

Supplementary file S1. Full search strategy.

Database [Platform] Searches run May 17, 2022	Results
MEDLINE(R) and Epub Ahead of Print, In-Process & Other Non-Indexed Citations and Daily [OVID] 1946 to May 16, 2022	74
Embase Classic+Embase [OVID] 1947 to May 16, 2022	430
Scopus - May 17, 2022	621
TOTAL	1125
Deduplicated total (263 duplicates removed in EndNote)	862

22341242.ui - Berger et al

Search Strategies:

Set 1 AND Set 2 AND Set 3

Medline

Set 1 Abdominal Radiography

Exp "radiography, abdominal"/ or "Diagnostic Imaging"/ or "Colonography, Computed Tomographic"/
Or

((abdomen* or abdominal*) adj4 (radiograph* or diagnostic imag* or xray* or x-ray* or x-radiograph*
or imag* or diagnostic X-Ray*)).tw,kw,kf,fs,sh

or

(cholangiograph* or endoscopic retrograde cholangiopancreatograph* or cholecystograph* or
Videodefecography or defecograph* or portograph* or colonic transit study or colonic transit
studies).tw,kw,kf,fs,sh

or

("Virtual Colonoscop*" or "Computed Tomographic Colonograph*" or "CT Colonograph*" or "X-Ray
Computed Tomograph*" or "XRay Computed Tomograph*" or "CT X-Ray\$" or "CT xray\$" or
Tomodensitometr\$ or "X-Ray CAT Scan\$" or "xray CAT Scan\$").tw,kw,kf,fs,sh

Set 2 Constipation and its synonyms

Exp "Constipation"/ or "Colonic Diseases, Functional"/ or (constipat* or Dyschezi* or Colonic Inertia or
f\$ecal* impact* or f\$ecal retention or bowel dysfunction\$ or slow colonic transit* or "non-retentive
f\$ecal incontinence" or "NFRI" or "functional colonic disease\$").tw,kw,kf,fs,sh

Set 3 Sensitivity

Exp "Sensitivity and specificity"/ or exp "Predictive Value of Tests"/ or exp "Reference Values"/ or exp
"ROC Curve"/

or

(sensitiv* or specific* or screening or false positive or false negative or accura* or predict* or "reference
value\$" or "reference range\$" or "roc" or "roc analys\$s" or "roc area\$" or "roc auc" or "roc
characteristic\$" or "roc curve\$" or "roc curve method\$" or "roc estimate\$" or "roc evaluation\$" or
"Receiver Operating Characteristic" or "likelihood ratio").tw,kw,kf,fs,sh

Embase

Set 1 Abdominal Radiography

Exp "abdominal radiography"/ or "Diagnostic Imaging"/ or "computed tomographic colonography"/

Or

((abdomen* or abdominal*) adj4 (radiograph* or diagnostic imag* or xray* or x-ray* or x-radiograph* or imag* or diagnostic X-Ray*)).tw,kw,kf,fs,sh

or

(cholangiograph* or endoscopic retrograde cholangiopancreatograph* or cholecystograph* or Videodefecography or defecograph* or portograph* or colonic transit study or colonic transit studies).tw,kw,kf,fs,sh

or

("Virtual Colonoscop*" or "Computed Tomographic Colonograph*" or "CT Colonograph*" or "X-Ray Computed Tomograph*" or "XRay Computed Tomograph*" or "CT X-Ray\$" or "CT xray\$" or Tomodensitometr\$ or "X-Ray CAT Scan\$" or "xray CAT Scan\$").tw,kw,kf,fs,sh

Set 2 Constipation and its synonyms

Exp "Constipation"/ or "irritable colonic"/ or (constipat* or Dyschezi* or Colonic Inertia or f\$ecal* impact* or f\$ecal retention or bowel dysfunction\$ or slow colonic transit* or "non-retentive f\$ecal incontinence" or "NFRI" or "functional colonic disease\$").tw,kw,kf,fs,sh

