PRIZES



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AGENDA

- Epi Moment
- Overview
 - Anatomy
 - Histology
- Stage
- Treatment
- Case Scenarios



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Let us all raise our glasses to the pancreas,
It has never been an organ of distinction –
Though it functions day by day,
In a most convenient way,
It has never had the glory that the liver gets.

Let us all raise our glasses to the pancreas,
Just secretin alkaline digestive juices,
Into the intestine
Just to neutralize the stomach acid
That could be remaining on the food

Hey pancreas, hey pancreas,
You are my favorite organ,
Hey pancreas, hey pancreas,
I cant think of anything that rhymes with organ

Pumpin out from the lovely Isles of Langerhans
Comes the insulin that regulates the sugar in the blood
And thats why so high I rank it
And Ill drop a note to thank it
May you never have a cranky pancreas!

Hey pancreas, hey pancreas, have a nice day!

EPI MOMENT

Theme song: Pancreas! by Heywood Banks

<https://www.youtube.com/watch?v=3dTIjEtSfP8>

(you are welcome)

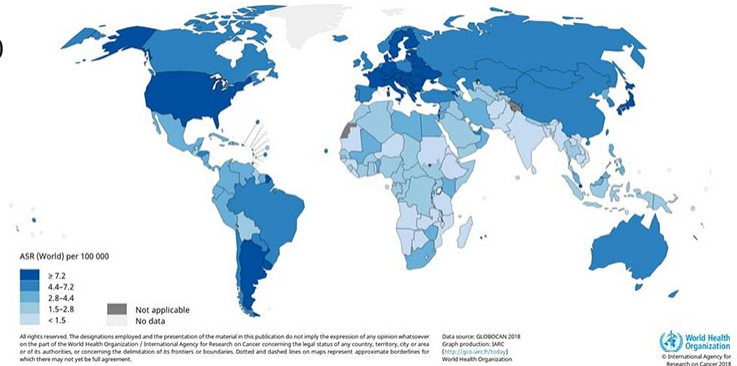


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DESCRIPTIVE EPI

- Analyzed alone; tobacco-associated (C25...)
- Incidence 10th (11th globally)
 - 14.9 per 100,000 men; ↑ 1.1%
 - 11.4 women; ↑ 1.0%
 - 17.8 black men; ↑ .6%
 - 15.0 black women; ↑ 0.9%
- Mortality 4th: (7th globally)
 - 12.7 per 100,000 men; ↑ 0.3%
 - 9.6 women; ↑ 0.2%
 - 15.4 black men; stable
 - 12.32 black women; ↓ 0.2%
- I/M Ratio 94%
 - >1.0

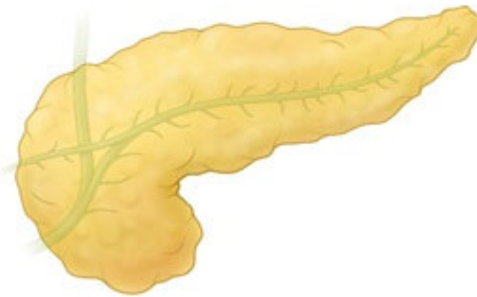
Estimated age-standardized incidence rates (World) in 2018, pancreas, both sexes, all ages



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HISTOLOGY

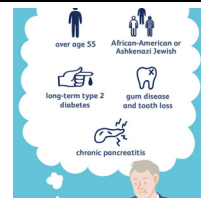
- Exocrine
 - Ductal adenocarcinoma
 - >85% of all pancreatic cancers
 - 75% in head of pancreas
 - Cystic <1%
- Endocrine
 - PanNET (5%)
 - Islet-cell/neuroendocrine are rare



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RISK FACTORS

- Etiology poorly understood
 - Diabetes dx often temporally close (reverse causation)
- Heredity: 2+ family (6x)
 - BRCA2 (3.5x), PALAB2, CDKN2A, KTK!!, PRSS1, KRAS, p53, SMAD4
- Occupational chemical exposures suspected
- **NO RISK:** alcohol, coffee or radiation
- Tobacco use & alcohol abuse
- Diabetes
- Obesity & diet
- Age, ethnicity, family history/genetics
- *Helicobacter pylori* infection
- Non-O blood group and chronic pancreatitis



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SIGNS & SYMPTOMS

- Average age at dx: 71
 - Generally asymptomatic until late stage—no population-based screening
- Jaundice
- Abdominal pain and/or lower back pain
- Rapid weight loss
- Bloating
- Loss of appetite and/or nausea
- Pale stool & Dark urine
- Itchiness
- Recent diabetes dx

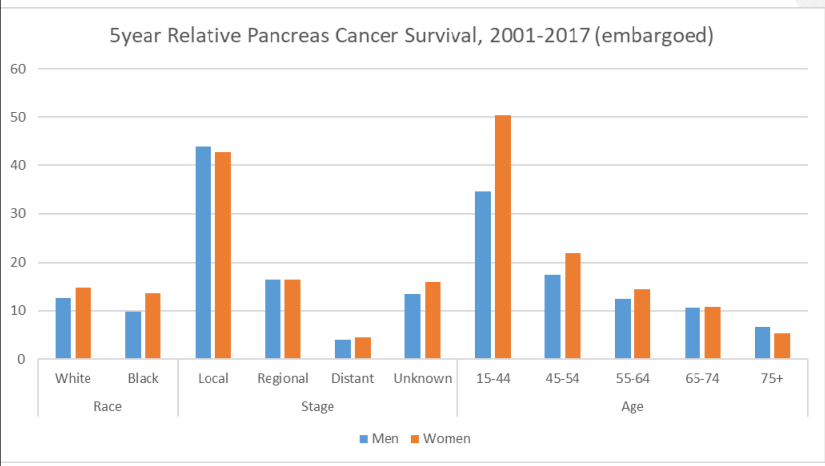
PANCREATIC CANCER: 16 WARNING SIGNS YOU SHOULD KNOW

SYMPTOMS: Pancreatic cancer may cause only vague unexplained symptoms. If you are experiencing one or more of the below symptoms, the Pancreatic Cancer Action Network urges you to speak to your doctor immediately and reference pancreatic cancer.

