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Contents

Search Terms 2
Pubmed (Central) Search Strategy 2
Medline (Ovid) Search Strategy 4
Embase (Ovid) Search Strategy 6
Web of Science Search Strategy 8
Cochrane Library Search Strategy 10
Risk of Bias Assessment 12
NEWCASTLE - OTTAWA QUALITY ASSESSMENT SCALE (CASE CONTROL STUDIES) 12
Selection 12
Comparability 12
Exposure 12
NEWCASTLE - OTTAWA QUALITY ASSESSMENT SCALE (COHORT STUDIES) 14
Selection 14
Comparability 14
Outcome 14
Table 1 Study Summary 16
Table 2 Subgroup Analyses Between Different SSI Types 18

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Search Terms

Pubmed (Central) Search Strategy

Framework Item	Target	Search term
Population	female participants who had post-hysterectomy surgeries SSI (no restriction to age)	hysterectomy surgeriesmesh term: #1
Intervention	hysterectomy surgeries(No restriction on the surgery type, e.g. laparoscopy)	hysterectomy surgeriesmesh term: #1
Comparator	the number of participants who had or had not post-hysterectomy SSI	RCT, case-control, cross-sectional, longitudinal, observational, cohort and prospective study mesh term: #2 OR #3 OR #4 OR #5 OR #6 OR #7 OR #8
Outcome	SSI	Infection mesh term: #10

step	code	results
#1	(((((((hysterectomy) OR (hysterectomies)) OR (hysterectomy, Vaginal)) OR (hysterectomies, Vaginal)) OR (vaginal hysterectomies)) OR (vaginal hysterectomy)) OR (Colpohysterectomy)) OR (Colpohysterectomies))	53,350
#2	((Clinical Trials, Randomized) OR (Trials, Randomized Clinical)) OR (Controlled Clinical Trials, Randomized)	742,997
#3	(((((((((((((((((((((((Cross Sectional Studies) OR (Cross-Sectional Study)) OR (Studies, Cross-Sectional)) OR (Study, Cross-Sectional)) OR (Surveys, Disease Frequency)) OR (Disease Frequency Survey)) OR (Survey, Disease Frequency)) OR (Analysis, Cross-Sectional)) OR (Analyses, Cross-Sectional)) OR (Analysis, Cross Sectional)) OR (Cross-Sectional Analyses)) OR (Cross-Sectional Analysis)) OR (Cross Sectional Analysis)) OR (Analyses, Cross Sectional)) OR (Cross Sectional Analyses)) OR (Cross-Sectional Survey)) OR (Cross Sectional Survey)) OR (Cross-Sectional Surveys)) OR (Survey, Cross-Sectional)) OR (Surveys, Cross-Sectional)) OR (Disease Frequency Surveys)) OR (Prevalence Studies)) OR (Prevalence Study)) OR (Studies, Prevalence)) OR (Study, Prevalence)	1,122,672
#4	(((((((((((((((((((((((((((((((Longitudinal Study) OR (Studies, Longitudinal)) OR (Study, Longitudinal)) OR (Tuskegee Syphilis Study)) OR (Syphilis Studies, Tuskegee)) OR (Syphilis Study, Tuskegee)) OR (Tuskegee Syphilis Studies)) OR (Jackson Heart Study)) OR (Heart Studies, Jackson)) OR (Heart Study, Jackson)) OR (Jackson Heart Studies)) OR (Studies, Jackson Heart)) OR (California Teachers Study)) OR (California Teachers Studies)) OR (Studies, California Teachers)) OR (Study, California Teachers)) OR (Teachers Studies, California)) OR (Teachers Study, California)) OR (Bogalusa Heart Study)) OR (Bogalusa Heart Studies)) OR (Heart Studies, Bogalusa)) OR (Heart Study, Bogalusa)) OR (Studies, Bogalusa Heart)) OR (Study, Bogalusa Heart)) OR (Framingham Heart Study)) OR (Framingham Heart Studies)) OR (Heart Studies, Framingham)) OR (Heart Study, Framingham)) OR (Longitudinal Survey)) OR (Longitudinal Surveys)) OR (Survey, Longitudinal)) OR (Surveys, Longitudinal)	339,768
#5	(((Case-Control Study) OR (Studies, Case-Control)) OR (Study, Case-Control)) OR (Case-Comparison Studies)) OR (Case Comparison Studies)) OR (Case-Comparison Study)) OR (Studies, Case-Comparison)) OR (Study, Case-Comparison)) OR (Case-Compeer Studies)) OR (Studies, Case-Compeer)) OR (Case-Referrent Studies)) OR (Case Referrent Studies)) OR (Case-Referrent Study)) OR (Studies, Case-Referrent)) OR (Study, Case-Referrent)) OR (Case-Referent Studies)) OR (Case Referent Studies)) OR (Case-Referent Study)) OR (Studies, Case-Referent)) OR (Study, Case-Referent)) OR (Case-Base Studies)) OR (Case Base Studies)) OR (Studies, Case-Base)) OR (Case Control Studies)) OR (Case Control Study)) OR (Studies, Case Control)) OR (Study, Case Control)) OR (Nested Case-Control Studies)) OR (Case-Control Studies, Nested)) OR (Case-Control Study, Nested)) OR (Nested Case Control Studies)) OR (Nested Case-Control Study)) OR (Studies, Nested Case-Control)) OR (Study, Nested Case-Control)) OR (Matched Case-Control Studies)) OR	1,589,628

