

**Manuscript Type:** Article

**Title:** Expression profiles of Human Endogenous Retrovirus (HERV)-K and HERV-R Env proteins in various cancers

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**Running Title:** Expression patterns of HERV-K and R Env proteins

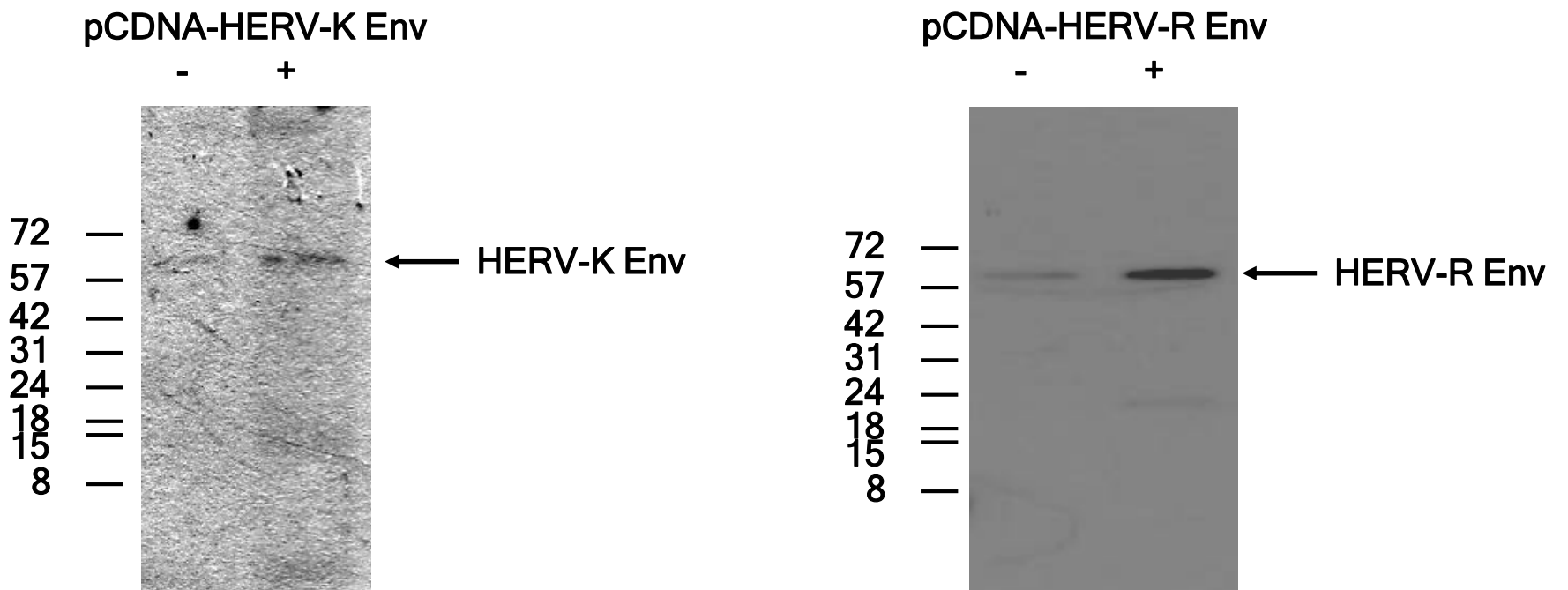
**Keywords:** HERV, Env, cancer, expression pattern

**Corresponding Author's Information:**

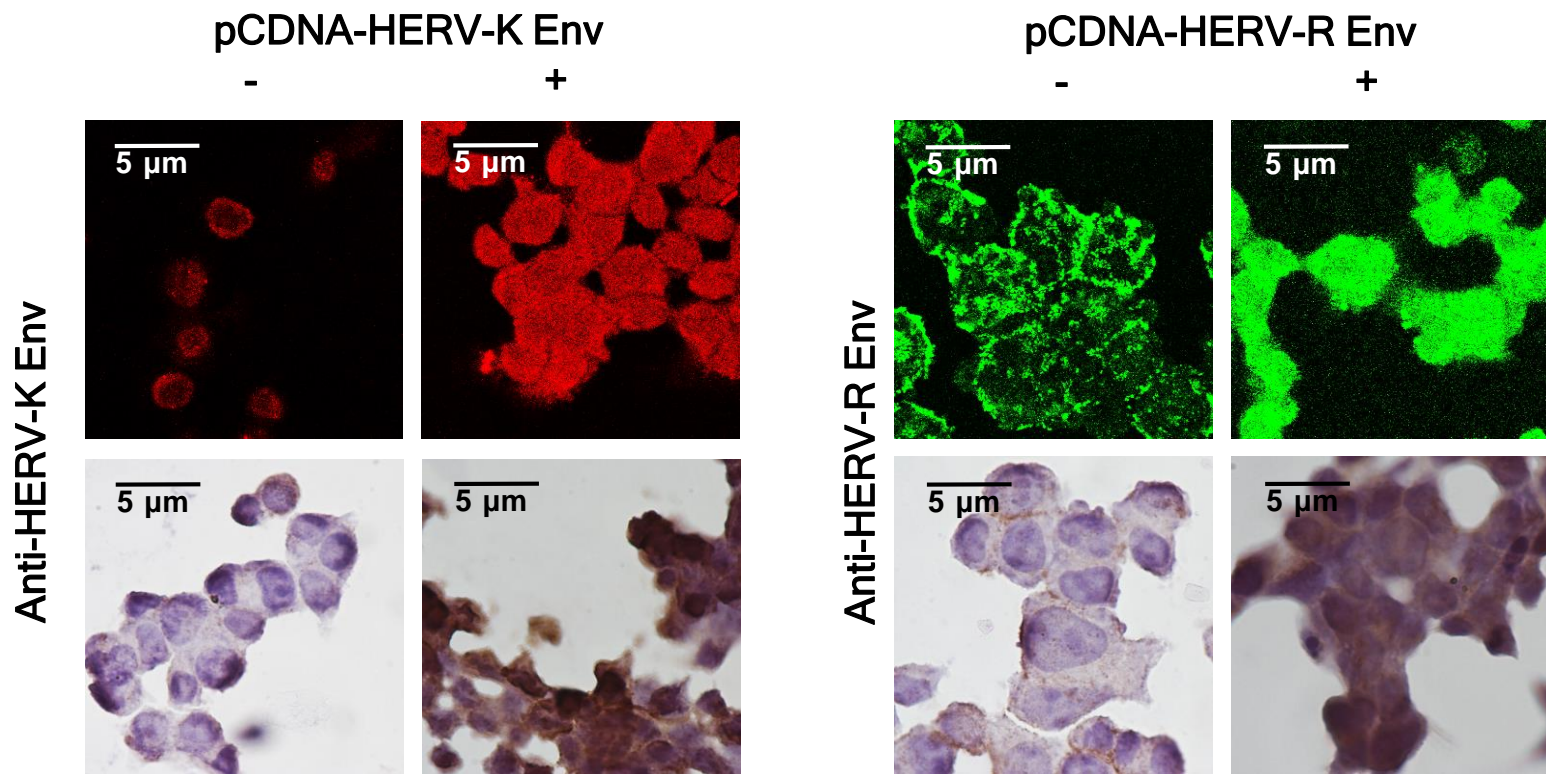
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\*\* These authors contributed equally to this work.

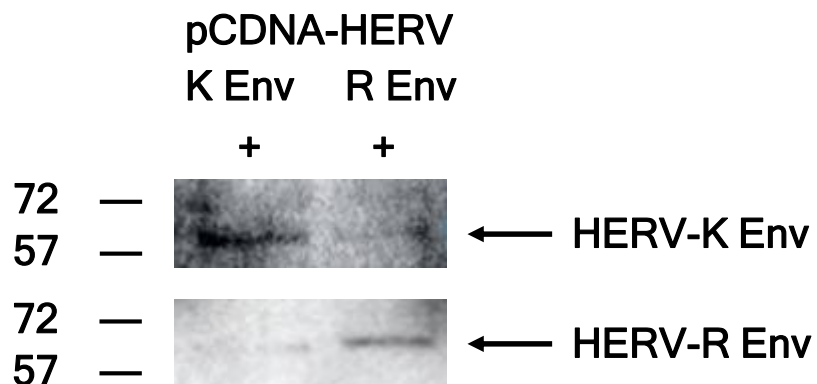
**A**



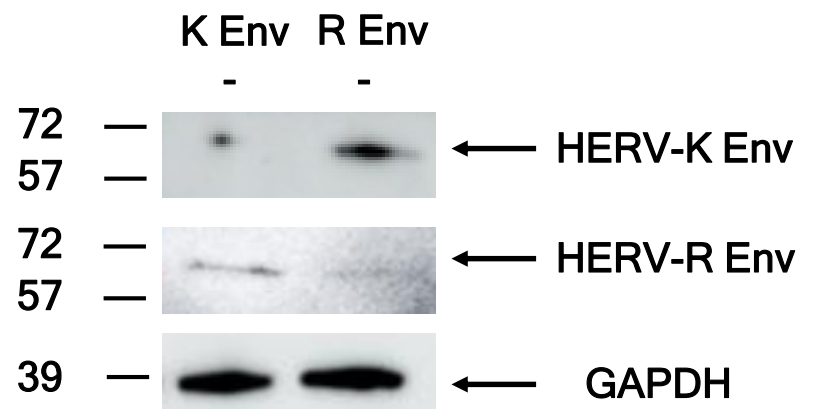
**B**



**C**



**D**



**Supplement-Figure. 1 Antibody specificity.** Antibody specificity of both anti HERV-K and HERV-R Env antibodies was confirmed by transfection of expression vectors of HERV-K or HERV-R *env* gene.

(A) Western blot analysis of HERV-K and HERV-R Env over-expression in control and transfected cells.

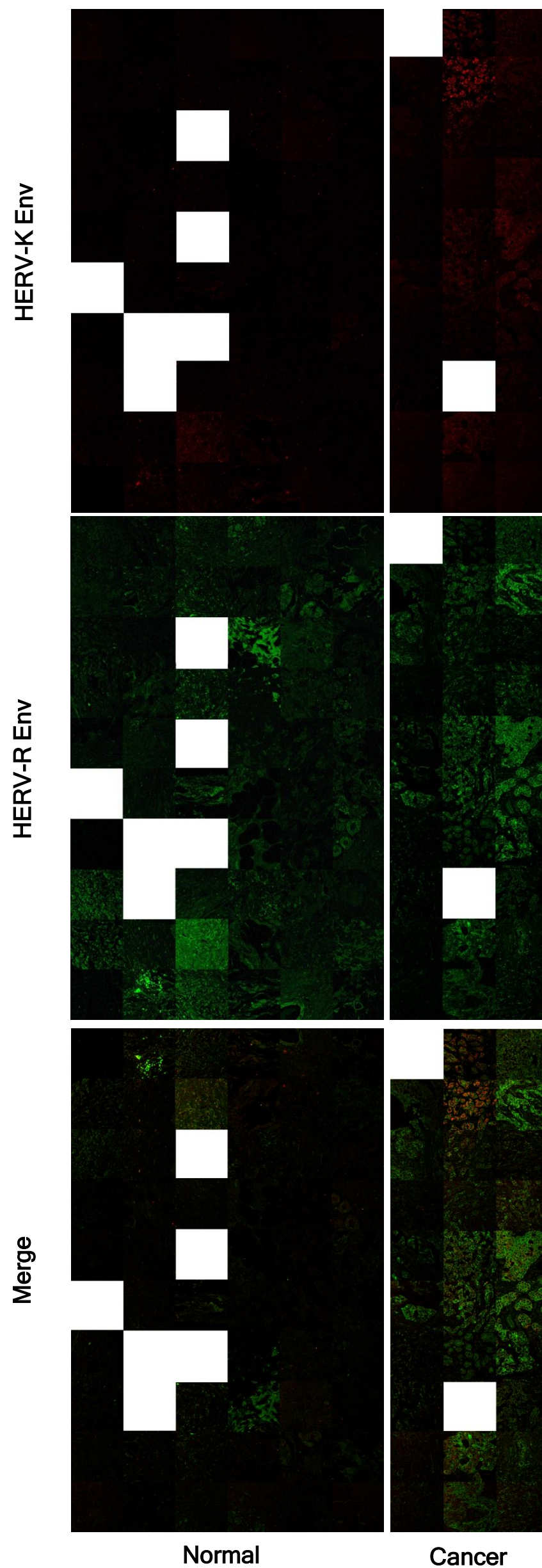
(B) Immunofluorescence and histochemical staining of HERV-K and HERV-R Env over-expression in control and transfected cells.

(C) Cross-reactivity check of both antibodies by Western blot analysis of proteins of HERV-K and HERV-R over-expressing cells.

(D) Cross-reactivity check of both antibodies by Western blot analysis of proteins of HERV-K and HERV-R Knockout cells.

