

Patient tumor information						PDX tumor information							
Model ID	Collection site	Tx naïve or pretreated	ER	PR	HER2	ER	PR	HER2	Estrogen Dependent	IHC	PDXo	Derived subline(s)	Notes
HCI-001	1° breast	Pretreated	neg	neg	neg	neg	neg	neg	n/a	DeRose et al, 2011	Yes		PTEN negative by IHC
HCI-002	1° breast	Naïve	neg	neg	neg	neg	neg	neg	n/a	DeRose et al, 2011	Yes		PTEN positive by IHC
HCI-003	1° breast	Naïve	pos	pos	neg	pos	pos	neg	Yes; ESR1 WT	DeRose et al, 2011	Yes	HCI-003FR (fulvestrant resistant PDXoX); Figure S51	PTEN positive by IHC
HCI-004	1° breast	Naïve	neg	neg	neg	neg	neg	neg	n/a	DeRose et al, 2011	In progress		PTEN positive by IHC
HCI-005	Pleural Effusion	Pretreated	pos	pos	primary tumor was pos and amplified; PE not tested	pos	pos	pos, mixed; not amplified	Partial; E2 enhanced; ESR1 L536P	DeRose et al, 2011	Yes		PTEN positive by IHC
HCI-006	Pleural Effusion	Pretreated	pos	pos		pos	pos	nd	nd; ESR1 L536P	DeRose et al, 2011	nd		PTEN positive by IHC
HCI-007	Pleural Effusion	Pretreated	pos	pos		pos	pos	pos, mixed; not amplified	nd; ESR1 L536P	DeRose et al, 2011	Yes		PTEN positive by IHC
HCI-008	Pleural Effusion	Pretreated	neg	neg	pos	neg	neg	pos, mixed; not amplified	n/a	DeRose et al, 2011	Yes		PTEN positive by IHC
HCI-009	Ascites	Pretreated	neg	neg	neg	neg	neg	neg	n/a	DeRose et al, 2011	Failed		PTEN negative by IHC
HCI-010	Pleural Effusion	Pretreated	neg	neg	neg	neg	border line	neg	n/a	DeRose et al, 2011	Yes		PTEN negative by IHC
HCI-011	Pleural Effusion	Pretreated	pos	pos	neg	pos	pos	neg	Partial; E2 enhanced; ESR1 WT	DeRose et al, 2011	Yes	HCI-011FR (fulvestrant resistant PDXoX); Figure S51	PTEN positive by IHC
HCI-012	Pleural Effusion	Pretreated	neg	neg	pos	neg	neg	pos, mixed	n/a	DeRose et al, 2011	Yes		PTEN negative by IHC
HCI-013	Pleural Effusion	Pretreated	pos	pos	neg	pos	pos	neg	Partial; E2 enhanced; ESR1 Y537S	Figure S4	Failed	HCI-013EI (estrogen independent) PDX; Figure S43	PTEN positive by IHC
HCI-014	Pleural Effusion	Pretreated	neg	neg	neg	neg	neg	neg	n/a	Figure S5	In progress		
HCI-015	Brain metastasis	Pretreated	neg	neg	neg	neg	neg	neg	n/a	Figure S6	Yes	HCI-015BR (birinapant resistant) PDX and PDXo	PTEN negative by IHC
HCI-016	1° breast	Unknown	neg	neg	neg	neg	neg	neg	n/a	Figure S7	Yes		PTEN positive by IHC
HCI-017	1° breast	Naïve	pos	pos	neg	pos	pos	neg	Yes; ESR1 WT	Figure S8	Yes		PTEN positive by IHC
HCI-018	Brain metastasis	Pretreated	pos	neg	neg	pos	neg	neg	Yes; ESR1 WT (4-9%)	Figure S9	Yes		PTEN positive by IHC; PDXo are ESR1 WT
HCI-019	1° breast	Naïve	neg (1%)	neg (1%)	neg	neg	neg	neg	n/a	Figure S10	Yes		PTEN positive by IHC
HCI-023	1° breast	Naïve	neg	neg	neg	neg	neg	neg	n/a	Figure S11	Yes	HCI-023BR (birinapant resistant) PDX and PDXo	
HCI-024	Skin metastasis	Pretreated	neg	neg	neg	neg	neg	neg	n/a	Figure S12	In progress		
HCI-025	Skin metastasis	Pretreated	neg	neg	neg	neg	neg	neg	n/a	Figure S13	Yes		