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	(Case-Control Studies, Matched)) OR (Case-Control Study, Matched)) OR (Matched Case Control Studies)) OR (Matched Case-Control Study)) OR (Studies, Matched Case-Control)) OR (Study, Matched Case-Control)	
#6	((Prospective Study) OR (Studies, Prospective)) OR (Study, Prospective)	904,417
#7	((((((((((((((((((((((((((((((Cohort Study) OR (Studies, Cohort)) OR (Study, Cohort)) OR (Concurrent Studies)) OR (Studies, Concurrent)) OR (Concurrent Study)) OR (Study, Concurrent)) OR (Closed Cohort Studies)) OR (Cohort Studies, Closed)) OR (Closed Cohort Study)) OR (Cohort Study, Closed)) OR (Study, Closed Cohort)) OR (Studies, Closed Cohort)) OR (Birth Cohort Studies)) OR (Birth Cohort Study)) OR (Cohort Studies, Birth)) OR (Cohort Study, Birth)) OR (Studies, Birth Cohort)) OR (Study, Birth Cohort)) OR (Analysis, Cohort)) OR (Analyses, Cohort)) OR (Cohort Analyses)) OR (Cohort Analysis)) OR (Historical Cohort Studies)) OR (Cohort Studies, Historical)) OR (Cohort Study, Historical)) OR (Historical Cohort Study)) OR (Study, Historical Cohort)) OR (Studies, Historical Cohort)) OR (Incidence Studies)) OR (Incidence Study)) OR (Studies, Incidence)) OR (Study, Incidence)	3,150,416
#8	Observational Study	205,618
#9	#2 OR #3 OR #4 OR #5 OR #6 OR #7 OR #8	4,994,412
#10	((((Infection and Infestation) OR (Infestation and Infection)) OR (Infections and Infestations)) OR (Infestations and Infections)) OR (Infection)	4003846
#11	#1 AND #9 AND #10	1,758
#12	The year 2000 - Current	1,198
#13	English	1,096

The results are hyperlinked in each column

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Medline (Ovid) Search Strategy

Framework Item	Target	Search term
Population	female participants who had post-hysterectomy surgeriesSSI(no restriction to age)	hysterectomy surgeriesmesh term with Medline code
Intervention	hysterectomy surgeries(No restriction on the surgery type, e.g. laparoscopy)	hysterectomy surgeriesmesh term with Medline code
Comparator	the number of participants who had or had not post-hysterectomy SSI	RCT, case-control, cross-sectional, longitudinal, observational, cohort and prospective study mesh term with Medline code
Outcome	SSI	Infection mesh term with Medline code

	Term searched	Results
Group 1	Population	
1	hysterectomy. ti,ab,mp.	52599
2	hysterectomies. ti,ab,mp.	3423
3	hysterectomy, Vaginal. ti,ab,mp.	3235
4	hysterectomies, Vaginal. ti,ab,mp.	9
5	vaginal hysterectomies. ti,ab,mp.	437
6	vaginal hysterectomy. ti,ab,mp.	3593
7	Colpohysterectomy. ti,ab,mp.	84
8	Colpohysterectomies. ti,ab,mp.	8
9	1 or 2 or 3 or 4 or 5 or 6 or 7 or 8	53278
Group 2	Intervention	
10	hysterectomy. ti,ab,mp.	52599
11	hysterectomies. ti,ab,mp.	3423
12	hysterectomy, Vaginal. ti,ab,mp.	3235
13	hysterectomies, Vaginal. ti,ab,mp.	9
14	vaginal hysterectomies. ti,ab,mp.	437
15	vaginal hysterectomy. ti,ab,mp.	3593
16	Colpohysterectomy. ti,ab,mp.	84
17	Colpohysterectomies. ti,ab,mp.	8
18	10 or 11 or 12 or 13 or 14 or 15 or 16 or 17	53278
Group 3	Comparator	
19	Cross-sectional. ti,ab,mp.	632818
20	Longitudinal. ti,ab,mp.	377935
21	Prospective study. ti,ab,mp.	159216
22	Cohort study. ti,ab,mp.	274386
23	Observational study. ti,ab,mp.	199248
24	Randomized control study. ti,ab,mp.	937
25	Case-Control Studies. ti,ab,mp.	338463
26	19 or 21 or 22 or 23 or 24 or 25	1494518
Group 4	Outcome	
27	Infections. ti,ab,mp.	1470008
28	"Infection and Infestation". ti,ab,mp.	86
29	"Infestation and Infection". ti,ab,mp.	51
30	"Infections and Infestations". ti,ab,mp.	311

