

Supplementary Table 1. Definitions and Diagnostic Criteria for Surgical Characteristics and Complications

Characteristics/ complications	Definitions and diagnostic criteria
Emergency operation	Defined as medical emergency that the immediate surgical intervention was the only option to successfully solve the life-threatening situation such as toxic megacolon, intestinal perforation or uncontrolled hemorrhage.
Elective operation	Defined as surgery scheduled in advance since it did not involve any clinical emergency.
Laparoscopy surgery	Defined as establishing pneumoperitoneum and using laparoscopic and trocar technique to separate the colon and its adjunctive mesentery or peritoneum. Intestinal anastomosis and pouch establishment were performed through further 5–10 cm incision.
Open surgery	Open approach defined as accomplish the bowel separation and excision through the open incision. Conversion to open approach during laparoscopic operation because of unexpected complication or difficult operating was categorized as open group.
Two-stage IPAA	Define as complete total proctocolectomy and establishment of an ileal pouch with diverting loop ileostomy and close the ileostomy secondly.
Three-stage IPAA	Defined as subtotal colectomy, followed by excising remaining rectum and IPAA at the second time, and finally close ileostomy.
Abdominal infection	Any infective process in the abdominal detected by clinical symptoms or radiological means, including those with or without anastomotic leakage.
Pulmonary infection	Pulmonary Infection is diagnosed on the basis of newly present of clinical symptom and sputum culture results or chest X-ray or contrast studies.
Anastomotic leakage	The demonstration of a defect in the anastomosis at endoscopy, contrast enema, digital examination or operation.
Urinary infection	Urinary infection is diagnosed on the basis of clinical symptoms and elevated urine WBC level or urine culture results.
Ileus	Ileus is diagnosed on the basis of any of following criteria: plain X-ray or contrast studies indicate obstruction, patient presented with abdominal pain, vomiting, abdominal distension and absence of gas and stool in the previous 24 hours.
Intra-abdominal hemorrhage	Any abnormal intra-abdominal hemorrhage required blood infusion or re-operation after surgery.
Anastomotic hemorrhage	Any abnormal anastomotic bleeding that required blood infusion or other intervention treatment and confirmed by endoscopy or surgery.
Urinary retention	Consistent urinary retention after surgery without urinary infection.
Enteritis	Presented with refractory diarrhea or intestinal bleeding following colectomy and diffuse small bowel mucosal inflammation is confirmed by endoscopy.
Enteral fistula	An abnormal passage or sinus from the enteric canal or pouch to another surface or organ, confirmed by clinical symptoms or radiological means.
Pouchitis	Patient presented with typical symptoms of pouchitis (increased number and looser consistency of bowel movements, rectal bleeding, urgency, incontinence, and/or abdominal or pelvic cramps) and confirmed by abnormal pouch endoscopy.
Anastomotic stricture	Any present of a narrowing at the anastomosis on digital examination that required dilation.

IPAA, ileal pouch anal anastomosis; WBC, white blood cell.