

## Fertility problems: assessment and treatment

### [G] Tubal surgery

*NICE guideline NGXXX*

*Evidence reviews underpinning recommendation 1.6.1 in the  
NICE guideline*

*September 2025*

*Draft for consultation*

*This evidence review was developed by NICE*



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Local commissioners and/or providers have a responsibility to enable the guideline to be applied when individual health professionals and their patients or service users wish to use it. They should do so in the context of local and national priorities for funding and developing services, and in light of their duties to have due regard to the need to eliminate unlawful discrimination, to advance equality of opportunity and to reduce health inequalities. Nothing in this guideline should be interpreted in a way that would be inconsistent with compliance with those duties.

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# 1 Tubal surgery

## 2 Review question

- 3 What is the clinical and cost effectiveness of tubal surgery (as a standalone treatment)  
4 compared to expectant management or in vitro fertilisation (IVF) for fertility problems  
5 associated with tubal disease?

## 6 Introduction

7 Tubal disease can cause fertility problems due to occlusion or dysfunction of the fallopian  
8 tubes. Surgery to repair damaged fallopian tubes has been proposed as a treatment to  
9 improve the fertility of people with tubal disease. However, we do not know if tubal surgery is  
10 effective compared to doing nothing (expectant management) or IVF. Therefore, the aim of  
11 this review is to determine the effectiveness and cost effectiveness of tubal surgery in people  
12 with fertility problems associated with tubal disease.

## 13 Summary of the protocol

14 See Table 1 for a summary of the Population, Intervention, Comparison and Outcome  
15 (PICO) characteristics of this review.

16 **Table 1: Summary of the protocol (PICO table)**

<b>Population</b>	<p>Inclusion:</p> <ul style="list-style-type: none"> <li>• People with fertility problems associated with tubal disease</li> </ul> <p>Exclusion:</p> <ul style="list-style-type: none"> <li>• People seeking reversal of sterilisation</li> <li>• People with endometriosis</li> </ul>
<b>Intervention</b>	<ul style="list-style-type: none"> <li>• Tubal surgery (including microsurgery, laparoscopy and minilaparotomy or laparotomy)</li> </ul> <p>Exclusion:</p> <ul style="list-style-type: none"> <li>• Tubal surgery as an adjunct to artificial reproductive technologies (ART)</li> </ul>
<b>Comparison</b>	<ul style="list-style-type: none"> <li>• Expectant management</li> <li>• In vitro fertilisation (IVF)</li> </ul>
<b>Outcome</b>	<p><b>Critical</b></p> <ul style="list-style-type: none"> <li>• Live birth (as defined by study, risk of bias assessments will reflect where this is not defined as a live birth to include a gestational age of <math>\geq 20</math> weeks)</li> <li>• Clinical pregnancy (as defined by study, risk of bias assessments will reflect where this is not defined as an ultrasound scan that has shown at least one fetal heart rate)</li> </ul> <p><b>Important</b></p> <ul style="list-style-type: none"> <li>• Ectopic pregnancy</li> <li>• Multiple gestation (defined as an ultrasound scan that has shown at least 2 fetal heartbeats)</li> <li>• Ovarian Hyperstimulation Syndrome (OHSS)</li> <li>• Post-operative recurrence of tubal occlusion</li> </ul>

17

18 For further details see the review protocol in Appendix A.

## 1 **Methods and process**

2 This evidence review was developed using the methods and process described in  
3 [Developing NICE guidelines: the manual](#). Methods specific to this review question are  
4 described in the review protocol in appendix A and the methods document (supplementary  
5 document 1).

6 Declarations of interest were recorded according to [NICE's conflicts of interest policy](#).

## 7 **Effectiveness evidence**

### 8 **Included studies**

9 A systematic review of the literature was conducted but no studies were identified which  
10 were applicable to this review question.

11 See the literature search strategy in appendix B and study selection flow chart in appendix C.

### 12 **Excluded studies**

13 Studies not included in this review are listed, and reasons for their exclusion are provided in  
14 appendix J.

### 15 **Summary of included studies**

16 No studies were identified which were applicable to this review question (and so there are no  
17 evidence tables in Appendix D). No meta-analysis was conducted for this review (and so  
18 there are no forest plots in Appendix E).

### 19 **Summary of the evidence**

20 No studies were identified which were applicable to this review question (and so there are no  
21 GRADE tables in Appendix F).

## 22 **Economic evidence**

23 A total of 249 studies were identified in the health economic literature search for this review  
24 question. After duplicates were removed, 201 studies were sifted on title and abstract, of  
25 which all were excluded at this stage.

### 26 **Included studies**

27 A systematic review of the economic literature was conducted but no economic studies were  
28 identified which were applicable to this review question.

29 Also see the literature search strategy in appendix B and the economic study selection flow  
30 chart in appendix G.

### 31 **Excluded studies**

32 Economic studies not included in this review are listed, and reasons for their exclusion are  
33 provided in appendix J.

## **1 Summary of included economic evidence**

2 No economic studies were identified which were applicable to this review question.

## **3 Economic model**

4 No economic modelling was undertaken for this review because the committee agreed that  
5 other topics were higher priorities for economic evaluation.

## **6 The committee's discussion and interpretation of the evidence**

### **7 The outcomes that matter most**

8 The committee agreed that live birth is the most important outcome for people with fertility  
9 problems and reflects both pregnancy rates and antenatal loss. However, the committee  
10 were aware that clinical pregnancy rates are more commonly reported in studies and are  
11 often reported instead of live birth rates. The committee therefore agreed it was appropriate  
12 to make both live birth and clinical pregnancy critical outcomes to reflect the evidence  
13 available and to ensure evidence on direct measures of improved fertility were prioritised  
14 over other more indirect measures of effectiveness.

15 The committee agreed a number of other outcomes were important. For example, ectopic  
16 pregnancy was agreed to be an important outcome because more frequent in people with  
17 tubal disease and may be more likely if conception follows surgery as compared to  
18 conception due to IVF. Ovarian hyperstimulation syndrome (OHSS) was agreed to be  
19 important because it is an important risk of IVF. The committee agreed that multiple gestation  
20 was important because it creates a greater risk of complications in pregnancy and during  
21 delivery, such as early birth. The committee also agreed that post-operative recurrence of  
22 tubal occlusion was important because it may affect the effectiveness and cost-effectiveness  
23 of tubal surgery.

### **24 The quality of the evidence**

25 No studies were identified which were applicable to this review question.

### **26 Benefits and harms**

27 The committee based the recommendation on their clinical knowledge and experience as  
28 there was no relevant randomised controlled trial evidence identified. The committee agreed  
29 that tubal surgery should be considered as an option for those with mild tubal disease who  
30 do not wish to have IVF because, for example, of their moral or religious beliefs. The  
31 committee drew on their knowledge of older cohort studies that suggest that tubal surgery  
32 may not be effective for more damaged fallopian tubes, and on current clinical practice. They  
33 agreed not to recommend tubal surgery for those with moderate or severe tubal disease.  
34 Based on their knowledge about the likely ineffectiveness of tubal surgery for more severe  
35 tubal disease, the committee agreed not to make a research recommendation.