Set 3 Sensitivity

Exp "Sensitivity and specificity"/ or exp "Predictive Value"/ or exp "Reference Values"/ or exp "receiver operating characteristic"/

or

(sensitiv* or specific* or screening or false positive or false negative or accura* or predict* or "reference value\$" or "reference range\$" or "roc" or "roc analys\$s" or "roc area\$" or "roc auc" or "roc characteristic\$" or "roc curve\$" or "roc curve method\$" or "roc estimate\$" or "roc evaluation\$" or "Receiver Operating Characteristic" or "likelihood ratio").tw,kw,kf,fs,sh

scopus

Set 1 Abdominal Radiography

ALL ("abdominal radiograph*" OR "diagnostic imaging" OR "computed tomographic colonography*")

Or

TITLE-ABS-KEY (((abdom* W/4 radiograph* OR "diagnostic imag*" OR "xray*" OR "x-ray*" OR "x-radiograph*" OR "imag*" OR "diagnostic X-Ray*")))

or

TITLE-ABS-KEY ((cholangiograph* OR "endoscopic retrograde cholangiopancreatograph*" OR cholecystograph* OR videodefecography OR defecograph* OR portograph* OR "colonic transit study" OR "colonic transit studies"))

or

TITLE-ABS-KEY (("Virtual Colonoscop*" or "Computed Tomographic Colonograph*" or "CT Colonograph*" or "X-Ray Computed Tomograph*" or "XRay Computed Tomograph*" or "CT X-Ray\$" or "CT xray\$" or Tomodensitometr\$ or "X-Ray CAT Scan\$" or "xray CAT Scan\$"))

Set 2 Constipation and its synonyms

ALL ("Constipation" or "Functional Colonic Disease*")

or

TITLE-ABS-KEY ((constipat* or Dyschezi* or "Colonic Inertia" or "f\$ecal* impact*" or "f\$ecal retention" or "bowel dysfunction\$" or "slow colonic transit*" or "non-retentive f\$ecal incontinence" or "NFRI" or "functional colonic disease\$"))

Set 3 Sensitivity

ALL ("Predictive Value of Tests" or "Reference Values" or "ROC Curve")

or

TITLE-ABS-KEY ((sensitiv* or specific* or screening or "false positive" or "false negative" or accura* or predict* or "reference value\$" or "reference range\$" or "roc" or "roc analys\$s" or "roc area\$" or "roc auc" or "roc characteristic\$" or "roc curve\$" or "roc curve method\$" or "roc estimate\$" or "roc evaluation\$" or "Receiver Operating Characteristic" or "likelihood ratio"))

Ovid MEDLINE(R) and Epub Ahead of Print, In-Process, In-Data-Review & Other Non-Indexed Citations and Daily <1946 to May 16, 2022>

#	Searches	Results
1	exp "radiography, abdominal"/ or "Diagnostic Imaging"/ or "Colonography, Computed Tomographic"/	89837
2	((abdomen* or abdominal*) adj4 (radiograph* or diagnostic imag* or xray* or x-ray* or x-radiograph* or imag* or diagnostic X-Ray*)).tw,kw,kf,fs,sh.	22641
3	(cholangiograph* or endoscopic retrograde cholangiopancreatograph* or cholecystograph* or Videodefecography or defecograph* or portograph* or colonic transit study or colonic transit studies).tw,kw,kf,fs,sh.	33518
4	("Virtual Colonoscop*" or "Computed Tomographic Colonograph*" or "CT Colonograph*" or "X-Ray Computed Tomograph*" or "XRay Computed Tomograph*" or "CT X-Ray\$" or "CT xray\$" or Tomodensitometr\$ or "X-Ray CAT Scan\$" or "xray CAT Scan\$").tw,kw,kf,fs,sh.	8353
5	or/1-4	122910
6	exp "Constipation"/ or "Colonic Diseases, Functional"/ or (constipat* or Dyschezi* or Colonic Inertia or f\$ecal* impact* or f\$ecal retention or bowel dysfunction\$ or slow colonic transit* or "non-retentive f\$ecal incontinence" or "NFRI" or "functional colonic disease\$").tw,kw,kf,fs,sh.	37568
7	5 and 6	1390
8	exp "Sensitivity and specificity"/ or exp "Predictive Value of Tests"/ or exp "Reference Values"/ or exp "ROC Curve"/	782696
9	(sensitiv* or specific* or screening or false positive or false negative or accura* or predict* or "reference value\$" or "reference range\$" or "roc" or "roc analys\$s" or "roc area\$" or "roc auc" or "roc characteristic\$" or "roc curve\$" or "roc curve method\$" or "roc estimate\$" or "roc evaluation\$" or "Receiver Operating Characteristic" or "likelihood ratio").tw,kw,kf,fs,sh.	3684118
10	8 or 9	3866640
11	7 and 10	247

