

**Supplementary Table S1: Survival outcomes of gastric cancer patients with different stages.**

|                        | Median | 95%CI |        | Mean  | SD   | 3 years | 5 years |
|------------------------|--------|-------|--------|-------|------|---------|---------|
|                        |        | Lower | Upper  |       |      |         |         |
| Early                  | 98.53  | 92.98 | 104.54 | 89.7  | 0.85 | 77.84   | 66.76   |
| Locally advanced stage | 29.7   | 29.08 | 30.39  | 53.81 | 0.4  | 44.63   | 33.07   |
| Distant metastasis     | 6.21   | 6.08  | 6.34   | 13.42 | 0.17 | 7.02    | 4.13    |

Abbreviations: PGC, proximal gastric cancer; DGC distal gastric cancer; SD, standard deviation.

**Pairwise comparisons**

|  | <i>P</i> value |
|--|----------------|
| Early stage Vs distant metastasis            | <0.01          |
| Early stage Vs locally advanced stage        | <0.01          |
| Locally advanced stage Vs distant metastasis | <0.01          |

**Supplementary Table S2: Survival outcomes of PGC group and DGC group in early stage.**

|                           | Median | 95%CI |        | Mean  | SD   | 3 years | 5 years |
|---------------------------|--------|-------|--------|-------|------|---------|---------|
|                           |        | Lower | Upper  |       |      |         |         |
| <b>Early stage</b>        |        |       |        |       |      |         |         |
| PGC                       | 91.83  | 87.49 | 98.83  | 84.26 | 1.08 | 76.4    | 64.62   |
| DGC                       | 106.55 | 98.53 | 116.53 | 92.46 | 1.23 | 79.44   | 69.12   |
| <b>Local advanced</b>     |        |       |        |       |      |         |         |
| PGC                       | 29.5   | 28.78 | 30.32  | 52.78 | 0.51 | 44.03   | 32.07   |
| DGC                       | 30.09  | 28.88 | 31.24  | 54.36 | 0.61 | 45.44   | 34.37   |
| <b>Distant metastatic</b> |        |       |        |       |      |         |         |
| PGC                       | 6.8    | 6.64  | 7      | 13.85 | 0.22 | 7.05    | 4.15    |
| DGC                       | 5.09   | 4.9   | 5.29   | 12.24 | 0.26 | 7.01    | 4.11    |

Abbreviations: PGC, proximal gastric cancer; DGC distal gastric cancer; SD, standard deviation.

**Supplementary Table S3: Survival outcomes of LAPGC and LADGC groups with gastrectomy of different adjuvant therapy.**

|              | Median | 95%CI |       | Mean  | SD   | 3 years | 5 years |
|--------------|--------|-------|-------|-------|------|---------|---------|
|              |        | Lower | Upper |       |      |         |         |
| <b>LAPGC</b> |        |       |       |       |      |         |         |
| No NAT/AT    | 20.63  | 18.79 | 22.31 | 39.62 | 0.98 | 35.98   | 25.23   |
| NAT          | 37.36  | 35.52 | 39.95 | 57.88 | 0.76 | 50.92   | 39.15   |
| AT           | 32.13  | 29.5  | 34.17 | 50.43 | 0.98 | 46.4    | 33.14   |
| NAT plus AT  | 37.16  | 34.1  | 39.79 | 58.35 | 1.79 | 50.97   | 37.25   |
| <b>LADGC</b> |        |       |       |       |      |         |         |
| No NAT/AT    | 21.36  | 19.94 | 23.16 | 39.94 | 0.77 | 37.82   | 27.78   |
| NAT          | 64.3   | 51.02 | 89.17 | 60.7  | 1.79 | 60.59   | 50.83   |
| AT           | 38.9   | 36.5  | 41.43 | 58.09 | 0.88 | 51.93   | 39.33   |
| NAT plus AT  | 56.31  | 43.99 | 86.44 | 55.11 | 1.61 | 60.67   | 48.65   |

Abbreviations: LAPGC, locally advanced proximal gastric cancer; LADGC, locally advanced distal gastric cancer; SD, standard deviation; NAT, neoadjuvant therapy; AT, adjuvant therapy.

| Pairwise comparisons | LAPGC |       | LADGC |       |
|----------------------|-------|-------|-------|-------|
|                      | 1     | 2     | 3     | 4     |
| No NAT/AT            | 1     |       | <0.01 | <0.01 |
| NAT                  | 2     | <0.01 |       | 0.94  |
| AT                   | 3     | <0.01 | <0.01 | <0.01 |
| NAT plus AT          | 4     | <0.01 | <.001 | 0.04  |

Abbreviations: LAPGC, locally advanced proximal gastric cancer; LADGC, locally advanced distal gastric cancer; SD, standard deviation; NAT, neoadjuvant therapy; AT, adjuvant therapy.