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Survivorship – Pancreatic Cancer

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**ELIGIBILITY**
- Resected pancreatic adenocarcinoma
- Sporadic neuroendocrine tumor
- Resected Duodenal/Peri-ampullary cancer
- ≥ 3 years post-treatment and No Evidence of Disease (NED)

**CONCURRENT COMPONENTS OF VISIT**
- Years 3 to 5:
  - History and physical every 6-12 months
  - CT chest, abdomen, and pelvis with contrast every 6-12 months
  - Nutrition evaluation with Registered Dietitian:
    - As clinically indicated if status post distal or central pancreatectomy
    - Every 6-12 months if status post pancreaticoduodenectomy (PD) or total pancreatectomy (TP)

**SURVEILLANCE**
- Years 5 to 10:
  - Annual history and physical
  - Annual CT chest, abdomen, and pelvis with contrast or MRI Abdomen with and without contrast - MRCP based on age of patient and genetic history
  - Nutrition evaluation with Registered Dietitian:
    - As clinically indicated if status post distal or central pancreatectomy
    - Annually if status post PD or TP

- > 10 years:
  - Annual history and physical
  - Annual MRI Abdomen with and without contrast - MRCP
  - Nutrition evaluation with Registered Dietitian annually or as clinically indicated. If status post PD or TP, additional labs with annual visit (see Appendix A)

- Labs: CBC with differential, CMP, HbA1c, CA 19-9 and/or CEA every 6-12 months
  - If status post PD or TP, will need additional labs annually (see Appendix A)

- Bone Density Monitoring (DEXA) baseline at 2 years post-op, then every 2-5 years from baseline or as indicated (see Appendix B)

**DISPOSITION**
- Abnormal findings?
  - Yes
    - Continue survivorship monitoring
  - No
    - Return to primary treating physician

- Primary Oncologist to discuss Goal Concordant Care (GCC) with patient, or if clinically indicated, with Patient Representative

**MONITORING FOR LATE EFFECTS**
- Risk Reduction/Early Detection
  - See Page 3

**PSYCHOSOCIAL FUNCTIONING**

**Disclaimer:**
1 CA19-9 elevated above normal, new lesions/lymphadenopathy on imaging, imaging findings suggestive of stricture, thrombus, fluid collections, clinical status decline, patient choice with MD review, abnormal physical exam findings
2 GCC should be initiated by the Primary Oncologist. If Primary Oncologist is unavailable, Primary Team/Attending Physician to initiate GCC discussion and notify Primary Oncologist. Patients, or if clinically indicated, the Patient Representative should be informed of therapeutic and/or palliative options. GCC discussion should be consistent, timely, and re-evaluated as clinically indicated. The Advance Care Planning (ACP) note should be used to document GCC discussion. Refer to GCC home page (for internal use only).

**CMP** = complete metabolic panel
**CA 19-9** = cancer associated antigen 19-9
**CEA** = carcinoembryonic antigen
**MRCP** = magnetic resonance cholangiopancreatography

**Department of Clinical Effectiveness V1**
Approved by The Executive Committee of the Medical Staff on 06/20/2023
Survivorship – Pancreatic Cancer

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ELIGIBILITY

Resected pancreatic adenocarcinoma or Sporadic neuroendocrine tumor or Resected Duodenal /Peri-ampullary cancer and ≥ 3 years post-treatment and NED

CONCURRENT COMPONENTS OF VISIT

Monitor for following at each visit:
- Fatigue
- Weight loss
- Pancreatic Exocrine Insufficiency (PEI)
- Nutrient Deficiency
- Hepaticojejunostomy Anastomotic Strictures

Patient education, counseling, and screening:
- Lifestyle risk assessment
- Routine cancer screening as appropriate per guidelines
- Consider Vitamin D testing and replacement as clinically indicated
- HPV vaccination as clinically indicated (see HPV Vaccination algorithm)
- Screening for Hepatitis B and C as clinically indicated (see Hepatitis B (HBV) Screening and Management and Hepatitis C (HCV) Screening algorithms)
- Consider cardiovascular risk reduction
- Osteoporosis surveillance (see Appendix B)
- Genetic screening if not already completed (see Genetic Counseling algorithm)
- Vaccinations including Spleenectomy Vaccine boosters (see Asplenia/Hyposplenia – Management of Adult Patients algorithm) as appropriate

PSYCHOSOCIAL FUNCTIONING

Assess for:
- Distress management (see Distress Screening and Psychosocial Management algorithm)
- Body image concerns

DISPOSITION

Refer or consult as indicated

1 See Physical Activity, Nutrition, and Tobacco Cessation algorithms; ongoing reassessment of lifestyle risks should be a part of routine clinical practice
2 Recommend at least 30 minutes of moderate-intensity activity most days of the week
3 Includes breast, cervical (if appropriate), colorectal, liver, lung, pancreatic, and skin cancer screening
4 Consider use of Vanderbilt’s ABCDE’s approach to cardiovascular health
5 Based on Centers for Disease Control and Prevention (CDC) guidelines

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Patient Population

**Normal bone density**
Recheck DEXA every 5 years if male or premenopausal; recheck DEXA every 2 years if postmenopausal

**Osteopenia, ≥ 50 years old**
Consider medical therapy or referral to bone health specialist based on FRAX Calcula\(^1\): if risk of hip fracture is < 3% risk and risk of non-hip fracture is < 20%, recheck DEXA in 2 years. If risk of hip fracture is ≥ 3% or risk of non-hip fracture is ≥ 20%, bone health specialist

**Osteopenia, < 50 years old**
Refer to bone health specialist

**Osteoporosis**
Refer to bone health specialist

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**APPENDIX B: Bone Density Monitoring**

DEXA = dual-energy x-ray absorptionmetry
PDAC = Pancreatic Ductal Adenocarcinoma

\(^1\) FRAX® - Fracture Risk Assessment Tool at [www.shef.ac.uk/frax](http://www.shef.ac.uk/frax)

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**APPENDIX A: Pancreatoduodenectomy or Total Pancreatectomy labs**

- CBC with differential
- PT with INR
- Copper
- Zinc
- Selenium
- Ferritin
- Iron
- Transferrin
- Folate
- Vitamin B6
- Vitamin B12
- Methylmalonic acid
- Vitamin A
- CRP
- Vitamin E
- 25-OH Vitamin D
- Albumin
- HbA1C

PT with INR = Prothrombin Time with INR
CRP = C-Reactive Protein
SUGGESTED READINGS

Centers for Disease Control and Prevention. (2023). *Recommended adult immunization schedule for ages 19 years or older, United States, 2023.* Retrieved from https://www.cdc.gov/vaccines/schedules/hcp/imz/adult.html


MD Anderson Institutional Policy #CLN1202 - Advance Care Planning Policy

Advance Care Planning (ACP) Conversation Workflow (ATT1925)


This survivorship algorithm is based on majority expert opinion of the Pancreatic Survivorship workgroup at the University of Texas MD Anderson Cancer Center. It was developed using a multidisciplinary approach that included input from the following:

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