36 The committee wanted to emphasise that tubal surgery should be performed in centres  
37 where appropriate expertise is available to ensure patient safety as this is an invasive  
38 procedure which can lead to bleeding, infection, scarring and damage to other pelvic organs.  
39 The committee acknowledged that this means there can be geographical variation in  
40 availability of this intervention.

41 They also discussed that the presence of male factor fertility issues should be taken into  
42 account when considering tubal surgery and agreed that this would be part of the routine  
43 assessment of all heterosexual couples with subfertility.



## 1 Cost effectiveness and resource use

2 In the absence of any included evidence or original economic analysis, the committee made  
3 a qualitative assessment of the cost effectiveness of their recommendations.

4 The committee noted that tubal surgery for women with mild tubal disease is no longer  
5 commonly conducted in current practice. However, the committee acknowledged that tubal  
6 surgery was likely to offer some benefits in terms of providing an improved chance of live  
7 birth relative to no treatment for those with mild tubal disease. It was noted that the clinical  
8 effects of surgery would likely vary depending on the severity of the disease, and tubal  
9 surgery may not be effective for those people with damaged fallopian tubes. The committee,  
10 therefore, concluded that tubal surgery would be a cost-effective option for those with mild  
11 tubal disease, who do not wish to have IVF – for example, due to their moral or religious  
12 beliefs. The committee made the recommendation reflective of this.

13 The committee noted the uncertainties of the overall clinical benefits for tubal surgery, and  
14 the established clinical effectiveness of IVF. It was therefore concluded that IVF is the more  
15 cost-effective intervention for the general population under review. Although, it was  
16 acknowledged that the recommendation made provides those without the option of IVF a  
17 greater chance of conception compared to no treatment for those people meeting the criteria  
18 of established clinical effectiveness for tubal surgery (mild tubal disease). For further details  
19 on the cost-effectiveness of IVF see evidence review J and evidence review K.

20 Due to advances in IVF, tubal surgery is now performed less frequently throughout the UK.  
21 Tubal surgery, in current practice, is performed in centres where appropriate expertise is  
22 available. The committee emphasised the importance of this to ensure patient safety. Tubal  
23 surgery is an invasive procedure which can lead to; bleeding, infection, scarring and damage  
24 to other pelvic organs.

25 No change in current practice is anticipated from the recommendations made for this review  
26 question. The recommendations are in line with the previous NICE guideline and are  
27 reflective of current clinical practice. The committee were confident that their  
28 recommendations would not result in a significant resource impact.

## 29 Recommendations supported by this evidence review

30 This evidence review supports recommendation 1.6.1.

## 31 References

32 No studies were identified which were applicable to this review question.

# 1 Appendices

## 2 Appendix A Review protocols

3 **Review protocol for review question: What is the clinical and cost effectiveness of tubal surgery (as a standalone**  
 4 **treatment) compared to expectant management or in vitro fertilisation (IVF) for fertility problems associated with tubal**  
 5 **disease?**

6 **Table 2: Review protocol**

ID	Field	Content
0.	PROSPERO registration number	CRD42023478551
1.	Review title	Clinical and cost effectiveness of tubal surgery compared to expectant management or IVF for fertility problems associated with tubal disease
2.	Review question	What is the clinical and cost effectiveness of tubal surgery (as a standalone treatment) compared to expectant management or in vitro fertilisation (IVF) for fertility problems associated with tubal disease?
3.	Objective	To determine the clinical and cost effectiveness of tubal surgery compared to expectant management or IVF for fertility problems associated with tubal disease
4.	Searches	<p>The following databases will be searched (from October 2016 [date of search for Cochrane review; Chua 2017] to date search conducted):</p> <p>Clinical searches</p> <ul style="list-style-type: none"> <li>• Cochrane Central Register of Controlled Trials (CENTRAL)</li> <li>• Cochrane Database of Systematic Reviews (CDSR)</li> <li>• Embase</li> <li>• MEDLINE ALL</li> <li>• Epistemonikos</li> </ul>

ID	Field	Content
		<p>Searches will be restricted by:</p> <ul style="list-style-type: none"> <li>• English language</li> <li>• Human studies</li> </ul> <p>The guideline committee will decide whether and when to re-run the searches to retrieve further studies for inclusion.</p> <p>The full search strategies for MEDLINE database will be published in the final review.</p>
5.	Condition or domain being studied	Surgical interventions for female factor fertility problems
6.	Population	<p>Inclusion:</p> <ul style="list-style-type: none"> <li>• People with fertility problems associated with tubal disease</li> </ul> <p>Both proximal and distal tubal disease will be included.</p> <p>All grades of severity of tubal damage will be included and categorised according to the Hull and Rutherford (2002) classification system as minor (grade I), moderate (grade II) and severe (grade III)</p> <p>Exclusion:</p> <ul style="list-style-type: none"> <li>• People seeking reversal of sterilisation</li> <li>• People with endometriosis</li> </ul> <p>If some, but not all, of a study's participants are eligible for this review then we will include a study if at least 80% of its participants are eligible.</p>
7.	Intervention	<ul style="list-style-type: none"> <li>• Tubal surgery (including microsurgery, laparoscopy and minilaparotomy or laparotomy)</li> </ul> <p>Exclusion: Tubal surgery as an adjunct to artificial reproductive technologies (ART) will not be included.</p>
8.	Comparator	<ul style="list-style-type: none"> <li>• Expectant management</li> <li>• In vitro fertilisation (IVF)</li> </ul>
9.	Types of study to be included	<ul style="list-style-type: none"> <li>• Systematic reviews of RCTs</li> <li>• RCTs*</li> </ul>

