

Table SI. Hierarchical analysis of serum cytokine levels according to surgery in gastric cancer patients.

Cytokines	Serum levels (pg/ml)		Z(P)
	Surgery (n=103)	No surgery (n=39)	
GM-CSF	0.131(0.071,0.197)	0.114(0.067,0.169)	0.587(0.557)
IL-1 α	0.007(0.000,0.665)	0.307(0.000,0.929)	1.448(0.148)
IL-5	0.173(0.000,0.652)	0.282(0.000,0.787)	0.391(0.696)
IL-7	11.686(8.570,15.806)	14.125(8.356,18.817)	1.474(0.140)
IL-12/IL-23P40	157.946(117.766,223.350)	146.887(117.240,183.137)	0.889(0.374)
IL-15	2.559(2.167,2.950)	2.582(2.331,3.049)	0.713(0.476)
IL-16	180.108(123.698,260.773)	223.632(151.109,332.078)	1.926(0.054)
IL-17 α	3.328(2.154,4.917)	3.084(2.111,5.672)	0.197(0.844)
TNF- β	0.182(0.138,0.223)	0.184(0.143,0.215)	0.105(0.916)
VEGF	114.251(74.817,179.548)	159.030(101.031,360.170)	1.861(0.063)
IFN- γ	7.247(5.023,11.202)	7.571(5.732,11.278)	0.448(0.654)
IL-1 β	0.199(0.000,0.890)	0.266(0.000,1.112)	0.021(0.983)
IL-2	0.325(0.185,0.489)	0.268(0.169,0.428)	1.374(0.170)
IL-4	0.006(0.000,0.019)	0.005(0.000,0.019)	0.258(0.797)
IL-6	1.726(0.935,3.346)	1.798(0.858,4.521)	0.329(0.742)
IL-8	99.253(45.316,230.955)	119.492(54.104,377.360)	0.907(0.364)
IL-10	0.520(0.343,0.826)	0.662(0.517,0.942)	1.789(0.074)
IL-12p70	0.192(0.084,0.369)	0.212(0.104,0.416)	0.396(0.692)
IL-13	0.890(0.299,1.415)	0.738(0.276,1.388)	0.598(0.550)
TNF- α	4.388(3.300,5.805)	4.191(3.519,5.782)	0.1670.8680)

The serum concentration of inflammatory cytokines is presented as the Median (P25, P75) pg/ml. For the Z(P) values, a nonparametric test (Mann-Whitney U) was used to compare the differences between the serum levels of the inflammatory cytokines.

IL-, interleukin; TNF- α , tumor necrosis factor- α ; GM-CSF, granulocyte-macrophage colony-stimulating factor; VEGF, vascular endothelial growth factor; IFN- γ , interferon- γ .

Table SII. Hierarchical correlation analysis between serum cytokine levels and gastric cancer pathology.

Cytokines	Lauren Classification			<i>H(P)</i>
	Intestinal type (n=78)	Diffuse type (n=45)	Unknown (n=19)	
GM-CSF	0.123(0.063,0.192)	0.120(0.061,0.175)	0.159(0.092,0.229)	2.069(0.355)
IL-1 α	0.357(0.000,0.598)	0.463(0.000,1.338)	0.000(0.000,0.031)	5.756(0.056)
IL-5	0.176(0.000,0.633)	0.347(0.000,0.887)	0.000(0.000,0.321)	4.185(0.123)
IL-7	12.486(8.276,18.094)	12.594(8.829,16.168)	12.142(9.652,15.580)	0.059(0.971)
IL-12/IL-23P40	152.521(115.288,205.410)	161.912(122.503,221.943)	145.022(128.623,257.947)	0.661(0.719)
IL-15	2.493(2.154,2.921)	2.659(2.257,3.056)	2.743(2.078,3.044)	1.586(0.452)
IL-16	200.431(126.662,278.274)	187.612(125.661,299.185)	209.293(143.073,295.721)	0.061(0.970)
IL-17 α	3.082(2.182,4.421)	3.352(2.176,5.913)	3.287(1.933,7.675)	0.766(0.682)
TNF- β	0.181(0.132,0.217)	0.189(0.147,0.249)	0.175(0.142,0.207)	1.987(0.370)
VEGF	114.246(84.723,182.957)	146.572(68.061,213.410)	146.756(82.913,220.555)	0.396(0.820)
IFN- γ	7.182(5.321,10.973)	6.914(4.961,10.565)	11.703(4.956,15.715)	1.393(0.498)
IL-1 β	0.234(0.000,0.797)	0.250(0.000,1.172)	0.171(0.000,0.680)	0.190(0.910)
IL-2	0.308(0.180,0.482)	0.286(0.153,0.458)	0.297(0.226,0.411)	0.985(0.611)
IL-4	0.008(0.000,0.019)	0.005(0.000,0.024)	0.007(0.000,0.017)	0.313(0.855)
IL-6	1.833(0.898,4.098)	1.432(0.920,2.436)	2.369(1.136,4.521)	2.470(0.291)
IL-8	101.561(49.222,253.142)	101.735(46.640,290.252)	162.724(41.657,219.404)	0.550(0.760)
IL-10	0.531(0.401,0.834)	0.589(0.325,1.041)	0.662(0.425,0.827)	0.673(0.714)
IL-12p70	0.184(0.089,0.356)	0.208(0.090,0.387)	0.264(0.084,0.416)	0.352(0.838)
IL-13	0.869(0.454,1.264)	0.764(0.099,1.514)	1.117(0.095,1.388)	0.640(0.726)
TNF- α	4.204(3.289,5.693)	4.411(3.433,5.754)	4.501(3.583,5.807)	0.658(0.720)

The serum concentration of inflammatory cytokines is presented as the Median (P25, P75) pg/ml. For the *H(P)* values a nonparametric test (Kruskal-Wallis H) was used to compare the differences between the serum levels of inflammatory cytokines. IL-, interleukin; TNF- α , tumor necrosis factor- α ; GM-CSF, granulocyte-macrophage colony-stimulating factor; VEGF, vascular endothelial growth factor; IFN- γ , interferon- γ .

Table SIII. Differences in the lifestyle factor scores between GC patients and healthy controls.

Variable	Median (Q25,Q75)	
	Controls (n=97)	GC patients (n=140)
The integral scores of lifestyle factors	-3(-5,-3)	-1(-3,1)
Z(P)	7.885(<0.001)	

Based on the present and previous results (12), five common lifestyle factors (eating fried and salty foods, eating quickly, smoking, and drinking alcohol) were regarded as risky lifestyle factors, while eating fresh fruits was regarded as a protective lifestyle factor. The protective lifestyle factor was marked as -1 point, the risky lifestyle factors were marked as 1 point, and all participants were scored according to these lifestyle factors. A nonparametric test (Mann-Whitney U) was conducted to present the differences in the integral scores of lifestyle factors between the GC patients and healthy controls. GC, gastric cancer.