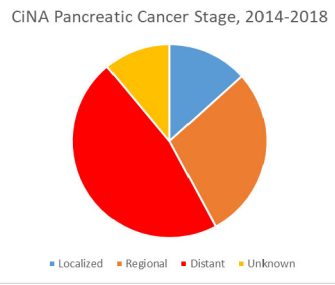
- Pain: usually in the abdomen or back
- Loss of appetite
- Jaundice: yellowing of the skin and/or eyes
- Weight loss
- Nausea
- Change in stool
- Recent onset diabetes



SURVIVAL—CINA MONOGRAPHS MAY, 2021



Prevalence Estimate:
US 73,173
(10Year Limited Duration)

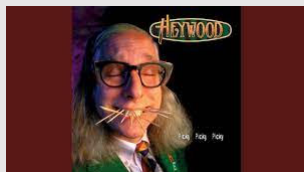


PATRICK SWAYZE VERSUS STEVE JOBS

- Disease of same name but not the same
- Jobs—neuroendocrine/islet cell
 - Rarer, slower growing, easier to treat
 - 8 years; age 56; non-smoking vegan
- Swayze—ductal adenocarcinoma
 - Median survival 5 months
 - 20 months; age 57; active but smoker
 - Gemcitabine



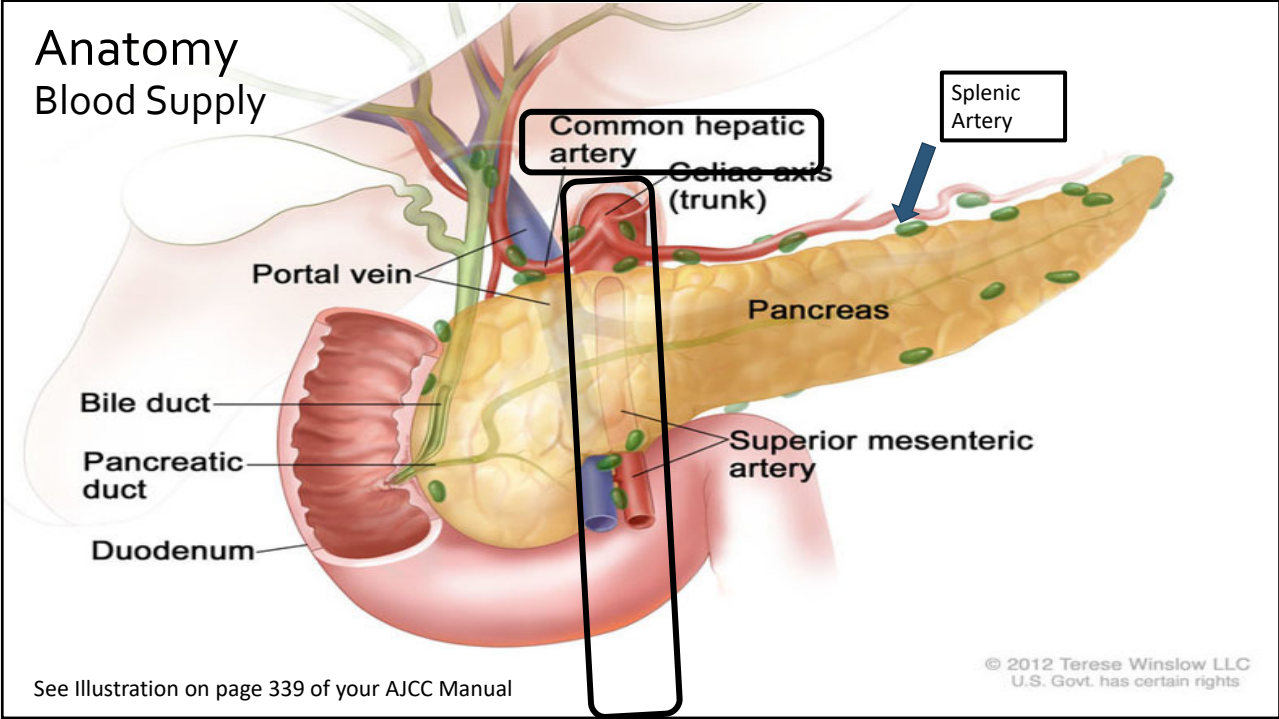
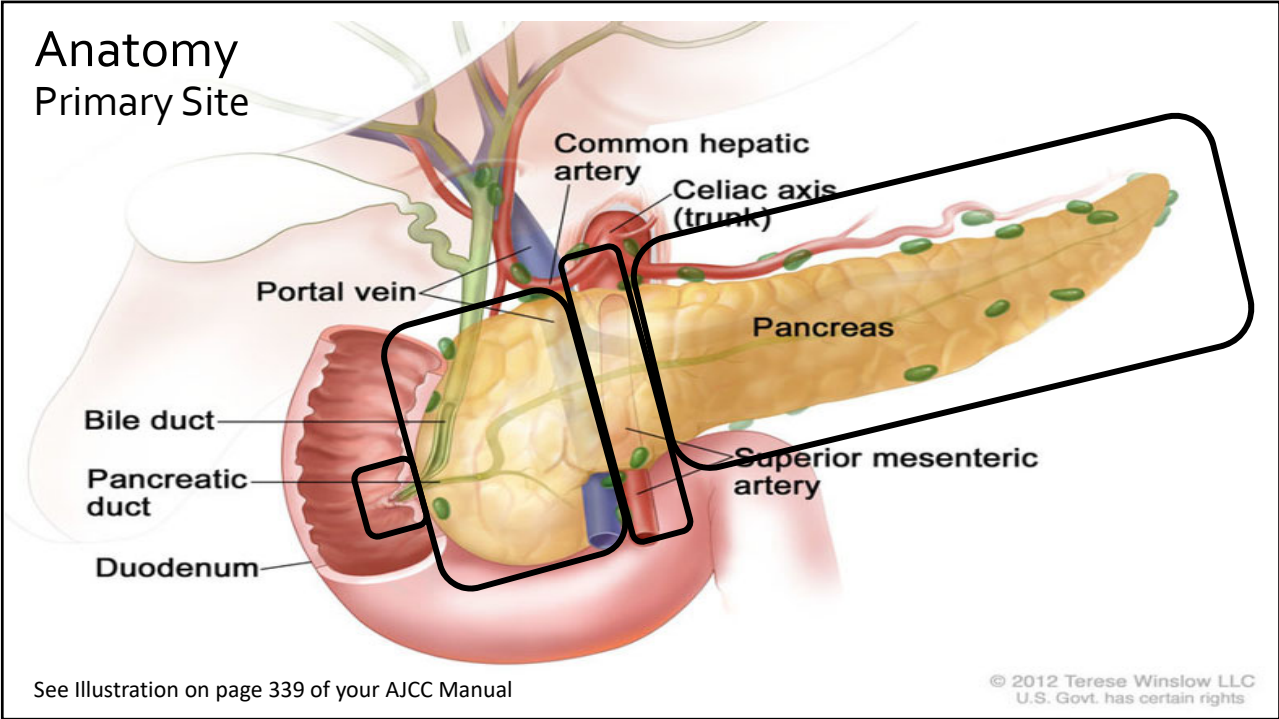
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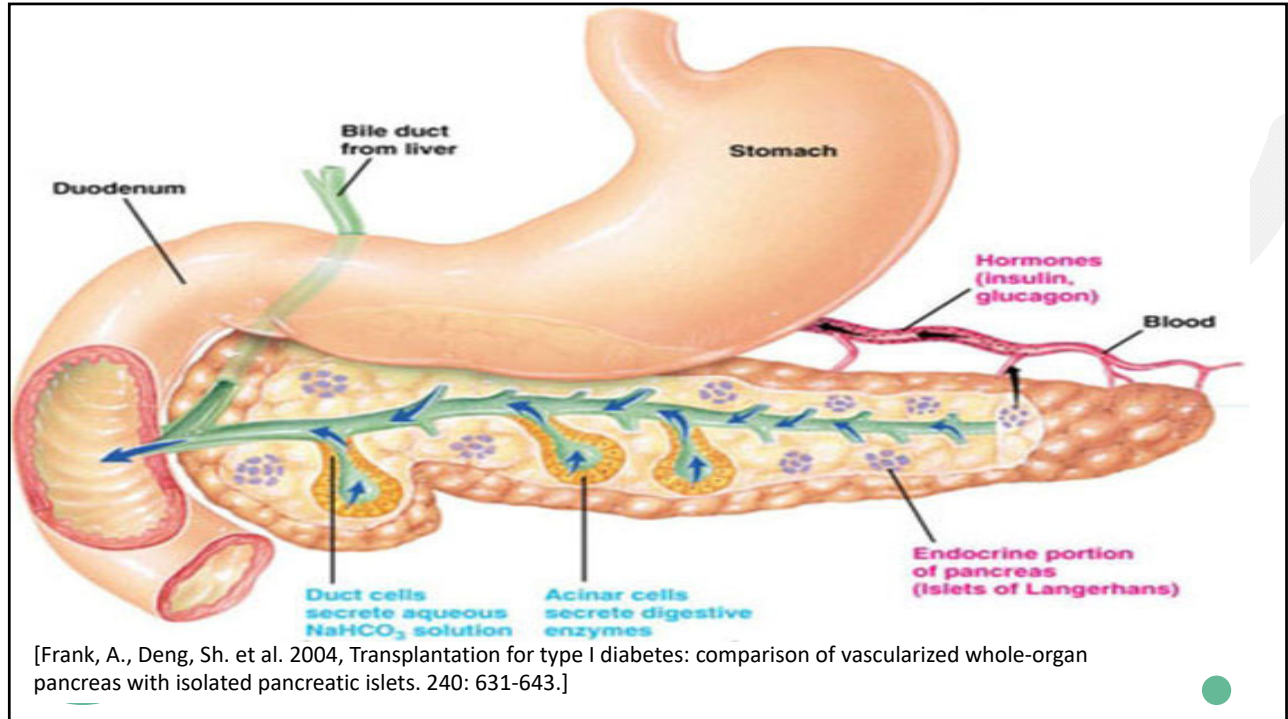