ID	Field	Content
		<p>*Cross-over RCTs will be included but only where data can be extracted for the end of the first phase</p> <p>Quasi-RCTs, such as trials in which allocation is determined by alternation or date of birth, will be excluded</p>
10.	Other exclusion criteria	<p>Other exclusion criteria:</p> <ul style="list-style-type: none"> <li>• Language limitations: non-English-language papers will be excluded (unless data can be obtained, and risk of bias assessed, from an existing systematic review)</li> <li>• Conference abstracts, dissertations and unpublished data will not be included unless the data can be extracted (and risk of bias assessed) from elsewhere (for instance, from an existing systematic review)</li> </ul>
11.	Context	<p>This guidance will fully update the following NICE guideline: Fertility problems: assessment and treatment (last updated 2017; CG156)</p>
12.	Primary outcomes (critical outcomes)	<ul style="list-style-type: none"> <li>• Live birth (as defined by study, risk of bias assessments will reflect where this is not defined as a live birth to include a gestational age of <math>\geq 20</math> weeks)</li> <li>• Clinical pregnancy (as defined by study, risk of bias assessments will reflect where this is not defined as an ultrasound scan that has shown at least one fetal heart rate)</li> </ul> <p>The primary unit of analysis will be cumulative rates (of each outcome) per woman randomised</p>
13.	Secondary outcomes (important outcomes)	<ul style="list-style-type: none"> <li>• Ectopic pregnancy</li> <li>• Multiple gestation (defined as an ultrasound scan that has shown at least 2 fetal heartbeats)</li> <li>• Ovarian Hyperstimulation Syndrome (OHSS)</li> <li>• Post-operative recurrence of tubal occlusion</li> </ul>
14.	Data extraction (selection and coding)	<p>All references identified by the searches and from other sources will be uploaded into EPPI and de-duplicated. Titles and abstracts of the retrieved citations will be screened to identify studies that potentially meet the inclusion criteria outlined in the review protocol.</p> <p>Dual sifting will be performed on at least 10% of records; 90% agreement is required. Disagreements will be resolved via discussion between the two reviewers, and consultation with senior staff if necessary.</p> <p>Full versions of the selected studies will be obtained for assessment. Studies that fail to meet the inclusion criteria once the full version has been checked will be excluded at this stage. Each study excluded after checking the full version will be listed, along with the reason for its exclusion. A standardised form will be used to extract data from studies included after full-text review. The following data will be extracted: study details (reference, country where study was carried out, and dates), participant characteristics, inclusion and exclusion criteria, details of the</p>

ID	Field	Content
		interventions, follow-up, relevant outcome data and source of funding. One reviewer will extract relevant data into a standardised form, and this will be quality assessed by a senior reviewer.
15.	Risk of bias (quality) assessment	<p>Quality assessment of individual studies will be performed using the following checklists:</p> <ul style="list-style-type: none"> <li>• ROBIS tool for systematic reviews</li> <li>• Cochrane RoB tool v.2 for RCTs</li> </ul> <p>The quality assessment will be performed by one reviewer, and this will be quality assessed by a senior reviewer.</p>
16.	Strategy for data synthesis	<p>Depending on the availability of the evidence, the findings will be summarised narratively or quantitatively. Where data is available, meta-analyses will be conducted using Cochrane Review Manager software, and data will be presented as risk ratios or odds ratios (all included outcomes are dichotomous outcomes). It is considered likely that a random-effects model will be used for meta-analyses (based on assumptions about methodological diversity of studies). Funnel plot asymmetry (relationship between the magnitude of the effect estimate and study size) will be considered (for meta-analyses that include at least 10 studies), and where asymmetry is indicated a fixed-effects model will be conducted (and both random-effects and fixed-effects analyses will be presented) or sensitivity analyses excluding small studies will be considered.</p> <p>Heterogeneity in the effect estimates of the individual studies will be assessed using the I<sup>2</sup> statistic. Alongside visual inspection of the point estimates and confidence intervals, I<sup>2</sup> values of greater than 50% and 80% will be considered as significant and very significant heterogeneity, respectively. Heterogeneity will be explored as appropriate using sensitivity analyses and pre-specified subgroup analyses.</p> <p>The confidence in the findings across all available evidence will be evaluated for each outcome using an adaptation of the 'Grading of Recommendations Assessment, Development and Evaluation (GRADE) toolbox' developed by the international GRADE working group: <a href="http://www.gradeworkinggroup.org/">http://www.gradeworkinggroup.org/</a>.</p> <p>Importance and imprecision of findings will be assessed against minimally important differences (MIDs). The following MIDs will be used:</p> <ul style="list-style-type: none"> <li>• Live birth: statistical significance</li> <li>• All other outcomes: 0.8 and 1.25 for all relative dichotomous outcomes</li> </ul>
17.	Analysis of sub-groups	<p>Evidence will be sub-grouped by the following:</p> <ul style="list-style-type: none"> <li>• Age (based on the mean age reported in the study):</li> </ul>

ID	Field	Content														
		<ul style="list-style-type: none"> <li>○ ≤35 years</li> <li>○ &gt;35 years</li> <li>• Severity of tubal damage:               <ul style="list-style-type: none"> <li>○ Minor/grade I</li> <li>○ Moderate/grade II</li> <li>○ Severe/grade III</li> </ul> </li> <li>• Tubal occlusion:               <ul style="list-style-type: none"> <li>○ Unilateral</li> <li>○ Bilateral</li> </ul> </li> </ul> <p>Where evidence is sub-grouped the committee will consider on a case-by-case basis if separate recommendations should be made for distinct groups. Separate recommendations may be made where there is evidence of a differential effect of interventions in distinct groups. If there is a lack of evidence in one group, the committee will consider, based on their experience, whether it is reasonable to extrapolate and assume the interventions will have similar effects in that group compared with others.</p>														
18.	Type and method of review	<table border="1"> <tbody> <tr> <td><input checked="" type="checkbox"/></td><td>Intervention</td></tr> <tr> <td><input type="checkbox"/></td><td>Diagnostic</td></tr> <tr> <td><input type="checkbox"/></td><td>Prognostic</td></tr> <tr> <td><input type="checkbox"/></td><td>Qualitative</td></tr> <tr> <td><input type="checkbox"/></td><td>Epidemiologic</td></tr> <tr> <td><input type="checkbox"/></td><td>Service Delivery</td></tr> <tr> <td><input type="checkbox"/></td><td>Other (please specify)</td></tr> </tbody> </table>	<input checked="" type="checkbox"/>	Intervention	<input type="checkbox"/>	Diagnostic	<input type="checkbox"/>	Prognostic	<input type="checkbox"/>	Qualitative	<input type="checkbox"/>	Epidemiologic	<input type="checkbox"/>	Service Delivery	<input type="checkbox"/>	Other (please specify)
<input checked="" type="checkbox"/>	Intervention															
<input type="checkbox"/>	Diagnostic															
<input type="checkbox"/>	Prognostic															
<input type="checkbox"/>	Qualitative															
<input type="checkbox"/>	Epidemiologic															
<input type="checkbox"/>	Service Delivery															
<input type="checkbox"/>	Other (please specify)															
19.	Language	English														
20.	Country	England														
21.	Anticipated or actual start date	September 2023														

ID	Field	Content		
22.	Anticipated completion date	November 2024		
23.	Stage of review at time of this submission	Review stage	Started	Completed
		Preliminary searches	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
		Piloting of the study selection process	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
		Formal screening of search results against eligibility criteria	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
		Data extraction	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
		Risk of bias (quality) assessment	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
		Data analysis	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
24.	Named contact	5a. Named contact Guideline Development Team A  5b. Named contact e-mail <a href="mailto:FertilityProblems@nice.org.uk">FertilityProblems@nice.org.uk</a>  5c. Organisational affiliation of the review Guideline Development Team A, Centre for Guidelines, National Institute for Health and Care Excellence (NICE)		
25.	Review team members	<ul style="list-style-type: none"><li>• Senior Technical Analyst</li><li>• Technical Analyst</li></ul>		
26.	Funding sources/sponsor	This systematic review is being completed by the National Institute for Health and Care Excellence (NICE)		
27.	Conflicts of interest	All guideline committee members and anyone who has direct input into NICE guidelines (including the evidence review team and expert witnesses) must declare any potential conflicts of interest in line with NICE's code of practice for declaring and dealing with conflicts of interest. Any relevant interests, or changes to interests, will also be declared publicly at the start of each guideline committee meeting. Before each meeting, any potential conflicts of interest will be considered by the guideline committee Chair and a senior member of the development team. Any decisions to exclude a person from all or part of a meeting will be documented. Any changes to a member's		

