# Supplement File of search strategy

#### Filters:

There will be no temporal restriction other than the studies being included up until the search date. Studies published in English will be included.

## Scopus search strategy:

(robot\* W/3 (surg\* OR procedure\* OR resection\* OR exent\* OR "beyond TME" OR "beyond total mesorectal excision\*")))) AND (TITLE-ABS-KEY(((colorectal\* OR rectal\* OR rectum\* OR rectosigmoid\*) W/3 (cancer\* OR carcinoma \* OR adenocarcinoma\* OR tumor\* OR tumour\* OR neoplas\* OR malignan\*)))

## Medline search strategy:

1 (robot\* adj3 (surg\* or procedure\* or resection\* or exent\* or beyond TME or beyond total mesorectal excision\*)).mp. [mp=title, book title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms, population supplementary concept word, anatomy supplementary concept word]

2 exp pelvic exenteration/ or exp robotic surgical procedures/

3 1 or 2

4 ((colorectal or rectal or rectum) adj3 (cancer\* or carcinoma\* or adenocarcinoma\* or tumor\* or tumour\* or neoplas\* or malignan\*)).mp. [mp=title, book title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms, population supplementary concept word, anatomy supplementary concept word]

5 colorectal neoplasms/ or exp colorectal neoplasms, hereditary nonpolyposis/ or exp rectal neoplasms/

6 4 or 5

7 3 and 6

# EMBASE search strategy:

1 (robot\* adj3 (surg\* or procedure\* or resection\* or exent\* or beyond TME or beyond total mesorectal excision\*)).mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword heading word, floating subheading word, candidate term word]

- 2 exp \*pelvis exenteration/
- 3 \*robot assisted surgery/
- 4 1 or 2 or 3

5 ((colorectal\* or rectal\* or rectum\* or rectosigmoid\*) adj3 (cancer\* or carcinoma\* or adenocarcinoma\* or tumor\* or tumour\* or neoplas\* or malignan\*)).mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword heading word, floating subheading word, candidate term word]

6 \*colorectal cancer/ or exp \*colorectal carcinoma/ or exp \*hereditary colorectal cancer/ or exp \*rectosigmoid cancer/ or exp \*rectum cancer/

- 7 5 or 6
- 8 4 and 7

#### **Prospero search**

Website: https://www.crd.york.ac.uk/prospero/#searchadvanced Search: robotic and locally advanced or recurrent rectal cancer

#### **Clinical trials search**

Website: https://classic.clinicaltrials.gov/ct2/search/advanced

Search:

Condition or disease: locally advanced or recurrent rectal cancer

Other terms: robotic