

Figure S1. Between July 2004 and July 2019, 303 patients underwent esophagectomy in Fukushima Medical University Hospital, Fukushima, Japan. Among them, 106 patients with ESCC who had not received additional preoperative therapy were selected, with the exception of one patient who had no pathological specimen data.

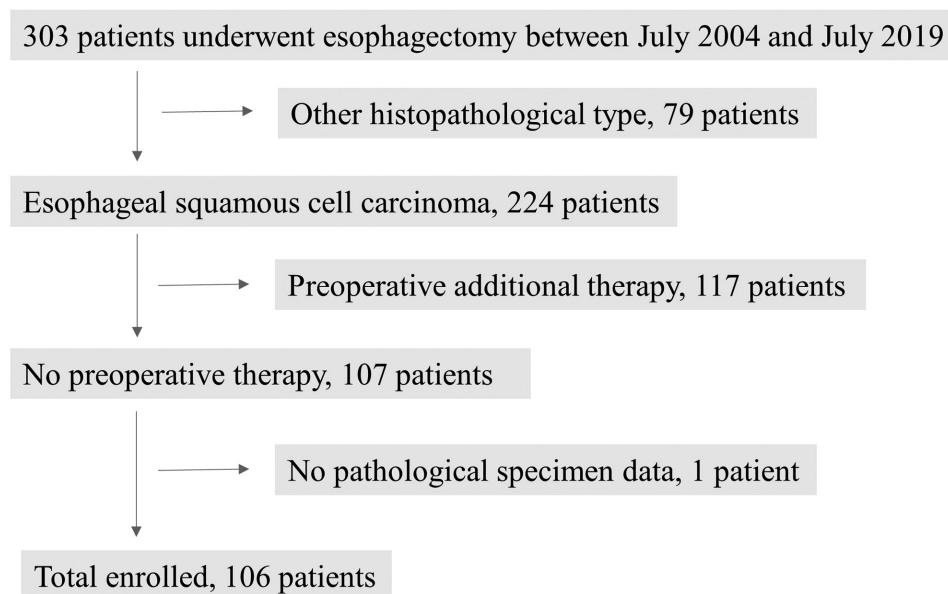
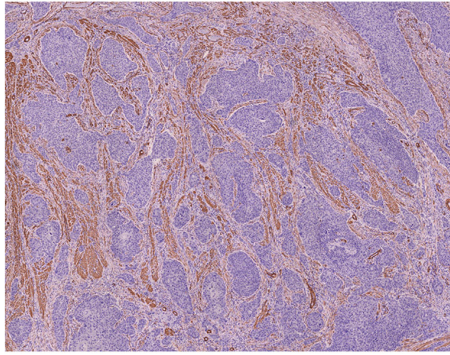
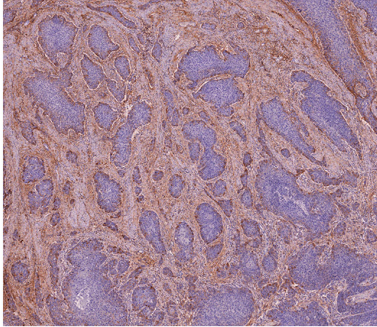


Figure S2. Versican, Periostin and Lumican expression locally matched with α SMA, suggesting that cancer-associated fibroblasts express Versican, Periostin and Lumican. α SMA, α -smooth muscle actin.

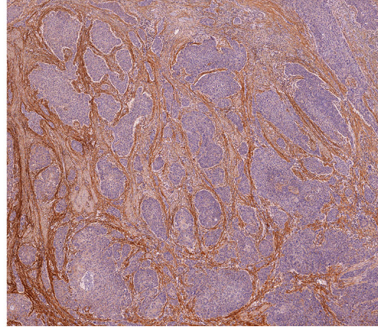
α SMA



Versican



Periostin



Lumican

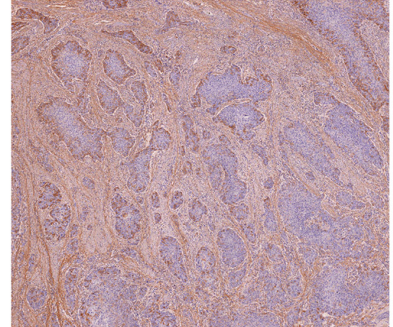


Figure S3. (A) High expression of stromal versican was associated with worse RFS compared with low expression in stage I and III patients. (B) Stromal periostin was not significantly different in stage I, III and IV, while the expression of stromal periostin in stage III was non-significantly associated with a poor prognosis. (C) High expression of stromal lumican was significantly associated with a poor prognosis in stage I patients.