ID	Field	Content										
		declaration of interests will be recorded in the minutes of the meeting. Declarations of interests will be published with the final guideline.										
28.	Collaborators	Development of this systematic review will be overseen by an advisory committee who will use the review to inform the development of evidence-based recommendations in line with section 3 of <a href="#">Developing NICE guidelines: the manual</a> . Members of the guideline committee are available on the NICE website: <a href="https://www.nice.org.uk/guidance/indevelopment/gid-ng10263">https://www.nice.org.uk/guidance/indevelopment/gid-ng10263</a>										
29.	Other registration details	None										
30.	Reference/URL for published protocol	<a href="https://www.crd.york.ac.uk/PROSPERO/display_record.php?RecordID=478551">https://www.crd.york.ac.uk/PROSPERO/display_record.php?RecordID=478551</a>										
31.	Dissemination plans	NICE may use a range of different methods to raise awareness of the guideline. These include standard approaches such as: <ul style="list-style-type: none"><li>• notifying registered stakeholders of publication</li><li>• publicising the guideline through NICE's newsletter and alerts</li><li>• issuing a press release or briefing as appropriate, posting news articles on the NICE website, using social media channels, and publicising the guideline within NICE</li></ul>										
32.	Keywords	Fallopian tube surgery, tubal infertility, female factor fertility problems										
33.	Details of existing review of same topic by same authors	None										
34.	Current review status	<table><tr><td><input checked="" type="checkbox"/></td><td>Ongoing</td></tr><tr><td><input checked="" type="checkbox"/></td><td>Completed but not published</td></tr><tr><td><input type="checkbox"/></td><td>Completed and published</td></tr><tr><td><input type="checkbox"/></td><td>Completed, published and being updated</td></tr><tr><td><input type="checkbox"/></td><td>Discontinued</td></tr></table>	<input checked="" type="checkbox"/>	Ongoing	<input checked="" type="checkbox"/>	Completed but not published	<input type="checkbox"/>	Completed and published	<input type="checkbox"/>	Completed, published and being updated	<input type="checkbox"/>	Discontinued
<input checked="" type="checkbox"/>	Ongoing											
<input checked="" type="checkbox"/>	Completed but not published											
<input type="checkbox"/>	Completed and published											
<input type="checkbox"/>	Completed, published and being updated											
<input type="checkbox"/>	Discontinued											
35.	Additional information	None										
36.	Details of final publication	<a href="http://www.nice.org.uk">www.nice.org.uk</a>										

1 RCT: randomised controlled trial; RoB: risk of bias



## 1 Appendix B Literature search strategies

2 Literature search strategies for review question: What is the clinical and cost  
3 effectiveness of tubal surgery (as a standalone treatment) compared to  
4 expectant management or in vitro fertilisation (IVF) for fertility problems  
5 associated with tubal disease?

6 Database: MEDLINE ALL <1946 to November 22, 2023>

7 Date of last search: 27/11/2023

#	Searches
1	((tube? or tubal*) adj4 (infertil* or subfertil* or fertil* or factor?)).tw,kf.
2	exp Fallopian Tube Diseases/
3	Pelvic Inflammatory Disease/
4	Fallopian Tubes/pa, ab
5	((fallopian or uter* or proximal or distal) adj4 (tube? or tubal*) adj4 (patholog* or block* or obstruct* or occlu* or fibros* or damag* or injur* or adhesion* or disten* or malform* or abnormal* or spasm* or polyp* or plug* or infect* or scar* or inflam* or disease* or lesion*)).tw,kf.
6	((peritubal* or oviduct* or cornual) adj4 (patholog* or block* or obstruct* or occlu* or fibros* or damag* or injur* or adhesion* or disten* or malform* or abnormal* or spasm* or polyp* or plug* or infect* or scar* or inflam* or disease* or lesion*)).tw,kf.
7	(hydrosalpin* or hydro-salpin* or salpingiti*).tw,kf.
8	or/1-7
9	gynecologic surgical procedures/ or salpingectomy/ or salpingostomy/
10	microsurgery/ or minimally invasive surgical procedures/
11	(salpingectom* or tubectom* or salpingostom* or neosalpingostomy or fimbrioplast* or ((tube? or tubal* or oviduct* or cornual or salpinx) adj2 excision*)).tw,kf.
12	(surg* or tuboplasty or tubo-plasty or microsurg* or macrosurg*).tw,kf.
13	(reconstruct* or re-construct* or adhesiolysis or ((tubocornual or tubo-cornual or cornual or tubo-uterine or tubouterine) adj2 anastomosis)).tw,kf.
14	Electrosurgery/ or Electrocoagulation/
15	(electrosurg* or electromicrosurg* or electrocoagulat*).tw,kf.
16	Laparoscopy/ or Laparoscopes/ or Hand-assisted laparoscopy/ or Laparotomy/
17	(celioscop* or laparoscop* or peritoneoscop* or laparotom* or minilaparotom*).tw,kf.
18	Embolization, Therapeutic/
19	Endoscopic Ultrasound-Guided Fine Needle Aspiration/
20	Sclerotherapy/
21	(emboli* or embolotherap* or recanali* or re-canal* or aspirat* or FNA or EUSFNA or sclerotherap*).tw,kf.
22	or/9-21
23	8 and 22
24	Fallopian Tubes/su or Fallopian Tube Diseases/su or Infertility, Female/su
25	23 or 24
26	letter/
27	editorial/
28	news/
29	exp historical article/
30	Anecdotes as topic/
31	comment/
32	case reports/
33	(letter or comment*).ti.
34	or/26-33
35	randomized controlled trial/ or random*.ti,ab.
36	34 not 35
37	animals/ not humans/
38	exp Animals, Laboratory/
39	exp Animal Experimentation/

#	Searches
40	exp Models, Animal/
41	exp Rodentia/
42	(rat or rats or rodent* or mouse or mice).ti.
43	or/36-42
44	25 not 43
45	limit 44 to english language
46	meta-analysis/
47	meta-analysis as topic/
48	(meta analy* or metanaly* or metaanaly*).ti,ab.
49	((systematic* or evidence*) adj2 (review* or overview*)).ti,ab.
50	(reference list* or bibliograph* or hand search* or manual search* or relevant journals).ab.
51	(search strategy or search criteria or systematic search or study selection or data extraction).ab.
52	(search* adj4 literature).ab.
53	(medline or pubmed or cochrane or embase or psychlit or psyclit or psychinfo or psycinfo or cinahl or science citation index or bids or cancerlit).ab.
54	cochrane.jw.
55	or/46-54
56	randomized controlled trial.pt.
57	controlled clinical trial.pt.
58	pragmatic clinical trial.pt.
59	randomi#ed.ab.
60	placebo.ab.
61	randomly.ab.
62	Clinical Trials as topic.sh.
63	trial.ti.
64	or/56-63
65	45 and (55 or 64)
66	limit 65 to ed=20161001-20231130
67	limit 65 to dt=20161001-20231130
68	66 or 67