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31	"Infestations and Infections". ti,ab,mp.	28
32	Infection. ti,ab,mp.	1418735
33	27 or 28 or 29 or 30 or 31 or 32	2279134
Combined	9 and 18 and 26 and 33	407
Limited to English only	9 and 18 and 26 and 33	384
The year 2000 to present	9 and 18 and 26 and 33	337

Results link:

https://ovidsp.ovid.com/ovidweb.cgi?T=JS&NEWS=N&PAGE=main&SHAREDSEARCHID=5SYIqKO2Gpep7EBCDrAGLmKZrFtVAMXrv0wx7zAaFQsQRH5DCIC4ESMKrqhH2tOv1

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Embase (Ovid) Search Strategy

Framework Item	Target	Search term
Population	female participants who had post-hysterectomy surgeriesSSI(no restriction to age)	hysterectomy surgeriesmesh term with Embase code
Intervention	hysterectomy surgeries(No restriction on the surgery type, e.g. laparoscopy)	hysterectomy surgeriesmesh term with Embase code
Comparator	the number of participants who had or had not post-hysterectomy SSI	RCT, case-control, cross-sectional, longitudinal, observational, cohort and prospective study mesh term with Embase code
Outcome	SSI	Infection mesh term with Embase code

	Term searched	Results
Group 1	Population	
1	hysterectomy. ti,ab,mp.	93767
2	hysterectomies. ti,ab,mp.	6284
3	hysterectomy, Vaginal. ti,ab,mp.	392
4	trachelectomy. ti,ab,mp.	19
5	hysterectomies, Vaginal. ti,ab,mp.	758
6	vaginal hysterectomies. ti,ab,mp.	8954
7	vaginal hysterectomy. ti,ab,mp.	83
8	Colpohysterectomy. ti,ab,mp.	5
9	Colpohysterectomies. ti,ab,mp.	94170
10	1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9	93767
Group 2	Intervention	
11	hysterectomy. ti,ab,mp.	93767
12	hysterectomies. ti,ab,mp.	6284
13	hysterectomy, Vaginal. ti,ab,mp.	392
14	trachelectomy. ti,ab,mp.	19
15	hysterectomies, Vaginal. ti,ab,mp.	758
16	vaginal hysterectomies. ti,ab,mp.	8954
17	vaginal hysterectomy. ti,ab,mp.	83
18	Colpohysterectomy. ti,ab,mp.	5
19	Colpohysterectomies. ti,ab,mp.	94170
20	11 or 12 or 13 or 14 or 15 or 16 or 17 or 18 or 19	93767
Group 3	Comparator	
21	Cross-sectional. ti,ab,mp.	765496
22	Longitudinal. ti,ab,mp.	475332
23	Prospective study. ti,ab,mp.	899849
24	Cohort study. ti,ab,mp.	405571
25	Observational study. ti,ab,mp.	342074
26	Randomized control study. ti,ab,mp.	1628
27	Case-Control Studies. ti,ab,mp.	27610
28	21 or 22 or 23 or 24 or 25 or 26 or 27	2146419
Group 4	Outcome	
29	Infections. ti,ab,mp.	835857
30	"Infection and Infestation". ti,ab,mp.	107

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31	"Infestation and Infection". ti,ab,mp.	55
32	"Infections and Infestations". ti,ab,mp.	807
33	"Infestations and Infections". ti,ab,mp.	49
34	Infection. ti,ab,mp.	2763568
35	29 or 30 or 31 or 32 or 33 or 34	2991465
Combined	10 and 20 and 28 and 35	1510
Limited to English only	10 and 20 and 28 and 35	1468
The year 2000 to present	10 and 20 and 28 and 35	1419

Results link:

https://ovidsp.ovid.com/ovidweb.cgi?T=JS&NEWS=N&PAGE=main&SHAREDSEARCHID=79TCxxCp1oN0adXj9ZUf4UzOGz44m8xhcwT9pEsrMoJkpSIjfY4IktYO5RKZbvU7

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Web of Science Search Strategy

Framework Item	Target	Search term
Population	female participants who had post-hysterectomy surgeriesSSI(no restriction to age)	hysterectomy surgeriesmesh term with the web of science code: #1
Intervention	hysterectomy surgeries(No restriction on the surgery type, e.g. laparoscopy)	hysterectomy surgeriesmesh term with the web of science code: #1
Comparator	the number of participants who had or had not post-hysterectomy SSI	RCT, case-control, cross-sectional, longitudinal, observational, cohort and prospective study mesh terms with the web of science code: #2, #3, #4, #5, #6, #7, #8
Outcome	SSI	Infection mesh term with the web of science code: #10