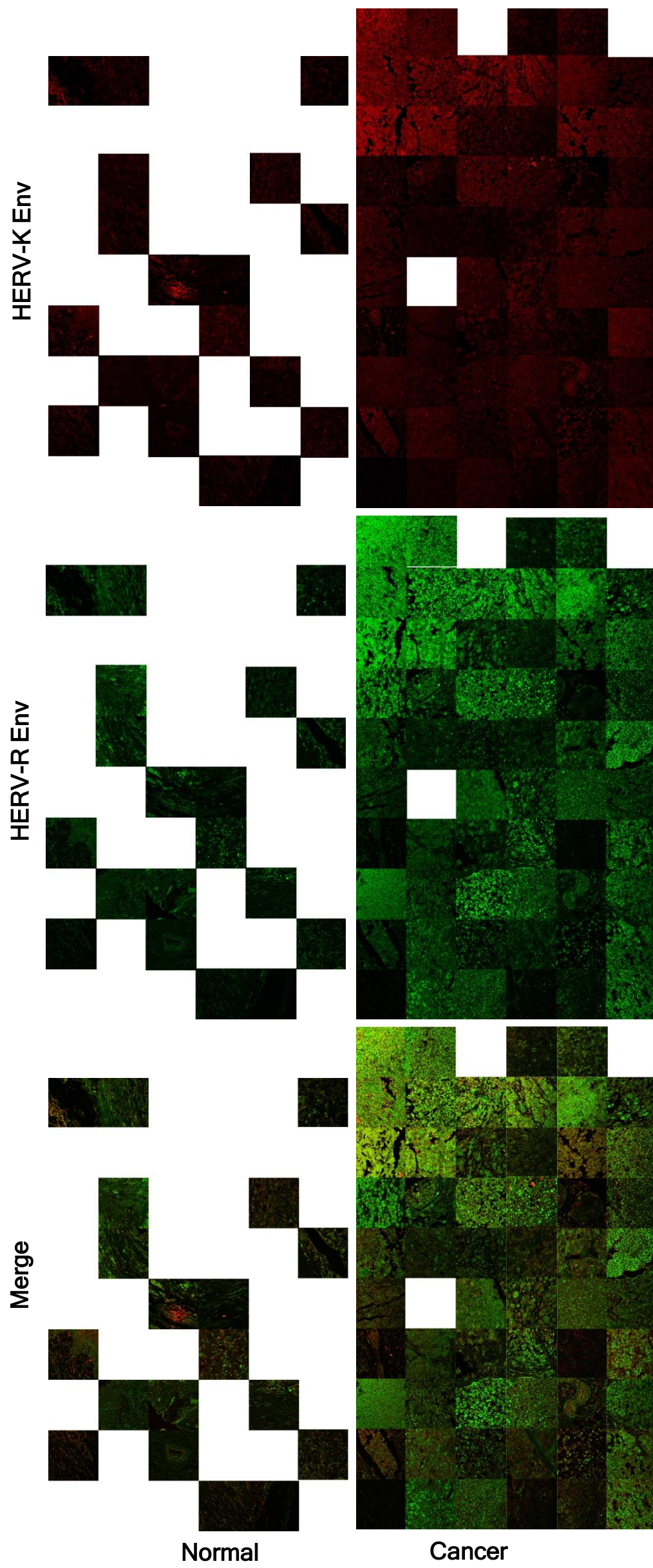
A

## Breast Cancer



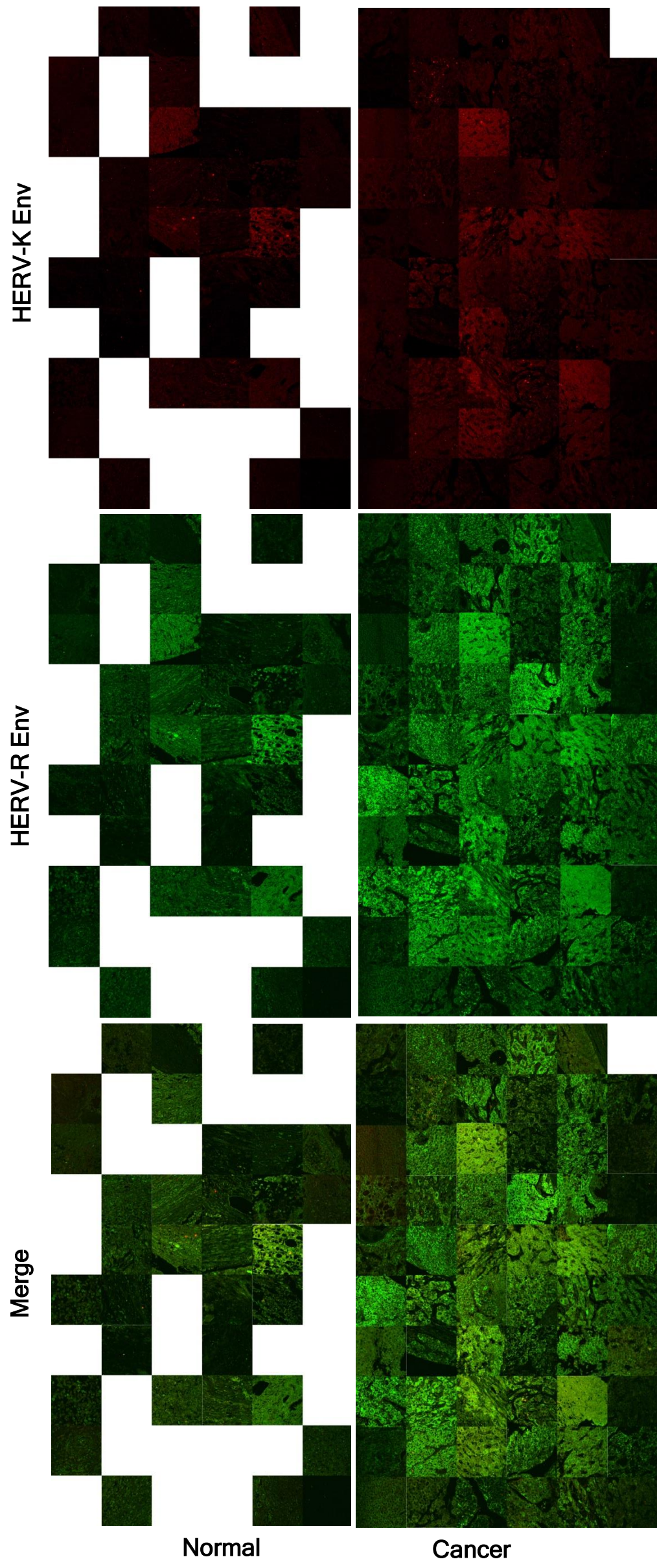
Supplement-Figure. 2 The expression of HERV-K and HERV-R Env proteins in various cancers. HERV-K and HERV-R Env protein expression was analyzed by immunofluorescence analysis with tissue microarray slides of breast cancer (A), melanoma (B), liver cancer (C), stomach cancer (D), ovarian cancer (E), kidney cancer (F), prostate cancer (G), cervical cancer (H), esophagus cancer (I), osteosarcoma (J), and colon cancer (K). The empty space is when the tissue is in poor condition and it is difficult to achieve adequate results.