12	limit 11 to (english language and humans)	193
13	limit 12 to yr="2012 -Current"	74
14	"22341242".ui.	1
15	13 and 14	1
16	remove duplicates from 13	74

Embase Classic+Embase <1947 to 2022 Week 19>

#	Searches	Results
1	exp "abdominal radiography"/ or "Diagnostic Imaging"/ or "computed tomographic colonography"/	268183
2	((abdomen* or abdominal*) adj4 (radiograph* or diagnostic imag* or xray* or x-ray* or x-radiograph* or imag* or diagnostic X-Ray*)).tw,kw,kf,fs,sh.	68704
3	(cholangiograph* or endoscopic retrograde cholangiopancreatograph* or cholecystograph* or Videodefecography or defecograph* or portograph* or colonic transit study or colonic transit studies).tw,kw,kf,fs,sh.	71366
4	("Virtual Colonoscop*" or "Computed Tomographic Colonograph*" or "CT Colonograph*" or "X-Ray Computed Tomograph*" or "XRay Computed Tomograph*" or "CT X-Ray\$" or "CT xray\$" or Tomodensitometr\$ or "X-Ray CAT Scan\$" or "xray CAT Scan\$").tw,kw,kf,fs,sh.	91461
5	or/1-4	444522
6	exp "Constipation"/ or "irritable colonic"/ or (constipat* or Dyschezi* or Colonic Inertia or f\$ecal* impact* or f\$ecal retention or bowel dysfunction\$ or slow colonic transit* or "non-retentive f\$ecal incontinence" or "NFRI" or "functional colonic disease\$").tw,kw,kf,fs,sh.	116634
7	exp "Sensitivity and specificity"/ or exp "Predictive Value"/ or exp "Reference Values"/ or exp "receiver operating characteristic"/	789441
8	(sensitiv* or specific* or screening or false positive or false negative or accura* or predict* or "reference value\$" or "reference range\$" or "roc" or "roc analys\$s" or "roc area\$" or "roc auc" or "roc characteristic\$" or "roc curve\$" or "roc curve method\$" or "roc estimate\$" or "roc evaluation\$" or "Receiver Operating Characteristic" or "likelihood ratio").tw,kw,kf,fs,sh.	9269695
9	7 or 8	9325191
10	5 and 6 and 9	1178
11	limit 10 to (human and english language and yr="2012 -Current")	796
12	(conference abstract or "Case Reports" or editorial or comment or letter or newspaper article).pt.	6340751
13	11 not 12	432
14	remove duplicates from 13	430

