

## PANCREATIC CANCER PDX TUMOR MICROARRAYS

NCI's Patient-Derived Models Repository (NCI PDMR) has developed tissue microarrays (TMAs) with patient-derived xenograft (PDX) models that are designed to facilitate selection of PDX models or their matched in vitro organoid (PDOrg) or tumor culture (PDC) models for research. TMAs are intended for screening efforts and hypothesis generation as a research tool, not for direct clinical translation or application.

**Panc I TMA Description:** Panc I includes 60 pancreatic cancer PDX models, representing 44 patients. These models are predominantly pancreatic adenocarcinoma and ductal adenocarcinoma. Tissues cores are taken from early passage PDX tumors (passage 1-3) that are representative of each PDX model. Four replicate TMA blocks, designated A, B, C and D, were generated for this panel. Once depleted a new Panc TMA Panel will be created, likely with some differences in model characteristics.

### **Tumor Microarray Profile**

Catalog#:	Panc I
Model Type:	PDX
Host-Species:	Mouse, NOD.Cg-PrkdcscidIl2rgtm1Wjl/SzJ (NSG)
# PDX Models on TMA:	60
# Cores/PDX Model:	2
Control Tissues on TMA:	Mouse Spleen (MS) & Mouse Mammary Fat Pad (MFP)
# Cores/Control Tissue:	3
Fixation Method:	Formalin fixed, paraffin embedded
Applications:	H&E and IHC/IF staining
Core Size:	1.5 mm diameter
Section thickness:	5 um
Slide:	Epredia™ SlideMate™ Plus Microscope Slides
Storage Conditions:	Short term at room temperature. Store at 4°C. Do not freeze.
Slide preparation:	Slides are sealed/dipped with paraffin wax. Follow <b>SOP60101 TMA Slide Deparaffinization</b> ( <a href="#">PDMR SOPs - NCI</a> )

### **Panc I TMA QA/QC:**

H&E and human Ku80 IHC staining have been performed at set intervals through the TMA block and assessed by a certified pathologist for pass/fail quality control.

- **Each PDX Spot** needs to pass the following: minimum of 500 human tumor cells with nuclei.
- **Each PDX Model** needs to pass the following: at least one spot represented
- **Each Slide** needs to pass the following:  $\geq 75\%$  of PDX models are represented by at least 1 spot
- **Each Mouse Control** is represented by at least 1 spot.

## **Panc I TMA Map:**

Slide Label		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	I	47	48	49	50	51	52	53	54	55	56	57	58	59	60	18
	H	46	Spleen	45	44	43	42	41	40	39	38	37	36	35	34	33
	G	19	20	21	22	23	MFP	24	25	26	27	28	29	30	31	32
	F	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3
	E	50	51	52	53	54	55	56	57	58	59	Spleen	60	18	1	2
	D	49	48	MFP	47	46	45	44	43	42	41	40	39	38	37	36
	C	<Empty>	<Empty>	<Empty>	25	26	27	28	29	30	31	32	33	Spleen	34	35
	B	<Empty>	<Empty>	<Empty>	24	23	22	21	20	MFP	19	17	16	15	14	13
	A	<Empty>	<Empty>	<Empty>	1	2	3	4	5	6	7	8	9	10	11	12

The **TMA Map and Attributes Table** can be found on the next page. This table includes PDX Spot ID#, XY Map coordinates, PDX Distribution Lot Names, and general information including histology, age, genetic ancestry, patient treatment status, and key mutations. Additional model details can be found in the NCI PDMR database (<https://pdmdb.cancer.gov/web/apex/f?p=101>).

## **General Information about TMAs**

The representative **H&E and human Ku80 IHC images** are taken at set intervals through the block and will not exactly match the tissue cores on the slide you receive. These images can be downloaded on the NCI PDMR Website (<https://dctd.cancer.gov/drug-discovery-development/reagents-materials/pdmr/using-pdmr/request-material>). Due to the inherent variability of tissue architecture, individual distributed slides will not be an exact match for the H&E images provided on the website.

