

Supplementary Table 1. When postoperative complication was categorized into the 5 degrees, the point HRs for Overall survival(OS) and Disease-free survival(DFS) increased from Grade 0 to Grade IV.

Complications	<i>P</i> (OS)	HR(95%CI)	<i>P</i> (DFS)	HR(95%CI)
Grade 0	<0.001		<0.001	
Grade I	<0.001	3.169(2.275-4.415)	<0.001	3.006(2.169-4.166)
Grade II	<0.001	3.275(2.161-4.964)	<0.001	3.066(2.042-4.601)
Grade III	<0.001	5.547(3.340-9.213)	<0.001	5.196(3.133-8.619)
Grade IV	<0.001	5.328(2.889-9.828)	<0.001	4.875(2.648-8.975)

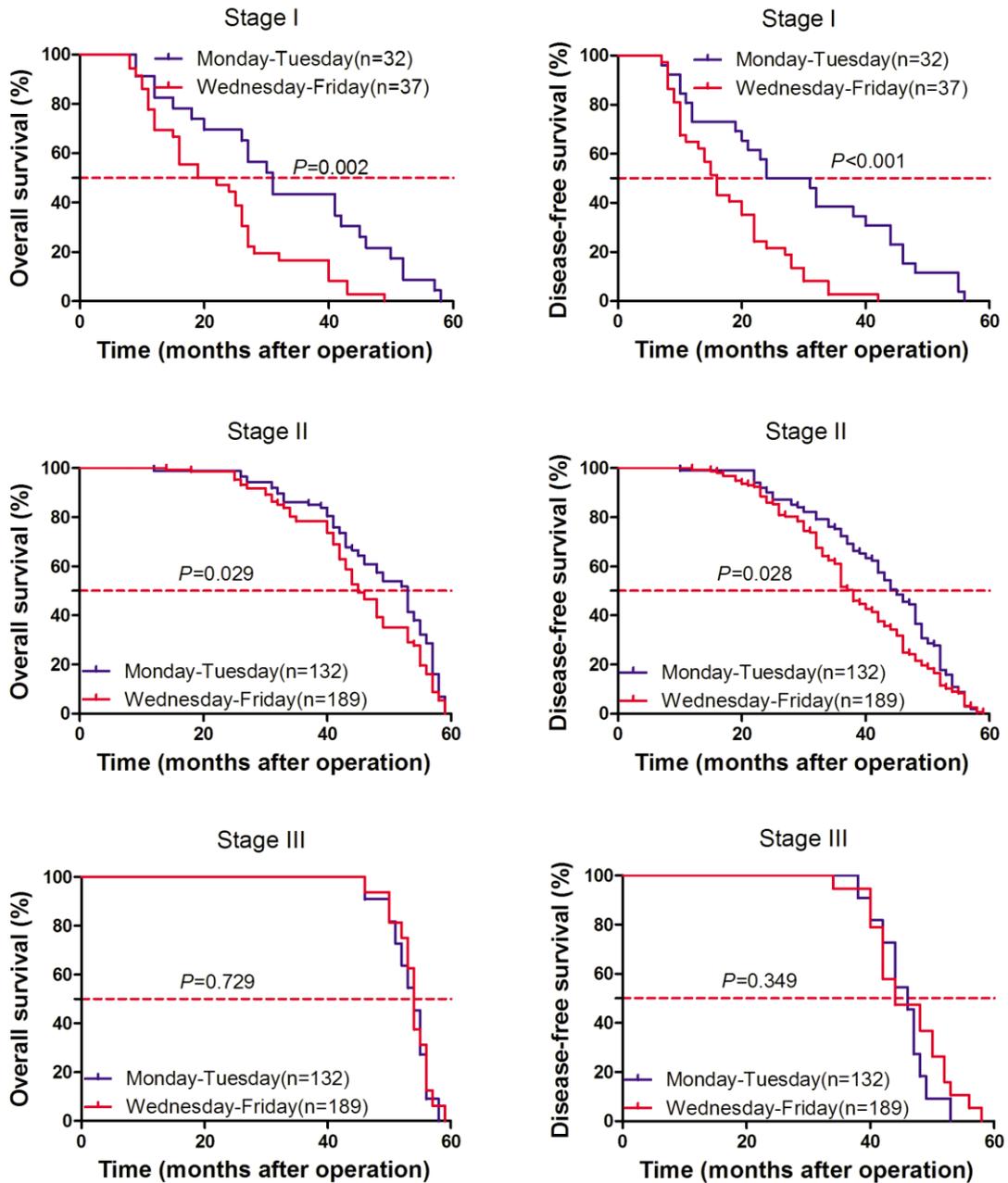
Supplementary Table 2. The effect of weekday of surgery was limited in the group with complications.