## 1 Database: Embase <1974 to 2023 November 22>

## 2 Date of last search: 27/11/2023

#	Searches
1	((tube? or tubal*) adj4 (infertil* or subfertil* or fertil* or factor?)).tw,kf.
2	exp uterine tube disease/
3	pelvic inflammatory disease/
4	((fallopian or uter* or proximal or distal) adj4 (tube? or tubal*) adj4 (patholog* or block* or obstruct* or occlu* or fibros* or damag* or injur* or adhesion* or disten* or malform* or abnormal* or spasm* or polyp* or plug* or infect* or scar* or inflam* or disease* or lesion*)).tw,kf.
5	((peritubal* or oviduct* or cornual) adj4 (patholog* or block* or obstruct* or occlu* or fibros* or damag* or injur* or adhesion* or disten* or malform* or abnormal* or spasm* or polyp* or plug* or infect* or scar* or inflam* or disease* or lesion*)).tw,kf.
6	(hydrosalpin* or hydro-salpin* or salpingiti*).tw,kf.
7	or/1-6
8	gynecologic surgery/ or uterine tube surgery/
9	salpingoplasty/ or salpingostomy/ or salpingectomy/
10	microsurgery/ or minimally invasive surgery/ or minimally invasive procedure/
11	(salpingectom* or tubectom* or salpingostom* or neosalpingostomy or fimbrioplast* or ((tube? or tubal* or oviduct* or cornual or salpinx) adj2 excision*)).tw,kf.
12	(surg* or tuboplasty or tubo-plasty or microsurg* or macrosurg*).tw,kf.
13	(reconstruct* or re-construct* or adhesiolysis or ((tubocornual or tubo-cornual or cornual or tubo-uterine or tubouterine) adj2 anastomosis)).tw,kf.
14	electrosurgery/ or electrocoagulation/
15	(electrosurg* or electromicrosurg* or electrocoagulat*).tw,kf.

#	Searches
16	laparoscopy/ or hand assisted laparoscopy/ or laparoscopic surgery/ or exp laparoscope/
17	laparotomy/
18	(celioscop* or laparoscop* or peritoneoscop* or laparotom* or minilaparotom*).tw,kf.
19	artificial embolization/
20	Endoscopic Ultrasound-Guided Fine Needle Aspiration/ or aspiration/
21	exp sclerotherapy/
22	recanalization/
23	(emboli* or embolotherap* or recanali* or re-canali* or aspirat* or FNA or EUSFNA or sclerotherap*).tw,kf.
24	or/8-23
25	7 and 24
26	Fallopian tube/ and surgery/
27	uterine tube disease/su or female infertility/su
28	or/25-27
29	letter.pt. or letter/
30	note.pt.
31	editorial.pt.
32	case report/ or case study/
33	(letter or comment*).ti.
34	or/29-33
35	randomized controlled trial/ or random*.ti,ab.
36	34 not 35
37	animal/ not human/
38	nonhuman/
39	exp Animal Experiment/
40	exp Experimental Animal/
41	animal model/
42	exp Rodent/
43	(rat or rats or rodent* or mouse or mice).ti.
44	or/36-43
45	28 not 44
46	limit 45 to english language
47	(conference abstract* or conference review or conference paper or conference proceeding).db,pt,su.
48	46 not 47
49	systematic review/
50	meta-analysis/
51	(meta analy* or metanaly* or metaanaly*).ti,ab.
52	((systematic or evidence) adj2 (review* or overview*)).ti,ab.
53	(reference list* or bibliograph* or hand search* or manual search* or relevant journals).ab.
54	(search strategy or search criteria or systematic search or study selection or data extraction).ab.
55	(search* adj4 literature).ab.
56	(medline or pubmed or cochrane or embase or psychlit or psyclit or psychinfo or psycinfo or cinahl or science citation index or bids or cancerlit).ab.
57	((pool* or combined) adj2 (data or trials or studies or results)).ab.
58	cochrane.jw.
59	or/49-58
60	random*.ti,ab.
61	factorial*.ti,ab.
62	(crossover* or cross over*).ti,ab.
63	((doubl* or singl*) adj blind*).ti,ab.
64	(assign* or allocat* or volunteer* or placebo*).ti,ab.
65	crossover procedure/
66	single blind procedure/
67	randomized controlled trial/
68	double blind procedure/

#	Searches
69	or/60-68
70	48 and (59 or 69)
71	limit 70 to dc=20161001-20231130

1

2 **Database: Cochrane Database of Systematic Reviews, Issue 11 of 12, November 2023**

