## Supplementary Materials

Table S1. Comparisons of dose parameters according to sigmoid circumference

| Sigmoid circumference <br> (\%) |  | $\mathrm{EQD}_{2}$ (Gy) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | GTV $\mathrm{D}_{98 \%}$ | HR-CTV $\mathrm{D}_{98 \%}$ | IR-CTV $\mathrm{D}_{98 \%}$ | Rectum $\mathrm{D}_{2 \mathrm{~mL}}$ | Sigmoid $\mathrm{D}_{2 \mathrm{~mL}}$ | Bladder $\mathrm{D}_{2 \mathrm{~mL}}$ | Bowel $\mathrm{D}_{2 \mathrm{~mL}}$ |
| 0 ( $\mathrm{n}=11$ ) | 2D | $139.4 \pm 42.9$ | $80.7 \pm 14.4$ | $63.8 \pm 7.0$ | $65.3 \pm 7.7$ | $56.4 \pm 3.8$ | $87.8 \pm 17.7$ | $66.5 \pm 15.0$ |
|  | 3D | $118.0 \pm 27.1$ | $73.6 \pm 10.7$ | $60.7 \pm 4.6$ | $65.6 \pm 8.8$ | $56.2 \pm 7.7$ | $79.7 \pm 7.6$ | $57.9 \pm 6.8$ |
| $0-10(\mathrm{n}=26)$ | 2D | $142.0 \pm 55.5$ | $83.7 \pm 11.0$ | $66.5 \pm 7.9$ | $62.6 \pm 7.7$ | $66.9 \pm 7.0$ | $88.7 \pm 18.3$ | $59.9 \pm 13.3$ |
|  | 3D | $119.0 \pm 36.1$ | $80.8 \pm 7.2$ | $64.8 \pm 4.8$ | $62.2 \pm 6.2$ | $65.9 \pm 7.1$ | $81.6 \pm 9.4$ | $55.7 \pm 6.1$ |
| $>10(\mathrm{n}=13)$ | 2D | $120.4 \pm 56.2$ | $81.2 \pm 13.6$ | $65.3 \pm 8.5$ | $57.1 \pm 6.3$ | $76.1 \pm 11.1$ | $87.4 \pm 10.4$ | $52.7 \pm 9.5$ |
|  | 3D | $116.9 \pm 45.4$ | $82.6 \pm 4.1$ | $66.3 \pm 3.5$ | $57.3 \pm 5.1$ | $71.0 \pm 5.7$ | $81.9 \pm 5.3$ | $51.3 \pm 7.8$ |

Values are presented as mean $\pm$ standard deviation.
Bold type was statistically significant factor.
$\mathrm{EQD}_{2}, 2$ Gy equivalent dose; GTV, gross tumor volume; HR-CTV, high-risk clinical target volume; IR-CTV, intermediate-risk clinical target volume; 2D, two-dimensional; 3D, three-dimensional.