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## NCI Patient-Derived Models Repository (NCI PDMR)

<http://pdmr.cancer.gov/>

### Panc I PDX Tissue Microarray

#### PDX Attributes:

PDX Spot#	X,Y Position on TMA Block	PDX Distribution Lot Name	CTEP SDC Descrip	DiagnosisSubtype	Ethnicity	Genetic Ancestry	Age at Diagnosis	Provided Tissue Origin Site	Treatment Naive?	MSI	KRAS Mutation	Panc Subtype
1	A4, E14	165739-295-R	Adenocarcinoma - pancreas	-	Not Provided	European (CEU)	70	Primary	Yes	MSI-Stable	G12D	Classical
2	A5, E15	193399-133-R	Adenocarcinoma - pancreas	-	Not Provided	European (CEU)	68	Primary	Yes	MSI-Stable	G12V	Classical
3	A6, F15	217524-143-R1	Adenocarcinoma - pancreas	mucinous	Not Provided	European (CEU)	49	Primary	No	MSI-Stable	G12R	Classical
4	A7, F14	217524-143-R2	Adenocarcinoma - pancreas	mucinous	Not Provided	European (CEU)	49	Metastatic	No	MSI-Stable	G12R	Classical
5	A8, F13	217524-143-R4	Adenocarcinoma - pancreas	mucinous	Not Provided	European (CEU)	49	Primary	No	MSI-Stable	G12R	Classical
6	A9, F12	217524-143-R5	Adenocarcinoma - pancreas	mucinous	Not Provided	European (CEU)	49	Metastatic	No	MSI-Stable	G12R	Classical
7	A10, F11	227483-062-R1	Adenocarcinoma - pancreas	Ductal	Not Provided	European (CEU)	60	Primary	No	MSI-Stable	G12V	Classical
8	A11, F10	242566-281-R	Adenocarcinoma - pancreas	-	Not Hispanic or Latino	European (CEU)	57	Primary	No	MSI-Stable	G12D	Classical
9	A12, F9	285369-178-R	Adenocarcinoma - pancreas	-	Not Hispanic or Latino	European (CEU)	78	Primary	Yes	MSI-Stable	G12V	Classical
10	A13, F8	292921-168-R	Adenocarcinoma - pancreas	-	Not Provided	European (CEU)	64	Primary	No	MSI-High	G12D	Basal-like
11	A14, F7	377384-186-R	Adenocarcinoma - pancreas	-	Not Hispanic or Latino	European (CEU)	80	Primary	No	MSI-Stable	G12D	Basal-like
12	A15, F6	381576-328-R	Adenocarcinoma - pancreas	-	Not Hispanic or Latino	European (CEU)	63	Primary	Yes	MSI-Stable	G12C	Classical
13	B15, F5	422866-222-R5	Adenocarcinoma - pancreas	-	Not Provided	European (CEU)	83	Metastatic	No	MSI-Stable	G12C	Basal-like
14	B14, F4	463931-005-R	Adenocarcinoma - pancreas	-	Not Provided	European (CEU)	74	Primary	Yes	MSI-Stable	G12D	Classical
15	B13, F3	466636-057-R	Adenocarcinoma - pancreas	-	Not Hispanic or Latino	European (CEU)	56	Primary	Yes	MSI-Stable	G12R	Classical
16	B12, F2	482815-354-R1	Adenocarcinoma - pancreas	ductal	Not Provided	European (CEU)	85	Metastatic	No	MSI-Stable	G12V	Classical
17	B11, F1	482815-354-R2	Adenocarcinoma - pancreas	ductal	Not Provided	European (CEU)	85	Primary	No	MSI-Stable	G12V	Classical
18	E13, I15	485176-168-R4	Adenocarcinoma - pancreas	w/mucinous features	Not Provided	European (CEU)	80	Metastatic	No	MSI-Stable	--	Classical