THANK YOU

✉ RSHERMAN@NAACCR.ORG

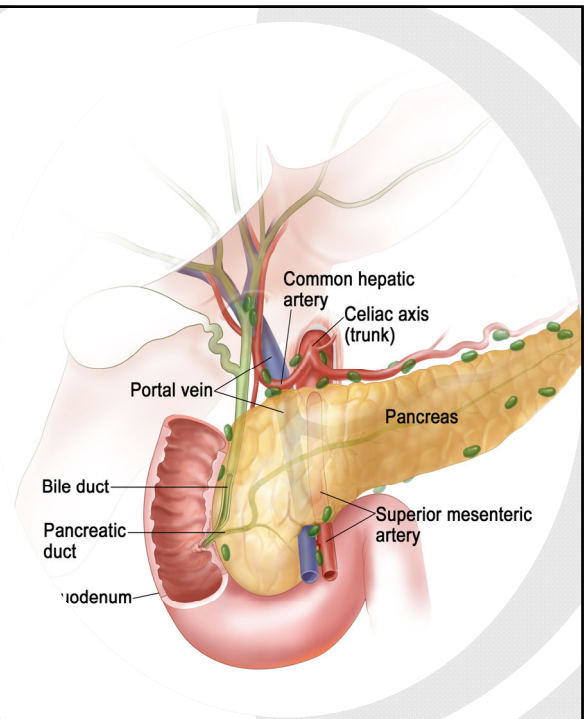
🌐 WWW.NAACCR.ORG





Regional Lymph Nodes

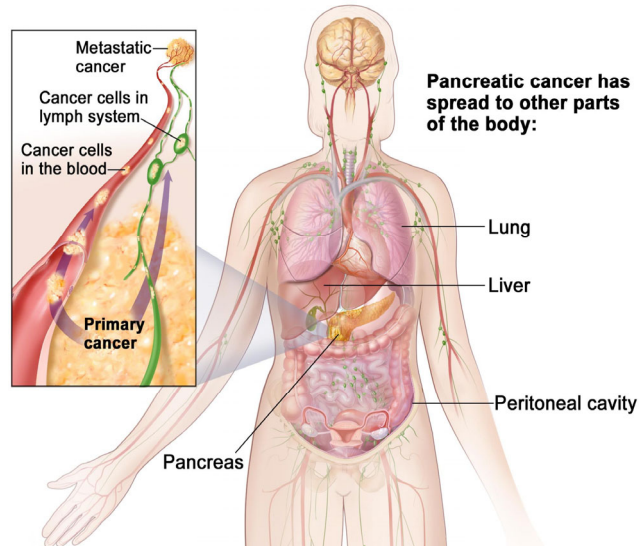
- Superior mesenteric
- Anterior and posterior pancreaticoduodenal
- Pyloric
- Proximal mesenteric
- Common bile duct lymph nodes
- Splenic hilar, pancreatic tail, peripancreatic, hepatic artery, retroperitoneal, lateral aortic
- Head only
 - Infrapyloric, subpyloric, celiac
- Body & Tail only
 - pancreaticolienal, splenic



DISTANT METASTASIS

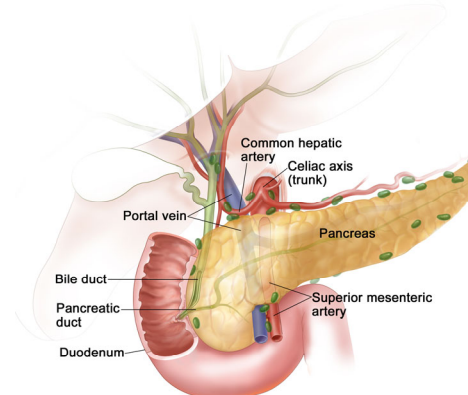
- Liver
- Peritoneal Cavity
- Lungs

Stage IV Pancreatic Cancer



HISTOLOGY-EXOCRINE PANCREAS

- Ductal adenocarcinoma (8500/3)
 - Most frequently occurs in head of pancreas
 - Arises in association with precursor lesions: PanIN, IPMN or MCN
- Acinar carcinoma (8550/3) or acinar cell cystadenocarcinoma (8551/3)
- Adenosquamous (8560/3)
- Neuroendocrine carcinoma (8041/3)



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HISTOLOGY-ENDOCRINE PANCREAS

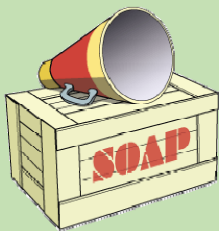
- Neuroendocrine tumor (8240/3)
 - Neuroendocrine tumor, grade 1
 - Neuroendocrine tumor, well differentiated
- Neuroendocrine tumor, grade 2 (8249/3)
- Reportable as of 1/1/2021
 - Pancreatic neuroendocrine tumor, non functioning (8150/3)
 - Insulinoma (8151/3)
 - Glucagonoma (8152/3)

<https://www.naaccr.org/wp-content/uploads/2021/04/C25-Histologies.xlsx>

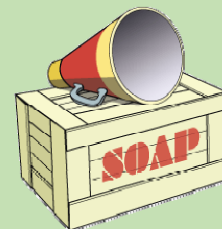


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soapbox moment



Steven Peace, CTR
Florida Cancer Data System



How Did We Find Out We Had a Problem?