step	code	results
#1	TS= (hysterectomy* OR hysterectomies* OR hysterectomy, vaginal* OR hysterectomies, vaginal OR vaginal hysterectomies* OR vaginal hysterectomy* OR colpohysterectomy* OR colpohysterectomies*)	40974
#2	TS= (Clinical Trials, Randomized* OR Trials, Randomized Clinical* OR Controlled Clinical Trials, Randomized*)	357993
#3	TS= (Longitudinal Study* OR Studies, Longitudinal* OR Study, Longitudinal* OR Tuskegee Syphilis Study* OR Syphilis Studies, Tuskegee* OR Syphilis Study, Tuskegee* OR Tuskegee Syphilis Studies* OR Jackson Heart Study* OR Heart Studies, Jackson* OR Heart Study, Jackson* OR Jackson Heart Studies* OR Studies, Jackson Heart* OR California Teachers Study* OR California Teachers Studies* OR Studies, California Teachers* OR Study, California Teachers* OR Teachers Studies, California* OR Teachers Study, California* OR Bogalusa Heart Study* OR Bogalusa Heart Studies* OR Heart Studies, Bogalusa* OR Heart Study, Bogalusa* OR Studies, Bogalusa Heart* OR Study, Bogalusa Heart* OR Framingham Heart Study* OR Framingham Heart Studies* OR Heart Studies, Framingham* OR Heart Study, Framingham* OR Longitudinal Survey* OR Longitudinal Surveys* OR Survey, Longitudinal* OR Surveys, Longitudinal*)	389252
#4	TS= (Case-Control Study* OR Studies, Case-Control* OR Study, Case-Control* OR Case-Comparison Studies* OR Case Comparison Studies* OR Case-Comparison Study* OR Studies, Case-Comparison* OR Study, Case-Comparison* OR Case-Compeer Studies* OR Studies, Case-Compeer* OR Case-Referrent Studies* OR Case Referrent Studies* OR Case-Referrent Study* OR Studies, Case-Referrent* OR Study, Case-Referrent* OR Case-Referent Studies* OR Case Referent Studies* OR Case-Referent Study* OR Studies, Case-Referent* OR Study, Case-Referent* OR Case-Base Studies* OR Case Base Studies* OR Studies, Case-Base* OR Case Control Studies* OR Case Control Study* OR Studies, Case Control* OR Study, Case Control* OR Nested Case-Control Studies* OR Case-Control Studies, Nested* OR Case-Control Study, Nested* OR Nested Case Control Studies* OR Nested Case-Control Study* OR Studies, Nested Case-Control* OR Study, Nested Case-Control* OR Matched Case-Control Studies* OR Case-Control Studies, Matched* OR Case-Control Study, Matched* OR Matched Case Control Studies* OR Matched Case-Control Study* OR Studies, Matched Case-Control* OR Study, Matched Case-Control*)	742023
#5	TS= (Cross Sectional Studies* OR Cross-Sectional Study * OR Studies, Cross-Sectional * OR Study, Cross-Sectional * OR Surveys, Disease Frequency * OR Disease Frequency Survey * OR Survey, Disease Frequency * OR Analysis, Cross-Sectional * OR Analyses, Cross-Sectional * OR Analysis, Cross Sectional * OR Cross-Sectional Analyses * OR Cross-Sectional Analysis * OR Cross Sectional Analysis	1164085

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	* OR Analyses, Cross Sectional * OR Cross Sectional Analyses * OR Cross-Sectional Survey * OR Cross Sectional Survey * OR Cross-Sectional Surveys * OR Survey, Cross-Sectional * OR Surveys, Cross-Sectional * OR Disease Frequency Surveys * OR Prevalence Studies * OR Prevalence Study * OR Studies, Prevalence * OR Study, Prevalence*)	
#6	TS= (Prospective Study* OR Studies, Prospective* OR Study, Prospective*)	721432
#7	TS= (Cohort Study* OR Studies, Cohort * OR Study, Cohort * OR Concurrent Studies * OR Studies, Concurrent * OR Concurrent Study * OR Study, Concurrent * OR Closed Cohort Studies * OR Cohort Studies, Closed * OR Closed Cohort Study * OR Cohort Study, Closed * OR Study, Closed Cohort * OR Studies, Closed Cohort * OR Birth Cohort Studies * OR Birth Cohort Study * OR Cohort Studies, Birth * OR Cohort Study, Birth * OR Studies, Birth Cohort * OR Study, Birth Cohort * OR Analysis, Cohort * OR Analyses, Cohort * OR Cohort Analyses * OR Cohort Analysis * OR Historical Cohort Studies * OR Cohort Studies, Historical * OR Cohort Study, Historical * OR Historical Cohort Study * OR Study, Historical Cohort * OR Studies, Historical Cohort * OR Incidence Studies * OR Incidence Study * OR Studies, Incidence * OR Study, Incidence*)	1333108
#8	TS= (Observational study *)	234254
#9	#2 OR #3 OR #4 OR #5 OR #6 OR #7 OR #8	3887063
#10	TS= (Infections* OR Infection and Infestation * OR Infestation and Infection * OR Infections and Infestations * OR Infestations and Infections * OR Infection *)	1895911
#11	#1 AND #9 AND #10	853
#12	The year 2000 – current; English	726

The results are hyperlinked in each column

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Cochrane Library Search Strategy

