

Supplementary

Table S1 Clinical and radiographic factors of Krukenberg tumors from colorectal cancer or gastric cancer

Variables	Levels	Colorectal (n=104)	Gastric (n=45)	P value
Bilateral ovarian metastases (%)	No	54 (58.7)	15 (45.5)	0.27
	Yes	38 (41.3)	18 (54.5)	
Size of left ovarian metastasis, cm, median (IQR)		6.1 (4.1, 10.2)	6.4 (4.3, 7.4)	0.73
Size of right ovarian metastasis, cm, median (IQR)		7.8 (5.3, 12.7)	6.4 (4.1, 9.0)	0.11
Metastasis at distant sites other than peritoneum (%)	No	49 (57.6)	16 (57.1)	1.00
	Yes	36 (42.4)	12 (42.9)	
Peritoneal metastasis (%)	No	47 (55.3)	13 (44.8)	0.45
	Yes	38 (44.7)	16 (55.2)	
Lymph node metastasis (%)	No	58 (71.6)	17 (60.7)	0.40
	Yes	23 (28.4)	11 (39.3)	
Ascites (%)	No	51 (63.7)	10 (33.3)	0.008
	Yes	29 (36.2)	20 (66.7)	
Radiographic diagnosis (%)	Either Krukenberg tumor or primary ovarian cancer	20 (24.7)	7 (25.0)	0.35
	Krukenberg tumor	30 (37.0)	15 (53.6)	
	Neither Krukenberg tumor nor primary ovarian cancer	8 (9.9)	1 (3.6)	
	Primary ovarian cancer	23 (28.4)	5 (17.9)	
Cystic or solid (%)	Both	32 (40.0)	4 (13.8)	<0.001
	Cystic	33 (41.2)	6 (20.7)	
	Solid	15 (18.8)	19 (65.5)	
Types of Krukenberg tumors (%)	Metachronous	60 (57.7)	18 (40.0)	0.052
	Synchronous	44 (42.3)	27 (60.0)	

IQR, interquartile range.

Table S2 Survival analysis of patients with Krukenberg tumors from colorectal cancer for progression-free survival

Variables	Levels	HR (95% CI, P value)	
		Univariate	Multivariable
Grade	1/2	–	–
	3/4	0.87 (0.52–1.44, 0.58)	–
Signet ring	No	–	–
	Yes	0.60 (0.24–1.52, 0.28)	–
Mucinous	No	–	–
	Yes	0.90 (0.48–1.68, 0.73)	–
Resected primary tumor	No	–	–
	Yes	0.59 (0.29–1.21, 0.15)	–
Treatment for Krukenberg tumor	Surgery	–	–
	Medical	2.63 (1.55–4.48, P<0.001)	2.42 (1.07–5.49, 0.035)
KRAS mutation	No	–	–
	Yes	0.77 (0.43–1.39, 0.39)	–
Type of Krukenberg tumor	Metachronous	–	–
	Synchronous	1.10 (0.68–1.79, 0.69)	–
Bilateral ovarian metastases	No	–	–
	Yes	1.75 (1.05–2.93, 0.032)	0.58 (0.22–1.51, 0.26)
Metastasis at distant sites other than peritoneum	No	–	–
	Yes	1.92 (1.11–3.31, 0.019)	1.78 (0.71–4.44, 0.22)
Peritoneal metastasis	No	–	–
	Yes	1.97 (1.15–3.37, 0.013)	3.21 (1.22–8.45, 0.018)
Lymph node metastasis	No	–	–
	Yes	1.66 (0.92–3.00, 0.092)	–
Ascites	No	–	–
	Yes	1.27 (0.74–2.18, 0.38)	–
Age, per 10-year increase		0.98 (0.81–1.18, 0.82)	–
CEA, per 10 ng/mL increase		1.02 (1.00–1.04, 0.013)	1.02 (1.00–1.04, 0.056)
Size of left ovarian metastasis, per 10-cm increase		0.47 (0.24–0.89, 0.021)	0.35 (0.16–0.80, 0.012)
Size of right ovarian metastasis, per 10-cm increase		0.74 (0.36–1.50, 0.406)	–

HR, hazard ratio; CI, confidence interval; CEA, carcinoembryonic antigen.

Table S3 Survival analysis of patients with Krukenberg tumors from colorectal cancer for overall survival

Variables	Levels	HR (95% CI, P value)	
		Univariate	Multivariable
Grade	1/2	–	–
	3/4	1.01 (0.57–1.78, 0.98)	–
Signet ring	No	–	–
	Yes	1.83 (0.82–4.10, 0.14)	–
Mucinous	No	–	–
	Yes	0.79 (0.40–1.57, 0.50)	–
Resected primary tumor	No	–	–
	Yes	0.40 (0.19–0.84, 0.015)	0.84 (0.22–3.16, 0.80)
Treatment for Krukenberg tumor	Surgery	–	–
	Medical	2.04 (1.14–3.67, 0.017)	1.04 (0.41–2.64, 0.94)
KRAS mutation	No	–	–
	Yes	0.67 (0.34–1.32, 0.25)	–
Type of Krukenberg tumor	Metachronous	–	–
	Synchronous	0.78 (0.46–1.33, 0.36)	–
Bilateral ovarian metastases	No	–	–
	Yes	2.64 (1.51–4.60, 0.001)	1.74 (0.77–3.94, 0.18)
Metastasis at distant sites other than peritoneum	No	–	–
	Yes	1.86 (1.05–3.30, 0.033)	1.38 (0.62–3.07, 0.43)
Peritoneal metastasis	No	–	–
	Yes	2.08 (1.18–3.69, 0.012)	1.29 (0.57–2.94, 0.54)
Lymph node metastasis	No	–	–
	Yes	2.32 (1.20–4.49, 0.012)	2.01 (0.79–5.12, 0.14)
Ascites	No	–	–
	Yes	1.29 (0.73–2.30, 0.38)	–
Age, per 10-year increase		1.03 (0.83–1.27, 0.82)	–
CEA, per 10 ng/mL increase		1.01 (1.00–1.02, 0.002)	1.01 (0.99–1.03, 0.26)
Size of left ovarian metastasis, per 10-cm increase		0.54 (0.29–1.03, 0.06)	–
Size of right ovarian metastasis, per 10-cm increase		1.07 (0.53–2.16, 0.85)	–

HR, hazard ratio; CI, confidence interval; CEA, carcinoembryonic antigen.