- One of the Florida NCI-Designated Cancer Centers asked FCDS why we were not picking up all of the pancreatic cancers that they expected to find during research study reviewing data from pancreatic cancers diagnosed across FL.
 - They noted that many of the non-invasive pancreatic cancers were missing
 - They also noted that many of these cancers were diagnosed on EUS **without** Bx
 - But, all were being treated for 'early' pancreatic cancer
- So, we tried to figure out if there was a way we could identify these missed cases on routine case finding even without positive biopsy or imaging
 - All we had to go by was the EUS done at endoscopy centers - poor data source
 - Endoscopy Centers frequently had limited access to charts and have long been recognized as being a poor quality data source often with incomplete data
 - Endoscopy centers often do not even get the pathology even if a Bx was done

Use of EUS with/out Bx to Dx Pancreatic CA

- Pancreatic Cancer is highly malignant
- Pancreatic Cancer is frequently diagnosed at advanced stage
- Physicians have been trying to figure out a way to screen 'at risk' patients
- The intent is to find pancreatic cancers at an earlier, more treatable stage
- **Targeted Screening** is useful with EUS plus or minus MRI to ID tumors
 - However, some of these procedures do not include biopsy of tumor
 - Therefore, many of these 'direct visualization' diagnoses go unreported
 - The types of cancers identified on screening are non-invasive/pre-invasive
 - But, most of them do go on to get treated with chemo and followed closely
- Are we missing pancreatic cancers that should be reported to registry?
- How can we ensure we don't miss these cases?

What pancreatic cancers does EUS find?

- IPMN - Intraductal Papillary Mucinous Neoplasms (IPMN) (8453/2)
- IOPN - Intraductal Oncocytic Papillary Neoplasm (IOPN)
- ITPN - Intraductal Papillary Mucinous Neoplasms (IPMN)
- MCN - Mucinous Cystadenocarcinoma, non-invasive (MCN) (8470/2)
- Papillary neoplasm, pancreatobiliary-type, with high grade intraepithelial neoplasia
- Infiltrating Duct Carcinoma
- Cystadenocarcinoma
- Mucinous Cystadenocarcinoma
- Papillary Mucinous Cystadenocarcinoma
- Neuroendocrine Tumors (NET Grade 1 and Grade 2)
- Note: All the blue highlighted neoplasms are non-invasive/in-situ cancers

Use of EUS with/out Bx to Dx Pancreatic CA

- How do we identify these cases when there is no biopsy proof?
- Where do we find these cases? Ambulatory care surgical centers.
- What kinds of non-invasive pancreatic cancers are found on EUS?
- How do physicians identify 'high-risk' patients – what are the criteria?
- How can the EUS operator diagnose a non-invasive tumor without a Bx?
- Don't all non-invasive/in-situ tumors have to be microscopically proven to be non-invasive (excluding: benign/borderline brain)?
- How do we code these non-invasive/in-situ cancers – do we use a diagnostic confirmation of 6 – direct visualization? Histology/Behavior?

Identifying High Risk Groups to Screen w/EUS

- There are key characteristics/symptoms for patients at high risk of pancreatic and other hepato-pancreato-biliary system cancers; i.e. pancreatitis and jaundice
- Only about 10% of pancreatic cancers have hereditary characteristics
- The rest are 'random' – so, that is a lot to find without guidance
- Some Symptom & Risk Factors have ICD-10-CM Diagnosis Codes:
 - Acute Pancreatitis – K85.90
 - Chronic Pancreatitis – K86.1
 - Alcoholic Pancreatitis – K85.2
 - Dx Codes K85.* and K86.* may be useful in identifying patients to screen for these cancers
 - Proc CPT Code 43231, 43259 – EUS w/out EGD w/out biopsy + DX codes & you have a cohort
 - Note: other EUS codes – 43239, 43235, 43237, 43238, etc. may be useful, too
- Other symptoms and risk factors may not have an CD-10-CM DX Codes or are vague
 - Smoking, obesity, diabetes, lack of physical activity, jaundice, nausea, etc.

Identifying High Risk Groups to Screen w/EUS

- Are there genetic risk factors/genetic tests to help ID high risk patients?
 - Familial pancreatic cancers
 - Peutz-Jeghers Syndrome
 - Lynch Syndrome with Mismatch Repair Mutations – MLH1, MSH2, MSH6, PMS2
 - Patient's with Specific Genetic Abnormalities
 - BRCA1
 - BRCA2
 - PALB2
 - STK11
 - ATM
 - CDKN2A
- Take these genetic predisposition factors and add them together with the Diagnostic and Procedure 'hints' to create a cohort to case find and ID cases
- Have to review a lot of negative cases to find the positive ones – at ambi surg ctrs

Collaboration & Education

- FCDS' approach to resolving this problem is a combination of collaboration with the surgical centers to help us identify the cases and education of the abstractors working in these ambulatory care centers to make them aware we were missing important cases and teach them how to screen Diagnostic and Procedure Codes to try to find them and then how to screen the Medical Records to find cases.
- This approach is difficult to implement for multiple reasons including level of knowledge of abstractors working in ambulatory care centers, the quality of coding diagnostic and procedure codes in these centers, and the fact that this was not only an ambulatory care center problem, it was also a problem for hospital outpatient ambulatory care centers – and we still did not have a fool-proof methodology to find all the cases.
- So, this is an ongoing 'completeness' activity for the central registry and for the ambulatory care centers whether they are free-standing or hospital-based
- We are trying to identify a more straightforward and easier methodology to find these missed cases. But for now, all we are able to do is suggest they review the potential cases using a combination of Diagnostic and Procedure Codes or leave them as not reported - until we can identify a more straightforward methodology to casefind without so much manual review of every patient with EUS w/out Bx.