Framework Item	Target	Search term
Population	female participants who had post-hysterectomy surgeriesSSI(no restriction to age)	hysterectomy surgeriesCochrane search manager hysterectomy surgerieswith Cochrane code based on mesh term: #1
Intervention	hysterectomy surgeries(No restriction on the surgery type, e.g. laparoscopy)	hysterectomy surgerieswith Cochrane code based on mesh term
Comparator	the number of participants who had or had not post-hysterectomy SSI	RCT, case-control, cross-sectional, longitudinal, observational, cohort and prospective study with Cochrane code based on mesh term:
Outcome	SSI	hysterectomy surgerieswith Cochrane code based on mesh term

step	code	results
#1	(hysterectomy):ti,ab,kw OR (hysterectomies):ti,ab,kw OR (hysterectomy,Vaginal):ti,ab,kw OR (hysterectomies,Vaginal):ti,ab,kw OR (vaginal hysterectomies):ti,ab,kw OR (vaginal hysterectomy):ti,ab,kw OR (Colpohysterectomy):ti,ab,kw OR (Colpohysterectomies):ti,ab,kw	8202
#2	(Clinical Trials, Randomized):ti,ab,kw OR (Trials, Randomized Clinical):ti,ab,kw OR (Controlled Clinical Trials, Randomized):ti,ab,kw	154945
#3	(Longitudinal Study):ti,ab,kw OR (Studies, Longitudinal):ti,ab,kw OR (Study, Longitudinal):ti,ab,kw OR (Tuskegee Syphilis Study):ti,ab,kw OR (Syphilis Studies, Tuskegee):ti,ab,kw OR (Syphilis Study, Tuskegee):ti,ab,kw OR (Tuskegee Syphilis Studies):ti,ab,kw OR (Jackson Heart Study):ti,ab,kw OR (Heart Studies, Jackson):ti,ab,kw OR (Heart Study, Jackson):ti,ab,kw OR (Jackson Heart Studies):ti,ab,kw OR (Studies, Jackson Heart):ti,ab,kw OR (California Teachers Study):ti,ab,kw OR (California Teachers Studies):ti,ab,kw OR (Studies, California Teachers):ti,ab,kw OR (Study, California Teachers):ti,ab,kw OR (Teachers Studies, California):ti,ab,kw OR (Teachers Study, California):ti,ab,kw OR (Bogalusa Heart Study):ti,ab,kw OR (Bogalusa Heart Studies):ti,ab,kw OR (Heart Studies, Bogalusa):ti,ab,kw OR (Heart Study, Bogalusa):ti,ab,kw OR (Studies, Bogalusa Heart):ti,ab,kw OR (Study, Bogalusa Heart):ti,ab,kw OR (Framingham Heart Study):ti,ab,kw OR (Framingham Heart Studies):ti,ab,kw OR (Heart Studies, Framingham):ti,ab,kw OR (Heart Study, Framingham):ti,ab,kw OR (Longitudinal Survey):ti,ab,kw OR (Longitudinal Surveys):ti,ab,kw OR (Survey, Longitudinal):ti,ab,kw OR (Surveys, Longitudinal):ti,ab,kw	23544
#4	(Case-Control Study):ti,ab,kw OR (Studies, Case-Control):ti,ab,kw OR (Study, Case-Control):ti,ab,kw OR (Case-Comparison Studies):ti,ab,kw OR (Case Comparison Studies):ti,ab,kw OR (Case-Comparison Study):ti,ab,kw OR (Studies, Case-Comparison):ti,ab,kw OR (Study, Case-Comparison):ti,ab,kw OR (Case-Compeer Studies):ti,ab,kw OR (Studies, Case-Compeer):ti,ab,kw OR (Case-Referrent Studies):ti,ab,kw OR (Case Referrent Studies):ti,ab,kw OR (Case-Referrent Study):ti,ab,kw OR (Studies, Case-Referrent):ti,ab,kw OR (Study, Case-Referrent):ti,ab,kw OR (Case-Referent Studies):ti,ab,kw OR (Case Referent Studies):ti,ab,kw OR (Case-Referent Study):ti,ab,kw OR (Studies, Case-Referent):ti,ab,kw OR (Study, Case-Referent):ti,ab,kw OR (Case-Base Studies):ti,ab,kw OR (Case Base Studies):ti,ab,kw OR (Studies, Case-Base):ti,ab,kw OR (Case Control Studies):ti,ab,kw OR (Case Control Study):ti,ab,kw OR (Studies, Case Control):ti,ab,kw OR (Study, Case Control):ti,ab,kw OR (Nested Case-Control Studies):ti,ab,kw OR (Case-Control Studies, Nested):ti,ab,kw OR (Case-Control Study, Nested):ti,ab,kw OR (Nested Case Control Studies):ti,ab,kw OR (Nested Case-Control Study):ti,ab,kw OR (Studies, Nested Case-Control):ti,ab,kw OR (Study, Nested Case-Control):ti,ab,kw OR (Matched Case-Control Studies):ti,ab,kw OR	33557