19	B10, G1	485368-065-R3	Adenocarcinoma - pancreas	-	Not Provided	European (CEU)	42	Metastatic	No	MSI-Stable	G12V, AMP	Basal-like
20	B8, G2	485368-065-R4	Adenocarcinoma - pancreas	-	Not Provided	European (CEU)	42	Metastatic	No	MSI-Stable	G12V, AMP	Basal-like
21	B7, G3	485368-065-R8	Adenocarcinoma - pancreas	-	Not Provided	European (CEU)	42	Metastatic	No	MSI-Stable	G12V, AMP	Basal-like
22	B6, G4	492569-054-R	Adenocarcinoma - pancreas	Invasive ductal	Not Hispanic or Latino	European (CEU)	69	Primary	Yes	MSI-Stable	G12R	Classical
23	B5, G5	496974-208-R	Adenocarcinoma - pancreas	Invasive	Not Hispanic or Latino	European (CEU)	73	Primary	Yes	MSI-Stable	G12D	Basal-like
24	B4, G7	521955-158-R2	Adenocarcinoma - pancreas	-	Not Hispanic or Latino	European (CEU)	62	Metastatic	No	MSI-Stable	G12D	Classical
25	C4, G8	521955-158-R3	Adenocarcinoma - pancreas	-	Not Hispanic or Latino	European (CEU)	62	Metastatic	No	MSI-Stable	G12D	Classical
26	C5, G9	521955-158-R4	Adenocarcinoma - pancreas	-	Not Hispanic or Latino	European (CEU)	62	Metastatic	No	MSI-Stable	G12D	Classical
27	C6, G10	521955-158-R5	Adenocarcinoma - pancreas	-	Not Hispanic or Latino	European (CEU)	62	Primary	No	MSI-Stable	G12D	Classical
28	C7, G11	521955-158-R6	Adenocarcinoma - pancreas	-	Not Hispanic or Latino	European (CEU)	62	Metastatic	No	MSI-Stable	G12D	Classical
29	C8, G12	523694-262-R	Adenocarcinoma - pancreas	-	Not Hispanic or Latino	European (CEU)	60	Primary	No	MSI-Stable	G12D	Classical
30	C9, G13	529294-124-R	Adenocarcinoma - pancreas	-	Not Hispanic or Latino	European (CEU)	72	Primary	Yes	MSI-Stable	G12R	Classical
31	C10, G14	561559-040-R	Adenocarcinoma - pancreas	-	Not Hispanic or Latino	European (CEU)	64	Primary	No	MSI-Stable	G12V	Classical
32	C11, G15	612792-311-R	Adenocarcinoma - pancreas	-	Not Hispanic or Latino	European (CEU)	85	Primary	Yes	MSI-Stable	G12D	Classical
33	C12, H15	616732-234-R1	Adenocarcinoma - pancreas	-	Not Hispanic or Latino	European (CEU)	53	Primary	No	MSI-Stable	G12V	Classical
34	C14, H14	616732-234-R2	Adenocarcinoma - pancreas	-	Not Hispanic or Latino	European (CEU)	53	Metastatic	No	MSI-High	G12V	Basal-like
35	C15, H13	616732-234-R3	Adenocarcinoma - pancreas	-	Not Hispanic or Latino	European (CEU)	53	Metastatic	No	MSI-High	G12V	Classical
36	D15, H12	619344-162-R	Adenocarcinoma - pancreas	-	Not Hispanic or Latino	Mixed (AII < 80%)	61	Primary	No	MSI-Stable	G12D	Basal-like
37	D14, H11	633739-251-R	Adenocarcinoma - pancreas	Ductal	Not Hispanic or Latino	European (CEU)	62	Primary	No	MSI-Stable	Q61H	Classical
38	D13, H10	671287-276-R	Adenocarcinoma - pancreas	-	Not Hispanic or Latino	European (CEU)	79	Primary	Yes	MSI-Stable	G12D	Classical
39	D12, H9	699152-130-R	Adenocarcinoma - pancreas	-	Not Hispanic or Latino	European (CEU)	70	Primary	No	MSI-Stable	G12D	Basal-like