3 **Date of last search: 27/11/2023**

#	Searches
1	((tube* or tubal*) near/4 (infertil* or subfertil* or fertil* or factor*)):ti,ab,kw
2	MeSH descriptor: [Fallopian Tube Diseases] explode all trees
3	MeSH descriptor: [Pelvic Inflammatory Disease] this term only
4	MeSH descriptor: [Fallopian Tubes] this term only and with qualifier(s): [abnormalities - AB, pathology - PA]
5	((fallopian or uter* or proximal or distal) near/4 (tube* or tubal*) near/4 (patholog* or block* or obstruct* or occlu* or fibros* or damag* or injur* or adhesion* or disten* or malform* or abnormal* or spasm* or polyp* or plug* or infect* or scar* or inflam* or disease* or lesion*)):ti,ab,kw
6	((peritubal* or oviduct* or cornual) near/4 (patholog* or block* or obstruct* or occlu* or fibros* or damag* or injur* or adhesion* or disten* or malform* or abnormal* or spasm* or polyp* or plug* or infect* or scar* or inflam* or disease* or lesion*)):ti,ab,kw
7	((hydrosalpin* or hydro-salpin* or salpingiti*)):ti,ab,kw
8	{or #1-#7}
9	MeSH descriptor: [Gynecologic Surgical Procedures] this term only
10	MeSH descriptor: [Salpingectomy] this term only
11	MeSH descriptor: [Salpingostomy] this term only
12	MeSH descriptor: [Microsurgery] this term only
13	MeSH descriptor: [Minimally Invasive Surgical Procedures] this term only
14	((salpingectom* or tubectom* or salpingostom* or neosalpingostomy or fimbrioplast* or ((tube* or tubal* or oviduct* or cornual or salpinx) near/2 excision*)):ti,ab,kw
15	((surg* or tuboplasty or tubo-plasty or microsurg* or macrosurg*)):ti,ab,kw
16	((reconstruct* or re-construct* or adhesiolysis or ((tubocornual or tubo-cornual or cornual or tubo-uterine or tubouterine) near/2 anastomosis)):ti,ab,kw
17	MeSH descriptor: [Electrosurgery] this term only
18	MeSH descriptor: [Electrocoagulation] this term only
19	((electrosurg* or electromicrosurg* or electrocoagulat*)):ti,ab,kw
20	MeSH descriptor: [Laparoscopy] this term only
21	MeSH descriptor: [Laparoscopes] this term only
22	MeSH descriptor: [Hand-Assisted Laparoscopy] this term only
23	MeSH descriptor: [Laparotomy] this term only
24	((celioscop* or laparoscop* or peritoneoscop* or laparotom* or minilaparotom*)):ti,ab,kw
25	MeSH descriptor: [Embolization, Therapeutic] this term only
26	MeSH descriptor: [Endoscopic Ultrasound-Guided Fine Needle Aspiration] this term only
27	MeSH descriptor: [Sclerotherapy] this term only
28	((emboli* or embolotherap* or recanali* or re-canal* or aspirat* or FNA or EUSFNA or sclerotherap*)):ti,ab,kw
29	{or #9-#28}
30	#8 and #29
31	MeSH descriptor: [Fallopian Tubes] this term only and with qualifier(s): [surgery - SU]
32	MeSH descriptor: [Fallopian Tube Diseases] this term only and with qualifier(s): [surgery - SU]
33	MeSH descriptor: [Infertility, Female] this term only and with qualifier(s): [surgery - SU]
34	{or #30-#33}
35	((clinicaltrials or trialsearch* or trial-registry or trials-registry or clinicalstudies or trialsregister* or trialregister* or trial-number* or studyregister* or study-register* or controlled-trials-com or current-controlled-trial or AMCTR or ANZCTR or ChiCTR* or CRIS or CTIS or CTRI* or DRKS* or EU-CTR* or EUCTR* or EUDRACT* or ICTRP or IRCT* or JAPIC* or JMCTR* or JRCT or ISRCTN* or LBCTR* or NTR* or ReBec* or REPEC* or RPCEC* or SLCTR or TCTR* or UMIN*):so or (ctgov or ictrp)):an
36	#34 not #35
37	"conference":pt

#	Searches
38	#36 not #37 with Cochrane Library publication date Between Oct 2016 and Nov 2023, in Cochrane Reviews

1

2 **Database: Cochrane Central Register of Controlled Trials, Issue 10 of 12, October 2023**

3 **Date of last search: 27/11/2023**

#	Searches
1	((tube* or tubal*) near/4 (infertil* or subfertil* or fertil* or factor*)):ti,ab,kw
2	MeSH descriptor: [Fallopian Tube Diseases] explode all trees
3	MeSH descriptor: [Pelvic Inflammatory Disease] this term only
4	MeSH descriptor: [Fallopian Tubes] this term only and with qualifier(s): [abnormalities - AB, pathology - PA]
5	((fallopian or uter* or proximal or distal) near/4 (tube* or tubal*) near/4 (patholog* or block* or obstruct* or occlu* or fibros* or damag* or injur* or adhesion* or disten* or malform* or abnormal* or spasm* or polyp* or plug* or infect* or scar* or inflam* or disease* or lesion*)):ti,ab,kw
6	((peritubal* or oviduct* or cornual) near/4 (patholog* or block* or obstruct* or occlu* or fibros* or damag* or injur* or adhesion* or disten* or malform* or abnormal* or spasm* or polyp* or plug* or infect* or scar* or inflam* or disease* or lesion*)):ti,ab,kw
7	((hydrosalpin* or hydro-salpin* or salpingiti*)):ti,ab,kw
8	{or #1-#7}
9	MeSH descriptor: [Gynecologic Surgical Procedures] this term only
10	MeSH descriptor: [Salpingectomy] this term only
11	MeSH descriptor: [Salpingostomy] this term only
12	MeSH descriptor: [Microsurgery] this term only
13	MeSH descriptor: [Minimally Invasive Surgical Procedures] this term only
14	((salpingectom* or tubectom* or salpingostom* or neosalpingostomy or fimbrioplast* or ((tube* or tubal* or oviduct* or cornual or salpinx) near/2 excision*)):ti,ab,kw
15	((surg* or tuboplasty or tubo-plasty or microsurg* or macrosurg*)):ti,ab,kw
16	((reconstruct* or re-construct* or adhesiolysis or ((tubocornual or tubo-cornual or cornual or tubo-uterine or tubouterine) near/2 anastomosis*)):ti,ab,kw
17	MeSH descriptor: [Electrosurgery] this term only
18	MeSH descriptor: [Electrocoagulation] this term only
19	((electrosurg* or electromicrosurg* or electrocoagulat*)):ti,ab,kw
20	MeSH descriptor: [Laparoscopy] this term only
21	MeSH descriptor: [Laparoscopes] this term only
22	MeSH descriptor: [Hand-Assisted Laparoscopy] this term only
23	MeSH descriptor: [Laparotomy] this term only
24	((celioscop* or laparoscop* or peritoneoscop* or laparotom* or minilaparotom*)):ti,ab,kw
25	MeSH descriptor: [Embolization, Therapeutic] this term only
26	MeSH descriptor: [Endoscopic Ultrasound-Guided Fine Needle Aspiration] this term only
27	MeSH descriptor: [Sclerotherapy] this term only
28	((emboli* or embolotherap* or recanali* or re-canali* or aspirat* or FNA or EUSFNA or sclerotherap*)):ti,ab,kw
29	{or #9-#28}
30	#8 and #29
31	MeSH descriptor: [Fallopian Tubes] this term only and with qualifier(s): [surgery - SU]
32	MeSH descriptor: [Fallopian Tube Diseases] this term only and with qualifier(s): [surgery - SU]
33	MeSH descriptor: [Infertility, Female] this term only and with qualifier(s): [surgery - SU]
34	{or #30-#33}
35	((clinicaltrials or trialsearch* or trial-registry or trials-registry or clinicalstudies or trialsregister* or trialregister* or trial-number* or studyregister* or study-register* or controlled-trials-com or current-controlled-trial or AMCTR or ANZCTR or ChiCTR* or CRiS or CTIS or CTRL* or DRKS* or EU-CTR* or EUCTR* or EUDRACT* or ICTRP or IRCT* or JAPIC* or JMCTR* or JRCT or ISRCTN* or LBCTR* or NTR* or ReBec* or REPEC* or RPCEC* or SLCTR or TCTR* or UMIN*):so or (ctgov or ictrp)):an
36	#34 not #35
37	"conference":pt
38	#36 not #37 with Publication Year from 2016 to 2023, in Trials

