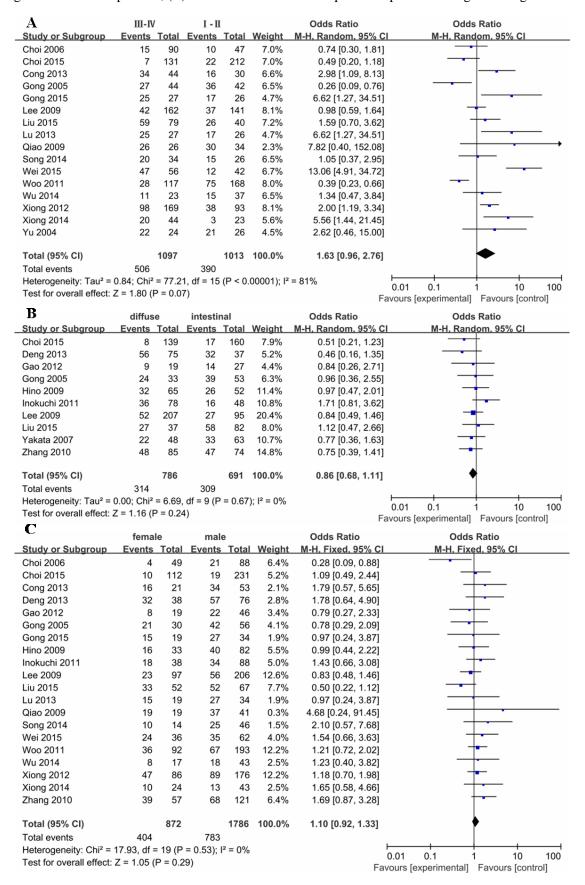
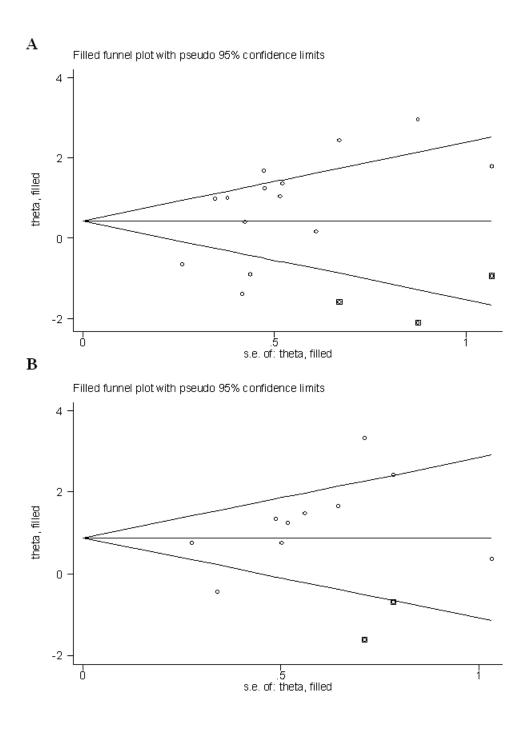
**Supplemental Figure 1** Forest plots of odds ratios (OR). (A) OR for the association of p-stat3 expression and TNM stage in gastric carcinoma patients; (B) OR for the association of p-stat3 expression and Lauren's classification in gastric carcinoma patients, (C) OR for the association of p-stat3 expression and gender in gastric carcinoma patients.



**Supplemental Figure 2** Filled funnel plot with pseudo 95% confidence limits. (A) Combined estimates for the association between p-stat3 expression and lymph node metastasis after trim-fill treatment; (B) Combined estimates for the association between p-stat3 expression and tumor differentiation after trim-fill treatment.



Supplemental Table 1 Sensitivity analysis for p-stat3 expression with overall survival

Study omitted	HR (95% CI)
Deng 2010	1.85 [1.42, 2.40]
Deng 2013	1.98 [1.42, 2.76]
Gong 2005	2.00 [1.45, 2.77]
Inokuchi 2011	2.03 [1.46, 2.81]
Lee 2009	2.12 [1.50, 2.99]
Liu 2015	1.95 [1.41, 2.71]
Song 2014	1.98 [1.42, 2.75]
Woo 2011	2.19 [1.75, 2.73]
Wu 2014	2.05 [1.49, 2.82]
Xiong 2012	2.03 [1.41, 2.92]
Yakata 2007	2.03 [1.47, 2.80]
Combined	2.02 [1.49, 2.73]

Supplemental Table 2 Sensitivity analysis for p-stat3 expression with tumor differentiation

Study omitted	OR (95% CI)
Choi 2006	3.60 [1.84, 7.03]
Cong 2013	3.02 [1.71, 5.34]
Gong 2015	3.38 [1.78, 6.40]
Liu 2015	3.76 [1.89, 7.52]
Lu 2013	3.38 [1.78, 6.40]
Qiao 2009	3.93 [2.04, 7.58]
Song 2014	3.66 [1.85, 7.23]
Wei 2015	3.73 [1.86, 7.45]
Xiong 2012	4.08 [1.92, 8.67]
Yakata 2007	3.98 [1.98, 7.97]
Zhang 2010	4.42 [2.66, 7.33]
Combined	3.70 [1.98, 6.93]

## Supplemental Table 3 Sensitivity analysis for p-stat3 expression with lymph node metastasis

Study omitted	OR (95% CI)
Choi 2015	2.75 [1.44, 5.23]
Cong 2013	2.32 [1.20, 4.50]
Deng 2013	2.34 [1.20, 4.56]
Gao 2012	2.53 [1.30, 4.92]
Gong 2015	2.13 [1.14, 3.99]
Hino 2009	2.82 [1.54, 5.17]
Inokuchi 2011	2.40 [1.21, 4.74]
Liu 2015	2.51 [1.27, 4.97]
Lu 2013	2.13 [1.14, 3.99]
Qiao 2009	2.30 [1.21, 4.39]
Song 2014	2.15 [1.14, 4.04]
Wei 2015	2.38 [1.22, 4.64]
Woo 2011	2.71 [1.44, 5.10]
Yakata 2007	2.25 [1.17, 4.31]
Zhang 2010	2.40 [1.21, 4.77]
Combined	2.40 [1.28, 4.50]

**Supplemental Table 4** Explore the source of publication bias for p-stat3 expression with lymph node metastasis by omitting studies one by one.

Study omitted	P value
Choi 2015	0.009
Cong 2013	0.018
Deng 2013	0.016
Gao 2012	0.01
Gong 2015	0.029
Hino 2009	0.005
Inokuchi 2011	0.01
Liu 2015	0.016
Lu 2013	0.029
Qiao 2009	0.012
Song 2014	0.025
Wei 2015	0.017
Woo 2011	0.083
Yakata 2007	0.014
Zhang 2010	0.007