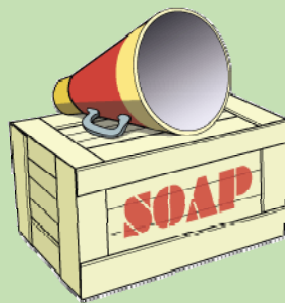
Abstracting & Coding Cases

- These cases require additional text documentation to explain why the case is reported as non-invasive/in-situ pancreatic cancer without having biopsy proof and why it was only confirmed by visualization
- The case should be documented and coded as described by the EUS operator/physician – include the findings from the EUS Report !!!
- The case will need an edit override for behavior/dx confirmation
- Histologies of interest are in the table on the next slide.

Pancreatic Cancer Histologies of Interest

Reportable	ICD-O-3	Description
Yes	8440/3	Cystadenocarcinoma of the pancreas
Yes	8150/3	Cystic Pancreatic Endocrine Neoplasm (CPEN)
Yes	8500/3	Infiltrating Duct Carcinoma of the pancreas
Yes	8503/2	Intraductal Oncocytic Papillary Neoplasm (IOPN) of the pancreas
Yes	8453/2	Intraductal Papillary Mucinous Neoplasms (IPMN) of the pancreas
Yes	8453/3	Intraductal Papillary Mucinous Neoplasm (IPMN) with invasive carcinoma
Yes	8503/2	Intraductal Tubule-Papillary Neoplasm (ITPN) of the pancreas
Yes	8503/3	Intraductal Tubule-Papillary Neoplasm (ITPN) with invasive carcinoma
Yes	8470/2	Mucinous Cystic Neoplasm (MCN) of the pancreas with high-grade dysplasia
Yes	8470/2	Non-invasive Mucinous Cystic Neoplasm (MCN) of the pancreas with high-grade dysplasia
Yes	8470/2	Mucinous Cystadenocarcinoma, non-invasive (MCN)
Yes	8470/3	Mucinous Cystadenocarcinoma of the pancreas
Yes	8470/3	Mucinous Cystic Neoplasm (MCN) of the pancreas with invasive carcinoma
Yes	8246/3	Neuroendocrine Carcinoma of the pancreas
Yes	8240/3	Neuroendocrine Tumor, Grade 1 (NET GR1) of the pancreas
Yes	8249/3	Neuroendocrine Tumor, Grade 2 (NET GR2) of the pancreas
Yes	8471/3	Papillary Mucinous Cystadenocarcinoma of the pancreas
Yes	8452/3	Solid Pseudo-Papillary Neoplasm (SPN) of the pancreas
Yes	8552/3	Mixed acinar-ductal carcinoma
Yes	8163/2	Papillary neoplasm, pancreatobiliary-type, with high grade intraepithelial neoplasia
Yes	8163/3	Pancreatobiliary-type carcinoma

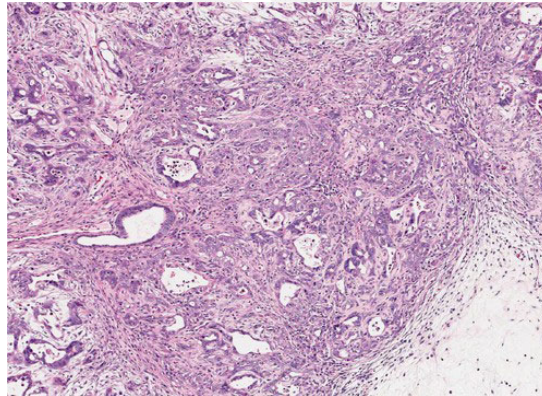
References: 2010 WHO Classification of Tumours of the Pancreas; Pathologie. 2011 Nov;32 Suppl 2:332-6. doi: 10.1007/s00292-011-1515-2; Ann Surg. 2004 May; 239(5): 651-659), 2011 ICD-O-3 Updates, 2015 SEER Program Coding and Staging Manual, and NCI SEER Ask A SEER Registrar.



Thank you for Listening

GRADE-ADENOCARCINOMA

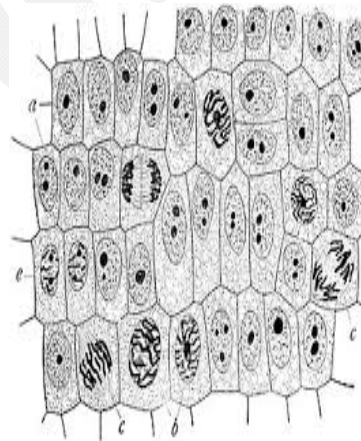
- Grade 1 Well-differentiated
 - (greater than 95% of tumor composed of glands)
- Grade 2 Moderately differentiated
 - (50% to 95% of tumor composed of glands)
- Grade 3 Poorly differentiated
 - (49% or less of tumor composed of glands)



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GRADE

Code	Grade Description
1	G1: Mitotic count (per 10 HPF) less than 2 AND Ki-67 index (%) less than 3
2	G2: Mitotic count (per 10 HPF) equal 2-20 OR Ki-67 index (%) equal 3-20
3	G3: Mitotic count (per 10 HPF) greater than 20 OR Ki-67 index (%) greater than 20
A	Well differentiated
B	Moderately differentiated
C	Poorly differentiated
D	Undifferentiated, anaplastic
9	Grade cannot be assessed (GX); Unknown



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QUESTIONS?



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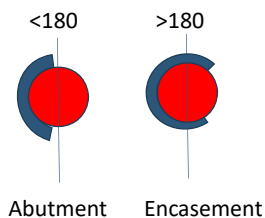
WORK-UP

- Pancreatic protocol CT
- Magnetic Resonance (MR) imaging or MR cholangiopancreatography (MRCP)
- Endoscopic ultrasound (EUS)
- Endoscopic retrograde cholangiopancreatography (ERCP)
- Biopsy
 - CT guided
 - EUS guided (preferred)