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	(Case-Control Studies, Matched):ti,ab,kw OR (Case-Control Study, Matched):ti,ab,kw OR (Matched Case Control Studies):ti,ab,kw OR (Matched Case-Control Study):ti,ab,kw OR (Studies, Matched Case-Control):ti,ab,kw OR (Study, Matched Case-Control):ti,ab,kw	
#5	(Cross Sectional Studies):ti,ab,kw OR (Cross-Sectional Study):ti,ab,kw OR (Studies, Cross-Sectional):ti,ab,kw OR (Study, Cross-Sectional):ti,ab,kw OR (Surveys, Disease Frequency):ti,ab,kw OR (Disease Frequency Survey):ti,ab,kw OR (Survey, Disease Frequency):ti,ab,kw OR (Analysis, Cross-Sectional):ti,ab,kw OR (Analyses, Cross-Sectional):ti,ab,kw OR (Analysis, Cross Sectional):ti,ab,kw OR (Cross-Sectional Analyses):ti,ab,kw OR (Cross-Sectional Analysis):ti,ab,kw OR (Cross Sectional Analysis):ti,ab,kw OR (Analyses, Cross Sectional):ti,ab,kw OR (Cross Sectional Analyses):ti,ab,kw OR (Cross-Sectional Survey):ti,ab,kw OR (Cross Sectional Survey):ti,ab,kw OR (Cross-Sectional Surveys):ti,ab,kw OR (Survey, Cross-Sectional):ti,ab,kw OR (Surveys, Cross-Sectional):ti,ab,kw OR (Disease Frequency Surveys):ti,ab,kw OR (Prevalence Studies):ti,ab,kw OR (Prevalence Study):ti,ab,kw OR (Studies, Prevalence):ti,ab,kw OR (Study, Prevalence):ti,ab,kw	54133
#6	(Prospective Study):ti,ab,kw OR (Studies, Prospective):ti,ab,kw OR (Study, Prospective):ti,ab,kw	233446
#7	(Cohort Study):ti,ab,kw OR (Studies, Cohort):ti,ab,kw OR (Study, Cohort):ti,ab,kw OR (Concurrent Studies):ti,ab,kw OR (Studies, Concurrent):ti,ab,kw OR (Concurrent Study):ti,ab,kw OR (Study, Concurrent):ti,ab,kw OR (Closed Cohort Studies):ti,ab,kw OR (Cohort Studies, Closed):ti,ab,kw OR (Closed Cohort Study):ti,ab,kw OR (Cohort Study, Closed):ti,ab,kw OR (Study, Closed Cohort):ti,ab,kw OR (Studies, Closed Cohort):ti,ab,kw OR (Birth Cohort Studies):ti,ab,kw OR (Birth Cohort Study):ti,ab,kw OR (Cohort Studies, Birth):ti,ab,kw OR (Cohort Study, Birth):ti,ab,kw OR (Studies, Birth Cohort):ti,ab,kw OR (Study, Birth Cohort):ti,ab,kw OR (Analysis, Cohort):ti,ab,kw OR (Analyses, Cohort):ti,ab,kw OR (Cohort Analyses):ti,ab,kw OR (Cohort Analysis):ti,ab,kw OR (Historical Cohort Studies):ti,ab,kw OR (Cohort Studies, Historical):ti,ab,kw OR (Cohort Study, Historical):ti,ab,kw OR (Historical Cohort Study):ti,ab,kw OR (Study, Historical Cohort):ti,ab,kw OR (Studies, Historical Cohort):ti,ab,kw OR (Incidence Studies):ti,ab,kw OR (Incidence Study):ti,ab,kw OR (Studies, Incidence):ti,ab,kw OR (Study, Incidence):ti,ab,kw	184886
#8	(Observational Study):ti,ab,kw	20328
#9	(Infection and Infestation):ti,ab,kw OR (Infection and Infestation):ti,ab,kw OR (Infections and Infestations):ti,ab,kw OR (Infestations and Infections):ti,ab,kw OR (Infection):ti,ab,kw	102985
#10	#2 OR #3 OR #4 OR #5 OR #6 OR #7 OR #8	552677
#11	#1 AND #9 AND #10	382
#12	Trials	377
#13	The year 2000 – current; English	243

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Risk of Bias Assessment

NEWCASTLE - OTTAWA QUALITY ASSESSMENT SCALE (CASE CONTROL STUDIES)

Selection

1) Is the case definition adequate?

a) yes, with independent validation □

b) yes, e.g. record linkage or based on self-reports

c) no description

2) Representativeness of the cases

a) consecutive or obviously representative series of cases □

b) potential for selection biases or not stated

3) Selection of Controls

a) community controls □

b) hospital controls

c) no description

4) Definition of Controls

a) no history of disease (endpoint) □

b) no description of source

Comparability

1) Comparability of cases and controls on the basis of the design or analysis

a) study controls for _____ (Select the most important factor.) □

b) study controls for any additional factor (This criteria could be modified to indicate specific control for a second important factor.)