**B****Melanoma**



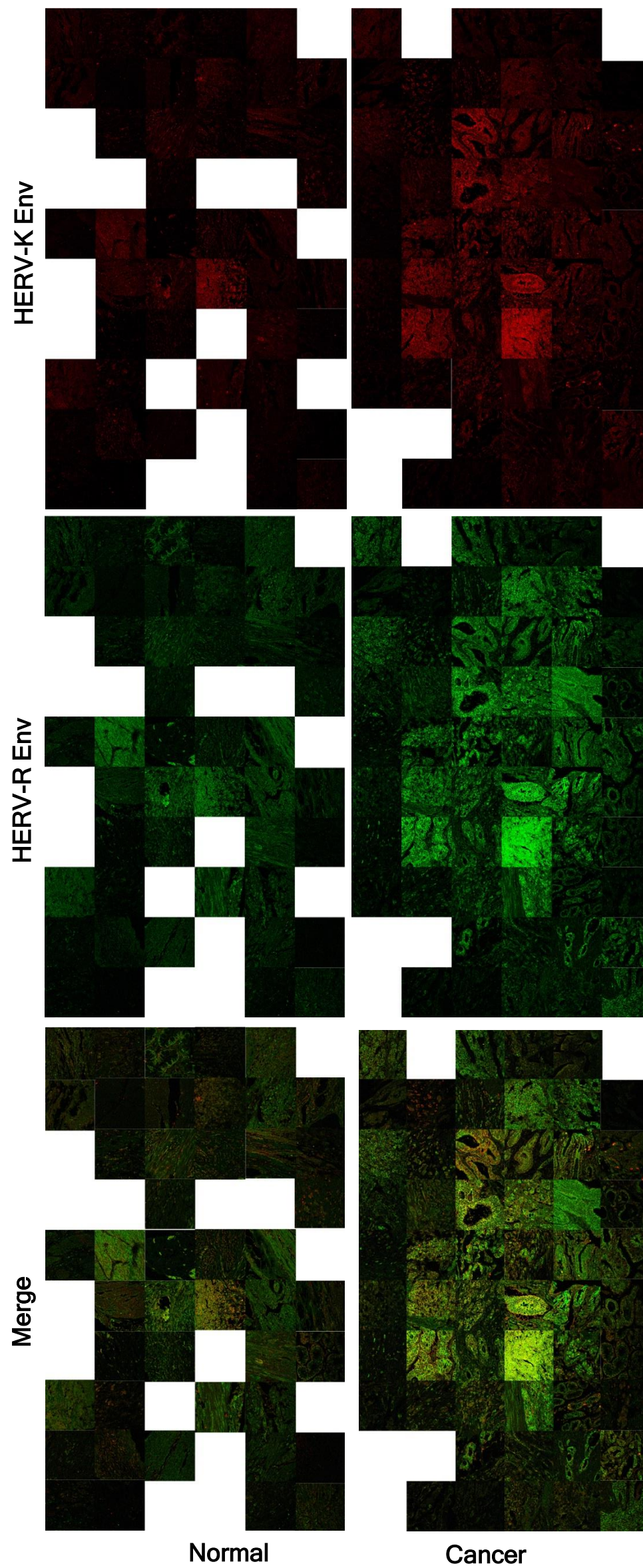
Liver Cancer





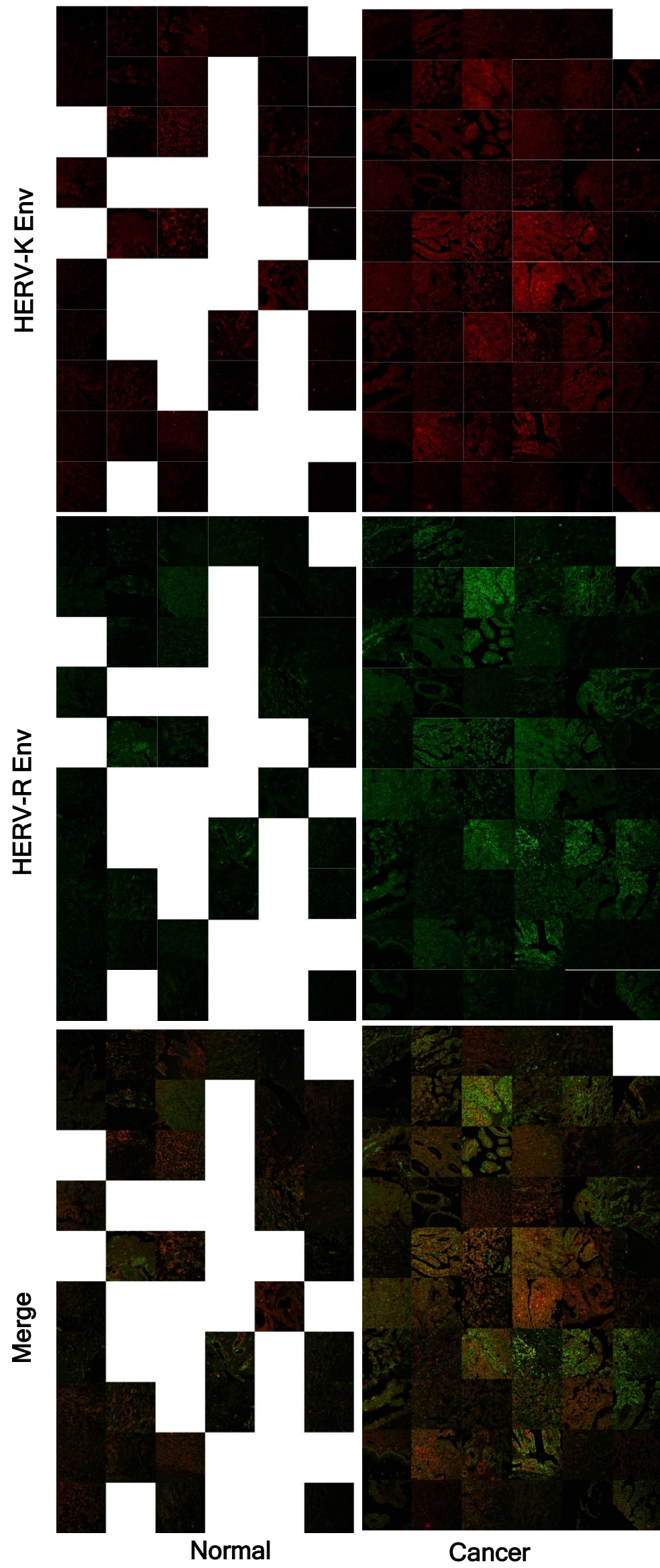
D

Stomach Cancer





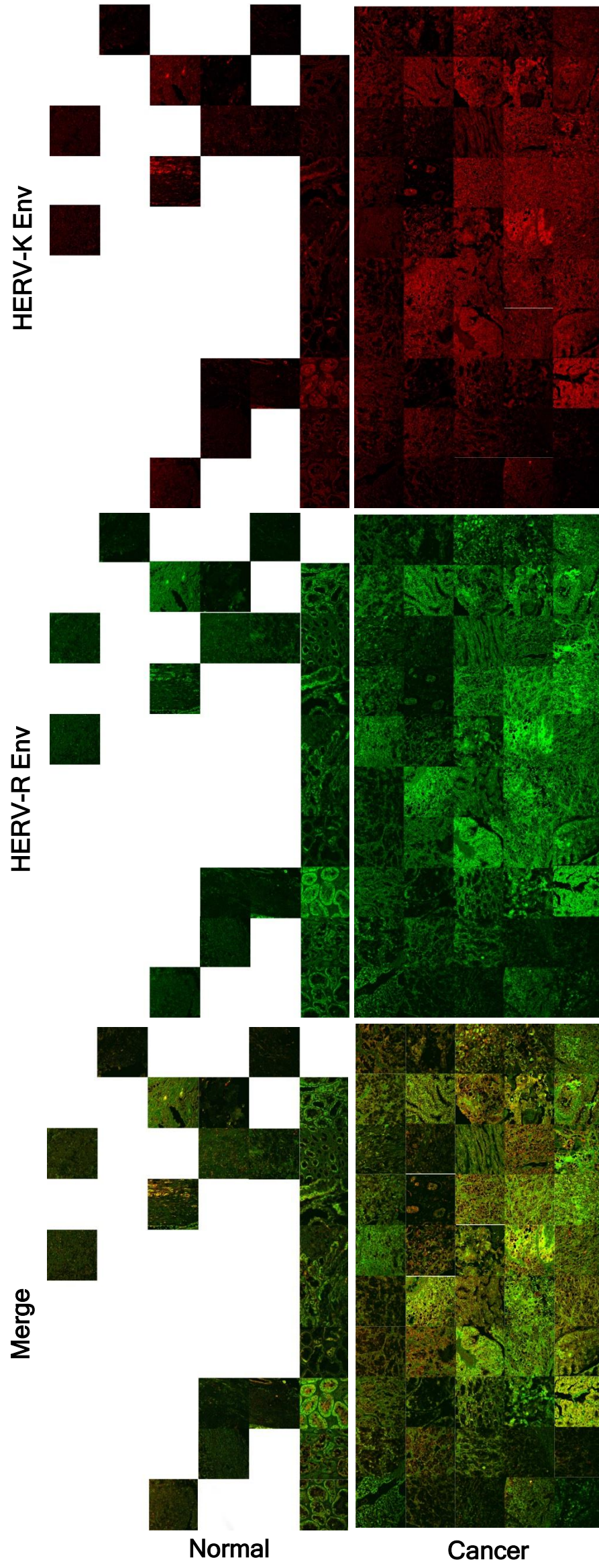
## Ovarian Cancer





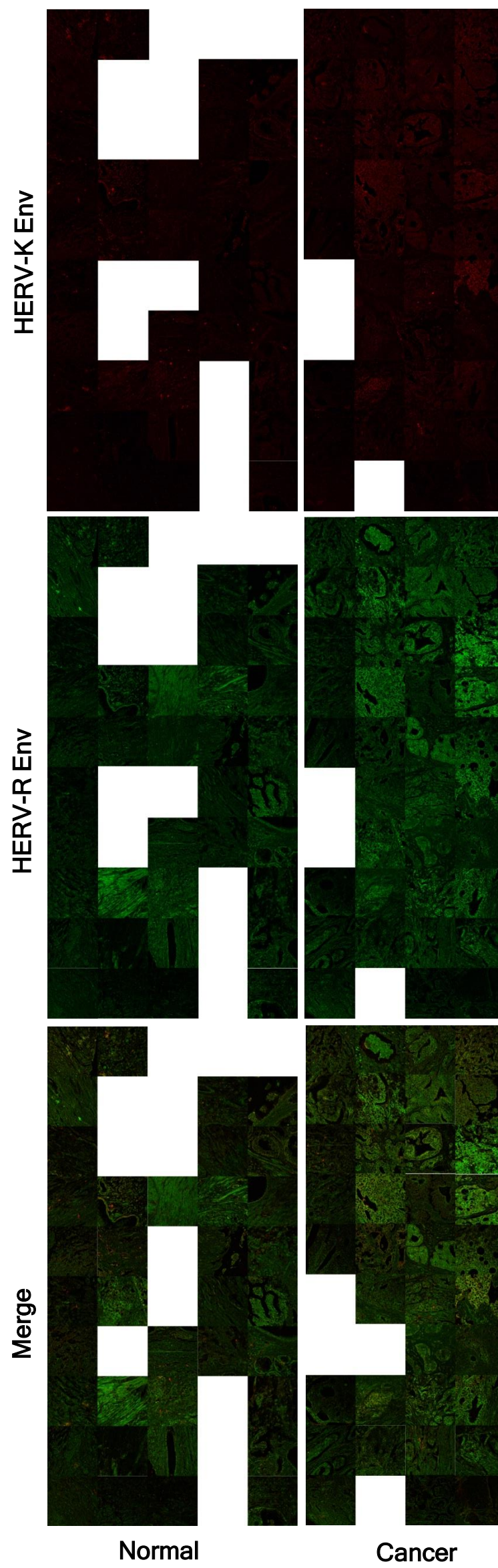
F

Kidney Cancer



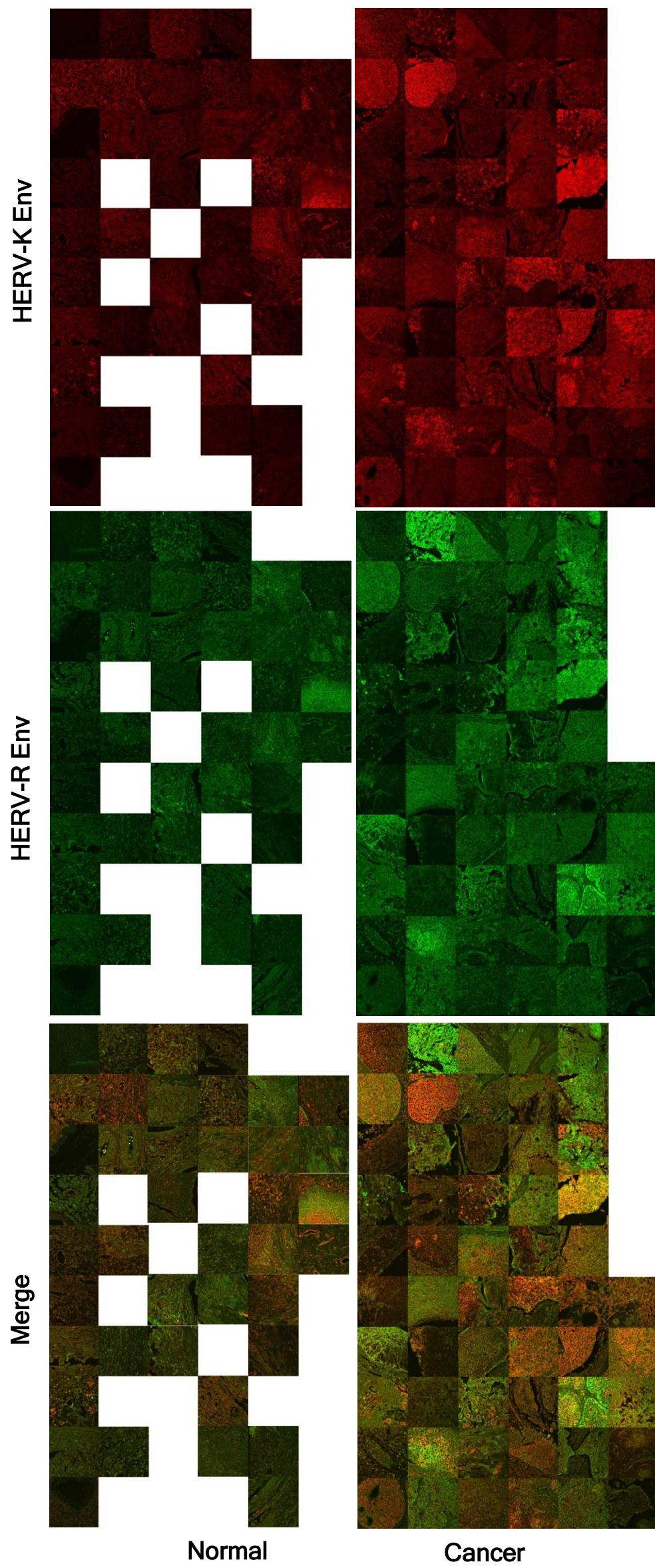


## Prostate Cancer



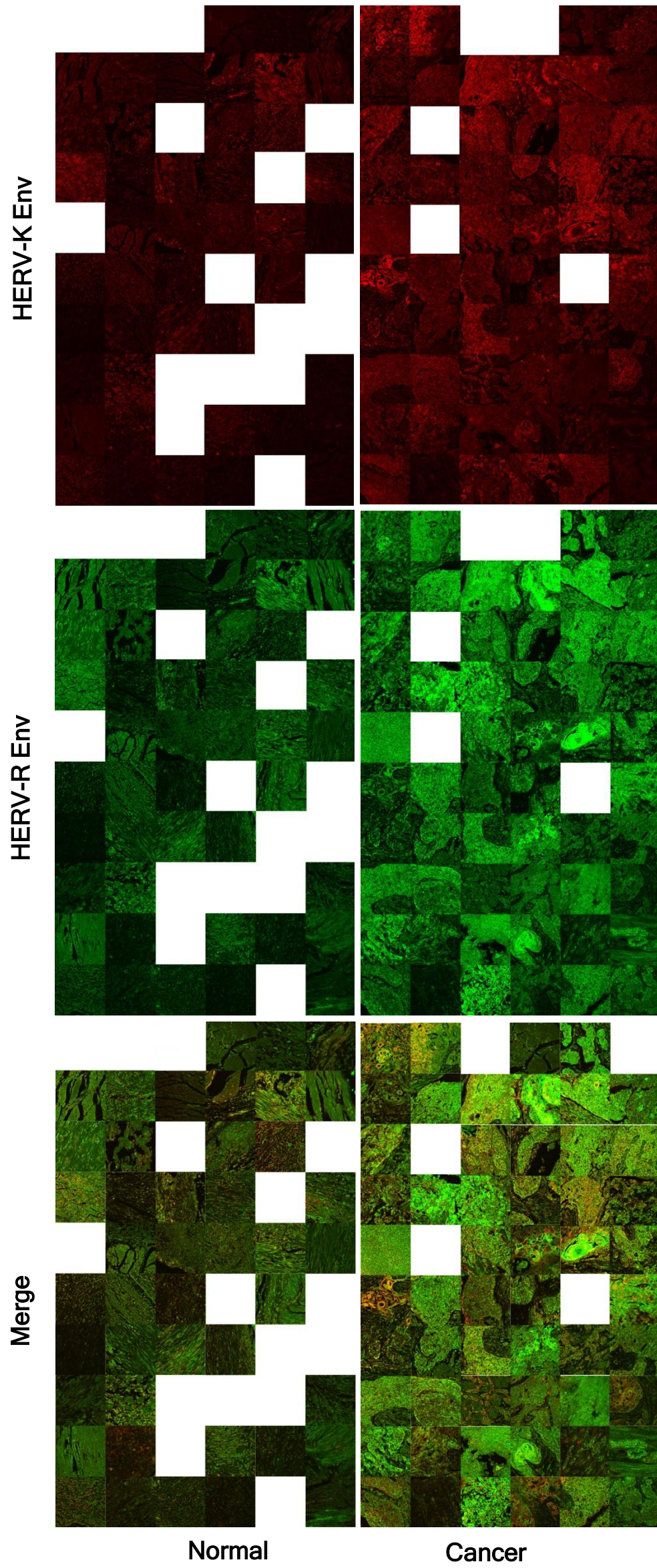


## Cervical Cancer

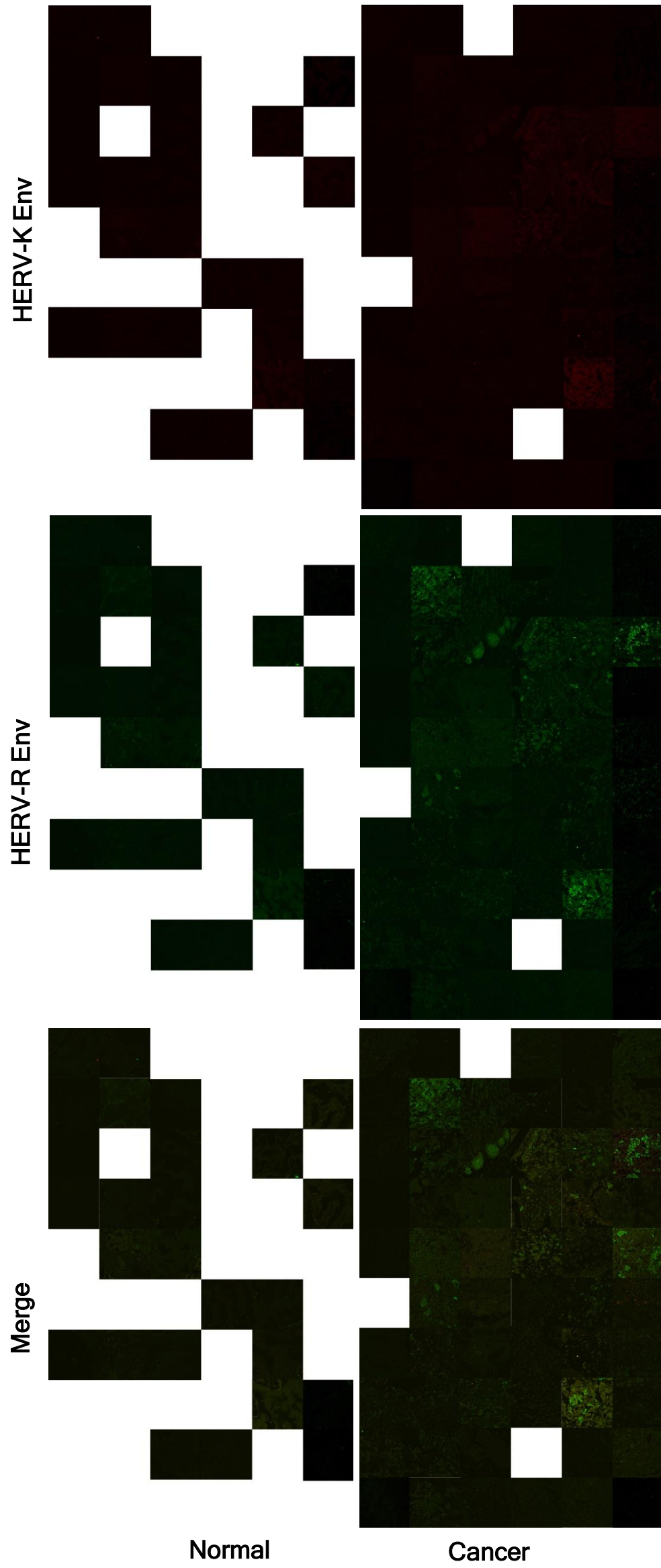




# Esophagus Cancer



Osteosarcoma



Normal

Cancer

HERV-K Env

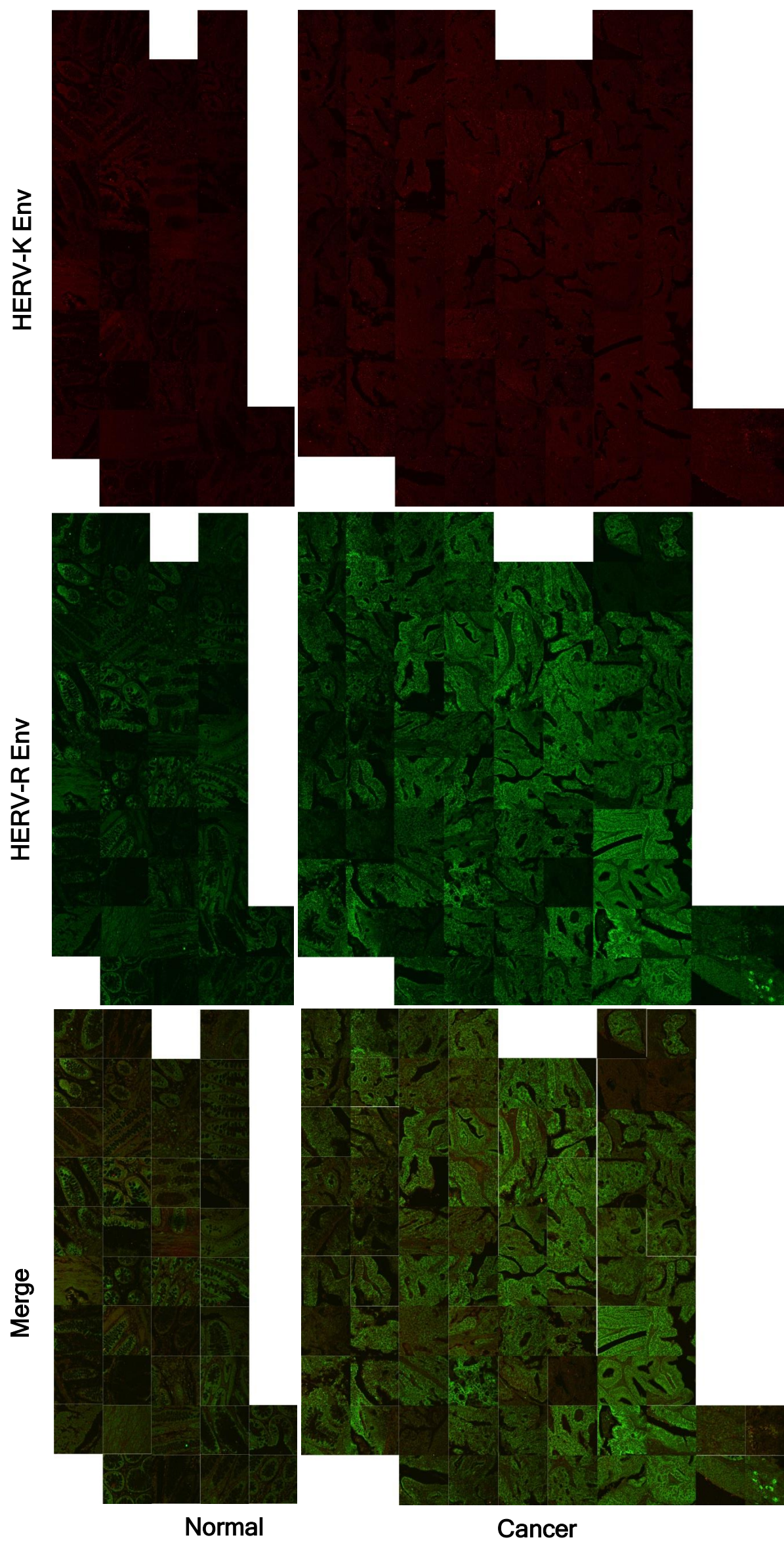
HERV-R Env

Merge



K

Colon Cancer



# Patients information of Breast cancer-metastasis-normal tissue microarray



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## CBA4 Human, Breast cancer-metastasis-normal

