Supplementary Figure 1

Cumulative risk (hazard) for radiologic progression over the 16-year study period for high risk individuals after baseline screening

Supplementary Figure 2

Cumulative risk (hazard) for radiologic progression stratified by baseline age > 60 years (red upper curve) and  $\leq$ 60 years (blue lower curve) (p=0.0001).

## Supplementary Table 1

## Association of Neoplastic Progression with Type of Radiologic Worrisome Feature

		ſ	1
Radiologic Worrisome Feature	Number (%) of	Frequency (%)	p value
	All 354 HRI with	Associated with	
	Feature	PDAC and/or High	
		Grade Precursor	
		Neoplasm	
Solid mass	28 (7.9%)	12/28 (43%)	<0.0001
Cyst or MPD with mural nodule	6 (1.7%)	5/6 (83%)	<0.0001
Multiple cysts $\geq$ 3 at baseline	20 (5.7%)	12/20 (60%)	<0.0001
Cyst > 3 cm	2 (0.6%)	1(50%)	1.0
Cyst wall thick or enhancing	5 (1.4%)	3/5(60%)	0.003
Cyst growth rate > 4 mm in 1 year	11 (3.1%)	3/11(27%)	0.032
Dilated MPD at baseline <sup>2</sup>	76 (21.5%)	14/76(18%)	<0.0001
Dilated MPD > 5 mm anytime	21 (5.9%)	3/21(14%)	0.162

HRI n = 354 (Univariate Analysis)

<sup>1</sup>High grade precursor neoplasm = intraductal papillary mucinous neoplasm (IPMN) with high grade dysplasia or pancreatic intraepithelial neoplasia (PanIN)-3

<sup>2</sup>Dilated MPD defined by Rosemont criteria<sup>1</sup> ( $\geq$  3.5 mm in the head,  $\geq$  2.5 mm in the body,

and/or  $\geq$  1.5 mm in the tail), < 5 mm

Pathological diagnoses made by surgery in 48, percutaneous or EUS-guided FNA in 5 HRI

1. Catalano MF, Sahai A, Levy M, et al. EUS-based criteria for the diagnosis of chronic pancreatitis: the Rosemont classification. Gastrointest Endosc 2009;69:1251-61.

## Supplementary Table 2 Cox Proportional Hazards Regression Model

	Unadjusted Model			Adjusted Model		
	Hazard	p-value	95% CI	Hazard	p-value	95% CI
	Ratio			Ratio		
Age at baseline > 60 years	3.0	<0.0001	1.72, 5.36	3.1	<0.0001	1.69, 5.70
Mutation carrier	1.4	0.362	2.77, 0.69	2.7	0.017	1.20, 6.25
Total lesions at baseline $\geq 3$	4.9	<0.0001	2.70, 8.70	4.3	<0.0001	2.32, 7.92
Total number of relatives with PDAC (for each additional relative)	1.0	0.925	0.79, 1.23	1.1	0.640	0.81,1.40
Dilated MPD at baseline <sup>1</sup>	3.5	<0.0001	1.98, 6.04	4.2	<0.0001	2.40, 7.49

Showing Estimated Hazard Ratios for Radiological Progression

PDAC = pancreatic ductal adenocarcinoma, MPD = main pancreatic duct

<sup>1</sup>Dilated MPD defined by Rosemont criteria ( $\geq$  3.5 mm in the head,  $\geq$  2.5 mm in the body,

and/or  $\geq$  1.5 mm in the tail), up to 5 mm