Exposure

1) Ascertainment of exposure

a) secure record (e.g. surgical records) □

b) structured interview where blind to case/control status □

c) interview not blinded to case/control status

d) written self-report or medical record only

e) no description

2) Same method of ascertainment for cases and controls

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a) yes □

b) no

3) Non-response rate

a) same rate for both groups □

b) non-respondents described

c) rate different and no designation

Table 1 Risk of Bias Assessment with NOS Case-control Study Scale

Author & Year	Selection				Comparability	Exposure			Total score
Olsen 2009	1	1	1	0	2	1	1	0	6
Lake 2013	1	1	1	1	2	1	1	1	9
Savage 2013	1	1	1	0	2	1	1	0	7
Pop-Vicas 2014	0	1	1	0	2	0	1	1	6
Morgan 2016	1	1	1	0	2	0	1	1	7
Wang 2022	1	1	1	0	2	1	1	0	7

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NEWCASTLE - OTTAWA QUALITY ASSESSMENT SCALE (COHORT STUDIES)

Selection

1) Representativeness of the exposed cohort

a) truly representative of the average _____ (describe) in the community □

b) somewhat representative of the average _____ in the community □

c) selected group of users e.g. nurses, volunteers

d) no description of the derivation of the cohort

2) Selection of the non-exposed cohort

a) drawn from the same community as the exposed cohort □

b) drawn from a different source

c) no description of the derivation of the non-exposed cohort

3) Ascertainment of exposure

a) secure record (e.g. surgical records) □

b) structured interview □

c) written self-report

d) no description

4) Demonstration that outcome of interest was not present at start of study

a) yes □

b) no

Comparability

1) Comparability of cohorts on the basis of the design or analysis

a) study controls for _____ (select the most important factor) □

b) study controls for any additional factor □ (This criteria could be modified to indicate specific control for a second important factor.)

Outcome

1) Assessment of outcome

a) independent blind assessment □

b) record linkage □

c) self-report

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d) no description

2) Was follow-up long enough for outcomes to occur

a) yes (select an adequate follow-up period for outcome of interest) □

b) no

3) Adequacy of follow-up of cohorts

a) complete follow-up - all subjects accounted for □

b) subjects lost to follow-up unlikely to introduce bias - small number lost - > ____ % (select an adequate %) follow up, or description provided of those lost) □

c) follow up rate < ____% (select an adequate %) and no description of those lost

d) no statement

Table 2 Risk of Bias Assessment with NOS Cohort Study Scale

Author & Year	Selection				Comparability	Exposure			Total score
Molina-Cabrillana 2008	0	1	1	0	2	1	1	0	6
Coleman 2014	1	1	1	0	2	1	0	1	7
Mahdi 2014	1	1	1	0	2	1	1	0	7
Uppal 2015	1	1	1	0	2	1	1	1	8
Tuomi 2016	1	1	1	0	2	1	1	1	8
Till 2017	1	1	1	0	2	0	1	1	7
Brown 2019	1	1	1	1	2	1	1	1	9
Tsuzuki 2021	1	1	1	0	2	1	1	0	7

Table 3 Study Summary

Author & Year	Selection				Comparability	Exposure			Total score
Molina-Cabrillana 2008#	0	1	1	0	2	1	1	0	6
Olsen 2009*	1	1	1	0	2	1	1	0	6
Lake 2013*	1	1	1	1	2	1	1	1	9
Savage 2013*	1	1	1	0	2	1	1	0	7
Coleman 2014#	1	1	1	0	2	1	0	1	7
Mahdi 2014#	1	1	1	0	2	1	1	0	7
Pop-Vicas 2014*	0	1	1	0	2	0	1	1	6
Uppal 2015#	1	1	1	0	2	1	1	1	8
Morgan 2016*	1	1	1	0	2	0	1	1	7
Tuomi 2016#	1	1	1	0	2	1	1	1	8
Till 2017#	1	1	1	0	2	0	1	1	7
Brown 2019#	1	1	1	1	2	1	1	1	9
Tsuzuki 2021#	1	1	1	0	2	1	1	0	7
Wang 2022*	1	1	1	0	2	1	1	0	7

Note. *means this study was assessed through the items for case-control studies. # means this study was assessed through the items for cohort studies.