No.	Age	Sex	Organ	Diagnosis	pTNM	Stage	LN*	Tissue type **
1	59	F	Breast	infiltrating duct carcinoma	T2N0M0	II A	0/19	6
2	48	F	Breast	infiltrating duct carcinoma	T2N0M0	II A	0/16	6
3	42	F	Breast	infiltrating duct carcinoma	T2N2aM0	III A	5/19	6
4	37	F	Breast	infiltrating duct carcinoma	T2N2aM0	III A	8/8	6
5	37	F	Breast	infiltrating duct carcinoma	T2N0M0	II A	0/20	6
6	55	F	Breast	infiltrating duct carcinoma	T2N0M0	II A	0/19	6
7	55	F	Breast	infiltrating duct carcinoma	T3N3aM0	III C	20/20	6
8	36	F	Breast	infiltrating duct carcinoma	T3N0M0	II B	0/14	6
9	52	F	Breast	infiltrating duct carcinoma	T2N2aM0	III A	5/24	6
10	40	F	Breast	infiltrating duct carcinoma	T2N0M0	II A	0/11	6
11	51	F	Breast	infiltrating duct carcinoma	T2N0M0	II A	0/8	6
12	55	F	Breast	infiltrating duct carcinoma	T2N0M0	II A	0/19	6
13	60	F	Breast	infiltrating duct carcinoma	T2N0M0	II A	0/16	6
14	45	F	Breast	sarcomatoid carcinoma	T2N1aM0	II B	3/23	6
15	38	F	Breast	infiltrating duct carcinoma	T3N1aM0	III A	3/13	6
16	53	F	Breast	infiltrating duct carcinoma	T2N1mIM0	II B	3/14	6
17	48	F	Breast	infiltrating duct carcinoma	T2N1mIM0	II B	2/15	6
18	46	F	Breast	intraductal papillary carcinoma	T2N0M0	II A	0/15	6
19	40	F	Breast	infiltrating duct carcinoma	T3N0M0	II B	0/10	6
20	51	F	Breast	atypical medullary carcinoma	T2N1aM0	II B	1/16	6
21	56	F	Breast	infiltrating duct carcinoma	T2N0M0	II A	0/14	6
22	45	F	Breast	metaplastic carcinoma	T2N0M0	II A	0/17	6
23	42	F	Breast	infiltrating duct carcinoma	T2N3aM0	III C	12/26	6
24	47	F	Breast	infiltrating duct carcinoma	T2N1mIM0	II B	1/11	6
25	39	F	Breast	infiltrating duct carcinoma	T2N1aM0	II B	2/17	6
26	51	F	Breast	infiltrating duct carcinoma	T2N1aM0	II B	1/13	6
27	49	F	Breast	infiltrating duct carcinoma	T2N0M0	II A	0/20	6
28	57	F	Breast	infiltrating duct carcinoma	T3N1aM0	III A	3/7	6
29	52	F	Breast	infiltrating duct carcinoma	T2N1aM0	II B	1/22	6
30	41	F	Breast	infiltrating duct carcinoma	T3N2aM0	III A	7/9	6
31	48	F	Breast	infiltrating duct carcinoma	T2N3aM0	III C	35/35	6
32	34	F	Breast	infiltrating duct carcinoma	T2N1aM0	II B	2/11	6
33	37	F	Breast	infiltrating duct carcinoma	T2N3aM0	III C	22/23	6
34	58	F	Breast	infiltrating duct carcinoma	T2N3aM0	III C	19/22	6
35	37	F	Breast	infiltrating duct carcinoma	T2N3aM0	III C	17/19	6
36	66	F	Breast	infiltrating duct carcinoma	T2N2aM0	III A	4/11	6
37	51	F	Breast	infiltrating duct carcinoma	T2N1aM0	II B	3/16	6
38	41	F	Breast	infiltrating duct carcinoma	T2N3aM0	III C	15/21	6
39	56	F	Breast	infiltrating duct carcinoma	T3N2aM0	III A	5/13	6
40	47	F	Breast	infiltrating duct carcinoma	T3N3aM0	III C	11/13	6
41	48	F	Lymph node	metastatic carcinoma from #31	-	-	-	6
42	34	F	Lymph node	metastatic carcinoma from #32	-	-	-	6
43	37	F	Lymph node	metastatic carcinoma from #33	-	-	-	6
44	58	F	Lymph node	metastatic carcinoma from #34	-	-	-	6
45	37	F	Lymph node	metastatic carcinoma from #35	-	-	-	6
46	66	F	Lymph node	metastatic carcinoma from #36	-	-	-	6
47	51	F	Lymph node	metastatic carcinoma from #37	-	-	-	6
48	41	F	Lymph node	metastatic carcinoma from #38	-	-	-	6
49	56	F	Lymph node	metastatic carcinoma from #39	-	-	-	6
50	47	F	Lymph node	metastatic carcinoma from #40	-	-	-	6
51	37	F	Breast	normal (match to #5)	-	-	-	3
52	48	F	Breast	normal (match to #31)	-	-	-	3
53	36	F	Breast	normal (match to #8)	-	-	-	3
54	40	F	Breast	normal (match to #10)	-	-	-	3
55	51	F	Breast	normal (match to #11)	-	-	-	3
56	55	F	Breast	normal (match to #12)	-	-	-	3
57	60	F	Breast	normal (match to #13)	-	-	-	3
58	58	F	Breast	normal (match to #34)	-	-	-	3
59	37	F	Breast	normal (match to #35)	-	-	-	3
60	-	-	Carbon	-	-	-	-	-

TNM and stage : AJCC Cancer Staging Manual (7th Edition)

\* LN, positive lymph nodes / examined lymph nodes

51-60: Non-neoplastic breast tissue in breast cancer patients.

\*\*Tissue type: See General Information sheet

Supplementary data sheet contains ER, PR, p53, C-erbB2, histologic grade, tumor size and survival data (available by web)



CBA4 Supplementary data

No.	ER*	PR*	p53	C-erbB2	Histologic grade**	Tumor size	Follow-up months	Follow-up result	Cause of death	Remark
1	+	+	+	-	II	3.0 cm	84	alive	.	.
2	-	+	-	-	II	3.5 cm	84	alive	.	.
3	-	+	-	-	II	4.2 cm	84	alive	.	.
4	+	-	-	+	III	3.0 cm	34	dead	cancer	.
5	-	-	-	-	III	2.5 cm	84	alive	.	.
6	+	-	+	-	II	2.5 cm	83	alive	.	.
7	+	-	+	-	II	10.0 cm	57	dead	cancer	.
8	-	-	-	-	II	6.0 cm	82	alive	.	.
9	-	-	+	-	III	2.5 cm	82	alive	.	.
10	-	-	+	-	II	4.5 cm	82	alive	.	.
11	-	-	-	+	III	2.5 cm	82	alive	.	.
12	+	+	-	-	III	3.0 cm	80	alive	.	.
13	-	-	+	-	III	2.5 cm	79	alive	.	.
14	-	-	+	+	III	5.0 cm	38	dead	cancer	.
15	+	-	-	-	III	5.2 cm	79	alive	.	.
16	+	+	-	-	II	2.2 cm	78	alive	.	.
17	-	+	-	-	II	2.5 cm	78	alive	.	.
18	+	+	-	-	uk	4.5 cm	77	alive	.	.
19	-	-	+	-	III	5.5 cm	77	alive	.	.
20	-	-	-	-	uk	2.5 cm	77	alive	.	.
21	+	+	+	-	III	4.5 cm	77	alive	.	.
22	-	-	-	-	uk	3.5 cm	77	alive	.	.
23	+	+	-	-	II	3.0 cm	76	alive	.	.
24	-	+	+	+	II	3.0 cm	76	alive	.	.
25	-	-	+	+	III	2.5 cm	76	alive	.	.
26	+	+	-	+	III	4.0 cm	76	alive	.	.
27	+	-	+	-	III	2.5 cm	78	alive	.	.
28	+	-	-	-	II	5.5 cm	75	alive	.	.
29	-	-	-	-	II	5.0 cm	75	alive	.	.
30	-	-	-	+	II	10.0 cm	59	dead	cancer	.
31	-	-	+	-	III	3.5 cm	9	dead	cancer	.
32	-	-	-	-	III	3.0 cm	82	alive	.	.
33	-	-	+	-	III	2.5 cm	81	alive	.	.
34	-	-	+	+	III	3.5 cm	9	dead	cancer	.
35	-	-	-	+	III	4.5 cm	78	alive	.	.
36	-	-	-	-	III	5.0 cm	75	alive	.	.
37	-	-	+	-	III	3.0 cm	73	alive	.	.
38	-	-	-	+	III	3.5 cm	72	alive	.	.
39	-	-	+	+	II	6.0 cm	72	alive	.	.
40	-	-	+	-	II	10.0 cm	33	dead	cancer	.
41	-	-	+	-	.	.	.	.	.	.
42	-	-	-	-	.	.	.	.	.	.
43	-	-	+	-	.	.	.	.	.	.
44	-	-	+	+	.	.	.	.	.	.
45	-	-	-	+	.	.	.	.	.	.
46	-	-	-	-	.	.	.	.	.	.
47	-	-	+	-	.	.	.	.	.	.
48	-	-	-	+	.	.	.	.	.	.
49	-	-	+	+	.	.	.	.	.	.
50	-	-	+	-	.	.	.	.	.	.
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59	.	.	.	.	.	.	.	.	.	.
60	.	.	.	.	.	.	.	.	.	.

\*ER, estrogen receptor; PR, progesteron receptor; p53; C-erbB2; immunohistochemistry; uk, unknown  
 \*\*Histologic grade, Nottingham modification of Bloom-Richard system

# Patients information of Breast cancer-normal tissue microarray



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## CBB3 Human, Breast cancer-normal

No.	Age	Sex	Organ	Diagnosis	pTNM	Stage	LN*	C-erbB2	Tissue type**
1	28	F	Breast	infiltrating duct carcinoma	T3N3aM1	IV	12/15	-	6
2									
3									
4	47	F	Breast	infiltrating duct carcinoma	T2N2aM0	III A	5/22	-	6
5									
6	39	F	Breast	infiltrating duct carcinoma	T2N0M0	II A	0/16	-	6
7									
8	48	F	Breast	infiltrating duct carcinoma	T2N2aM0	III A	5/22	-	6
9									
10	60	F	Breast	infiltrating duct carcinoma	T2N0M0	II A	0/9	+	6
11									
12	54	F	Breast	infiltrating duct carcinoma	T3N1aM1	IV	1/16	+	6
13									
14	43	F	Breast	infiltrating duct carcinoma	T3N0M0	II B	0/9	+	6
15									
16	42	F	Breast	infiltrating duct carcinoma	T2N2aM0	III A	5/19	-	6
17									
18	40	F	Breast	infiltrating duct carcinoma	T2N3aM0	III C	18/21	-	6
19									
20	41	F	Breast	infiltrating duct carcinoma	T2N1aM0	II B	2/18	-	6
21									
22	57	F	Breast	infiltrating duct carcinoma	T2N3aM0	III C	15/24	-	6
23									
24	44	F	Breast	infiltrating duct carcinoma	T2N3aM0	III C	28/28	+	6
25									
26	84	F	Breast	infiltrating duct carcinoma	T2N0M0	II A	0/18	-	6
27									
28	52	F	Breast	infiltrating duct carcinoma	T2N1aM0	II B	1/14	-	6
29									
30	40	F	Breast	infiltrating duct carcinoma	T2N0M0	II A	0/10	-	6
31									
32	28	F	Breast	normal (match to #1 and #2)	.	.	.	.	3
33									
34	47	F	Breast	normal (match to #3 and #4)	.	.	.	.	3
35									
36	39	F	Breast	normal (match to #5 and #6)	.	.	.	.	3
37									
38	48	F	Breast	normal (match to #7 and #8)	.	.	.	.	3
39									
40	60	F	Breast	normal (match to #9 and #10)	.	.	.	.	3
41									
42	54	F	Breast	normal (match to #11 and #12)	.	.	.	.	3
43									
44	43	F	Breast	normal (match to #13 and #14)	.	.	.	.	3
45									
46	42	F	Breast	normal (match to #15 and #16)	.	.	.	.	3
47									
48	40	F	Breast	normal (match to #17 and #18)	.	.	.	.	3
49									
50	41	F	Breast	normal (match to #19 and #20)	.	.	.	.	3
51									
52	57	F	Breast	normal (match to #21 and #22)	.	.	.	.	3
53									
54	44	F	Breast	normal (match to #23 and #24)	.	.	.	.	3
55									
56	84	F	Breast	normal (match to #25 and #26)	.	.	.	.	3
57									
58	52	F	Breast	normal (match to #27 and #28)	.	.	.	.	3
59									
60	40	F	Breast	normal (match to #29 and #30)	.	.	.	.	3

TNM and Stage: AJCC Cancer Staging Manual (7th Edition)

\* LN, metastatic lymph nodes / examined lymph nodes

\*\*Tissue type: see General information sheet.

