## ALDH2 in gastric cancer

**Supplementary Table 1.** The univariable analysis of the clinical features relevant to survival

Characteristics	Total(N)	Univariate analysis	
		Hazard ratio (95% CI)	P value
Age	367		
≤65	163	/	
>65	204	1.620 (1.154-2.276)	0.005**
Pathologic stage	347		
Stage 1	50	/	
Stage 2	110	1.551 (0.782-3.078)	0.209
Stage 3	149	2.381 (1.256-4.515)	0.008**
Stage 4	38	3.991 (1.944-8.192)	<0.001***
Gender	370		
Female	133	/	
Male	237	1.267 (0.891-1.804)	0.188
T stage	362		
T1	18	/	
T2	78	6.725 (0.913-49.524)	0.061
T3	167	9.548 (1.326-68.748)	0.025*
T4	99	9.634 (1.323-70.151)	0.025*
N stage	352		
NO	107	/	
N1	97	1.629 (1.001-2.649)	0.049*
N2	74	1.655 (0.979-2.797)	0.060
N3	74	2.709 (1.669-4.396)	<0.001***
M stage	352		
MO	327	/	
M1	25	2.254 (1.295-3.924)	0.004**

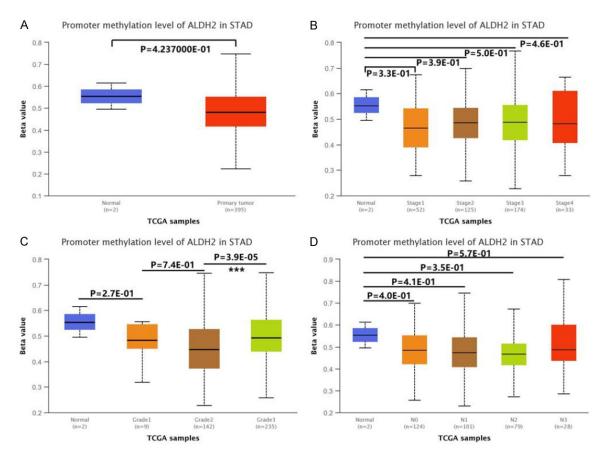
Note: \*P<0.05, \*\*P<0.01, \*\*\*P<0.001.

### ALDH2 in gastric cancer



Supplementary Figure 1. The DNA methylation and expression of ALDH2 in gastric cancer.

#### ALDH2 in gastric cancer



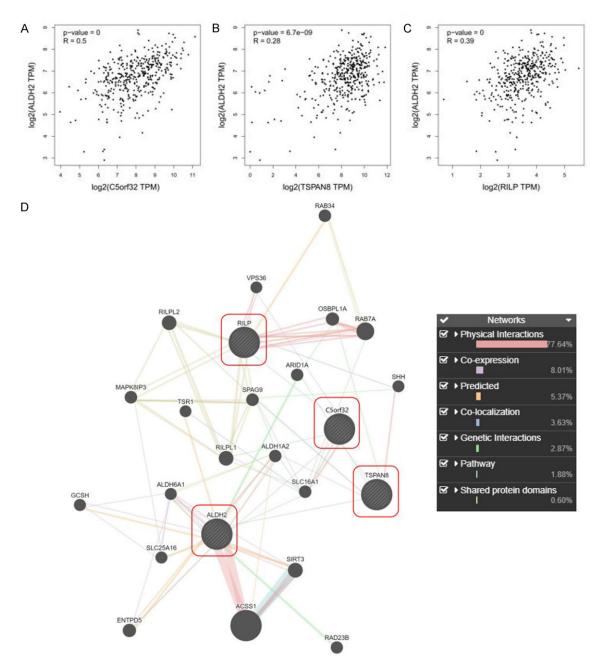
Supplementary Figure 2. The methylation of ALDH2 in gastric cancer. A. The methylation level of ALDH2 in gastric cancer sorted by tissue type. B. The methylation level of ALDH2 in gastric cancer sorted by tumor stage. C. The methylation level of ALDH2 in gastric cancer sorted by tumor grade. D. The methylation level of ALDH2 in gastric cancer sorted by nodal metastasis status.

#### Cox Proportional Hazard Model:

```
Model: Surv(STAD) ~ Age + Gender + Race + Purity + Stage + B cell + CD4 Tcell + CD8 Tcell + Neutrophil + Macrophage + Dendritic + ALDH2
278 patients with 104 dying
                                      95%CI_u p.value sig
1.060 0.000 ***
             coef
                        HR 95%CI_1
                     1.038
            0.038
                             1.017
gendermale
            0.236
                                        1.964
                                                0.293
raceBlack
            0.545
                     1.724
                             0.686
                                        4.334
                                                9.247
raceWhite
                             0.763
                                        2.253
            0.271
                                                0.326
                     1.311
Purity
            -0.507
                     0.602
                             0.268
                                        1.355
                                                0.221
stage2
            0.748
                     2.114
                             0.927
                                        4.822
                                                0.075
                     2.963
stage3
stage4
            1.476
                     4.376
                             1.521
                                       12.592
                                                0.006
            4.958
                   142.297
                                                0.048
B_cell
                             1.045
                                    19383.496
CD8_Tcell
           -0.799
                     0.450
                             0.020
                                       10.069
                                                9.614
Neutrophil -2.763
                     0.063
                             0.000
                                      124.898
                                                0.476
           7.762 2348.528
Dendritic 0.831
                    2.297
                            0.118
                                       44.690
                                                0.583
Rsquare= 0.137 (max possible= 9.76e-01 )
Likelihood ratio test p= 3.26e-04
Wald test p= 2.55e-04
Score (logrank) test p= 1.24e-04
```

Supplementary Figure 3. Full result of multivariable cox analysis.

# TCGA-STAD Tumor



Supplementary Figure 4. The relationship between ALDH2 and C5orf32, TSPAN8, RILP.