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Table 3 Study Summary

Author & Year	Sample Origin	N	SSI +	Age (±SD)	Surgery Method	Age RF	Anti-microbial	Blood Loss	Blood Transfusion	BMI	Diabetes	Obesity	Surgery Duration	Tobacco Use	Tumour	Wound Cleanness
Molina-Cabrillana 2008	2000-2004 Hospital Universitario Materno-Infantil de Canarias, Sapin	1540	72	54.00 (±12.90)	abdominal & vaginal	Age >60	Y/N	NR	NR	NR	Y/N	Y/N	≥P75	NR	Y/N	Clean-contaminated vs Contaminated /dirty
Olsen 2009	2003-2005 CDC Prevention Epicenter Program hospitals, USA	820	66	51.70 (±17.78)	abdominal & vaginal	Mean	NR	NR	NR	Mean	Y/N	NR	Mean	Y/N	Y/N	NR
Lake 2013	2005-2009 ACS-NSQIP, USA	13822	375	NR	abdominal & vaginal & laparoscopic	Age >80	NR	NR	Y/N	BMI≥30 (Obesity)	Y/N	BMI≥30 (Obesity)	≥P75	Y/N	Y/N	Clean vs Clean-contaminated Contaminated vs Dirty
Savage 2013	2007-2010 University of Iowa Hospitals and Clinics, USA	1104	126	54.53 (±13.66)	abdominal	Mean	Mean	NR	Median	BMI≥30 (Obesity)	Y/N	Y/N	Mean	NR	Y/N	NR
Coleman 2014	1999-2012 Johns Hopkins Medical Institution, USA	77	17	42.56 (±5.93)	abdominal & vaginal & laparoscopic	Mean	NR	>250ml; ≥451ml	Y/N	Median	Y/N	BMI≥30 (Obesity)	NR	Y/N	NR	NR
Mahdi 2014	2005-2011 ACS-NSQIP, USA	28366	296	NR	laparoscopic	Age >60, 70 & 80	NR	NR	>4 units of packed red blood cells	BMI≥30 (Obesity)	Y/N	BMI≥30 (Obesity)	>60 min, 180 min	Y/N	NR	NR
Pop-Vicas 2014	2012-2015 University of Wisconsin Hospitals, USA	1531	52	58.27 (±12.31)	abdominal & vaginal & laparoscopic	Mean	Y/N	Median*	NR	NR	NR	NR	Mean	Y/N	Y/N	NR

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Uppal 2015	2012-2015 MSQC, USA	21358	441	48.10 (±11.70)	abdominal & vaginal & laparoscopic	Median	Y/N	Median	NR	BMI≥30 (Obesity)	NR	BMI≥30 (Obesity)	Mean	Y/N	Y/N	NR
Morgan 2016	2012-2014 MSQC, USA	16548	315	NR	abdominal	Age >50	NR	Mean	Y/N	BMI≥30 (Obesity)	Y/N	BMI≥30 (Obesity)	Mean	Y/N	Y/N	NR
Tuomi 2016	2007-2013 Helsinki University Hospital, Finland	1164	94	67.46 (±10.23)	abdominal & vaginal & laparoscopic	Mean	NR	Median	NR	Mean	Y/N	NR	Mean	Y/N	NR	NR
Till 2017	2012-2015 MSQC, USA	18255	329	NR	abdominal & vaginal & laparoscopic	Age >65	NR	≥250ml	NR	BMI≥30 (Obesity)	Y/N	BMI≥30 (Obesity)	Mean	Y/N	Y/N	NR
Brown 2019	2012-2014 ACS-NSQIP, USA	46755	445	45.95 (±1.51)	laparoscopic	Mean	NR	NR	Y/N	Mean	Y/N	NR	Mean	Y/N	NR	Clean vs Clean-contaminated vs Contaminated vs Dirty
Tsuzuki 2021	2014-2018 Teine Keijinkai Hospital, Japan	1559	71	48.28 (±11.39)	laparoscopic	Mean	NA	NR	Y/N	Mean	Y/N	NR	Mean	Y/N	NR	NR
Wang 2022	2012-2022 Two Grade A Tertiary Hospitals, China	94	188	47.70 (±10.87)	abdominal	Age >50	Y/N	≥500ml	NR	Mean	Y/N	NR	>180 min	NR	Y/N	Clinicians determined Class II vs Class III
Overall		152993	2887	47.53 (±8.29)												

Note. The content under each risk factor was how these studies presented their data. The detailed case numbers are in Table 3; SSI+ refers to SSI-positive cases; ACS-NSQIP refers to the American College of Surgeons National Surgical Quality Improvement Program; MSQC refers to the Michigan Surgical Quality Collaborative; NR refers to not reported; NA refers to not applicable; Y/N refers to reported in Yes or No; Median*: the median reported in this study did not include IQR to estimate its variance; P75 refers to the 75th percentil

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Table 2 Subgroup Analyses Between Different SSI Types

	Superficial & Deep & Organ Space						Deep & Organ Space						Group Difference	
Risk Factors	**LogOR**	**I^2**	**OR**	**SE**	**z**	**p**	**LogOR**	**I^2**	**OR**	**SE**	**z**	**p**	**Q (df)**	**p**
Tobacco Use	0.36	0.00%	1.43	0.07	5.78	<.001	1	68.56%	2.72	0.18	5.69	.001	11.59 (1)	<.001
Diabetes	0.53	64.07%	1.70	0.15	2.5	<.001	0.27	61.95%	1.31	0.26	1.06	.290	.71 (1)	.400

Note. Only Tobacco Use and Diabetes retrieved more than 4 datasets reporting Deep or Organ Space SSI types. The individual SSI types, such as Superficial, Deep, or Organ Space, were reported in less than 4 sets. This is to demonstrate that ORs of risk factors might differ between SSI types.