Supplementary data sheet contains ER, PR, p53, histologic grade, tumor size and survival data (available by web)



# Patients information of melanoma tissue microarray



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## CK2 Human, Malignant melanoma

No.	Age	Sex	Organ	Diagnosis	Tissue type
1	37	F	Skin, toe	malignant melanoma	6
2	53	M	Skin, hip	malignant melanoma	6
3	43	M	Eyeball (1.0 cm)	malignant melanoma	6
4	65	F	Skin, sole	malignant melanoma	6
5	47	M	Skin, hand	malignant melanoma	6
6	25	F	Skin, neck	malignant melanoma	6
7	20	M	Skin, elbow	malignant melanoma	6
8	20	F	Skin, trunk	malignant melanoma	6
9	73	F	Skin, abdomen	malignant melanoma	6
10	66	M	Soft tissue, axilla	malignant melanoma	6
11	43	M	Skin, heel	malignant melanoma	6
12	56	M	Soft tissue, popliteal	malignant melanoma	6
13	33	F	Skin, buttock	malignant melanoma	6
14	19	M	Skin, axilla	malignant melanoma	6
15	55	M	Lung	metastatic malignant melanoma	6
16	63	M	Anus	malignant melanoma	6
17	63	F	Lymph node, axilla	metastatic malignant melanoma	6
18	59	M	Lung	metastatic malignant melanoma	6
19	77	M	Anus	malignant melanoma	6
20	36	F	Soft tissue, leg	malignant melanoma	6
21	47	M	Soft tissue, axilla	malignant melanoma soft tissue	6
22	35	F	Lymph node, inguinal	metastatic malignant melanoma	6
23	59	F	Nasal cavity	malignant melanoma	6
24	36	F	Lymph node, inguinal	metastatic malignant melanoma	6
25	65	M	Lymph node	metastatic melanoma	6
26	62	F	Skin, forearm	malignant melanoma	6
27	47	M	Lymph node	metastatic malignant melanoma	6
28	57	F	Lymph node, inguinal	metastatic malignant melanoma	6
29	68	M	Skin, leg	nodular malignant melanoma	6
*30	46	M	Soft tissue, inguinal	malignant melanoma	6
31	37	M	Skin, axilla	malignant melanoma	6
32	76	M	Skin, axilla	malignant melanoma	6
33	49	M	Rectum	malignant melanoma	6
*34	54	F	Skin, scalp	malignant melanoma	6
35	59	M	Skin, back	malignant melanoma	6
36	34	F	Skin, axilla	malignant melanoma	6
*37	60	M	Femur	metastatic carcinoma	6
38	62	F	Lymph node, inguinal	metastatic malignant melanoma	6
39	80	M	Skin, big toe	malignant melanoma	6
40	34	M	Eyeball (1.0 cm)	malignant melanoma	6
41	63	M	Skin, lower leg	malignant melanoma	6
*42	74	F	Skin, face	malignant melanoma	6
43	56	M	Skin, foot	malignant melanoma	6
44	65	M	Eyeball (1.7cm)	malignant melanoma	6
45	66	F	Lymph node, inguinal	metastatic malignant melanoma	6
46	53	M	Eyeball (1.8cm)	malignant melanoma	6
47	70	F	Skin, face	malignant melanoma	6
48	47	M	Lymph node	metastatic malignant melanoma	6
49	38	F	Rectum	malignant melanoma	6
50	61	M	Nasal cavity	malignant melanoma	6
51	64	F	Lymph node	metastatic malignant melanoma	6
52	43	M	Skin, forearm	malignant melanoma	6
53	41	M	Skin, thigh	malignant melanoma	6
54	71	M	Lymph node	metastatic malignant melanoma	6
55	61	M	Maxilla	malignant melanoma	6
56	70	M	Maxilla	malignant melanoma	6
57	39	F	Small bowel	metastatic malignant melanoma	6
58	74	M	Skin, inguinal	malignant melanomas	6
59	55	M	Skin, sole	malignant melanoma	6
60	.	.	Carbon	.	.

30\*: Definite diagnosis in question, possibility of paraganglioma

34\*: Undifferentiated carcinoma is considered as an alternative diagnosis

37\*: Initial diagnosis was malignant melanoma. The diagnosis was revised as metastatic carcinoma

42\*: malignant melanoma with osteocartilagenous differentiation

### CK2 Supplementary data

No.	Follow-up months	Follow-up result	Cause of death	Remark
1	144	alive	.	.
2	5	dead	cancer	.
3	139	alive	.	.
4	124	dead	cancer	.
5	34	dead	cancer	.
6	4	dead	cancer	.
7	130	alive	.	.
8	28	dead	cancer	.
9	8	dead	unknown	.
10	4	dead	cancer	.
11	2	dead	cancer	.
12	18	dead	cancer	.
13	36	dead	cancer	.
14	120	alive	.	.
15	114	alive	.	.
16	17	dead	cancer	.
17	42	dead	cancer	.
18	13	dead	cancer	.
19	24	dead	cancer	.
20	13	dead	cancer	.
21	22	dead	cancer	.
22	16	dead	cancer	.
23	26	dead	cancer	.
24	5	dead	cancer	.
25	27	dead	tetanus	.
26	94	alive	.	.
27	22	dead	cancer	.
28	3	dead	cancer	.
29	18	dead	cancer	.
*30	91	alive	.	.
31	4	dead	cancer	.
32	3	dead	liver cirrhosis	.
33	87	alive	.	.
*34	0	dead	cancer	.
35	34	dead	cancer	.
36	74	alive	.	.
*37	1	dead	cancer	.
38	71	alive	.	.
39	25	dead	cancer	.
40	70	alive	.	.
41	6	dead	cancer	.
*42	68	alive	.	.
43	67	alive	.	.
44	25	dead	cancer	.
45	65	alive	.	.
46	52	dead	cancer	.
47	64	alive	.	.
48	21	dead	cancer	.
49	8	dead	cancer	.
50	19	dead	cancer	.
51	6	dead	cancer	.
52	1	dead	cancer	.
53	17	dead	cancer	.
54	41	alive	.	.
55	12	dead	cancer	.
56	10	dead	cancer	.
57	8	dead	cancer	.
58	5	dead	cancer	.
59	6	dead	cancer	.
60	.	.	.	.



# Patients information of liver cancer tissue microarray



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## CS4 Human, Liver cancer

No.	Age	Sex	Organ	Diagnosis	pTNM	Stage	No. of CSN4#	Tissue type <sup>†</sup>
1	53	F	Skin	metastatic hepatocellular carcinoma	TxNxM1	IVB	.	6
2	57	M	Liver	hepatocellular carcinoma	T3aN0M0	IIIA	104	6
3	41	M	Liver	hepatocellular carcinoma	T3aN0M0	IIIA	.	6
4	45	M	Skin	metastatic hepatocellular carcinoma	TxNxM1	IVB	.	6
5	54	F	Chest wall	metastatic hepatocellular carcinoma	TxNxM1	IVB	.	6
6	40	M	Lumbar vertebra	metastatic hepatocellular carcinoma	TxNxM1	IVB	.	6
7	52	M	Liver	hepatocellular carcinoma	T3aN0M0	IIIA	112	6
8	43	M	Bile duct	hepatocellular carcinoma	T4NxM0	IIIC	.	6
9	51	M	Colon	metastatic hepatocellular carcinoma	TxNxM1	IVB	.	6
10	49	M	Bile duct	hepatocellular carcinoma	T4NxM0	IIIC	.	6
11	56	M	Liver	hepatocellular carcinoma	T1N0M0	I	.	6
12	56	F	Lung	metastatic hepatocellular carcinoma	TxNxM1	IVB	.	6
13	40	M	Lymph node	metastatic hepatocellular carcinoma	T3aN1M0	IVA	.	6
14	37	M	Liver	hepatocellular carcinoma	T4NxM1	IVB	131	6
15	75	M	Liver	hepatocellular carcinoma	T2N0M0	II	132	6
16	37	M	Neck	metastatic hepatocellular carcinoma	TxNxM1	IVB	.	6
17	32	M	Liver	combined hepatocellular carcinoma & cholangiocarcinoma	T3aN0M0	IIIA	133	6
18	50	M	Femur	metastatic hepatocellular carcinoma	TxNxM1	IVB	.	6
19	57	M	Liver	hepatocellular carcinoma	T3aN0M0	IIIA	134	6
20	62	M	Lung	metastatic hepatocellular carcinoma	TxNxM1	IVB	.	6
21	61	M	Lung	metastatic hepatocellular carcinoma	TxNxM1	IVB	.	6
22	65	M	Liver	hepatocellular carcinoma, moderately differentiated	T1N0M0	I	135	6
23	64	M	Liver	hepatocellular carcinoma, moderately differentiated	T3bN0M0	IIIB	.	6
24	65	M	Liver	hepatocellular carcinoma, poorly differentiated	T3aN0M0	IIIA	137	6
25	72	M	Liver	hepatocellular carcinoma, well differentiated & poorly differentiated	T2N0M0	II	138	6
26	58	F	Liver	hepatocellular carcinoma, well differentiated	T2N0M0	II	139	6
27	52	M	Liver	hepatocellular carcinoma, well differentiated	T2N0M0	II	140	6
28	40	M	Liver	hepatocellular carcinoma, moderately differentiated	T2N0M0	II	141	6
29	53	F	Liver	hepatocellular carcinoma, moderately differentiated	T3bN0M0	IIIB	142	6
30	67	M	Liver	hepatocellular carcinoma, moderately differentiated	T2N0M0	II	143	6
31	58	F	Liver	hepatocellular carcinoma, moderately differentiated	T3aN0M0	IIIA	.	6
32	20	M	Liver	hepatocellular carcinoma, well differentiated	T4N0M0	IIIC	.	6
33	48	M	Liver	hepatocellular carcinoma, moderately differentiated	T2N0M0	II	.	6
34	47	M	Liver	hepatocellular carcinoma	T1N0M0	I	144	6
35	35	M	Omentum	metastatic hepatocellular carcinoma	TxNxM1	IV	.	6
36	69	F	Liver	hepatocellular carcinoma, moderately differentiated	T1N0M0	I	.	6
37	46	M	Liver	hepatocellular carcinoma, moderately differentiated	T1N0M0	I	.	6
38	63	F	Liver	hepatocellular carcinoma, moderately differentiated	T1N0M0	I	146	6
39	60	F	Liver	hepatocellular carcinoma, poorly differentiated	T1N0M0	I	147	6
40	62	M	Liver	hepatocellular carcinoma, moderately differentiated	T1N0M0	I	148	6
41	52	M	Liver	hepatocellular carcinoma, moderately differentiated	T2N0M0	II	.	6
42	66	F	Liver	hepatocellular carcinoma, moderately differentiated	T2N0M0	II	149	6
43	65	F	Liver	hepatocellular carcinoma, well differentiated	T1N0M0	I	150	6
44	64	M	Liver	hepatocellular carcinoma, moderately differentiated	T3bN0M0	IIIB	.	6
45	59	M	Liver	hepatocellular carcinoma, poorly differentiated	T3bN0M0	IIIB	.	6
46	64	M	Liver	hepatocellular carcinoma, moderately differentiated	T1N0M0	I	151	6
47	54	M	Liver	hepatocellular carcinoma, moderately differentiated	T3bN0M0	IIIB	152	6
48	65	F	Liver	hepatocellular carcinoma, moderately differentiated	T1N0M0	I	153	6
49	60	M	Adrenal gland	metastatic hepatocellular carcinoma	TxNxM1	IVB	.	6
50	44	M	Liver	hepatocellular carcinoma, moderately differentiated	T1N0M0	I	.	6
51	41	M	Liver	hepatocellular carcinoma, moderately differentiated	T1N0M0	I	.	6
52	51	M	Liver	hepatocellular carcinoma	T1N0M0	I	154	6
53	55	M	Liver	hepatocellular carcinoma, well differentiated	T1N0M0	I	.	6
54	57	F	Liver	hepatocellular carcinoma, well differentiated	T1N0M0	I	156	6
55	57	M	Liver	hepatocellular carcinoma, moderately differentiated	T3bN0M0	IIIB	157	6
56	43	M	Liver	hepatocellular carcinoma, moderately differentiated	T1N0M0	I	.	6
57	50	M	Liver	hepatocellular carcinoma, poorly differentiated	T1N0M0	I	158	6
58	43	M	Liver	hepatocellular carcinoma, moderately differentiated	T1N0M0	I	159	6
59	60	F	Liver	hepatocellular carcinoma, poorly differentiated	T4N0M0	IIIC	.	6
60	.	.	Carbon	.	.	.	.	.

TNM and Stage: AJCC Cancer Staging Manual (7th Edition)

Tissue type<sup>†</sup>: see General information sheet

Supplementary data sheet contains survival data (available by web)

### CSA4 Supplementary data

No.	Follow-up months	Follow-up result	Cause of death	Remark
1	14	dead	cancer	.
2	95	alive	.	.
3	30	dead	cancer	.
4	9	dead	cancer	.
5	3	dead	cancer	.
6	47	dead	cancer	.
7	41	dead	cancer	.
8	4	dead	cancer	.
9	32	dead	cancer	.
10	67	alive	.	.
11	18	dead	cancer	.
12	18	dead	unknown	.
13	3	dead	cancer	.
14	92	dead	cancer	.
15	67	alive	.	.
16	35	dead	cancer	.
17	66	alive	.	.
18	47	dead	cancer	.
19	66	alive	.	.
20	22	dead	cancer	.
21	39	dead	cancer	.
22	65	alive	.	.
23	65	alive	.	.
24	64	alive	.	.
25	64	alive	.	.
26	64	alive	.	.
27	63	alive	.	.
28	63	alive	.	.
29	63	alive	.	.
30	54	alive	.	.
31	31	dead	cancer	.
32	28	dead	cancer	.
33	47	alive	.	.
34	44	alive	.	.
35	28	dead	cancer	.
36	3	dead	cancer	.
37	11	dead	cancer	.
38	10	dead	cancer	.
39	55	alive	.	.
40	1	dead	cancer	.
41	2	dead	cancer	.
42	71	alive	.	.
43	29	dead	cancer	.
44	16	dead	cancer	.
45	6	dead	cancer	.
46	3	dead	cancer	.
47	6	dead	cancer	.
48	10	dead	cancer	.
49	39	alive	.	.
50	1	dead	cancer	.
51	.	.	.	.
52	.	.	.	.
53	.	.	.	.
54	.	.	.	.
55	.	.	.	.
56	.	.	.	.
57	.	.	.	.
58	.	.	.	.
59	.	.	.	.
60	.	.	.	.



# Patients information of Stomach cancer tissue microarray



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## CQ2 Human, Stomach cancer

