

Supplementary Table 3. Risk factors for depression in rectal cancer patients with and without radiation therapy before and after surgery

| Variable | No radiotherapy | | | Preoperative radiotherapy | | | Postoperative radiotherapy | | | | |
|---|-----------------|--------|------|---------------------------|--------|-------|----------------------------|--------|------|-------|------|
| | HR | 95% CI | P>z | HR | 95% CI | P>z | HR | 95% CI | P>z | | |
| Female sex | 1.19 | 1.14 | 0.00 | 1.11 | 0.97 | 1.27 | 0.11 | 1.34 | 1.13 | 1.59 | 0.00 |
| Age (ref. 20s) | | | 0.96 | | | | | | | | |
| 30s | 0.99 | 0.54 | 0.73 | 0.63 | 0.19 | 2.14 | 0.46 | 0.12 | 0.03 | 0.46 | 0.00 |
| 40s | 1.10 | 0.62 | 0.36 | 0.57 | 0.18 | 1.80 | 0.34 | 0.15 | 0.05 | 0.47 | 0.00 |
| 50s | 1.31 | 0.74 | 0.11 | 0.66 | 0.21 | 2.07 | 0.48 | 0.17 | 0.06 | 0.54 | 0.00 |
| 60s | 1.58 | 0.90 | 0.02 | 0.77 | 0.25 | 2.40 | 0.65 | 0.18 | 0.06 | 0.57 | 0.00 |
| 70s | 2.02 | 1.15 | 0.02 | 0.93 | 0.30 | 2.90 | 0.90 | 0.24 | 0.08 | 0.77 | 0.02 |
| 80s | 1.99 | 1.12 | | 0.91 | 0.28 | 2.96 | 0.88 | 0.19 | 0.05 | 0.70 | 0.01 |
| Type(ref. no stoma) | | | 0.45 | | | | | | | | |
| Temporary stoma | 0.98 | 0.84 | | 1.04 | 0.72 | 1.50 | 0.85 | 1.52 | 0.78 | 2.96 | 0.21 |
| Permanent stoma | 1.07 | 0.90 | 0.00 | 1.27 | 0.84 | 1.91 | 0.25 | 1.59 | 0.77 | 3.30 | 0.21 |
| Previous depression (ref. none) | | | 0.42 | | | | | | | | |
| Prior to 1 year before index surgery | 2.34 | 2.21 | 0.08 | 2.32 | 1.96 | 2.74 | 0.00 | 2.32 | 1.83 | 2.94 | 0.00 |
| Number of stoma-making surgeries (ref. never) | | | 0.00 | | | | | | | | |
| Once | 0.94 | 0.80 | | 0.94 | 0.66 | 1.34 | 0.75 | 0.70 | 0.35 | 1.38 | 0.30 |
| Twice | 1.20 | 0.98 | 0.00 | 1.33 | 0.87 | 2.03 | 0.18 | 0.79 | 0.35 | 1.78 | 0.57 |
| More than 3 times | 1.75 | 1.24 | 0.03 | 1.98 | 1.00 | 3.93 | 0.05 | 0.91 | 0.28 | 2.98 | 0.88 |
| Socioeconomic status (ref. 16~20 quartile) | | | 0.23 | | | | | | | | |
| Medicaid | 1.52 | 1.38 | 0.95 | 1.73 | 1.28 | 2.32 | 0.00 | 1.06 | 0.69 | 1.62 | 0.79 |
| 1–5 quartile | 1.07 | 1.01 | 0.62 | 1.06 | 0.88 | 1.28 | 0.53 | 1.02 | 0.80 | 1.30 | 0.89 |
| 6–10 quartile | 1.05 | 0.98 | 0.09 | 1.10 | 0.91 | 1.32 | 0.33 | 0.97 | 0.76 | 1.24 | 0.82 |
| 11–15 quartile | 1.04 | 0.98 | 1.00 | 1.06 | 0.90 | 1.26 | 0.48 | 0.97 | 0.77 | 1.22 | 0.81 |
| Missing | 0.99 | 0.84 | 0.00 | 0.93 | 0.59 | 1.47 | 0.76 | 0.81 | 0.42 | 1.53 | 0.51 |
| Myocardial infarction | 0.89 | 0.57 | 0.02 | 2.18 | 0.90 | 5.26 | 0.08 | 0.62 | 0.09 | 4.48 | 0.64 |
| Congestive heart failure | 1.33 | 0.96 | 0.34 | 1.98 | 0.74 | 5.31 | 0.17 | 0.00 | – | – | – |
| Peripheral vascular disease | 1.00 | 0.65 | 0.05 | 0.30 | 0.04 | 2.12 | 0.23 | 1.82 | 0.43 | 7.69 | 0.42 |
| Cerebrovascular disease | 1.54 | 1.29 | 0.04 | 1.50 | 0.91 | 2.45 | 0.11 | 0.96 | 0.30 | 3.05 | 0.94 |
| Dementia | 0.71 | 0.41 | 0.01 | 1.11 | 0.28 | 4.47 | 0.89 | 0.00 | – | – | – |
| Chronic pulmonary disease | 1.22 | 1.03 | 0.03 | 0.92 | 0.54 | 1.56 | 0.75 | 1.09 | 0.45 | 2.65 | 0.85 |
| Rheumatic disease | 1.43 | 0.68 | 0.62 | 0.00 | – | – | – | 2.41 | 0.34 | 17.33 | 0.38 |
| Peptic ulcer disease | 1.19 | 1.00 | 0.39 | 1.00 | 0.65 | 1.55 | 0.99 | 0.69 | 0.22 | 2.16 | 0.53 |
| Mild liver disease | 1.27 | 1.01 | 0.22 | 0.92 | 0.49 | 1.72 | 0.80 | 0.88 | 0.28 | 2.74 | 0.82 |
| Diabetes without chronic complication | 1.18 | 1.04 | 0.26 | 0.95 | 0.73 | 1.25 | 0.73 | 1.33 | 0.78 | 2.30 | 0.30 |
| Diabetes with chronic complication | 1.33 | 1.04 | – | 0.75 | 0.33 | 1.69 | 0.49 | 2.14 | 0.50 | 9.19 | 0.31 |
| Hemiplegia or paraplegia | 0.88 | 0.52 | 1.47 | 3.81 | 1.32 | 11.06 | 0.01 | 3.57 | 0.57 | 22.35 | 0.17 |
| Renal disease | 0.81 | 0.50 | 1.31 | 0.78 | 0.19 | 3.17 | 0.73 | 2.16 | 0.30 | 15.57 | 0.45 |
| Moderate or severe liver disease | 0.29 | 0.04 | 2.06 | 0.00 | – | – | – | 1.00 | | | |
| Metastatic solid tumor | 1.08 | 0.94 | 1.24 | 1.01 | 0.78 | 1.31 | 0.95 | 1.39 | 0.80 | 2.42 | 0.24 |
| AIDS/HIV | 0.00 | – | – | 1.00 | | | | 1.00 | | | |

HR, hazard ratio; CI, confidence interval; Ref, reference; AIDS, acquired immune deficiency syndrome; HIV, human immunodeficiency virus.