HCI-027	1° breast	Pretreated	neg	neg	neg	neg	neg	neg	n/a	Figure S15	Yes	HCI-027BR (birinapant resistant) PDX and PDXo; HCI-027BS (birinapant sensitive PDX and PDXo)	
HCI-028	Pleural Effusion	Pretreated	neg	neg	neg	neg	neg	neg	n/a	Figure S16	Yes	HCI-028LV (liver metastasis) PDX; Figure S1	
HCI-030	recurr. breast	Pretreated	neg	neg	neg	neg	neg	neg	n/a	Figure S17	Failed		
HCI-031	Pleural Effusion	Pretreated	neg	neg	neg	neg	neg	neg	n/a	Figure S18	In progress	HCI-031OV (ovary metastasis) PDX; Figure S2	
HCI-032	recurr. breast	Pretreated	pos	pos	pos	pos	pos	pos	No; ESR1 WT (1-3% Y537S)	Figure S19	Yes	HCI-032EI (estrogen independent) PDX and PDXo; Figure S44	HCI-032 PDXo and HCI-032EI PDX and PDXo are ESR1 WT
HCI-033	Lung metastasis	Pretreated	neg	neg	neg	neg	neg	neg	n/a	Figure S20	Failed		
HCI-034	recurr. breast	Pretreated	neg	neg	neg	neg	neg	neg	n/a	Figure S21	In progress		
HCI-036	recurr. breast phyllodes	Naïve	neg	neg	neg	neg	neg	neg	n/a	Figure S22	nd		
HCI-037	recurr. breast	Pretreated	neg	neg	neg	neg	neg	neg	n/a	Figure S23	Yes		
HCI-038	Bone metastasis	Pretreated	neg	neg	neg	neg	neg	neg	n/a	Figure S24	Yes		
HCI-039	Pleural effusion	Pretreated	neg	neg	neg	neg	neg	neg	n/a	Figure S25	Yes		
HCI-040	Bone metastasis	Pretreated	pos	pos	pos	pos	pos	pos	No	Figure S26	Yes	HCI-040EI (estrogen independent) PDX and PDXo; Figure S45	no hotspot ESR1 mutations detected
HCI-041	1° breast	Naïve	neg	neg	neg	neg	neg	neg	n/a	Figure S27	Yes		
HCI-042	1° breast	Naïve	neg	neg (1%)	pos	neg	neg	neg	n/a	Figure S28	Yes		
HCI-043	1° breast	Naïve	neg	neg	neg	neg	neg	neg	n/a	Figure S29	Yes		
HCI-044	Brain metastasis	Pretreated	pos	pos	neg	pos	pos	neg	No; ESR1 Y537S homo	Figure S30	In progress	HCI-044EI (estrogen independent) PDX; Figure S46	
HCI-045	1° breast	Naïve	neg	neg	neg	neg	neg	neg	n/a	Figure S31	Yes	HCI-045VR (vinorelbine resistant) PDX and PDXo	
HCI-046	1° breast	Naïve	neg	neg	neg	neg	neg	neg	n/a	Figure S32	In progress		
HCI-047	Ascites	Pretreated	neg	neg	neg	neg	neg	neg	n/a	Figure S33	In progress		
HCI-048	1° breast	Naïve	pos (10%)	neg	neg	neg	neg	neg	n/a	Figure S34	Yes		
HCI-049	1° breast	Naïve	pos	pos	neg	pos	pos	neg	Yes	Figure S35	Failed		no hotspot ESR1 mutations detected
HCI-050	LN metastasis	Pretreated	neg	neg	neg	neg	neg	neg	n/a	Figure S36	Yes		
HCI-051	Ascites	Pretreated	neg	neg	neg	neg	neg	neg	n/a	Figure S37	Yes		
HCI-052	1° breast	Naïve	neg	neg	neg	neg	neg	neg	n/a	Figure S38	In progress		
HCI-053	1° breast	Naïve	neg	neg	neg	neg	neg	neg	n/a	Figure S39	Yes	HCI-053CR (capecitabine resistant) PDX	
HCI-054	1° breast	Pretreated	neg	neg	neg	neg	neg	neg	n/a	Figure S40	Yes	HCI-053CR (capecitabine resistant) PDX	

Abbreviations: 1°, primary; pos, positive; neg, negative; n/a, not applicable; nd, not done; E2, estradiol; PDXo, PDX-derived organoids; recurr., recurrent; LN, lymph node; tx, treatment
Model IDs with matching color models indicate multiple models from the same patient