1

2 **Database: Epistemonikos**

3 **Date of last search: 27/11/2023**

#	Searches
1	((tube* OR tubal*) AND (infertil* OR subfertil* OR fertil* OR factor*)) OR ((fallopian OR uter* OR proximal OR distal) AND (tube* OR tubal*) AND (patholog* OR block* OR obstruct* OR occlu* OR fibros* OR damag* OR adhesion* OR disten* OR malform* OR abnormal* OR spasm* OR polyp* OR plug* OR infect* OR scar* OR inflam* OR disease* OR lesion*)) OR ((peritubal* OR oviduct* OR cornual) AND (patholog* OR block* OR obstruct* OR occlu* OR fibros* OR damag* OR injur* OR adhesion* OR disten* OR malform* OR abnormal* OR spasm* OR polyp* OR plug* OR infect* OR scar* OR inflam* OR disease* OR lesion*)) OR hydrosalpin* OR hydro-salpin* OR (hydro AND salpin*) OR salpingiti*)
2	(salpingectom* OR tubectom* OR salpingostom* OR neosalpingostomy OR fimbrioplast* OR ((tube* OR tubal* OR oviduct* OR cornual OR salpinx) AND excision*) OR surg* OR tuboplasty OR tubo-plasty OR "tubo plasty" OR microsurg* OR macrosurg* OR reconstruct* OR re-construct* OR (re AND construct*) OR adhesiolysis OR ((tubocornual OR tubo-cornual OR "tubo cornual" OR cornual OR tubo-uterine OR "tubo uterine" OR tubouterine) AND anastomosis) OR electrosurg* OR electromicrosurg* OR electrocoagulat* OR celioscop* OR laparoscop* OR peritoneoscop* OR laparotom* OR minilaparotom* OR emboli* OR embolotherap* OR recanali* OR re-canali* OR (re AND canali*) OR aspirat* OR FNA OR EUSFNA OR sclerotherap*)
3	1 AND 2
4	Limit to Systematic Reviews, Year 2016-2023

4

5 **Health Economic Literature Search Strategies**

6 **Database: Ovid MEDLINE(R) ALL <1946 to November 22, 2023>**

7 **Date of last search: 27/11/2023**

#	Searches
1	((tube? or tubal*) adj4 (infertil* or subfertil* or fertil* or factor?)).tw,kf.
2	exp Fallopian Tube Diseases/
3	Pelvic Inflammatory Disease/
4	Fallopian Tubes/pa, ab
5	((fallopian or uter* or proximal or distal) adj4 (tube? or tubal*) adj4 (patholog* or block* or obstruct* or occlu* or fibros* or damag* or injur* or adhesion* or disten* or malform* or abnormal* or spasm* or polyp* or plug* or infect* or scar* or inflam* or disease* or lesion?)).tw,kf.
6	((peritubal* or oviduct* or cornual) adj4 (patholog* or block* or obstruct* or occlu* or fibros* or damag* or injur* or adhesion* or disten* or malform* or abnormal* or spasm* or polyp* or plug* or infect* or scar* or inflam* or disease* or lesion?)).tw,kf.
7	(hydrosalpin* or hydro-salpin* or salpingiti*).tw,kf.
8	or/1-7
9	gynecologic surgical procedures/ or salpingectomy/ or salpingostomy/
10	microsurgery/ or minimally invasive surgical procedures/
11	(salpingectom* or tubectom* or salpingostom* or neosalpingostomy or fimbrioplast* or ((tube? or tubal* or oviduct* or cornual or salpinx) adj2 excision?)).tw,kf.
12	(surg* or tuboplasty or tubo-plasty or microsurg* or macrosurg*).tw,kf.
13	(reconstruct* or re-construct* or adhesiolysis or ((tubocornual or tubo-cornual or cornual or tubo-uterine or tubouterine) adj2 anastomosis)).tw,kf.
14	Electrosurgery/ or Electrocoagulation/
15	(electrosurg* or electromicrosurg* or electrocoagulat*).tw,kf.
16	Laparoscopy/ or Laparoscopes/ or Hand-assisted laparoscopy/ or Laparotomy/
17	(celioscop* or laparoscop* or peritoneoscop* or laparotom* or minilaparotom*).tw,kf.
18	Embolization, Therapeutic/
19	Endoscopic Ultrasound-Guided Fine Needle Aspiration/
20	Sclerotherapy/
21	(emboli* or embolotherap* or recanali* or re-canali* or aspirat* or FNA or EUSFNA or sclerotherap*).tw,kf.
22	or/9-21
23	8 and 22

#	Searches
24	Fallopian Tubes/su or Fallopian Tube Diseases/su or Infertility, Female/su
25	23 or 24
26	letter/
27	editorial/
28	news/
29	exp historical article/
30	Anecdotes as topic/
31	comment/
32	case reports/
33	(letter or comment*).ti.
34	or/26-33
35	randomized controlled trial/ or random*.ti,ab.
36	34 not 35
37	animals/ not humans/
38	exp Animals, Laboratory/
39	exp Animal Experimentation/
40	exp Models, Animal/
41	exp Rodentia/
42	(rat or rats or rodent* or mouse or mice).ti.
43	or/36-42
44	25 not 43
45	limit 44 to english language
46	limit 45 to ed=20161001-20231130
47	limit 45 to dt=20161001-20231130
48	46 or 47
49	Economics/
50	Value of life/
51	exp "Costs and Cost Analysis"/
52	exp Economics, Hospital/
53	exp Economics, Medical/
54	exp Resource Allocation/
55	Economics, Nursing/
56	Economics, Pharmaceutical/
57	exp "Fees and Charges"/
58	exp Budgets/
59	budget*.ti,ab.
60	cost*.ti,ab.
61	(economic* or pharmaco?economic*).ti,ab.
62	(price* or pricing*).ti,ab.
63	(financ* or fee or fees or expenditure* or saving*).ti,ab.
64	(value adj2 (money or monetary)).ti,ab.
65	resourc* allocat*.ti,ab.
66	(fund or funds or funding* or funded).ti,ab.
67	(ration or rations or rationing* or rationed).ti,ab.
68	ec.fs.
69	or/49-68
70	quality-adjusted life years/
71	sickness impact profile/
72	(quality adj2 (wellbeing or well being)).ti,ab.
73	sickness impact profile.ti,ab.
74	disability adjusted life.ti,ab.
75	(qal* or qtime* or qwb* or daly*).ti,ab.
76	(euroqol* or eq5d* or eq 5*).ti,ab.
77	(qol* or hql* or hqol* or h qol* or hrqol* or hr qol*).ti,ab.

