

Disclaimer: This algorithm has been developed for MD Anderson using a multidisciplinary approach considering circumstances particular toMD Anderson's specific patient population, services and structure, and clinical information. This is not intended to replace the independent medical or professional judgment of physicians or other health care providers in the context of individual clinical circumstances to determine a patient's care. This algorithm should not be used to treat pregnant women.

**Note:** Screening is only intended for asymptomatic individuals and should be performed 10 years before age of diagnosis in closest relative affected with pancreatic cancer. Individuals undergoing pancreatic cancer screening should have a 10-year life expectancy and no co-morbidities that would limit the diagnostic evaluation or surgical treatment. The screening should be performed by a provider with experience in screening technique.

### **PRESENTATION RISK SCREENING** Proceed to diagnostic evaluation Yes • Annual: Presence of Physical examination pancreatic cancer o Laboratory studies (CA 19-9, fasting glucose, amylase, lipase and hemoglobin A1c) symptoms<sup>1</sup>? Imaging studies (MRI/MRCP) Yes No • Consider baseline endoscopic ultrasound (EUS)<sup>3</sup> High risk<sup>2</sup>? No No pancreatic cancer screening recommended

MRCP = magnetic resonance cholangiopancreatography

- Weight loss
- Jaundice
- Abdominal/back pain
- Nausea/vomiting

<sup>&</sup>lt;sup>1</sup>Pancreatic cancer symptoms include:

<sup>&</sup>lt;sup>2</sup> See Appendix A - Pancreatic Cancer High Risk Criteria

<sup>&</sup>lt;sup>3</sup>EUS will be repeated if patient develops other symptoms or if physical exam, blood markers or imaging tests show any abnormality



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### APPENDIX A: Pancreatic Cancer (PC) High Risk Criteria

Risk Factors	High Risk Criteria <sup>1</sup>
Pancreatic cancer family history	• Two or more relatives (from the same side of the family) who developed PC <sup>1</sup> • One FDR who developed PC before age 50
BRCA2 mutation	With no family history
ATM mutation	
CDKN2A/p16 mutation	
STK11 mutation (Peutz Jeghers Syndrome)	
PRSS1 mutation (Hereditary pancreatitis)	
BRCA1 mutation	Only if patient has PC family history
PALB2 mutation	
MMR mutation (Lynch Syndrome)	
p53 mutation (Li-Fraumeni Syndrome)	

Note: Some patients may not fit the criteria perfectly and risk assessment will be done by discussion with genetic counselor and expert physician given this is an evolving field

FDR = first degree relative

<sup>&</sup>lt;sup>1</sup> Consider referral to MD Anderson Pancreatic Cancer High Risk Clinic. Referrals can be made by:

<sup>•</sup> Phone: 1-877-632-6789; Monday – Friday, 8 a.m. to 11 p.m. CST and weekends and holidays from 8 a.m. to 7 p.m. CST

<sup>•</sup> Email: physicianreferrals@mdanderson.org



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#### **DEVELOPMENT CREDITS**

This screening algorithm is based on majority expert opinion of the Pancreatic Cancer Screening work group 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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