Supplementary table 1

**Table title**

A: Four common criteria categories in the Japanese Society for Endoscopic Surgery Certification Examination (60 points).

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| Category | Points | Criterion |
| Progress of the operation | 16 | Speed of the operation  Autonomy of the operator  Leadership ability  Cooperation with assistants |
| Exposure of the operative field | 15 | Insertion of ports  Keeping the surgical field at the center  Display of the target organ  Tissue retraction (use of the retractor)  Use of the non-dominant hand |
| Basic laparoscopic surgical skills | 19 | Appropriate selection of equipment  Appropriate handling of tissues  Appropriate use of energy devices  Correct dissection plane  Control of vessels |
| Suturing and knot-tying | 10 | Suturing skills  Knot-tying skills |

B: Procedure-specific criteria for sigmoidectomy (two points allotted for each item).

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| Category | Criterion |
| General | 1. At the beginning of the surgery, were the intra-abdominal search and the removal of the small bowel and greater omentum performed appropriately? 2. At the end of the surgery, was it confirmed that there was no bleeding from the port removal site, vascular stump, and dissection area, with no foreign body left in the abdominal cavity? 3. Was proper consideration given to cancer surgery (e.g., not touching a tumor)? 4. Was care taken to avoid intestinal injury? 5. Was the entire surgery structured in a planned manner? |
| Dissection and mobilization | 1. Was clear visualization of the surgical field developed? 2. Were tissue grasping and device manipulation appropriate, with bleeding controlled? 3. Was the procedure appropriate, without any unnecessary extension of time? 4. Were the peritoneal incisional line and method of medial and lateral approach appropriate? 5. Was the dissection layer recognition sufficiently appropriate? |
| Central lymph node dissection | 1. Was clear visualization of the surgical field developed? 2. Were tissue grasping and device manipulation appropriate, with bleeding controlled? 3. Was the procedure appropriate, without any unnecessary extension of time? 4. Was the central lymph node dissection appropriate? 5. Were the vascular recognition and management appropriate? |
| Rectal transection and anastomosis | 1. Was clear visualization of the surgical field developed? 2. Were tissue grasping and device manipulation appropriate, with bleeding controlled? 3. Was the procedure appropriate, without any unnecessary extension of time? 4. Were the rectal dissection and mesorectal transection appropriate? 5. Were the linear and circular stapler usages appropriate? |