S1 Table. Characteristics of the study subjects at baseline according to metachronous recurrence (n=124)

| Variables | Metachronous recurrence (n=124) | p-value |
|-----------|---------------------------------|---------|
|           | No (n=104)                      | Yes (n=20) |       |
| Age (yr)  | 61.8±8.5                        | 63.6±6.6 | 0.385 |
| Male sex  | 70 (67.3)                       | 13 (65.0) | 0.841 |
| Follow-up duration (day) | 1,601.5±429.2 | 1,051.2±620.6 | < 0.001<sup>a</sup> |
| No. of endoscopic follow-up | 5.5±2.2 | 3.8±2.0 | 0.002<sup>a</sup> |
| *Helicobacter pylori* positive | 38 (36.9) | 5 (25.0) | 0.307 |
| Current or ex-smoker (n=120) | 47 (46.5) | 8 (42.1) | 0.842 |
| Current or ex-drinker (n=120) | 53 (52.5) | 10 (52.6) | 0.996 |
| Family history of GC in 1° relatives (n=120) | 20 (19.8) | 2 (10.5) | 0.338 |
| Body mass index (kg/m<sup>2</sup>) | 24.3±3.3 | 24.2±3.3 | 0.849 |
| Education (n=120) | | | |
| Elementary-Middle-High | 56 (63.6) | 6 (46.2) | 0.227 |
| University | 32 (36.4) | 7 (53.8) | |
| Pathology of initial lesion | | | |
| Low-grade dysplasia | 28(26.9) | 8 (40.0) | < 0.001<sup>a</sup> |
| High-grade dysplasia | 3 (2.9) | 5 (25.0) | |
| Adenocarcinoma | 73 (70.2) | 7 (35.0) | |
| OLGA stage (n=47) | | | |
| Stage 0 | 8 (20.0) | 1 (14.3) | 0.714 |
| Stage 1 | 8 (20.0) | 3 (42.9) | |
| Stage 2 | 10 (25.0) | 1 (14.3) | |
| Stage 3 | 10 (25.0) | 1 (14.3) | |
| Stage 4 | 4 (10.0) | 1 (14.3) | |
| OLGIM stage (n=121) | | | |
| Stage 0 | 17 (16.8) | 1 (5.0) | 0.571 |
| Stage 1 | 18 (17.8) | 5 (25.0) | |
| Stage 2 | 34 (33.7) | 6 (30.0) | |
| Stage 3 | 20 (19.8) | 4 (20.0) | |
| Stage 4 | 12 (11.9) | 4 (20.0) | |
| Synchronous EGCs/dysplasia<sup>b</sup>) | 10 (9.6) | 5 (25.0) | 0.053 |
| MOS methylation level (%) | 38.9±15.9 | 49.8±20.7 | 0.009<sup>a</sup> |
| MOS methylation high<sup>c</sup>) | 36 (36.4) | 12 (60.0) | 0.049<sup>a</sup> |

p-values were calculated using chi-square test or Student’s t test. EGC, early gastric cancer; GC, gastric cancer; OLGA, operative link on gastritis assessment; OLGIM, operative link on gastric intestinal metaplasia assessment. <sup>a</sup>)Statistically significant, <sup>b</sup>)Synchronous lesions were defined as secondary dysplasia or cancers detected within 1 year after initial diagnosis, <sup>c</sup>)MOS methylation high was defined as a level of methylation above the cutoff value (35.82%) determined by receiver operating curve analysis.