No.	Age	Sex	Organ	Diagnosis	pTNM	Stage	No. of CQ2*	Tissue type**
1	40	M	Stomach	adenocarcinoma, poorly differentiated	T4aN3aM1	IV	101	6
2	43	F	Stomach	adenocarcinoma, poorly differentiated	T4aN0M0	II B	102	6
3	61	F	Stomach	adenocarcinoma, moderately differentiated	T3N3aM0	III B	103	6
4	45	F	Stomach	signet ring cell carcinoma	T3N3aM0	III B	104	6
5	67	M	Stomach	adenocarcinoma, poorly differentiated	T3N1M0	II B	105	6
6	53	F	Stomach	adenocarcinoma, poorly differentiated	T3N3aM0	III B	106	6
7	67	M	Stomach	adenocarcinoma, moderately differentiated	T4aN3bM0	III C	107	6
8	72	M	Stomach	adenocarcinoma, poorly differentiated	T3N3aM0	III B	108	6
9	61	M	Stomach	mucinous adenocarcinoma	T1bN2M0	II A	109	6
10	65	M	Stomach	adenocarcinoma, poorly differentiated	T4aN0M0	II B	110	6
11	70	M	Stomach	adenocarcinoma, moderately differentiated	T4aN2M0	III B	111	6
12	62	M	Stomach	adenocarcinoma, well differentiated	T3N2M0	III A	112	6
13	62	F	Stomach	signet ring cell carcinoma	T3N2M0	III A	113	6
14	52	M	Stomach	papillary adenocarcinoma	T2N0M0	I B	114	6
15	60	M	Stomach	adenocarcinoma, poorly differentiated	T3N3aM1	IV	115	6
16	66	M	Stomach	adenocarcinoma, poorly differentiated	T4aN3bM0	III C	116	6
17	41	M	Stomach	signet ring cell carcinoma	T3N3aM0	III B	117	6
18	60	F	Stomach	adenocarcinoma, poorly differentiated	T3N3aM0	III B	118	6
19	59	M	Stomach	adenocarcinoma, poorly differentiated	T4aN3bM0	III C	119	6
20	62	M	Stomach	adenocarcinoma, poorly differentiated	T3N3bM0	III B	120	6
21	49	M	Stomach	adenocarcinoma, poorly differentiated	T4bN3bM0	III C	121	6
22	64	M	Stomach	mucinous adenocarcinoma	T3N1M0	II B	122	6
23	55	M	Stomach	undifferentiated carcinoma	T4aN3bM0	III C	123	6
24	56	F	Stomach	adenocarcinoma, poorly differentiated	T3N2M0	III A	124	6
25	48	M	Stomach	adenocarcinoma, poorly differentiated	T3N2M0	III A	125	6
26	65	F	Stomach	mucinous adenocarcinoma	T4aN3aM0	III C	126	6
27	63	M	Stomach	adenocarcinoma, well differentiated	T3N2M0	III A	127	6
28	60	M	Stomach	adenocarcinoma, well differentiated	T3N0M0	II A	128	6
29	42	M	Stomach	signet ring cell carcinoma	T3N1M0	II B	129	6
30	55	M	Stomach	mucinous adenocarcinoma	T3N3aM0	III B	130	6
31	58	M	Stomach	adenocarcinoma, moderately differentiated	T3N3bM0	III B	131	6
32	72	F	Stomach	adenocarcinoma, moderately differentiated	T1bN2M0	II A	.	6
33	53	M	Stomach	adenocarcinoma, poorly differentiated	T3N0M0	II A	133	6
34	46	M	Stomach	adenocarcinoma, poorly differentiated	T4bN0M0	III B	134	6
35	64	M	Stomach	adenocarcinoma, moderately differentiated	T2N1M0	II A	135	6
36	65	M	Stomach	adenocarcinoma, poorly differentiated	T2N1M0	II A	136	6
37	45	F	Stomach	adenocarcinoma, poorly differentiated	T2N1M0	II A	137	6
38	58	F	Stomach	adenocarcinoma, well differentiated	T3N0M0	II A	138	6
39	68	F	Stomach	adenocarcinoma, poorly differentiated	T3N3aM1	IV	139	6
40	66	M	Stomach	adenocarcinoma, poorly differentiated	T4aN3aM0	III C	140	6
41	63	M	Stomach	adenocarcinoma, poorly differentiated	T3N0M0	II A	141	6
42	52	F	Stomach	adenocarcinoma, moderately differentiated	T3N2M0	III A	142	6
43	35	F	Stomach	adenocarcinoma, poorly differentiated	T1aN0M0	I A	143	6
44	44	F	Stomach	adenocarcinoma, well differentiated	T1bN0M0	I A	144	6
45	55	M	Stomach	adenocarcinoma, well differentiated	T1aN0M0	I A	145	6
46	40	M	Stomach	signet ring cell carcinoma	T1aN0M0	I A	146	6
47	66	M	Stomach	adenocarcinoma, moderately differentiated	T1bN0M0	I A	147	6
48	65	F	Stomach	adenocarcinoma, moderately differentiated	T1bN0M0	I A	148	6
49	62	F	Stomach	adenocarcinoma, poorly differentiated	T1bN0M0	I A	149	6
50	60	F	Stomach	adenocarcinoma, moderately differentiated	T1bN0M0	I A	.	6
51	70	F	Stomach	adenocarcinoma, moderately differentiated	T1bN1M0	I B	151	6
52	52	M	Stomach	adenocarcinoma, well differentiated	T1bN0M0	I A	152	6
53	40	M	Stomach	signet ring cell carcinoma	T1bN1M0	I B	153	6
54	34	F	Stomach	signet ring cell carcinoma	T1aN1M0	I B	154	6
55	60	M	Stomach	adenocarcinoma, well differentiated	T1bN0M0	I A	155	6
56	68	M	Stomach	adenocarcinoma, well differentiated	T1bN1M0	I B	156	6
57	52	M	Stomach	adenocarcinoma, well differentiated	T2N0M0	I B	157	6
58	62	M	Stomach	signet ring cell carcinoma	T1aN0M0	I A	158	6
59	60	M	Stomach	adenocarcinoma, well differentiated	T2N0M0	I B	159	6
60	.	.	Carbon	.	.	.	.	.

# The normal tissue in CQ2 array of this column is from the identical patient.

TNM and Stage: AJCC Cancer Staging Manual (7th Edition)

\*\* Tissue type: see General information sheet

Supplementary data sheet contains Lauren, survival data (available by web)

### CQ2 Supplementary data

No.	Lauren*	Follow-up months	Follow-up result	Cause of death	Remark
1	D	4	dead	cancer	.
2	D	132	alive	.	.
3	I	7	dead	cancer	.
4	D	132	alive	.	.
5	D	100	dead	chronic renal failure	.
6	D	16	dead	cancer	.
7	I	13	dead	cancer	.
8	D	1	dead	liver cirrhosis	.
9	I	123	dead	pneumonia	.
10	D	131	alive	.	.
11	I	9	dead	cancer	.
12	I	45	dead	cancer	.
13	D	26	dead	cancer	.
14	I	131	alive	.	.
15	D	6	dead	cancer	.
16	D	6	dead	cancer	.
17	D	131	alive	.	.
18	D	131	alive	.	.
19	D	36	dead	cancer	.
20	D	41	dead	cancer	.
21	D	4	dead	cancer	.
22	I	83	alive	.	.
23	D	7	dead	cancer	.
24	D	36	dead	cancer	.
25	D	10	dead	cancer	.
26	D	15	dead	cancer	.
27	I	130	alive	.	.
28	I	101	dead	cancer	.
29	D	130	alive	.	.
30	.	14	dead	cancer	.
31	I	10	dead	cancer	.
32	I	15	dead	cancer	.
33	D	130	alive	.	.
34	D	7	dead	cancer	.
35	I	130	alive	.	.
36	D	68	dead	cancer	.
37	D	129	alive	.	.
38	I	2	dead	cancer	.
39	D	5	dead	cancer	.
40	D	6	dead	cancer	.
41	D	81	dead	cancer	.
42	I	11	dead	cancer	.
43	D	132	alive	.	.
44	I	132	alive	.	.
45	I	132	alive	.	.
46	D	131	alive	.	.
47	I	131	alive	.	.
48	I	3	dead	chronic renal failure	.
49	D	130	alive	.	.
50	I	130	alive	.	.
51	I	130	alive	.	.
52	I	130	alive	.	.
53	D	130	alive	.	.
54	D	130	alive	.	.
55	I	130	alive	.	.
56	I	129	alive	.	.
57	I	129	alive	.	.
58	D	129	alive	.	.
59	I	99	dead	cancer	.
60	.	.	.	.	.

\* Lauren classification: D, diffuse; I, intestinal



# Patients information of Ovary cancer tissue microarray



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## CJ2 Human, Ovary cancer

No.	Age	Sex	Organ	Diagnosis	pTNM	Stage	Tissue type*
1	65	F	Ovary	serous papillary cystadenoma of borderline malignancy	T1aNOM0	I A	5
2	26	F	Ovary	mucinous cystadenoma of borderline malignancy	T1aNOM0	I A	5
3	35	F	Ovary	serous papillary cystadenoma of borderline malignancy	T1aNOM0	I A	5
4	65	F	Ovary	serous cystadenocarcinoma	T2bNOM0	II B	6
5	48	F	Ovary	endometrioid carcinoma	T2bNOM0	II B	6
6	44	F	Ovary	granulosa cell tumor	T1aNOM0	I A	5
7	49	F	Ovary	endometrioid carcinoma	T2bNOM0	II B	6
8	67	F	Ovary	mucinous cystadenoma of borderline malignancy	T2bNOM0	II B	5
9	75	F	Ovary	serous cystadenofibroma	T1aNOM0	I A	4
10	50	F	Ovary	papillary serous cystadenocarcinoma , poorly differentiated	T2cNOM0	II C	6
11	44	F	Ovary	fibroma	T1aNOM0	I A	4
12	50	F	Ovary	papillary serous cystadenocarcinoma	T3cNOM1	IV	6
13	47	F	Ovary	endometrioid carcinoma	T3cNOM1	IV	6
14	38	F	Ovary	mixed Brenner tumor and mucinous cystadenoma	T1aNOM0	I A	4
15	58	F	Ovary	papillary serous cystadenocarcinoma	T2bNOM0	II B	6
16	70	F	Ovary	papillary serous cystadenocarcinoma	T3bNOM0	III B	6
17	65	F	Ovary	struma ovarii	T1aNOM0	I A	4
18	79	F	Ovary	endometrioid adenoacanthofibroma	T1aNOM0	I A	4
19	57	F	Ovary	serous surface papillary carcinoma	T2bNOM0	II B	6
20	43	F	Ovary	papillary serous cystadenocarcinoma	T3bNOM0	III B	6
21	68	F	Ovary	undifferentiated carcinoma	T1bNOM0	I B	6
22	50	F	Ovary	clear cell carcinoma	T1aNOM0	I A	6
23	23	F	Ovary	dysgerminoma	T2bNOM0	II B	6
24	51	F	Ovary	common epithelial carcinoma , poorly differentiated	T2bNOM0	II B	6
25	70	F	Ovary	malignant muellerian mixed tumor	T1aNOM0	I A	6
26	21	F	Ovary	dysgerminoma	T1aNOM0	I A	6
27	34	F	Ovary	fibrothecoma	T1aNOM0	I A	4
28	61	F	Ovary	papillary serous cystadenocarcinoma	T3bNOM0	III B	6
29	54	F	Ovary	sertoli-leydig cell tumor	T1bNOM0	I B	4
30	53	F	Ovary	fibrothecoma	T1aNOM0	I A	4
31	54	F	Ovary	fibrothecoma	T1aNOM0	I A	4
32	34	F	Ovary	papillary serous cystadenocarcinoma	T2bNOM0	II B	6
33	31	F	Ovary	dysgerminoma	T2cNOM0	II C	6
34	51	F	Ovary	papillary serous cystadenocarcinoma	T2bN1M0	III C	6
35	61	F	Ovary	granulosa-theca cell tumor	T1aNOM0	I A	5
36	24	F	Ovary	sertoli-leydig cell tumor	T1aNOM0	I A	4
37	27	F	Ovary	sclerosing stromal tumor	T1aNOM0	I A	5
38	41	F	Ovary	clear cell carcinoma	T2bNOM0	II B	6
39	56	F	Ovary	malignant muellerian mixed tumor	T1aNOM0	I A	6
40	41	F	Ovary	clear cell carcinoma	T1aNOM0	I A	6
41	27	F	Ovary	embryonal carcinoma	T2aNOM0	II A	6
42	55	F	Ovary	granulosa cell tumor	T1aNOM0	I A	5
43	23	F	Ovary	dysgerminoma	T1aNOM0	I A	6
44	64	F	Ovary	papillary serous cystadenocarcinoma	T2cN1M0	III C	5
45	43	F	Ovary	metastatic adenocarcinoma (most likely from breast)	M1	IV	6
46	48	F	Ovary	malignant lymphoma	-	II	6
47	50	F	Ovary	adenocarcinoma from salpinx	T2bNOM0	II B	6
48	25	F	Ovary	fibrothecoma	T1aNOM0	I A	4
49	46	F	Ovary	metastatic undifferentiated carcinoma	M1	IV	6
50	37	F	Ovary	metastatic signet ring carcinoma from stomach	M1	IV	6
51	55	F	Ovary	serous cystadenocarcinoma, moderately differentiated	T3bNOM0	III B	6
52	55	F	Ovary	fibrothecoma	T1aNOM0	I A	4
53	45	F	Ovary	serous cystadenocarcinoma, moderately differentiated	T2cNOM0	II C	6
54	37	F	Ovary	endometrioid carcinoma	T2bNOM0	II B	6
55	58	F	Ovary	fibrothecoma	T1aNOM0	I A	4
56	65	F	Ovary	adenocarcinoma, poorly differentiated	T3cNOM0	III C	6
57	39	F	Ovary	clear cell carcinoma	T2cN1M0	III C	6
58	70	F	Ovary	fibroma	T1aNOM0	I A	4
59	58	F	Ovary	clear cell carcinoma	T1aNOM0	I A	6
60	-	-	Carbon	-	-	-	-

TNM and Stage: AJCC Cancer Staging Manual (7th Edition)

Tissue type\*: see General information sheet

Supplementary data sheet contains survival data (available by web)

### CJ2 Supplementary data

No.	SNOMED	Follow-up months	Follow-up result	Cause of death	Remark
1	M84601	0	lost	.	.
2	M84701	0	lost	.	.
3	M84601	0	lost	.	.
4	M84603	125	dead	cancer	.
5	M83803	0	lost	.	.
6	M86201	187	alive	.	.
7	M83803	72	dead	cancer	.
8	M84701	160	dead	fracture of femur	.
9	M90140	78	dead	cancer	.
10	M84603	5	lost	.	.
11	M88100	183	alive	.	.
12	M84603	153	dead	cancer	.
13	M83803	83	dead	cancer	.
14	M90000	2	lost	.	.
15	M84603	42	dead	cancer	.
16	M84603	26	dead	unknown	.
17	M90900	180	alive	.	.
18	M83810	156	dead	unknown	.
19	M84613	16	lost	.	.
20	M84603	48	dead	cancer	.
21	M80203	164	dead	cerebral infarction	.
22	M83103	30	dead	cancer	.
23	M90603	6	lost	.	.
24	M80203	174	alive	.	.
25	M89503	174	alive	.	.
26	M90603	174	alive	.	.
27	M86000	173	alive	.	.
28	M84603	172	alive	.	.
29	M86310	82	dead	cancer	.
30	M86000	172	alive	.	.
31	M86000	170	alive	.	.
32	M84603	21	dead	cancer	.
33	M90603	0	lost	.	.
34	M84603	5	lost	.	.
35	M86211	136	dead	cancer	.
36	M86310	0	lost	.	.
37	M85901	0	lost	.	.
38	M83103	161	alive	.	.
39	M89503	18	dead	cancer	.
40	M83103	159	alive	.	.
41	M90703	14	dead	cancer	.
42	M86201	157	alive	.	.
43	M90603	150	alive	.	.
44	M84601	34	dead	cancer	.
45	M81406	141	alive	.	.
46	M95903	133	alive	.	.
47	M81406	136	alive	.	.
48	M86000	135	alive	.	.
49	M80206	135	alive	.	.
50	M84906	134	alive	.	.
51	M84603	45	dead	cancer	.
52	M86000	48	alive	.	.
53	M84603	47	alive	.	.
54	M83803	47	alive	.	.
55	M86000	45	alive	.	.
56	M80203	45	alive	.	.
57	M83103	45	alive	.	.
58	M88100	45	alive	.	.
59	M83103	44	alive	.	.
60	.	.	.	.	.



