

**Supplementary Table S4A.** MPHOSPH1 expression and clinicopathological variables in SE

Seminoma	MPHOSPH1 expression				<i>P</i> value
	total	High (n = 5)	Low (n = 53)		
Age		37 (26–56)	37.9 (21–65)		0.85
≥pT2	26	2	24		0.82
≥N1	15	1	14		0.51
≥M1	5	0	5		0.71
Tumor marker elevated (any of LDH, AFP, HCG)	32	1	31		0.06
lymphatic permeation	15	0	15		0.17
vascular permeation	23	2	21		0.81
pSTAT3 high expression	22	4 (80%)	18 (34%)		0.04
SOCS3 high expression	30	4	26		0.19

**Supplementary Table S4B.** MPHOSPH1 expression and clinicopathological variables in EC

Embryonal carcinoma	MPHOSPH1 expression				<i>P</i> value
	total	High (n = 16)	Low (n = 2)		
Age		31.8 (21–54)	29.5 (26–33)		0.78
≥pT2	11	10	1		0.59
≥N1	8	7	1		0.52
≥M1	8	8	0		0.18
Tumor marker elevated (any of LDH, AFP, HCG)	16	15	1		0.06
lymphatic permeation	7	6	1		0.73
vascular permeation	9	9	0		0.13
pSTAT3 high expression	10	11	1		0.6
SOCS3 high expression	15	13	2		0.5

**Supplementary Table S4C.** MPHOSPH1 expression and clinicopathological variables in YST

Yolk sac tumor	MPHOSPH1 expression				<i>P</i> value
	total	High (n = 8)	Low (n = 2)		
Age		28.1 (21–45)	38.5 (38–39)		0.15
≥pT2	4	4	0		0.2
≥N1	3	1	2		0.052
≥M1	3	3	0		0.3
Tumor marker elevated (any of LDH, AFP, HCG)	9	7	2		0.6
lymphatic permeation	1	1	0		0.59
vascular permeation	3	3	0		0.3
pSTAT3 high expression	8	7	1		0.23
SOCS3 high expression	6	6	0		0.053

Abbreviations: SE, seminoma; EC, embryonal carcinoma; YST, yolk sac tumor