ELIGIBILITY FOR RESECTION

- Resectable
- Borderline resectable
- Unresectable

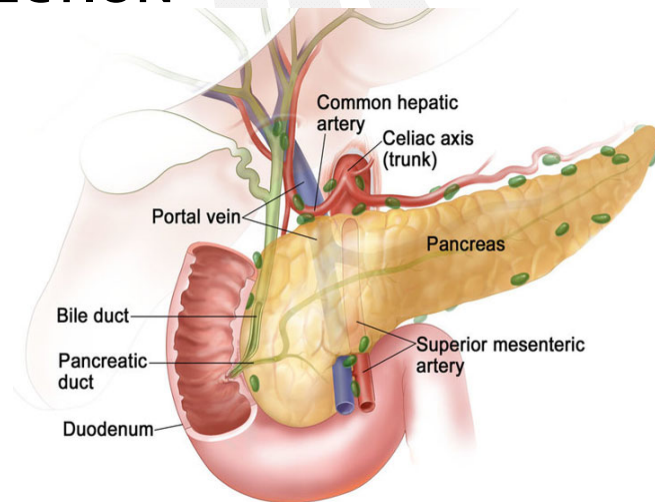


Criteria for Defining Resectability Status at Diagnosis

<https://www.nccn.org/guidelines/guidelines-detail?category=1&id=1455>

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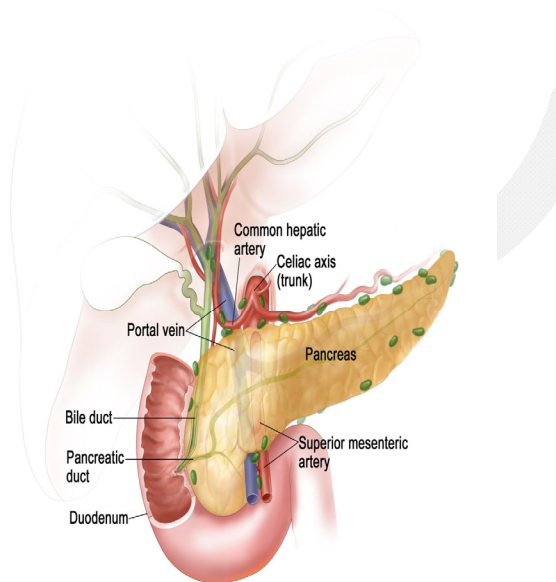
PALLIATIVE SURGERY

- Stent
 - ERCP
 - Percutaneous transhepatic cholangiography (PTC)
- Bypass Surgery
 - Common bile duct is rerouted directly into the small intestine



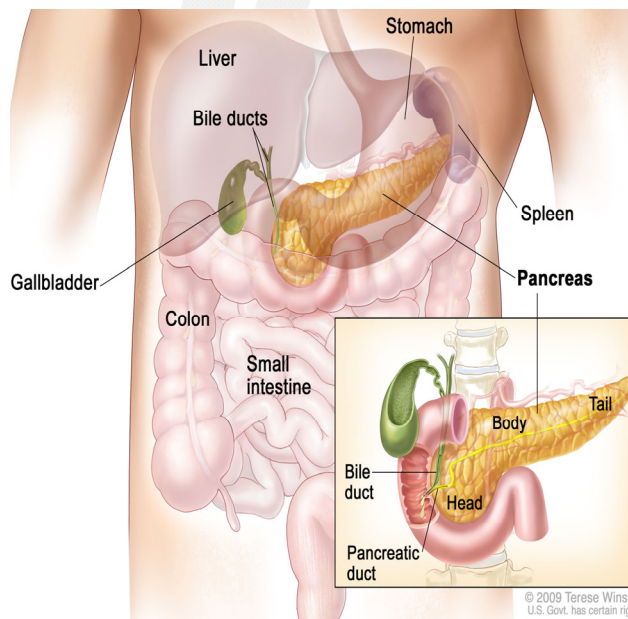
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SURGERY

- Pancreatoduodenectomy (Whipple procedure)
 - Removal of:
 - Head and part of the body of the pancreas
 - Portion of:
 - Duodenum
 - Jejunum
 - Common Bile
 - Distal half of the stomach (antrectomy)
 - Gallbladder and its cystic duct (cholecystectomy)
 - Regional lymph nodes

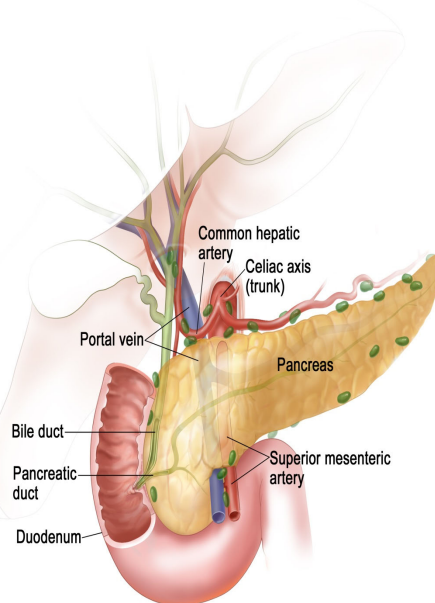


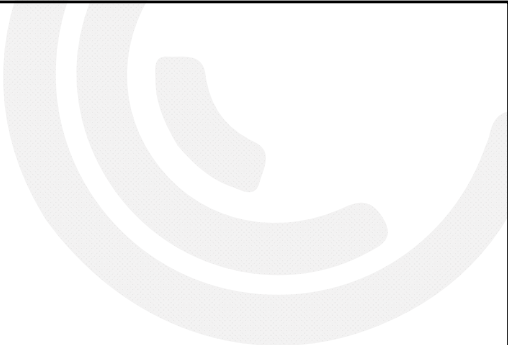
<http://www.aafp.org/afp/2006/0201/p485.html>



SURGERY

- Distal pancreatectomy
 - Removal of the body and tail of the pancreas and spleen
- Total pancreatectomy
 - Similar to a Whipple, but the entire pancreas is removed
 - Patient will be required to take supplemental enzymes and insulin







STAGING

AJCC Cancer Staging Manual

- Chapter 27 Ampulla of Vater-page 327
- Chapter 28 Exocrine Pancreas-page 337
- Chapter 34 Neuroendocrine Tumors of the Pancreas-page 407

EOD Pancreas
Summary Stage

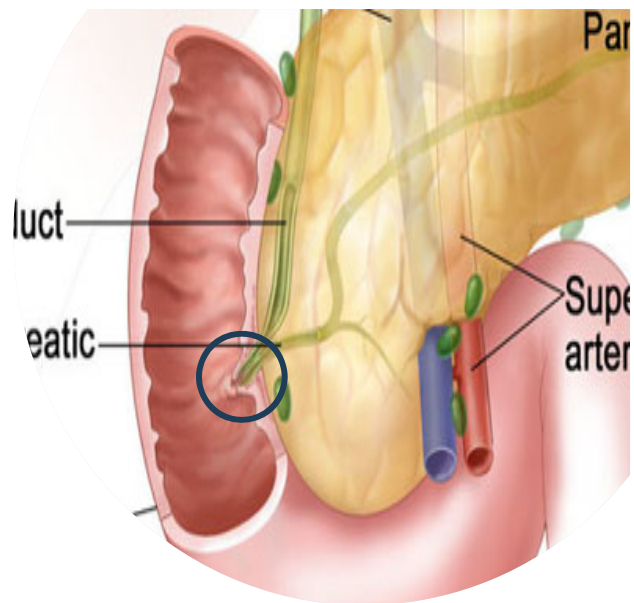


AJCC STAGING



AMPULLA OF VATER- CHAPTER 27, PAGE 327

- Highlights
 - Histology table
 - 8144-Adenocarcinoma, intestinal type
 - 8163 Adenocarcinoma, pancreatobiliary type
 - T Values (different than Exocrine Pancreas)
 - N Values
 - M Values



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EXOCRINE PANCREAS-CHAPTER 28, PAGE 337