Complications	Weekday of surgery	<i>p</i> (OS)	HR(95%CI)	<i>p</i> (DFS)	HR(95%CI)
Without	Monday-Tuesday		1		1
	Wednesday-Friday	0.002	1.521(1.165-1.987)	0.006	1.415(1.102-1.817)
With	Monday-Tuesday		1		1
	Wednesday-Friday	0.208	1.319 (0.857-2.031)	0.188	1.333(0.869-2.045)

Supplementary Table 3. The occurrence of postoperative complications promoted a much shorter survival time regardless of the weekday of surgery.

Weekday of surgery	Complications	<i>p</i> (OS)	HR(95%CI)	<i>p</i> (DFS)	HR(95%CI)
Monday-Tuesday	Without		1		1
	With	<0.001	3.889(2.562-5.903)	<0.001	3.468(2.315-5.194)
Wednesday-Friday	Without		1		1
	With	<0.001	3.304(2.427-4.499)	<0.001	3.139(2.316-4.254)

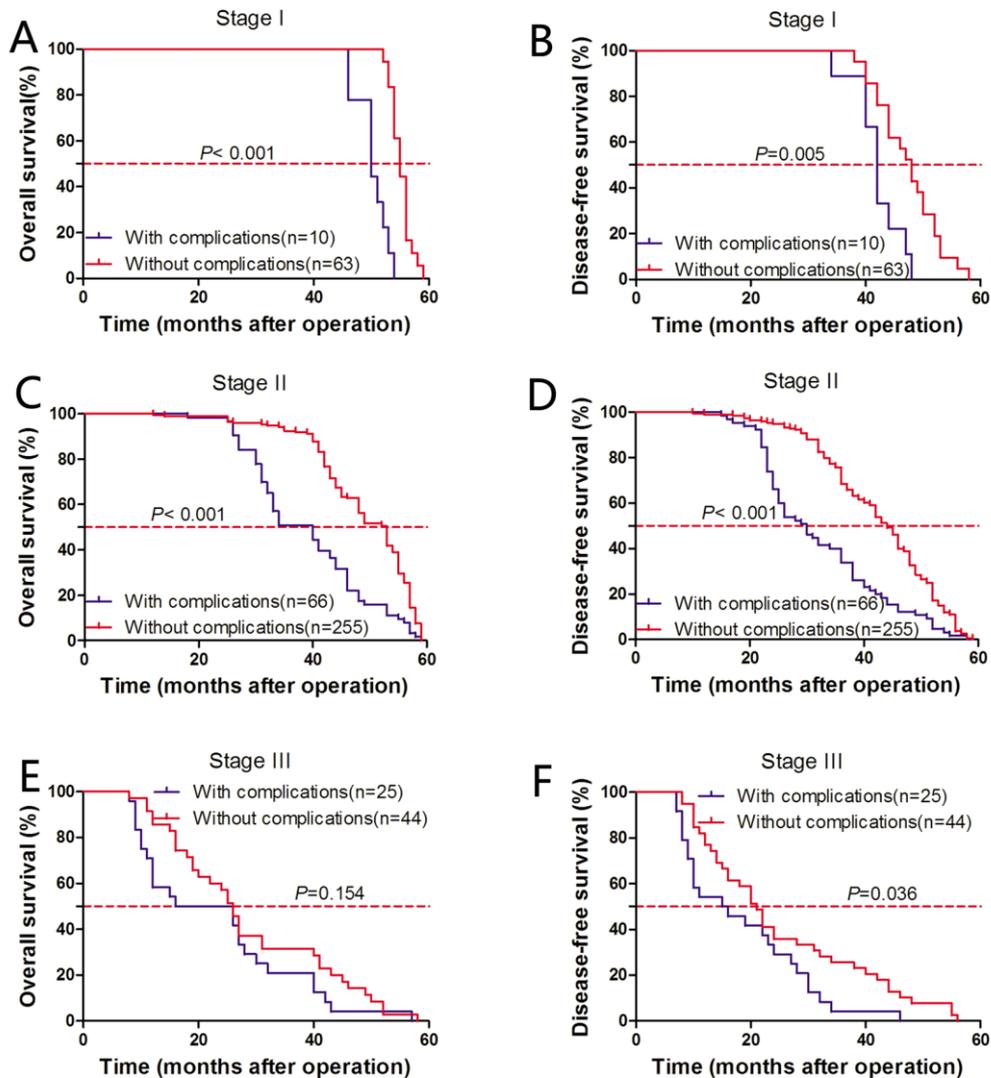
## Supplementary Fig. 1



### Legend for Supplementary Fig. 1

When stratified by the TNM stage, the influence of weekday of surgery was still evident in TNM stage I and II (A-D), but not in stage III (E, F).

## Supplementary Fig. 2



### Legend for Supplementary Fig. 2

The influence of postoperative complications on overall survival and disease-free survival after gastric cancer surgery was displayed when stratified by the TNM stage. The postoperative complications promoted a shorter overall survival time, while increase the relapse rate in TNM stage I and II(A-D). However, the 5-year overall survival rate was not shortened by the postoperative complications (E), while the disease-free survival time was effected significantly (F).