Scopus

14 (((ALL (all "abdominal radiograph*" OR "Diagnostic Imaging" OR "computed tomographic colonography*")) OR (TITLE-ABS-KEY ((abdom* W/4 radiograph* OR "diagnostic imag*" OR "xray*" OR "x-ray*" OR "x-radiograph*" OR "imag*" OR "diagnostic X-Ray*")))) OR (TITLE-ABS-KEY ((cholangiograph* OR "endoscopic retrograde cholangiopancreatograph*" OR cholecystograph* OR videodefecography OR defecograph* OR portograph* OR "colonic transit study" OR "colonic transit studies"))) OR (TITLE-ABS-KEY (("Virtual Colonoscop*" OR "Computed Tomographic Colonograph*" OR "CT Colonograph*" OR "X-Ray Computed Tomograph*" OR "XRay Computed Tomograph*" OR "CT X-Ray\$" OR "CT xray\$" OR tomodensitometr\$ OR "X-Ray CAT Scan\$" OR "xray CAT Scan\$")))) AND ((ALL ("Constipation" OR "Functional Colonic Disease*")) OR (TITLE-ABS-KEY ((constipat* OR dyschezi* OR "Colonic Inertia" OR "f\$ecal* impact*" OR "f\$ecal retention" OR "bowel dysfunction\$" OR "slow colonic transit*" OR "non-retentive f\$ecal incontinence" OR "NFRI" OR "functional colonic disease\$"))))) AND ((ALL ("Predictive Value of Tests" OR "Reference Values" OR "ROC Curve")) OR (TITLE-ABS-KEY ((sensitiv* OR specific* OR screening OR "false positive" OR "false negative" OR accura* OR predict* OR "reference value\$" OR "reference range\$" OR "roc" OR "roc analys\$s" OR "roc area\$" OR "roc auc" OR "roc characteristic\$" OR "roc curve\$" OR "roc curve method\$" OR "roc estimate\$" OR "roc evaluation\$" OR "Receiver Operating Characteristic" OR "likelihood ratio")))) AND (LIMIT-TO (DOCTYPE , "ar")) AND (LIMIT-TO (EXACTKEYWORD , "Humans")) AND (LIMIT-TO (LANGUAGE , "English")) AND (LIMIT-TO (SRCTYPE , "j")) ... 621 document results

13 (((ALL (all "abdominal radiograph*" OR "Diagnostic Imaging" OR "computed tomographic colonography*")) OR (TITLE-ABS-KEY ((abdom* W/4 radiograph* OR "diagnostic imag*" OR "xray*" OR "x-ray*" OR "x-radiograph*" OR "imag*" OR "diagnostic X-Ray*")))) OR (TITLE-ABS-KEY ((cholangiograph* OR "endoscopic retrograde cholangiopancreatograph*" OR cholecystograph* OR videodefecography OR defecograph* OR portograph* OR "colonic transit study" OR "colonic transit studies"))) OR (TITLE-ABS-KEY (("Virtual Colonoscop*" OR "Computed Tomographic Colonograph*" OR "CT Colonograph*" OR "X-Ray Computed Tomograph*" OR "XRay Computed Tomograph*" OR "CT X-Ray\$" OR "CT xray\$" OR tomodensitometr\$ OR "X-Ray CAT Scan\$" OR "xray CAT Scan\$")))) AND ((ALL ("Constipation" OR "Functional Colonic Disease*")) OR (TITLE-ABS-KEY ((constipat* OR dyschezi* OR "Colonic Inertia" OR "f\$ecal* impact*" OR "f\$ecal retention" OR "bowel dysfunction\$" OR "slow colonic transit*" OR "non-retentive f\$ecal incontinence" OR "NFRI" OR "functional colonic disease\$"))))) AND ((ALL ("Predictive Value of Tests" OR "Reference Values" OR "ROC Curve")) OR (TITLE-ABS-KEY ((sensitiv* OR specific* OR screening OR "false positive" OR "false negative" OR accura* OR predict* OR "reference value\$" OR "reference range\$" OR "roc" OR "roc analys\$s" OR "roc area\$" OR "roc auc" OR "roc characteristic\$" OR "roc curve\$" OR "roc curve method\$" OR "roc estimate\$" OR "roc evaluation\$" OR "Receiver Operating Characteristic" OR "likelihood ratio")))) AND (LIMIT-TO (PUBYEAR , 2022) OR LIMIT-TO (PUBYEAR , 2021) OR LIMIT-TO (PUBYEAR , 2020) OR LIMIT-TO (PUBYEAR , 2019) OR LIMIT-TO (PUBYEAR , 2018) OR LIMIT-TO (PUBYEAR , 2017) OR LIMIT-TO (PUBYEAR , 2016) OR LIMIT-TO (PUBYEAR , 2015) OR LIMIT-TO (PUBYEAR , 2014) OR LIMIT-TO (PUBYEAR , 2013) OR LIMIT-TO (PUBYEAR , 2012)) ... 1,091 document results