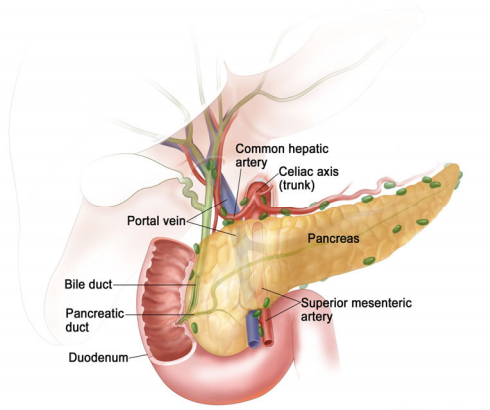
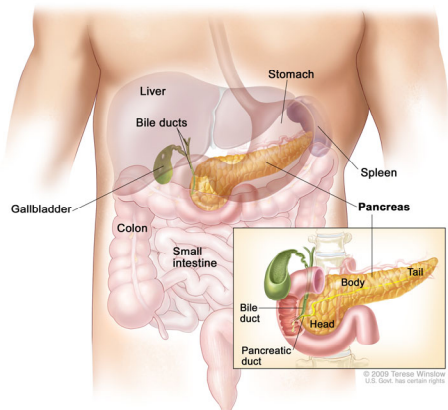
- Clinical Stage Classification
 - Preoperative biopsy (pg 340 top of left column)
 - Abutment vs Encasement (pg 341 second paragraph)
 - Suggested Radiology Report Format

Review of Imaging in Case Scenarios



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REVIEW OF CASE SCENARIOS-IMAGING



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EXOCRINE PANCREAS-CHAPTER 28, PAGE 337

- Pathological Classification
 - Surgical Resection of the primary tumor and regional lymph nodes (pg 342)
 - Review of T categories (pg 342 right column, first full paragraph)
 - Review of N categories (pg 343, left column, second full paragraph)
- Prognostic Factors
 - Involvement of Visceral Arteries (pg 343, right column)
 - Pre-operative CA 19-9 (pg 343, right column)
 - Completeness of resection (pg 344, left column)
- Review of CAP protocol
- Review of Case Scenario pathology report
- Review Definitions of AJCC TNM pg 344-345



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CANSWER FORUM

- Would involvement of the splenic artery depend on where the involvement of the Splenic artery was involved? ...
- ... The AJCC staging is not just based on anatomy like you have in EOD and Summary Stage, it is based on outcomes.
- For example, the hepatic artery is critical since patients cannot live without adequate blood supply to the liver. That is not true of the spleen. We all know that you can live without your spleen, so interruption of the splenic artery does not have an impact on the stage or the patient's prognosis....



<http://cancerbulletin.facs.org/forums/forum/ajcc-tnm-staging-8th-edition/hepatobiliary-system-chapters-22-28/exocrine-pancreas-chapter-28/103214-clarification-of-t4-celiac-axis>

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POP QUIZ

- Imaging shows a 3.2cm malignant appearing tumor in the body of pancreas.
 - The tumor encases the superior mesenteric artery.
 - No enlarged lymph nodes or metastasis identified.
- An exploratory laparotomy showed metastatic nodules on the surface of the liver.
- A biopsy of a metastatic nodule showed metastatic ductal carcinoma.

Data Item	Value
Clinical T	cT4
Clinical N	cN0
Clinical M	pM1
Stage	4
Path T	cT4
Path N	cN0
Path M	pM1
Stage	4



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- Imaging shows a 1.4 cm tumor in the head of the pancreas.
 - The tumor abuts the superior mesenteric artery. There is less than 180° of involvement. No additional arterial or celiac axis involvement.
 - No enlarged lymph nodes or metastasis identified.
- An EUS-FNA confirms poorly differentiated ductal adenocarcinoma
- The patient is treated with neoadjuvant chemoradiation.



Data Item	Values
Clinical T	cT4
Clinical N	cN0
Clinical M	cM0
Stage	3
Pathological T	blank
Pathological N	blank
Pathological M	blank
Pathological Stage	99

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POP QUIZ

yc staging is optional if the case is eligible for yp stage

- Imaging post chemoradiation failed to show any residual tumor or indication of metastasis.
- The patient went on to have a distal pancreatectomy.
 - Pathology did not show any residual tumor.
 - 17 lymph nodes were resected. No malignancy was identified.



Data Item	8 th ed
yc T	ycT0
yc N	ycN0
yc M	ycM0
yc Stage	99
yp T	ypT0
yp N	ypN0
yp M	cM0
yp Stage	99

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NEUROENDOCRINE TUMORS OF THE PANCREAS CHAPTER 34, PAGE 407

- Histology Codes (pg 408)
- “Functional” tumors (pg 408, right column, last paragraph)
- Clinical Classification (pg 412)
- Pathological Classification (pg 413)
- Prognostic factors (pg 414)
- Definitions of AJCC TNM (pg 415-416)

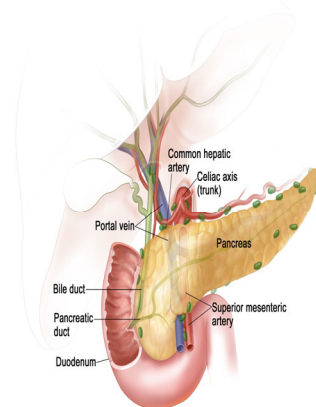


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SUMMARY STAGE (AMPULLA OF VATER AND PANCREAS)

Note 4: The terms "abutment," "abut(s)," "encases," or "encasement" of the major blood vessels can be interpreted as involvement of these structures.

2	<p>Regional by direct extension only</p> <ul style="list-style-type: none"> > All sites <ul style="list-style-type: none"> > Ampulla of Vater > Blood vessel(s) (major) <ul style="list-style-type: none"> > Aortic artery > Celiac artery > Common hepatic artery > Further contiguous extension to other major arteries > Portal vein > Superior mesenteric artery/vein > Duodenum > Extrahepatic bile duct(s) > Fixation to adjacent structure(s), NOS > Peripancreatic tissue, NOS > Stomach > Pancreas Head (C250) <ul style="list-style-type: none"> > Adjacent stomach > Blood vessel(s) (major) <ul style="list-style-type: none"> > Gastroduodenal artery > Transverse colon, including hepatic flexure > Pancreas Body Tail (C251, C252) <ul style="list-style-type: none"> > Spleen > Splenic artery/vein > Splenic flexure
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https://staging.seer.cancer.gov/eod_public/input/2.0/pancreas/ss2018/

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POP QUIZ

- Imaging shows a 3.2cm malignant appearing tumor in the tail of the pancreas. Peripancreatic extension is present.
 - Tumor encases the splenic artery, but does not approach any other major vessels.
 - No enlarged lymph nodes or metastasis identified.
- What cT value would be assigned?
- What Summary Stage 2018 value would be assigned?



