

Three-dimensional combined biomarkers assay could improve diagnostic accuracy for gastric cancer

Liping Sun^{1*}, Huakang Tu^{1,2*}, Tiejun Chen^{1,3}, Quan Yuan^{1,4}, Jingwei Liu¹,
Nannan Dong¹, Yuan Yuan^{1#}

Supplementary table 1. Selected demographic characteristics and serum biomarker levels
in atrophic gastritis and controls

factor	Controls (n=663)	Atrophic gastritis (n=663)	<i>P</i> -value ^a
Age (years, mean ± SD)	54.3±9.0	55.0±9.9	0.190
Gender			
Male	328(49.5%)	328(49.5%)	1.000
Female	335(50.5%)	335(50.5%)	
PGI (ng/mL)	94.1±51.9	102.4±59.2	0.007
PGII (ng/mL)	9.3±10.8	15.2±11.4	<0.001
PGI/II	13.3±6.8	8.9±6.1	<0.001
HpAb (EIU)	20±23.1	50.7±37.4	<0.001
OPN (ng/mL)	2.1±1.9	2.4±2.2	0.002

^a*P*-value: atrophic gastritis vs controls.

Supplementary table 2. diagnostic efficacy of PGI/II, HpAb, OPN individually and combined for atrophic gastritis detection

Biomarker	cutoff	Sensitivity (%)	Specificity (%)	YD
PGI/II	7.0	48.3	85.3	0.336
HpAb (EIU)	33.9	59.3	81.9	0.412
OPN (ng/ml)	1.2	70.2	42.4	0.126
PGI/II- HpAb	0.477	70.0	75.7	0.457
OPN- HpAb	0.392	70.0	69.1	0.391
PGI/II-OPN	0.407	70.0	66.2	0.362
PGI/II-OPN-HpAb	0.411	70.0	72.9	0.429

^aThe cutoff value was selected as the diagnosis point of Sen>70% and the highest Sep.