12 (((ALL (all "abdominal radiograph*" OR "Diagnostic Imaging" OR "computed tomographic colonography*")) OR (TITLE-ABS-KEY ((abdom* W/4 radiograph* OR "diagnostic imag*" OR "xray*" OR "x-ray*" OR "x-radiograph*" OR "imag*" OR "diagnostic X-Ray*")))) OR (TITLE-ABS-

KEY ((cholangiograph* OR "endoscopic retrograde cholangiopancreatograph*" OR cholecystograph* OR videodefecography OR defecograph* OR portograph* OR "colonic transit study" OR "colonic transit studies"))) OR (TITLE-ABS-KEY (("Virtual Colonoscop*" OR "Computed Tomographic Colonograph*" OR "CT Colonograph*" OR "X-Ray Computed Tomograph*" OR "XRay Computed Tomograph*" OR "CT X-Ray\$" OR "CT xray\$" OR tomodensitometr\$ OR "X-Ray CAT Scan\$" OR "xray CAT Scan\$"))) AND ((ALL ("Constipation" OR "Functional Colonic Disease*")) OR (TITLE-ABS-KEY ((constipat* OR dyschezi* OR "Colonic Inertia" OR "f\$ecal* impact*" OR "f\$ecal retention" OR "bowel dysfunction\$" OR "slow colonic transit*" OR "non-retentive f\$ecal incontinence" OR "NFRI" OR "functional colonic disease\$")))) AND ((ALL ("Predictive Value of Tests" OR "Reference Values" OR "ROC Curve")) OR (TITLE-ABS-KEY ((sensitiv* OR specific* OR screening OR "false positive" OR "false negative" OR accura* OR predict* OR "reference value\$" OR "reference range\$" OR "roc" OR "roc analys\$s" OR "roc area\$" OR "roc auc" OR "roc characteristic\$" OR "roc curve\$" OR "roc curve method\$" OR "roc estimate\$" OR "roc evaluation\$" OR "Receiver Operating Characteristic" OR "likelihood ratio")))) ... 1,664 document results

11 (ALL ("Predictive Value of Tests" OR "Reference Values" OR "ROC Curve")) OR (TITLE-ABS-KEY ((sensitiv* OR specific* OR screening OR "false positive" OR "false negative" OR accura* OR predict* OR "reference value\$" OR "reference range\$" OR "roc" OR "roc analys\$s" OR "roc area\$" OR "roc auc" OR "roc characteristic\$" OR "roc curve\$" OR "roc curve method\$" OR "roc estimate\$" OR "roc evaluation\$" OR "Receiver Operating Characteristic" OR "likelihood ratio"))) 17,442,026 document results

11 TITLE-ABS-KEY ((sensitiv* OR specific* OR screening OR "false positive" OR "false negative" OR accura* OR predict* OR "reference value\$" OR "reference range\$" OR "roc" OR "roc analys\$s" OR "roc area\$" OR "roc auc" OR "roc characteristic\$" OR "roc curve\$" OR "roc curve method\$" OR "roc estimate\$" OR "roc evaluation\$" OR "Receiver Operating Characteristic" OR "likelihood ratio")) 17,367,818 document results