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EOD

- Ampulla of Vater
- Pancreas
- NET Pancreas

EOD Primary Tumor

EOD Regional Nodes

EOD Mets



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SSDI'S

Pancreas

- CA 19-9 Pre TX Lab Value
 - Only required for pancreas (schema 00280)
 - CoC and SEER require this data item
 - Must be blank for pre-2021 cases
 - Information on what years this field is required are not included in the current version of the SSDI Notes.
 - Implementation dates will be added in next update
 - Edit enforces implementation date



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NET Pancreas

- Ki-67
 - Only required for NET Schemas for 2021 forward
 - Required for Breast 2018 forward
 - CoC and SEER require this data item
 - Must be blank for pre-2021 cases
 - Information on what years this field is required are not included in the current version of the SSDI Notes.
 - Implementation dates will be added in next update
 - Edit enforces implementation date

CA 19-9 PRETX LAB VALUE

- CA 19-9 is a sialylated Lewis A blood group antigen that is commonly expressed and shed in pancreatic and hepatobiliary disease and in many malignancies, thus is not tumor specific.
 - Pre-operative CA 19-9 levels in pancreatic cancer patients correlate both with AJCC staging and resectability [NCCN Guidelines Version 3.2019 Pancreatic Adenocarcinoma].
 - CA 19-9 levels should drop after surgery, radiation, and/or chemotherapy.
 - Post-therapy CA 19-9 levels should not be used to assign a value to this data item.



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KI-67 (MIB-1)

- KI-67 is a protein expressed by cells involved in replication
 - Pathologist counts about 1000 cells and determine the percentage of cells that are Ki-67 positive
 - Registrars collect percent of the cells that stain positive for Ki-67. A high percentage indicates the tumor is “proliferating” more rapidly.
 - If neoadjuvant therapy is given and there are no Ki-67 results from pre-treatment specimens, report the findings from post-treatment specimens. Use the Ki-67 from a specimen taken prior to neoadjuvant treatment if necessary.



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SSDI'S

CA 19-9 Pre Tx Lab Value

Code	Description
0.0	0.0 Units/milliliter (U/ml) exactly
0.1-9999.9	0.1-9999.9 U/ml (Exact value to nearest tenth in U/ml)
XXXX.1	10,000 U/ml or greater
XXXX.7	Test ordered, results not in chart
XXXX.8	Not applicable: Information not collected for this case (If this information is required by your standard setter, use of code XXXX.8 may result in an edit error.)
XXXX.9	Not documented in medical record CA (Carbohydrate Antigen) 19-9 Pretreatment Lab Value not assessed or unknown if assessed



Ki-67

Code	Description
0.0-100.0	0.0 to 100.0 percent positive: enter percent positive
XXX.4	Ki-67 stated as less than 3%
XXX.5	Ki-67 stated as 3%-20%
XXX.6	Ki-67 stated as greater than 20%
XXX.7	Test done; actual percentage not stated
XXX.8	Not applicable: Information not collected for this case (If this item is required by your standard setter, use of code XXX.8 will result in an edit error.)
XXX.9	Not documented in patient record Ki-67 (MIB-1) not assessed or unknown if assessed

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TREATMENT



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SURGERY

Codes

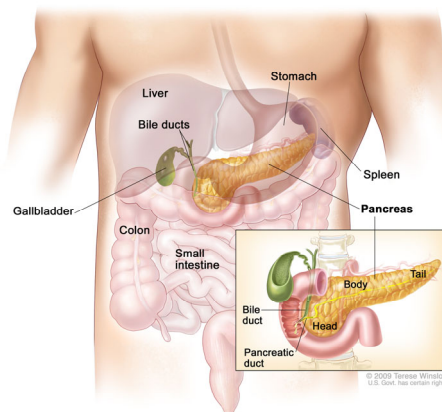
- 00 None; no surgery of primary site; autopsy ONLY
- 25 Local excision of tumor, NOS
- 30 Partial pancreatectomy, NOS; example: distal
- 35 Local or partial pancreatectomy and duodenectomy
 - 36 WITHOUT distal/partial gastrectomy
 - 37 WITH partial gastrectomy (Whipple)
- 40 Total pancreatectomy
- 60 Total pancreatectomy and subtotal gastrectomy or duodenectomy
- 70 Extended pancreatoduodenectomy
- 80 Pancreatectomy, NOS
- 90 Surgery, NOS



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SURGERY

- Pancreatoduodenectomy (Whipple procedure) (37)
 - Removal of:
 - Head and part of the body of the pancreas
 - Portion of:
 - Duodenum
 - Jejunum
 - Common Bile
 - Distal half of the stomach (antrectomy)
 - Gallbladder and its cystic duct (cholecystectomy)
 - Regional lymph nodes

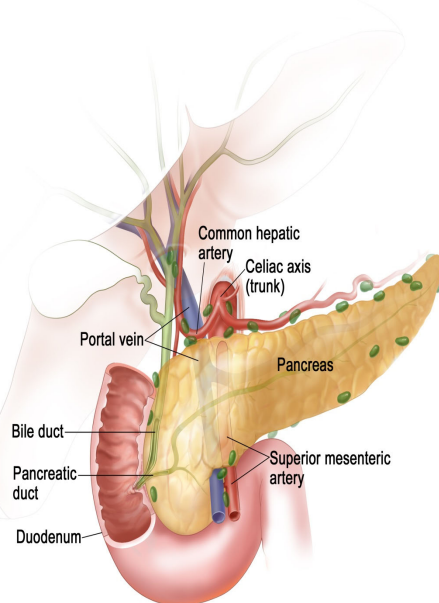


<http://www.aafp.org/afp/2006/0201/p485.html>



SURGERY

- Distal pancreatectomy (30)
 - Removal of the body and tail of the pancreas and spleen
- Total pancreatectomy (40)
 - Similar to a Whipple, but the entire pancreas is removed
 - Patient will be required to take supplemental enzymes and insulin



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CHEMOTHERAPY/RADIATION

- Adjuvant Therapy
 - Chemotherapy
 - Chemoradiation
 - IMRT
- Neoadjuvant Therapy
 - Performed on patients that are resectable or borderline surgical candidates
 - Adjuvant chemotherapy and radiation



CHEMOTHERAPY/RADIATION

- Primary Treatment
 - Intent is palliative and improved survival
- Chemotherapy
 - FOLFIRINOX
 - 5-fu
 - Leucovorin
 - Oxalplatin
 - Irinotecan
 - Gemcitabine
 - Clinical trials
- Chemoradiation
- Radiation
 - IMRT



QUESTIONS?

Case Scenarios



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COMING UP!

- 6/17/21 Kidney 2021
 - Denise Harrison, CTR
 - Louanne Currence, RHIT, CTR
- 7/8/21 Quality in CoC Accreditation
 - Courtney B. Jagneaux, CTR
 - Erin Weber, CTR



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FABULOUS PRIZES



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CE'S

- Phrase
- Link
 - <https://survey.alchemer.com/s3/5729149/Pancreas-2021>





THANK YOU

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🌐 [HTTPS://WWW.NAACCR.ORG/](https://www.naacr.org/)