# Patients information of kidney cancer tissue microarray



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## CL2 Human, Kidney cancer

No.	Age	Sex	Organ	Diagnosis	TNM	Tissue type <sup>†</sup>
1	52	F	Kidney	renal cell carcinoma, granular cell type	T2bNXOM0	6
2	60	F	Kidney	renal cell carcinoma, clear cell type	T3aNOM1*	6
3	42	M	Kidney	renal cell carcinoma, clear cell type	T3aNOM0	6
4	59	M	Kidney	renal cell carcinoma, clear cell type	T2aNOM0	6
5	67	F	Kidney	renal cell carcinoma, clear cell and granular cell type	T2aNXXM0	6
6	65	M	Kidney	renal cell carcinoma, clear cell and granular cell type	T2bNXOM0	6
7	59	M	Kidney	renal cell carcinoma, clear cell and granular cell type	T1bNXOM0	6
8	56	M	Kidney	renal cell carcinoma, clear cell and pseudosarcomatous type	T1bNOM1*	6
9	42	F	Kidney	renal cell carcinoma, clear cell type	T3aNXXM0	6
10	50	M	Kidney	renal cell carcinoma, clear cell type	T1aNOM0	6
11	52	M	Kidney	renal cell carcinoma, clear cell type	T1aNOM0	6
12	68	F	Kidney	renal cell carcinoma, clear cell type	T3aNOM0	6
13	60	F	Kidney	renal cell carcinoma, clear cell type	T3aNOM0	6
14	69	F	Kidney	renal cell carcinoma, clear cell type	T2aNXXM0	6
15	54	M	Kidney	renal cell carcinoma, clear cell type	T1bNXOM0	6
16	43	F	Kidney	renal cell carcinoma, clear cell type	T1aNOM0	6
17	53	M	Kidney	renal cell carcinoma, clear cell type	T3aNOM1**	6
18	59	M	Kidney	renal cell carcinoma, clear cell type	T3aNOM0	6
19	61	M	Kidney	renal cell carcinoma, collecting duct type	T1aNXXM0	6
20	40	M	Kidney	renal cell carcinoma, clear cell type	T1aNXXM0	6
21	52	M	Kidney	renal cell carcinoma, clear cell type	T1bNOM0	6
22	63	F	Kidney	renal cell carcinoma, clear cell and granular cell type	T2aNOM0	6
23	64	M	Kidney	renal cell carcinoma, clear cell type	T1bNOM0	6
24	37	M	Kidney	renal cell carcinoma, collecting duct type	T2bNOM0	6
25	65	M	Kidney	renal cell carcinoma, papillary type	T1bNXOM0	6
26	74	M	Kidney	renal cell carcinoma, clear cell type	T3aNOM0	6
27	67	M	Kidney	renal cell carcinoma, clear cell type	T4NXOM0	6
28	50	M	Kidney	renal cell carcinoma	T2aNOM0	6
29	74	M	Kidney	renal cell carcinoma, clear cell type	T3aNOM0	6
30	62	M	Kidney	renal cell carcinoma, clear cell and granular cell type	T3aNOM0	6
31	64	M	Kidney	renal cell carcinoma, papillary type	T1aNXXM0	6
32	45	M	Kidney	renal cell carcinoma, clear cell type	T1bNOM0	6
33	62	M	Kidney	renal cell carcinoma	T3aN1M0	6
34	53	M	Kidney	renal cell carcinoma, clear cell type	T1bNXOM0	6
35	64	M	Kidney	renal cell carcinoma, clear cell type	T1bNXOM0	6
36	72	M	Kidney	renal cell carcinoma, clear cell type	T1aNXXM0	6
37	62	F	Kidney	renal cell carcinoma, clear cell type	T3aNOM0	6
38	56	M	Kidney	renal cell carcinoma, clear cell type	T3aNOM0	6
39	58	M	Kidney	renal cell carcinoma	T2aNOM0	6
40	57	M	Kidney	renal cell carcinoma, clear cell and granular cell type	T3bNOM0	6
41	64	F	Kidney	transitional cell carcinoma, pelvis	.	6
42	43	F	Kidney	renal cell carcinoma, clear cell type	T1bNOM0	6
43	52	F	Kidney	renal cell carcinoma, granular cell type	T1bNOM0	6
44	64	M	Kidney	renal cell carcinoma, granular cell type	T3aNOM0	6
45	57	M	Kidney	renal cell carcinoma, clear cell type	T1bNOM0	6
46	59	M	Kidney	renal cell carcinoma, clear cell and granular cell type	T2aNXXM0	6
47	47	M	Kidney	renal cell carcinoma, clear cell type	T1aNXXM0	6
48	77	M	Kidney	renal cell carcinoma, clear cell type	T1aNOM0	6
49	47	F	Kidney	renal cell carcinoma, clear cell and granular cell type	T2aNXXM0	6
50	55	F	Kidney	renal cell carcinoma, clear cell type	T3aNOM0	6
51	59	M	Kidney	Normal of No. 4	.	3
52	43	F	Kidney	Normal of No. 16	.	3
53	40	M	Kidney	Normal of No. 20	.	3
54	52	M	Kidney	Normal of No. 21	.	3
55	62	M	Kidney	Normal of No. 30	.	3
56	72	M	Kidney	Normal of No. 36	.	3
57	43	F	Kidney	Normal of No. 42	.	3
58	77	M	Kidney	Normal of No. 48	.	3
59	55	F	Kidney	Normal of No. 50	.	3
60	.	.	Carbon	.	.	.

#2 \*: lung metastasis

#8 \*: metastasis to contralateral kidney

#17 \*: perinephric fat involvement, \*\*: bone metastasis

TNM and Stage: AJCC Cancer Staging Manual (7th Edition)

Tissue type<sup>†</sup>: see General information sheet

Supplementary data sheet contains tumor size, capsule involvement, vein involvement and survival data (available by web)







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**CA4 Human, Prostate cancer-normal**

No.	Age	Sex	Organ	Diagnosis	Gleason score	pTNM	Stage	Tissue type <sup>+</sup>
1	60	M	Prostate	adenocarcinoma	9	T3bN0M0	III	6
2	64	M	Prostate	adenocarcinoma	7	T2cN0M0	II B	6
3	71	M	Prostate	adenocarcinoma	9	T3bN0M0	III	6
4	64	M	Prostate	adenocarcinoma	10	T3aN0M0	III	6
5	59	M	Prostate	adenocarcinoma	9	T3bN0M0	III	6
6	65	M	Prostate	adenocarcinoma	8	T3bN0M0	III	6
7	73	M	Prostate	adenocarcinoma	7	T2cN0M0	II B	6
8	69	M	Prostate	adenocarcinoma	7	T2cN0M0	II B	6
9	62	M	Prostate	adenocarcinoma	7	T2cN0M0	II B	6
10	66	M	Prostate	adenocarcinoma	9	T3bN0M0	III	6
11	60	M	Prostate	adenocarcinoma	9	T3bN0M0	III	6
12	66	M	Prostate	adenocarcinoma	7	T3aN0M0	III	6
13	70	M	Prostate	adenocarcinoma	7	T3bN0M0	III	6
14	65	M	Prostate	adenocarcinoma	9	T3bN0M0	III	6
15	67	M	Prostate	adenocarcinoma	9	T3bN1M0	III	6
16	69	M	Prostate	adenocarcinoma	7	T3bN0M0	III	6
17	63	M	Prostate	adenocarcinoma	9	T3aN1M0	III	6
18	69	M	Prostate	adenocarcinoma	7	T3aN0M0	III	6
19	70	M	Prostate	adenocarcinoma	7	T3aN0M0	III	6
20	58	M	Prostate	adenocarcinoma	9	T3bN0M0	III	6
21	58	M	Prostate	adenocarcinoma	7	T3bN0M0	III	6
22	71	M	Prostate	adenocarcinoma	7	T2cN0M0	II B	6
23	70	M	Prostate	adenocarcinoma	7	T3bN0M0	III	6
24	59	M	Prostate	adenocarcinoma	6	T2bN0M0	II A	6
25	63	M	Prostate	adenocarcinoma	9	T3bN0M0	III	6
26	72	M	Prostate	adenocarcinoma	9	T3bN0M0	III	6
27	66	M	Prostate	adenocarcinoma	8	T3bN0M0	III	6
28	70	M	Prostate	adenocarcinoma	6	T3bN0M0	III	6
29	70	M	Prostate	adenocarcinoma	7	T2cN0M0	II B	6
30	68	M	Prostate	adenocarcinoma	8	T3bN0M0	III	6
31	63	M	Prostate	adenocarcinoma	10	T3bN0M0	III	6
32	57	M	Prostate	adenocarcinoma	7	T3bN0M0	III	6
33	72	M	Prostate	adenocarcinoma	8	T2cN0M0	II B	6
34	70	M	Prostate	adenocarcinoma	8	T3bN0M0	III	6
35	75	M	Prostate	adenocarcinoma	9	T3bN0M0	III	6
36	62	M	Prostate	adenocarcinoma	9	T3bN0M0	III	6
37	63	M	Prostate	adenocarcinoma	9	T3bN0M0	III	6
38	53	M	Prostate	adenocarcinoma	9	T3bN0M0	III	6
39	63	M	Prostate	adenocarcinoma	8	T3bN0M0	III	6
40	44	M	Prostate	adenocarcinoma	7	T3bN0M0	III	6
41	69	M	Prostate	normal (match of #8)	.	.	.	3
42	62	M	Prostate	normal (match of #9)	.	.	.	3
43	66	M	Prostate	normal (match of #12)	.	.	.	3
44	65	M	Prostate	normal (match of #14)	.	.	.	3
45	69	M	Prostate	normal (match of #18)	.	.	.	3
46	70	M	Prostate	normal (match of #19)	.	.	.	3
47	70	M	Prostate	normal (match of #29)	.	.	.	3
48	63	M	Prostate	normal (match of #31)	.	.	.	3
49	44	M	Prostate	normal (match of #40)	.	.	.	3
50	.	.	Carbon	.	.	.	.	.

TNM and Stage: AJCC Cancer Staging Manual (7th Edition)

Tissue type<sup>+</sup>: see General information sheet

Supplementary data sheet contains PSA level, residual tumor and survival data (available by web)

### CA4 Supplementary data

No.	PSA (ng/ml)	Residual tumor	Follow-up months	Follow-up result	Cause of death	Remark
1	11.2	R0	60	alive	.	.
2	30	R0	60	alive	.	.
3	60.4	R1	55	alive	.	.
4	7.4	R1	47	alive	.	.
5	9.8	R1	44	alive	.	.
6	34.9	R1	43	alive	.	.
7	48.1	R1	42	alive	.	.
8	10.6	R0	42	alive	.	.
9	37.3	R1	39	alive	.	.
10	1.2	R1	39	alive	.	.
11	40	R1	39	alive	.	.
12	8.4	R1	39	alive	.	.
13	7	R1	37	alive	.	.
14	17.5	R1	23	dead	cancer	.
15	13.1	R1	34	alive	.	.
16	1.1	R1	33	alive	.	.
17	11.8	R1	33	alive	.	.
18	17.6	R1	27	alive	.	.
19	9	R1	26	alive	.	.
20	5.8	R0	26	alive	.	.
21	15.8	R1	24	alive	.	.
22	31.4	R1	24	alive	.	.
23	14.4	R1	19	alive	.	.
24	18.3	R0	18	alive	.	.
25	16.6	R1	17	alive	.	.
26	.	R1	16	alive	.	.
27	10.8	R1	17	dead	cancer	.
28	10.8	R1	16	alive	.	.
29	.	R0	15	alive	.	.
30	26.9	R1	15	alive	.	.
31	.	R1	15	alive	.	.
32	25	R1	15	alive	.	.
33	16.8	R1	15	alive	.	.
34	0.5	R1	15	alive	.	.
35	98	R1	15	alive	.	.
36	.	R1	15	alive	.	.
37	91	R1	14	alive	.	.
38	161	R1	17	dead	cancer	.
39	13	R1	13	alive	.	.
40	.	R1	11	alive	.	.
41	.	.	.	.	.	.
42	.	.	.	.	.	.
43	.	.	.	.	.	.
44	.	.	.	.	.	.
45	.	.	.	.	.	.
46	.	.	.	.	.	.
47	.	.	.	.	.	.
48	.	.	.	.	.	.
49	.	.	.	.	.	.
50	.	.	.	.	.	.

\* R0: No residual tumor.

\* R1: Positive resection margin.

### Quality Control Sheet of CA4-D

Although we are doing our best to maintain the quality of every slide, the content of each case varies from slide to slide. Some of the cases may not contain adequate tissue. Please refer to this quality control sheet for evaluation.

#11: a few cancer cells included.



# Patients information of Uterine cervix cancer-metastasis-normal tissue microarray



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## CZA2 Human, Uterine cervix cancer-metastasis-normal

No.	Age	Sex	Organ	Diagnosis	pTNM	Stage	Tissue type*
1	70	F	Cervix	squamous cell carcinoma, microinvasive	T1a1N0M0	IA1	6
2	46	F	Cervix	squamous cell carcinoma, microinvasive	T1a1N0M0	IA1	6
3	42	F	Cervix	squamous cell carcinoma, microinvasive	T1a1N0M0	IA1	6
4	57	F	Cervix	squamous cell carcinoma in situ	TisN0M0	0	6
5	33	F	Cervix	squamous cell carcinoma, microinvasive	T1a1N0M0	IA1	6
6	35	F	Cervix	squamous cell carcinoma in situ	TisN0M0	0	6
7	48	F	Cervix	squamous cell carcinoma, microinvasive	T1a1N0M0	IA1	6
8	39	F	Cervix	squamous cell carcinoma, microinvasive	T1a1N0M0	IA1	6
9	58	F	Cervix	squamous cell carcinoma, microinvasive	T1a1N0M0	IA1	6
10	53	F	Cervix	squamous cell carcinoma in situ	TisN0M0	0	6
11	53	F	Cervix	squamous cell carcinoma	T1b2N0M0	IB2	6
12	53	F	Cervix	squamous cell carcinoma	T2bN1M0	IIIB	6
13	50	F	Cervix	adenocarcinoma	T1b2N1M0	IIIB	6
14	45	F	Cervix	squamous cell carcinoma	T1b2N1M0	IIIB	6
15	49	F	Cervix	squamous cell carcinoma	T1b1N1M0	IIIB	6
16	35	F	Cervix	squamous cell carcinoma	T1b1N0M0	IB1	6
17	57	F	Cervix	squamous cell carcinoma	T2a1N0M0	IIA1	6
18	39	F	Cervix	squamous cell carcinoma	T1b1N0M0	IB1	6
19	66	F	Cervix	squamous cell carcinoma	T2a1N1M0	IIIB	6
20	55	F	Cervix	squamous cell carcinoma	T1b2N0M0	IB2	6
21	64	F	Cervix	squamous cell carcinoma	T1b2N1M0	IIIB	6
22	50	F	Cervix	squamous cell carcinoma	T1b1N0M0	IB1	6
23	48	F	Cervix	squamous cell carcinoma	T1b1N1M0	IIIB	6
24	51	F	Cervix	squamous cell carcinoma	T1b2N1M0	IIIB	6
25	54	F	Cervix	squamous cell carcinoma	T1b1N0M0	IB1	6
26	39	F	Cervix	squamous cell carcinoma	T1b1N0M0	IB1	6
27	58	F	Cervix	squamous cell carcinoma	T1b1N0M0	IB1	6
28	57	F	Cervix	squamous cell carcinoma	T1b1N0M0	IB1	6
29	55	F	Cervix	squamous cell carcinoma	T1b1N0M0	IB1	6
30	35	F	Cervix	squamous cell carcinoma	T1b1N1M0	IIIB	6
31	62	F	Cervix	squamous cell carcinoma	T1b1N0M0	IB1	6
32	64	F	Cervix	squamous cell carcinoma	T1b2N1M0	IIIB	6
33	60	F	Cervix	adenosquamous carcinoma	T1b1N0M0	IB1	6
34	43	F	Cervix	squamous cell carcinoma	T1b1N1M0	IIIB	6
35	68	F	Cervix	squamous cell carcinoma	T1b1N0M0	IB1	6
36	45	F	Cervix	squamous cell carcinoma	T1b2N0M0	IB2	6
37	40	F	Cervix	squamous cell carcinoma	T1b1N0M0	IB1	6
38	58	F	Cervix	adenosquamous carcinoma	T1b1N0M0	IB1	6
39	67	F	Cervix	squamous cell carcinoma	T1b1N0M0	IB1	6
40	48	F	Cervix	squamous cell carcinoma	T1b1N1M0	IIIB	6
41	62	F	Cervix	squamous cell carcinoma	T1b2N1M0	IIIB	6
42	32	F	Cervix	squamous cell carcinoma	T1b1N1M0	IIIB	6
43	55	F	Cervix	squamous cell carcinoma	T2a1N1M0	IIIB	6
44	61	F	Cervix	squamous cell carcinoma	T2bN1M0	IIIB	6
45	34	F	Cervix	adenocarcinoma	T1b2N1M0	IIIB	6
46	53	F	Cervix	squamous cell carcinoma	T1b1N0M0	IB1	6
47	45	F	Cervix	squamous cell carcinoma	T1b1N0M0	IB1	6
48	65	F	Cervix	squamous cell carcinoma	T1b1N0M0	IB1	6
49	47	F	Cervix	squamous cell carcinoma	T1b1N1M0	IIIB	6
50	59	F	Cervix	adenosquamous carcinoma	T1b2N1M0	IIIB	6
51	62	F	Lymph node	metastatic carcinoma of No.41	.	.	6
52	32	F	Lymph node	metastatic carcinoma of No.42	.	.	6
53	55	F	Lymph node	metastatic carcinoma of No.43	.	.	6
54	61	F	Lymph node	metastatic carcinoma of No.44	.	.	6
55	34	F	Lymph node	metastatic carcinoma of No.45	.	.	6
56	53	F	Cervix	normal of No.46	.	.	3
57	45	F	Cervix	normal of No.47	.	.	3
58	65	F	Cervix	normal of No.48	.	.	3
59	47	F	Cervix	normal of No.49	.	.	3
60	.	.	Carbon	.	.	.	.