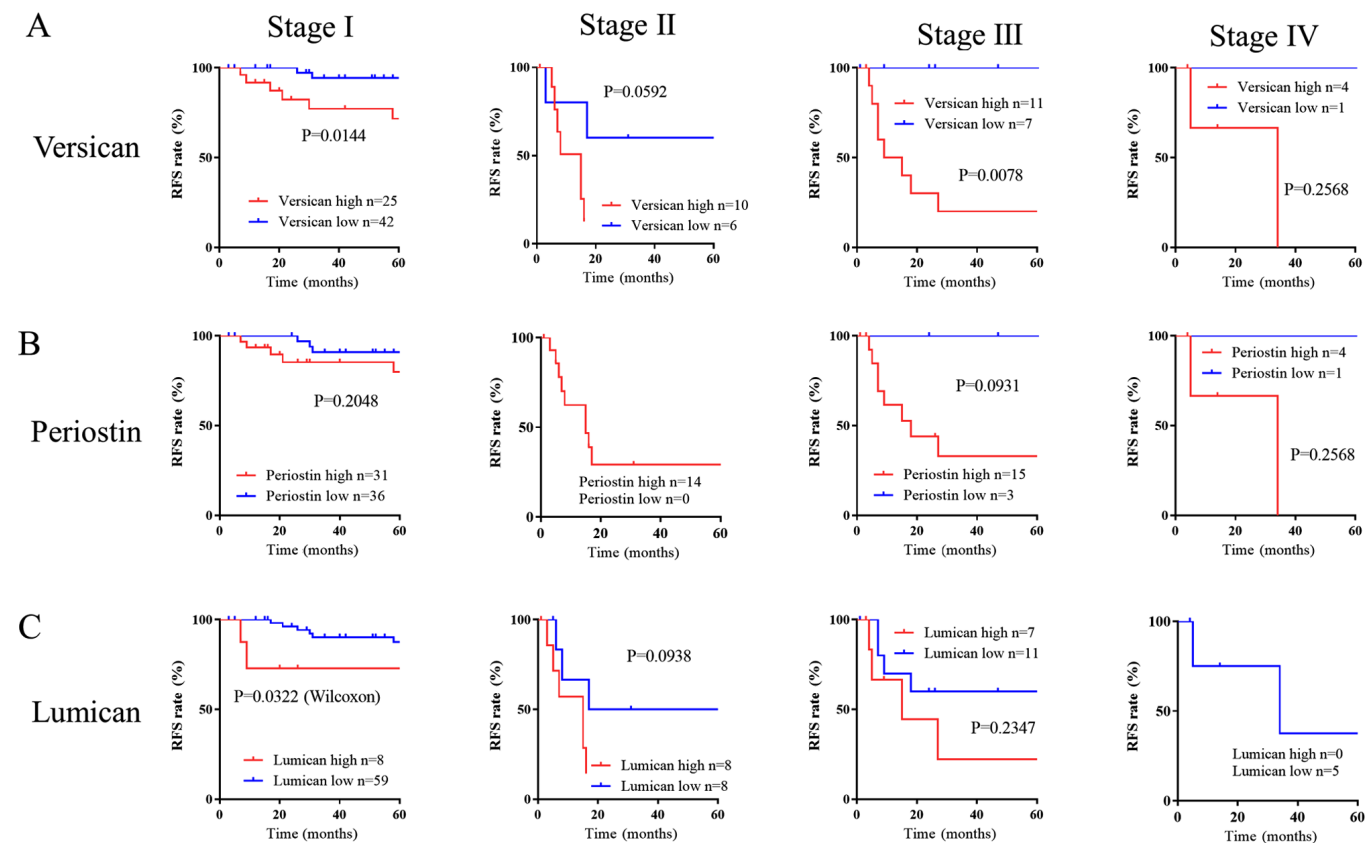


Table SI. Patient characteristics.

Characteristic	Value
Age, years	
Range (mean \pm SD)	37-81 (64.86 \pm 8.55)
≤ 60 , n	32
≥ 61 , n	74
Sex, n	
Male	93
Female	13
Postoperative additional therapy, n	
No	86
Chemotherapy	18
Radiotherapy	2
Chemoradiotherapy	0
Esophageal location, n	
Upper	15
Middle	61
Lower	30
Invasion depth, n	
pT1	74
pT2	13
pT3	18
pT4	1
Lymph node metastasis, n	
Yes	40
No	66
Lymphatic invasion, n	
Yes	49
No	57
Venous invasion, n	
Yes	57
No	49
TNM stage, n	
I	67
II	16
III	18
IV	5

TNM, Tumor-Node-Metastasis.

Table SII. Association between stromal versican, periostin, lumican and α SMA expression.

Expression	α SMA		P-value
	High (n=43)	Low (n=63)	
Versican			<0.0001
High (n=50)	33	17	
Low (n=56)	10	46	
Periostin			<0.0001
High (n=66)	38	28	
Low (n=40)	5	35	
Lumican			0.0454
High (n=23)	14	9	
Low (n=83)	29	54	

α SMA, α -smooth muscle actin.