

Table S1 Average number of weeks of tumor growth for xenograft expansion until tumor harvesting

Histology of primary tumor	n	Generation of xenograft: mean \pm SD (min–max)				
		1st	2nd	3rd	4th	5th
DA	27	17.4 \pm 14.8 (4.3–58.1)	10.4 \pm 7.7 (3.1–35.1)	7.4 \pm 3.8 (2.9–16.0)	8.8 \pm 7.0 (2.1–35.0)	7.2 \pm 3.8 (2.4–19.7)
PDA	8	16.8 \pm 15.6 (8.4–57.9)	20.2 \pm 18.0 (4.0–59.7)	14.6 \pm 11.5 (5.0–42.0)	13.2 \pm 8.8 (5.9–33.0)	9.5 \pm 5.5 (4.1–21.0)

DA: Differentiated adenocarcinoma, PDA: Poorly differentiated adenocarcinoma

Table S2 Pathological factors related to PDX establishment (stratified by type of immunodeficiency mouse model)

Mouse	pT/N/M	PDX		p-value
		Fail	Success	
NOG	pT	1/2	38	0.62
		3/4	7	
	pN	0	14	0.02
		1<	2	
	pM	86	19	1.00
		0	21	
		1	5	0
NGS	pT	1/2	0	-
		3/4	0	
	pN	0	5	-
		1<	1	
	pM	4	0	-
		0	0	
		1	5	0
SCID	pT	1/2	9	0.61
		3/4	2	
	pN	0	3	1.00
		1<	1	
	pM	24	4	-
		0	5	
		1	34	0

Table S3 Pathological factors related to PDX establishment (adenocarcinoma cases only, stratified by type of histological differentiation grade)

Histology of primary tumor	pT/N/M	PDX		p-value
		Fail	Success	
DA	pT	0	30	0.10
		1	57	
	pN	0	34	0.03
		1	53	
	pM	0	86	1.00
		1	1	
PDA	pT	1/2	15	0.20
		1	66	
	pN	0	23	0.44
		1	58	
	pM	0	77	1.00
		1	4	

DA: Differentiated adenocarcinoma, PDA: Poorly differentiated adenocarcinoma

Table S4 PDX establishment success and tumor location

	PDX		Success rate
	Failed	Success	
EGJ	8	2	20.0%
U	41	4	8.9%
M	44	5	10.2%
L	79	14	15.1%
N/A	0	1	0.0%

EGJ: Esophagogastric-junction, U: Upper, M: Middle, L: Lower, N/A: Not available