TNM and Stage: AJCC Cancer Staging Manual (7th Edition)

Tissue type\*: see General information sheet

Supplementary data sheet contains survival data (available by web)

# Patients information of Esophagus cancer tissue microarray



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## CR2 Human, Esophagus cancer

No.	Age	Sex	Organ	Diagnosis	pTNM	Stage	Tissue type <sup>*</sup>
1	58	M	Esophagus	basaloid carcinoma	T3N0M0	II B	6
2	54	M	Esophagus	squamous cell carcinoma, moderately differentiated	T2N3M0	III C	6
3	57	M	Esophagus	squamous cell carcinoma, poorly differentiated	T3N2M0	III B	6
4	75	M	Esophagus	squamous cell carcinoma	T3N1M0	III A	6
5	46	M	Esophagus	squamous cell carcinoma, well differentiated	T3N1M0	III A	6
6	58	M	Esophagus	squamous cell carcinoma, moderately differentiated	T3N2M0	III B	6
7	70	M	Esophagus	squamous cell carcinoma, moderately differentiated	T3N2M0	III B	6
8	66	M	Esophagus	squamous cell carcinoma, moderately differentiated	T3N0M0	II B	6
9	53	M	Esophagus	small cell carcinoma	T2N2M0	III A	6
10	67	M	Esophagus	squamous cell carcinoma, well differentiated	T3N0M0	II A	6
11	60	F	Esophagus	squamous cell carcinoma, well differentiated	T3N0M0	I B	6
12	69	M	Esophagus	squamous cell carcinoma, well differentiated	T3N0M0	II A	6
13	62	M	Esophagus	squamous cell carcinoma, moderately differentiated	T3N0M0	II B	6
14	57	M	Esophagus	squamous cell carcinoma, well differentiated	T3N1M0	III A	6
15	62	M	Esophagus	squamous cell carcinoma, well differentiated	T3N0M0	II A	6
16	36	F	Esophagus	adenocarcinoma, well differentiated	T1bN0M0	I A	6
17	60	M	Esophagus	squamous cell carcinoma, well differentiated	T3N0M0	I B	6
18	50	M	Esophagus	squamous cell carcinoma, moderately differentiated	T3N0M0	II A	6
19	60	F	Esophagus	squamous cell carcinoma, moderately differentiated	T3N1M0	III A	6
20	57	M	Esophagus	squamous cell carcinoma, moderately differentiated	T3N2M0	III B	6
21	58	M	Esophagus	squamous cell carcinoma, well differentiated	T3N2M0	III B	6
22	74	M	Esophagus	squamous cell carcinoma, moderately differentiated	T3N0M0	II B	6
23	56	F	Esophagus	squamous cell carcinoma, poorly differentiated	T3N2M0	III B	6
24	43	M	Esophagus	squamous cell carcinoma, well differentiated	T3N1M0	III A	6
25	69	M	Esophagus	squamous cell carcinoma, moderately differentiated	T3N2M0	III B	6
26	58	M	Esophagus	squamous cell carcinoma, poorly differentiated	T3N1M0	III A	6
27	62	M	Esophagus	squamous cell carcinoma, well differentiated	T4aN0M0	III A	6
28	63	M	Esophagus	adenosquamous carcinoma	T3N1M0	III A	6
29	56	M	Esophagus	squamous cell carcinoma, well differentiated	T4aN2M0	III C	6
30	59	M	Esophagus	squamous cell carcinoma, moderately differentiated	T3N1M0	III A	6
31	50	M	Esophagus	squamous cell carcinoma, well differentiated	T3N1M0	III A	6
32	52	M	Esophagus	squamous cell carcinoma, well differentiated	T2N2M0	III A	6
33	58	M	Esophagus	squamous cell carcinoma, moderately differentiated	T3N3M0	III C	6
34	64	F	Esophagus	squamous cell carcinoma, moderately differentiated	T3N1M0	III A	6
35	60	M	Esophagus	squamous cell carcinoma, moderately differentiated	T3N1M0	III A	6
36	64	M	Esophagus	squamous cell carcinoma, well differentiated	T3N1M0	III A	6
37	52	M	Esophagus	squamous cell carcinoma, well differentiated	T3N2M0	III B	6
38	45	M	Esophagus	adenosquamous carcinoma	T3N0M0	I B	6
39	46	M	Esophagus	squamous cell carcinoma, well differentiated	T3N0M0	I B	6
40	66	M	Esophagus	squamous cell carcinoma, moderately differentiated	T3N0M0	II B	6
41	69	M	Esophagus	squamous cell carcinoma, moderately differentiated	T3N1M0	III A	6
42	60	M	Esophagus	squamous cell carcinoma, well differentiated	T3N2M0	III B	6
43	62	M	Esophagus	squamous cell carcinoma, well differentiated	T3N1M1	IV	6
44	52	M	Esophagus	squamous cell carcinoma, poorly differentiated	T3N1M0	III A	6
45	59	M	Esophagus	squamous cell carcinoma, moderately differentiated	T3N0M0	II A	6
46	67	M	Esophagus	squamous cell carcinoma, moderately differentiated	T3N1M0	III A	6
47	65	M	Esophagus	adenosquamous cell carcinoma	T4aN0M0	III A	6
48	51	M	Esophagus	adenosquamous cell carcinoma, moderately differentiated	T3N0M0	II B	6
49	47	M	Esophagus	squamous cell carcinoma, well differentiated	T3N2M0	III B	6
50	42	M	Esophagus	squamous cell carcinoma, moderately differentiated	T3N3M1	IV	6
51	66	M	Esophagus	squamous cell carcinoma, poorly differentiated	T3N1M0	III A	6
52	53	M	Esophagus	adenocarcinoma, moderately differentiated	T3N2M0	III B	6
53	59	M	Esophagus	squamous cell carcinoma, well differentiated	T3N2M0	III B	6
54	59	M	Esophagus	squamous cell carcinoma, moderately differentiated	T3N1M0	III A	6
55	50	M	Esophagus	squamous cell carcinoma, moderately differentiated	T3N1M0	III A	6
56	42	M	Esophagus	squamous cell carcinoma, moderately differentiated	T3N0M0	II A	6
57	69	M	Esophagus	adenocarcinoma, poorly differentiated	T3N3M0	III C	6
58	54	M	Esophagus	squamous cell carcinoma, moderately differentiated	T3N0M0	II A	6
59	70	M	Esophagus	squamous cell carcinoma, moderately differentiated	T2N1M0	II B	6
60	68	M	Esophagus	squamous cell carcinoma, well differentiated	T3N2M0	III B	6

TNM and Stage: AJCC Cancer Staging Manual (7th Edition)

Tissue type<sup>\*</sup>: see General information sheet

Supplementary data sheet contains survival data (available by web)



# Patients information of Osteosarcoma tissue microarray



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 www.tissue-array.com info@tissue-array.com

## CV2 Human, Osteosarcoma

No.	Age	Sex	Organ	Diagnosis	Tissue type
1	24	M	Bone, femur	osteosarcoma, osteoblastic type	6
2	17	F	Bone, femur	osteosarcoma	6
3	16	M	Bone, femur	osteosarcoma	6
4	23	M	Bone	osteosarcoma	6
5	14	F	Bone, femur	osteosarcoma	6
6	37	M	Bone, pelvis	osteosarcoma	6
7	17	M	Bone, pelvis	osteosarcoma, chondroblastic type	6
8	20	M	Bone, femur	osteosarcoma, chondroblastic type	6
9	20	M	Bone, ilium	osteosarcoma, chondroblastic type	6
10	18	M	Bone, femur	osteosarcoma, chondroblastic type	6
11	17	M	Bone, tibia	osteosarcoma, osteoblastic type	6
12	20	M	Knee	osteosarcoma, osteoblastic type	6
13	35	F	Bone, humerus	osteosarcoma	6
14	44	F	Hip	osteosarcoma	6
15	19	M	Bone, femur	osteosarcoma, osteoblastic type	6
16	44	F	Bone, femur	osteosarcoma	6
17	19	M	Bone, femur	osteosarcoma, osteoblastic type	6
18	16	M	Leg	osteosarcoma, chondroblastic type	6
19	18	M	Bone, femur	osteosarcoma, telangiectatic type	6
20	10	M	Bone, femur	osteosarcoma, osteoblastic type	6
21	10	M	Bone, femur	osteosarcoma, osteoblastic type	6
22	10	M	Bone, femur	osteosarcoma, osteoblastic type	6
23	11	F	Bone, femur	osteosarcoma, osteoblastic type	6
24	11	M	Bone, femur	osteosarcoma, osteoblastic type	6
25	19	M	Bone, femur	osteosarcoma	6
26	19	M	Bone, femur	osteosarcoma	6
27	10	M	Bone, femur	osteosarcoma, osteoblastic type	6
28	10	M	Bone, femur	osteosarcoma, osteoblastic type	6
29	14	M	Bone, femur	osteosarcoma	6
30	18	M	Bone, mandible	osteosarcoma	6
31	13	M	Bone, femur	osteosarcoma	6
32	14	M	Bone, femur	osteosarcoma, osteoblastic type	6
33	9	M	Bone, femur	osteosarcoma	6
34	12	F	Bone, tibia	osteosarcoma, chondroblastic type	6
35	9	F	Bone, tibia	osteosarcoma, chondroblastic type	6
36	5	M	Bone, femur	osteosarcoma	6
37	11	M	Bone, fibula	osteosarcoma, chondroblastic type	6
38	11	M	Bone, fibula	osteosarcoma, chondroblastic type	6
39	11	M	Bone, tibia	osteosarcoma	6
40	11	M	Bone, tibia	osteosarcoma	6
41	38	M	Mediastinum	extraskelatal osteosarcoma	6
42	34	F	Lung	metastatic osteosarcoma, chondroblastic type	6
43	24	F	Bone, tibia and fibula	osteosarcoma, osteoblastic type	6
44	26	M	Bone, calcaneus	osteosarcoma, osteoblastic type	6
45	22	M	Bone, humerus	osteosarcoma, osteoblastic type	6
46	18	M	Bone, femur	osteosarcoma, osteoblastic type	6
47	22	M	Bone, tibia and fibula	osteosarcoma, osteoblastic type	6
48	20	F	Bone, tibia	osteosarcoma, osteoblastic type	6
49	22	M	Bone, humerus	osteosarcoma, osteoblastic type	6
50	24	M	Soft tissue, popliteal fossa	synovial sarcoma	6
51	23	M	Bone, humerus	osteosarcoma	6
52	17	F	Bone, tibia	osteosarcoma, fibroblastic type	6
53	16	F	Bone, femur	osteosarcoma	6
54	20	F	Bone, femur	osteosarcoma, osteoblastic type	6
55	27	M	Bone, femur	osteosarcoma, osteoblastic type	6
56	59	M	Mandible	extraskelatal osteosarcoma	6
57	29	M	Soft tissue	granulation tissue	1
58	31	F	Bone, tibia	osteosarcoma, osteoblastic type	6
59	39	M	Bone, femur	osteosarcoma, osteoblastic type	6
60	61	F	Bone, ilium	radiation-induced sarcoma	6

**ab178122 –  
Colon cancer tissue array  
paired with normal tissues in  
triplicates, 126 samples  
(1.5mm), set 1**

**Instructions for Use**

Designed for normal vs cancer IHC or ISH based protein or RNA tissue profiling in colon cancers.

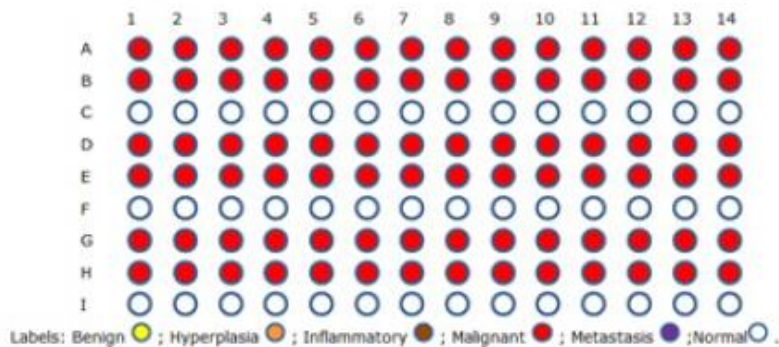
This product is for research use only and is not intended for diagnostic use.

**Product Overview:**

ab178122 is a colon paired cancer/normal tissue array, set 1, 42 cases, 126 cores, non-overlapping with ab178123, one normal paired with two tumor tissue cores from each patient.

Case:	42
Core:	126
Format:	9 rows x 14 columns
Size:	1.5mm
Thickness:	4µm

All the tissues were fixed in 10% neutral buffered formalin for 24 hours and processed using identical SOPs. Sections were picked onto Superfrost Plus or Startfrost Adhesive slides. There may be >5% tissue core losses for a slide. But retention rate should be >90%.



**Notes for use:**

Bake the slides at 60°C for 30 minutes before use. If antigen retrieval is needed, it is always a good idea to start with a protocol with weak to mild strength.

For hints and tips on Immunohistochemistry as well as other techniques please visit [www.abcam.com/protocols](http://www.abcam.com/protocols).

Keep up to date on Abcam events and conferences on Facebook & Twitter.