

Table S1. Patient clinical data. All patients had a diagnosis of pancreatic ductal carcinoma except patient 9 (ampullary cancer). Data was current at the time of press and is provided to the extent it was available in the patient medical records. Sex, Male (M) or Female (F); Age, current age at the time of surgery; Stage, American Joint Committee on Cancer Staging (AJCC) stage at the time of surgery, as determined by pathological review; Organoid, origin of organoids was either from PDX or patient primary tumor; 2D, yes or no refers to if two-dimensional cell lines were created; Neoadjuvant therapy (neoadj.), name of therapy indicated, if given; Adjuvant therapy (adj.), name of therapy indicated; Tumor size, dimensions of tumor, as determined by computed tomography scan, either before surgery (pre-surgery) or during the course of therapy indicated; CA19-9, Carbohydrate Antigen 19-9 levels measured in the blood in U/ml; Survival, months following surgery the patient survived; Notes, any information given in the medical record that indicated how the patient responded to treatment, or their current disease state. *Treatment abbreviations:* FOLFIRINOX, combination therapy of folinic acid, fluorouracil, irinotecan, and oxaliplatin; FOLFOX4, combination therapy of folinic acid, fluorouracil, and oxaliplatin; Gemcitabine, Gem; Abiraterone, Abx; Radiation Therapy, RT. Capecitabine, Cap; Surgery, surg.

Study ID	Sex	Age	Stage	Organoids	2D	Neoadjuvant Therapy	Adjuvant Therapy	Tumor size	CA19-9	Survival (post-surgery, months)	Notes
1	F	65	IIB	PDX	Yes	None	Gemcitabine; FOLFIRINOX	Tumor size not on file	20, pre-surg.; 14.47, with mets	16	Developed mets on Gemcitabine. Initial response to FOLFIRINOX, then became resistant.
2	M	57	IIB	PDX	Yes	FOLFIRINOX	FOLFIRINOX (no irinotecan); Gemcitabine/Abraxane	4.6x3.2cm, prior to neoadj. FOLFIRINOX; 3.3x2.9cm, after neoadj. FOLFIRINOX	2286, pre-surg.; 46.64, post-surg.; 876, 5m post-surg.; 32475, 1m prior to death	16	Minimal response to neoadj. FOLFIRINOX. Developed mets on adj. FOLFIRINOX. Response to GEM/Abx unclear as it was given late.
3	M	58	IA	PDX	Yes	None	Gemcitabine	Tumor size not on file	No CA-19-9 on file	Alive	No evidence of disease.
4	F	66	IIB	PDX	Yes	None	Gemcitabine; Gemcitabine/ Oxaliplatin	Tumor size not on file	No CA19-9 on file	16	Disease advanced when adj. chemo started. Died on second round of chemo.
5	M	50	IIB	PDX	No	None	Gemcitabine	4cm, pre-surgery	21, 3m post-surg.; 53, following Gem	15	CA19-9 rose while patient was on Gem.
6	M	50	IIB	Primary	No	None	Gemcitabine; Gemcitabine/Abraxane	3.4x2.0cm and 1.5, pre-surgery.	766, pre-surg.; 1954, 1m prior to death	15	No response to Gem/Abx, developed liver mets.
7	M	62	IIB	Primary	No	FOLFIRINOX	Gemcitabine; Gemcitabine/Abraxane	2.5x2.4cm, pre-surgery	58, following Gem/Abx	11	Liver mets developed on Gem. No response to FOLFIRINOX, No response to Gem/Abx.
8	M	61	IIB	Primary	No	FOLFIRINOX	FOLFIRINOX; RT	25x22mm, prior to neoadj. FOLFIRINOX; 5mm, after neoadj. FOLFIRINOX	33.12, pre-surg.; 25, pre-surg.; 9, post-surg.; 15, post-adj Rx, pre-RT; 63, during RT	Alive	No evidence of disease.

9	M	71	IB	Primary	No	None	FOLFOX4	2.5x2.1cm, pre-surgery	17, post- adj.	Alive	Ampullary cancer diagnosis. No evidence of disease.
10	M	66	IIB	Primary	No	None	Gemcitabine; Gemcitabine/ Capecitabine; Gemcitabine	1.5cm, pre-surgery	99, pre-surg.; 13, post-surg.; 30, pre-adj.; 12, on GEM/Cap	Alive	No evidence of disease.