

Supplementary Table 1 Oncologic outcomes in rectal cancer patients

| Variables | Surveillance intensity | | P value | |
|--|---------------------------|----------------------------|---------------------|---------|
| | Lower intensity (n = 659) | Higher intensity (n = 561) | | |
| Circumferential resection margin, No (%) | | | 0.006 | |
| Positive | 18 (2.7) | 36 (6.4) | | |
| Unknown | 7 (1.1) | 8 (1.4) | | |
| Factors | Univariate | | Multivariate | |
| | OR (95% CI) | P value | OR | P value |
| Overall survival | | | | |
| Age (years) | 1.029 (1.020-1.039) | < 0.001 | 1.034 (1.025-1.044) | < 0.001 |
| Sex | 0.779 (0.639-0.950) | 0.013 | 0.779 (0.638-0.951) | 0.014 |
| Surveillance intensity | 1.207 (1.002-1.455) | 0.048 | 1.171 (0.968-1.416) | 0.103 |
| Differentiation | | | | |
| WD/MD | Ref. | | Ref. | |
| PD/SRC/MUC | 1.935 (1.445-2.591) | < 0.001 | 1.775 (1.316-2.395) | < 0.001 |
| (y) pT stage | | | | |
| 0-2 | Ref. | | Ref. | |
| 3-4 | 1.912 (1.439-2.542) | < 0.001 | 1.514 (1.124-2.041) | 0.006 |
| (y) pN stage | | | | |
| 1c | Ref. | | Ref. | |

| | | | | |
|-------------------------------------|-------------------|--------------------|------------------|--------------------|
| 1 | 6.465 46.074) | (0.907- 0.062 | 6.341 45.293) | (0.888- 0.066 |
| 2 | 10.706 76.418) | (1.500- 0.018 | 8.712 62.468) | (1.215- 0.031 |
| Lymphovascular invasion | 1.557 1.878) | (1.291- < 0.001 | 1.181 1.445) | (0.965- 0.107 |
| Perineural invasion | 1.941 2.362) | (1.596- < 0.001 | 1.586 1.955) | (1.287- < 0.001 |
| Resection margin | 1.972 2.860) | (1.360- < 0.001 | 1.603 2.341) | (1.097- 0.015 |
| Recurrence-free interval | | | | |
| Age (years) | 1.000 1.009) | (0.991- 0.962 | | |
| Sex | 1.008 1.225) | (0.829- 0.936 | | |
| Surveillance intensity | 1.679 2.031) | (1.388- < 0.001 | 1.551 1.881) | (1.279- < 0.001 |
| Differentiation | | | | |
| WD/MD | Ref. | | Ref. | |
| PD/SRC/MUC | 1.685 2.303) | (1.234- 0.001 | 1.372 1.888) | (0.998- 0.052 |
| (y) pT stage | | | | |
| 0-2 | Ref. | | Ref. | |
| 3-4 | 2.122 2.850) | (1.580- < 0.001 | 1.724 2.352) | (1.265- 0.001 |
| (y) pN stage | | | | |
| 1c | Ref. | | Ref. | |
| 1 | 3.510 | (0.873- 0.077 | 3.446 | (0.855- 0.082 |

| | | | | |
|---------------------------------|-----------------------|--|--|-----------------------|
| | 14.114) | | | 13.889) |
| 2 | 6.231 (1.547- 0.010 | | | 4.808 (1.186- 0.028 |
| | 25.102) | | | 19.483) |
| Lymphovascular invasion | 1.491 (1.232- < 0.001 | | | 1.156 (0.940- 0.169 |
| | 1.806) | | | 1.421) |
| Perineural invasion | 1.926 (1.579- < 0.001 | | | 1.411 (1.141- 0.002 |
| | 2.350) | | | 1.746) |
| Resection margin | 2.192 (1.529- < 0.001 | | | 1.565 (1.083- 0.017 |
| | 3.144) | | | 2.262) |
| Post-recurrence survival | | | | |
| Age (years) | 1.014 (1.004- 0.005 | | | 1.013 (1.003- 0.013 |
| | 1.024) | | | 1.023) |
| Sex | 0.839 (0.671- 0.124 | | | 0.892 (0.707- 0.339 |
| | 1.049) | | | 1.127) |
| Surveillance intensity | 1.006 (0.811- 0.958 | | | |
| | 1.247) | | | |
| Differentiation | | | | |
| WD/MD | Ref. | | | Ref. |
| PD/SRC/MUC | 2.162 (1.557- < 0.001 | | | 1.988 (1.423- < 0.001 |
| | 3.004) | | | 2.778) |
| (y) pT stage | | | | |
| 0-2 | Ref. | | | Ref. |
| 3-4 | 1.095 (0.781- 0.600 | | | |
| | 1.534) | | | |
| (y) pN stage | | | | |
| 1c | Ref. | | | Ref. |
| 1 | 2.336 (0.327- 0.398 | | | |
| | 16.681) | | | |

| | | | | | | |
|-------------------------|---------|---------|---------|--------|---------|---------|
| 2 | 3.470 | (0.485- | 0.215 | | | |
| | 24.809) | | | | | |
| Lymphovascular invasion | 1.386 | (1.118- | 0.003 | 1.125 | (0.892- | 0.319 |
| | 1.718) | | | 1.419) | | |
| Perineural invasion | 1.481 | (1.188- | < 0.001 | 1.396 | (1.100- | 0.006 |
| | 1.845) | | | 1.773) | | |
| Resection margin | 1.416 | (0.966- | 0.075 | 1.266 | (0.856- | 0.237 |
| | 2.075) | | | 1.871) | | |
| Curative resection | 0.309 | (0.231- | < 0.001 | 0.344 | (0.255- | < 0.001 |
| | 0.414) | | | 0.463) | | |

OR: Odds ratio; CI: Confidence interval; Ref: Reference; WD: Well differentiated; MD: Moderately differentiated; PD: Poorly differentiated; SRC: Signet ring cell type; MUC: Mucinous carcinoma.