10 ALL ("Predictive Value of Tests" OR "Reference Values" OR "ROC Curve") 611,312 document results

9 ((ALL (all "abdominal radiograph*" OR "Diagnostic Imaging" OR "computed tomographic colonography*"))) OR (TITLE-ABS-KEY ((abdom* W/4 radiograph* OR "diagnostic imag*" OR "xray*" OR "x-ray*" OR "x-radiograph*" OR "imag*" OR "diagnostic X-Ray*")))) OR (TITLE-ABS-KEY ((cholangiograph* OR "endoscopic retrograde cholangiopancreatograph*" OR cholecystograph* OR videodefecography OR defecograph* OR portograph* OR "colonic transit study" OR "colonic transit studies"))) OR (TITLE-ABS-KEY (("Virtual Colonoscop*" OR "Computed Tomographic Colonograph*" OR "CT Colonograph*" OR "X-Ray Computed Tomograph*" OR "XRay Computed Tomograph*" OR "CT X-Ray\$" OR "CT xray\$" OR tomodensitometr\$ OR "X-Ray CAT Scan\$" OR "xray CAT Scan\$")))) AND ((ALL ("Constipation" OR "Functional Colonic Disease*")) OR (TITLE-ABS-KEY ((constipat* OR dyschezi* OR "Colonic Inertia" OR "f\$ecal* impact*" OR "f\$ecal retention" OR "bowel dysfunction\$" OR "slow colonic transit*" OR "non-retentive f\$ecal incontinence" OR "NFRI" OR "functional colonic disease\$"))))) 7,177 document results

8 (ALL ("Constipation" OR "Functional Colonic Disease*")) OR (TITLE-ABS-KEY ((constipat* OR dyschezi* OR "Colonic Inertia" OR "f\$ecal* impact*" OR "f\$ecal retention" OR "bowel dysfunction\$" OR "slow colonic transit*" OR "non-retentive f\$ecal incontinence" OR "NFRI" OR "functional colonic disease\$"))) 127,240 document results

7 TITLE-ABS-KEY ((constipat* OR dyschezi* OR "Colonic Inertia" OR "f\$ecal* impact*" OR "f\$ecal retention" OR "bowel dysfunction\$" OR "slow colonic transit*" OR "non-retentive f\$ecal incontinence" OR "NFRI" OR "functional colonic disease\$")) 98,301 document results

6 ALL ("Constipation" OR "Functional Colonic Disease*") 125,650 document results

5 (ALL (all "abdominal radiograph*" OR "Diagnostic Imaging" OR "computed tomographic colonography*")) OR (TITLE-ABS-KEY (((abdom* W/4 radiograph* OR "diagnostic imag*" OR "xray*" OR "x-ray*" OR "x-radiograph*" OR "imag*" OR "diagnostic X-Ray*")))) OR (TITLE-ABS-KEY ((cholangiograph* OR "endoscopic retrograde cholangiopancreatograph*" OR cholecystograph* OR videodefecography OR defecograph* OR portograph* OR "colonic transit study" OR "colonic transit studies"))) OR (TITLE-ABS-KEY (("Virtual Colonoscop*" OR "Computed Tomographic Colonograph*" OR "CT Colonograph*" OR "X-Ray Computed Tomograph*" OR "XRay Computed Tomograph*" OR "CT X-Ray\$" OR "CT xray\$" OR tomodensitometr\$ OR "X-Ray CAT Scan\$" OR "xray CAT Scan\$"))) 818,380 document results

4 TITLE-ABS-KEY (("Virtual Colonoscop*" OR "Computed Tomographic Colonograph*" OR "CT Colonograph*" OR "X-Ray Computed Tomograph*" OR "XRay Computed Tomograph*" OR "CT X-Ray\$" OR "CT xray\$" OR tomodensitometr\$ OR "X-Ray CAT Scan\$" OR "xray CAT Scan\$")) 131,896 document results

3 TITLE-ABS-KEY ((cholangiograph* OR "endoscopic retrograde cholangiopancreatograph*" OR cholecystograph* OR videodefecography OR defecograph* OR portograph* OR "colonic transit study" OR "colonic transit studies")) 62,404 document results

2 TITLE-ABS-KEY (((abdom* W/4 radiograph* OR "diagnostic imag*" OR "xray*" OR "x-ray*" OR "x-radiograph*" OR "imag*" OR "diagnostic X-Ray*"))) 54,651 document results

1 ALL (all "abdominal radiograph*" OR "Diagnostic Imaging" OR "computed tomographic colonography*") 694,379 document results