40	D11, H8	742811-063-R	Islet cell tumors - pancreas	-	Not Hispanic or Latino	West African (YRI)	39	Metastatic	No	MSI-Stable	--	N/A
41	D10, H7	744664-207-M	Adenocarcinoma - pancreas	-	Not Hispanic or Latino	European (CEU)	82	Metastatic	No	MSI-Stable	G12D	Classical
42	D9, H6	777334-354-R2	Adenocarcinoma - pancreas	-	Not Provided	European (CEU)	36	Primary	No	MSI-Stable	G12D	Classical
43	D8, H5	777334-354-R3	Adenocarcinoma - pancreas	-	Not Provided	European (CEU)	36	Metastatic	No	MSI-Stable	G12D	Classical
44	D7, H4	777334-354-R5	Adenocarcinoma - pancreas	-	Not Provided	European (CEU)	36	Metastatic	No	MSI-Stable	G12D	Classical
45	D6, H3	833975-119-R	Adenocarcinoma - pancreas	-	Not Provided	European (CEU)	68	Primary	Yes	MSI-Stable	G12D	Classical
46	D5, H1	839793-233-R4	Adenocarcinoma - pancreas	-	Not Provided	European (CEU)	82	Metastatic	Yes	MSI-Stable	G12R	Classical
47	D4, I1	868679-213-R	Adenocarcinoma - pancreas	-	Not Provided	European (CEU)	69	Primary	No	MSI-Stable	G12R	Classical
48	D2, I2	885724-159-R	Adenocarcinoma - pancreas	-	Not Provided	European (CEU)	71	Primary	Yes	MSI-Stable	G12V, AMP	Classical
49	D1, I3	958279-163-R	Adenocarcinoma - pancreas	-	Not Hispanic or Latino	European (CEU)	63	Primary	Yes	MSI-Stable	G12V	Classical
50	E1, I4	966289-007-R4	Adenocarcinoma - pancreas	carcinoma w/rhabdoid features	Not Provided	European (CEU)	49	Metastatic	Yes	MSI-Stable	--	Basal-like
51	E2, I5	968212-105-R	Adenocarcinoma - pancreas	-	Not Hispanic or Latino	European (CEU)	68	Metastatic	Yes	MSI-Stable	G12D	Classical
52	E3, I6	982778-135-R	Adenocarcinoma - pancreas	-	Not Provided	European (CEU)	67	Primary	Yes	MSI-Stable	G12D	Classical
53	E4, I7	K24384-001-R	Adenocarcinoma - pancreas	-	Not Hispanic or Latino	European (CEU)	0	Metastatic	No	MSI-Stable	G12V AMP	Classical
54	E5, I8	K64430-001-R	Adenocarcinoma - pancreas	-	Not Hispanic or Latino	European (CEU)	0	Metastatic	Yes	MSI-Stable	G12D	Classical
55	E6, I9	323965-272-R	Pancreatic cancer (not Islets)	ductal adenocarcinoma	Not Hispanic or Latino	European (CEU)	70	Primary	Yes	MSI-Stable	G12C	Classical
56	E7, I10	212328-146-R	Adenocarcinoma - pancreas	-	Not Provided	European (CEU)	46	Metastatic	Yes	MSI-Stable	G12R	Classical
57	E8, I11	454973-116-R2	Adenocarcinoma - pancreas	-	Not Hispanic or Latino	European (CEU)	57	Metastatic	No	MSI-Stable	G12D, AMP	Classical
58	E9, I12	454973-116-R3	Adenocarcinoma - pancreas	-	Not Hispanic or Latino	European (CEU)	57	Metastatic	No	MSI-Stable	G12D, AMP	Classical
59	E10, I13	454973-116-R4	Adenocarcinoma - pancreas	-	Not Hispanic or Latino	European (CEU)	57	Metastatic	No	MSI-Stable	G12D	Classical
60	E12, I14	K21392-128-T	Adenocarcinoma - pancreas	-	Not Hispanic or Latino	European (CEU)	61	Metastatic	No	MSI-Stable	G12D	Basal-like