**Supplemental Digital Content Table 1**

**Baseline demographic and clinical characteristics of patients with rectal cancer**

|  |  |  |  |
| --- | --- | --- | --- |
| **Variable** | **TME with pIONM**  | **TME without pIONM** | *P* |
| (n=82) | (n=89) |
| Age, years, mean (SD) | 61.0 | (11.4) | 63.7 | (9.7) | 0.108 |
| ASA classification, n (%) |  |  |  |
|  | I |  6  | (7) |  7  | (8) |  |
|  | II | 49  | (60) | 53  | (60) |  |
|  | III | 25  | (30) | 26  | (30) |  |
|  | IV |  2  | (2) | 2  | (2) |  |
|  | Missing data, n |  0 |  | 1  | (1) | 0.998 |
| Sex, n (%) |  |  |  |
|  | Male | 49  | (60) | 57  | (64) |  |
|  | Female | 33  | (40) | 32  | (36) | 0.564 |
| BMI, kg/m2, mean (SD) | 26.1 | (4.9) | 26.0 | (4.5) | 0.888 |
| Height of tumor, cm from anocutaneus line, mean (SD) | 7.7  | (2.8) | 7.4  | (3.1) | 0.365 |
| Ventral rectal quadrant involvement, (9 to 3 o’clock in lithotomy position), n (%) | 42  | (51) | 40  | (45) | 0.592 |
| Neoadjuvant therapy, n (%) | 50  | (61) | 56  | (63) |  |
|  | Radiochemotherapy, n | 42 |  | 43 |  |  |
|  | Radiotherapy, n |  3 |  |  4 |  |  |
|  | Chemotherapy, n |  4 |  | 8 |  |  |
|  | Unknown combination, n |  1 |  | 1 |  | 0.564 |
| Adjuvant therapy, n (%) | 11  | (13) | 11  | (12) |  |
|  | Radiochemotherapy, n |  3 |  |  4 |  |  |
|  | Chemotherapy, n |  8 |  |  7 |  | 0.647 |
| Anesthesia, n (%) |  |  |  |
|  | TIVA | 64  | (78) | 55  | (62) |  |
|  | Inhalation anesthesia | 17  | (21) | 33  | (37) |  |
|  | Both | 1  | (1) | 1  | (1) | 0.063 |

**Table 1 continued on next page**

**Supplemental Digital Content Table 1 (continued)**

|  |  |  |  |
| --- | --- | --- | --- |
| **Variable** | **TME with pIONM**  | **TME without pIONM**  | *P* |
| (n=82) | (n=89) |
| Surgery, n (%) |  |  |  |
|  | Minimally invasive surgery | 69 | (84) | 76 | (85) |  |
|  | laparoscopic | 66 | (80) | 71 | (80) |  |
|  | robotic | 3 | (4) | 5 | (6) |  |
|  | Open | 10 | (12) | 10 | (11) |  |
|  | Converted to open | 3 | (4) | 3 | (3) | 0.974 |
| Dissection technique, n (%)\* |  |  |  |
|  | Scissors | 10 | (12) | 4 | (4) |  |
|  | Bipolar scissors | 11 | (13) | 5 | (6) |  |
|  | Monopolar diathermy  | 15 | (18) | 28 | (31) |  |
|  | Ultrasound scalpels | 15 | (18) | 20 | (22) |  |
|  | Radiofrequency scalpels | 54 | (66) | 55 | (62) |  |
| Anastomosis, n (%)  | 77 | (94) | 78 | (88) | 0.160 |
|  | End-to-End anastomosis | 27 | (35) | 24 | (31) |  |
|  | Side-to-End anastomosis | 41 | (53) | 47 | (60) |  |
|  | J-Pouch anastomosis | 9 | (12) | 7 | (9) |  |
|  | None, Hartmann/Extirpation | 1 | / 4 | 7 | / 4 | 0.661 |
| Height of anastomosis, cm from anocutaneus line, mean (SD) | 3.6 | (1.1) | 3.5 | (1.5) | 0.602 |
|  | Missing data, n | 4 |  | 6 |  |  |
| Stoma formation (protective), n |  |  |  |  |  |
|  | Ileostomy | 72 |  | 74 |  |  |
|  | Colostomy | 3 |  | 1 |  |  |
|  | None | 2 |  | 2 |  |  |
|  | Missing data | 0 |  | 1 |  | 0.884 |
| Duration of surgery, min, mean (SD) | 319 | (104) | 295  | (92) | 0.104 |

 **Table 1 continued on next page**

**Supplemental Digital Content Table 1 (continued)**

|  |  |  |  |
| --- | --- | --- | --- |
| **Variable** | **TME with pIONM**  | **TME without pIONM**  | *P* |
| (n=82) | (n=89) |
| Loss of blood, mL, mean (SD) | 290 | (297) | 290 | (376) | 0.998 |
| Excessive blood loss >1000 mL, n | 5 |  | 5 |  | 1.000 |
| (y)pT category, n |  |  |  |
|  | 0 | 6 |  | 10 |  |  |
|  | 1 | 15 |  | 14 |  |  |
|  | 2 | 25 |  | 27 |  |  |
|  | 3 | 33 |  | 32 |  |  |
|  | 4 | 2 |  | 6 |  |  |
|  | Missing data | 1 |  | 0 |  | 0.798 |
| (y)pN category, n |  |  |  |
|  | 0 | 50 |  | 62 |  |  |
|  | 1 | 17 |  | 17 |  |  |
|  | 2 | 13 |  | 10 |  |  |
|  | Missing data | 2 |  | 0 |  | 0.471 |
| TME specimen quality, n (%) |  |  |  |  |  |
|  | Complete | 63 | (79) | 73 | (83) | 0.499 |
|  | Nearly complete | 16 | (20) | 15 | (17) |  |
|  | Incomplete | 1 | (1) | 0 |  |  |
|  | Missing data, n | 2 |  | 1 |  |  |
| Lymph node yield, n, mean (SD) | 18 | (9) | 19 | (10) | 0.546 |
|  | Missing data, n | 0 |  | 1 |  |  |
| DRM, mm, mean (SD) | 31 | (53) | 32 | (26) | 0.916 |
|  | Missing data, n | 6 |  | 8 |  |  |
| CRM, n (%) |  |  |  |
|  | Direct (0 mm) | 0 |  | 2 | (2) |  |
|  | Positive (>0 mm, ≤1 mm) | 1 | (1) | 6 | (7) |  |
|  | Negative (>1 mm) | 79 | (96) | 81 | (91) |  |
|  | Missing data, n | 2 |  | 0 |  | 0.077 |
| Intraoperative tumor perforation, n (%) | 1 | (1) | 0 |  | 0.269 |

TME: total mesorectal excision; pIONM: pelvic intraoperative neuromonitoring; SD: standard deviation;
n: number; ASA: American Society of Anesthesiologists; BMI: body mass index; TIVA: total intravenous anesthesia; DRM: distal resection margin; CRM: circumferential resection margin.

\* Multiple responses were allowed