#	Searches
78	(health utility* or utility score* or disutilit* or utility value*).ti,ab.
79	(hui or hui1 or hui2 or hui3).ti,ab.
80	(health* year* equivalent* or hye or hyes).ti,ab.
81	discrete choice*.ti,ab.
82	rosser.ti,ab.
83	(willingness to pay or time tradeoff or time trade off or tto or standard gamble*).ti,ab.
84	(sf36* or sf 36* or short form 36* or shortform 36* or shortform36*).ti,ab.
85	(sf20 or sf 20 or short form 20 or shortform 20 or shortform20).ti,ab.
86	(sf12* or sf 12* or short form 12* or shortform 12* or shortform12*).ti,ab.
87	(sf8* or sf 8* or short form 8* or shortform 8* or shortform8*).ti,ab.
88	(sf6* or sf 6* or short form 6* or shortform 6* or shortform6*).ti,ab.
89	or/70-88
90	48 and (69 or 89)

## 1 Database: Embase <1974 to 2023 November 22>

## 2 Date of last search: 27/11/2023

#	Searches
1	((tube? or tubal*) adj4 (infertil* or subfertil* or fertil* or factor?)).tw,kf.
2	exp uterine tube disease/
3	pelvic inflammatory disease/
4	((fallopian or uter* or proximal or distal) adj4 (tube? or tubal*) adj4 (patholog* or block* or obstruct* or occlu* or fibros* or damag* or injur* or adhesion* or disten* or malform* or abnormal* or spasm* or polyp* or plug* or infect* or scar* or inflam* or disease* or lesion*)).tw,kf.
5	((peritubal* or oviduct* or cornual) adj4 (patholog* or block* or obstruct* or occlu* or fibros* or damag* or injur* or adhesion* or disten* or malform* or abnormal* or spasm* or polyp* or plug* or infect* or scar* or inflam* or disease* or lesion*)).tw,kf.
6	(hydrosalpin* or hydro-salpin* or salpingiti*).tw,kf.
7	or/1-6
8	gynecologic surgery/ or uterine tube surgery/
9	salpingoplasty/ or salpingostomy/ or salpingectomy/
10	microsurgery/ or minimally invasive surgery/ or minimally invasive procedure/
11	(salpingectom* or tubectom* or salpingostom* or neosalpingostomy or fimbrioplast* or ((tube? or tubal* or oviduct* or cornual or salpinx) adj2 excision*)).tw,kf.
12	(surg* or tuboplasty or tubo-plasty or microsurg* or macrosurg*).tw,kf.
13	(reconstruct* or re-construct* or adhesiolysis or ((tubocornual or tubo-cornual or cornual or tubo-uterine or tubouterine) adj2 anastomosis)).tw,kf.
14	electrosurgery/ or electrocoagulation/
15	(electrosurg* or electromicrosurg* or electrocoagulat*).tw,kf.
16	laparoscopy/ or hand assisted laparoscopy/ or laparoscopic surgery/ or exp laparoscope/
17	laparotomy/
18	(celioscop* or laparoscop* or peritoneoscop* or laparotom* or minilaparotom*).tw,kf.
19	artificial embolization/
20	Endoscopic Ultrasound-Guided Fine Needle Aspiration/ or aspiration/
21	exp sclerotherapy/
22	recanalization/
23	(emboli* or embolotherap* or recanali* or re-canali* or aspirat* or FNA or EUSFNA or sclerotherap*).tw,kf.
24	or/8-23
25	7 and 24
26	Fallopian tube/ and surgery/
27	uterine tube disease/su or female infertility/su
28	or/25-27
29	letter.pt. or letter/
30	note.pt.
31	editorial.pt.



#	Searches
32	case report/ or case study/
33	(letter or comment*).ti.
34	or/29-33
35	randomized controlled trial/ or random*.ti,ab.
36	34 not 35
37	animal/ not human/
38	nonhuman/
39	exp Animal Experiment/
40	exp Experimental Animal/
41	animal model/
42	exp Rodent/
43	(rat or rats or rodent* or mouse or mice).ti.
44	or/36-43
45	28 not 44
46	limit 45 to english language
47	(conference abstract* or conference review or conference paper or conference proceeding).db,pt,su.
48	46 not 47
49	limit 48 to dc=20161001-20231130
50	health economics/
51	exp economic evaluation/
52	exp health care cost/
53	exp fee/
54	budget/
55	funding/
56	resource allocation/
57	budget*.ti,ab.
58	cost*.ti,ab.
59	(economic* or pharmaco?economic*).ti,ab.
60	(price* or pricing*).ti,ab.
61	(financ* or fee or fees or expenditure* or saving*).ti,ab.
62	(value adj2 (money or monetary)).ti,ab.
63	resourc* allocat*.ti,ab.
64	(fund or funds or funding* or funded).ti,ab.
65	(ration or rations or rationing* or rationed).ti,ab.
66	or/50-65
67	quality adjusted life year/
68	"quality of life index"/
69	short form 12/ or short form 20/ or short form 36/ or short form 8/
70	sickness impact profile/
71	(quality adj2 (wellbeing or well being)).ti,ab.
72	sickness impact profile.ti,ab.
73	disability adjusted life.ti,ab.
74	(qal* or qtime* or qwb* or daly*).ti,ab.
75	(euroqol* or eq5d* or eq 5*).ti,ab.
76	(qol* or hql* or hqol* or h qol* or hrqol* or hr qol*).ti,ab.
77	(health utility* or utility score* or disutilit* or utility value*).ti,ab.
78	(hui or hui1 or hui2 or hui3).ti,ab.
79	(health* year* equivalent* or hye or hyes).ti,ab.
80	discrete choice*.ti,ab.
81	rosser.ti,ab.
82	(willingness to pay or time tradeoff or time trade off or tto or standard gamble*).ti,ab.
83	(sf36* or sf 36* or short form 36* or shortform 36* or shortform36*).ti,ab.
84	(sf20 or sf 20 or short form 20 or shortform 20 or shortform20).ti,ab.
85	(sf12* or sf 12* or short form 12* or shortform 12* or shortform12*).ti,ab.

#	Searches
86	(sf8* or sf 8* or short form 8* or shortform 8* or shortform8*).ti,ab.
87	(sf6* or sf 6* or short form 6* or shortform 6* or shortform6*).ti,ab.
88	or/67-87
89	49 and (66 or 88)

1

## 2 Database: INAHTA

## 3 Date of last search: 27/11/2023

#	Searches
1	((tube* or tubal*) AND (infertil* or subfertil* or fertil* or factor*))
2	"Fallopian Tube Diseases"[mh]
3	"Pelvic Inflammatory Disease"[mh]
4	"Fallopian Tubes"[mh]
5	((fallopian or uter* or proximal or distal) AND (tube* or tubal*) AND (patholog* or block* or obstruct* or occlu* or fibros* or damag* or injur* or adhesion* or disten* or malform* or abnormal* or spasm* or polyp* or plug* or infect* or scar* or inflam* or disease* or lesion*))
6	((peritubal* or oviduct* or cornual) AND (patholog* or block* or obstruct* or occlu* or fibros* or damag* or injur* or adhesion* or disten* or malform* or abnormal* or spasm* or polyp* or plug* or infect* or scar* or inflam* or disease* or lesion*))
7	(hydrosalpin* or hydro-salpin* or (hydro AND salpin*) or salpingiti*)
8	#7 OR #6 OR #5 OR #4 OR #3 OR #2 OR #1
9	"Gynecologic Surgical Procedures"[mh]
10	"Salpingectomy"[mh]
11	"Salpingostomy"[mh]
12	"Microsurgery"[mh]
13	"Minimally Invasive Surgical Procedures"[mh]
14	(salpingectom* or tubectom* or salpingostom* or neosalpingostomy or fimbrioplast* or ((tube* or tubal* or oviduct* or cornual or salpinx) AND excision*))
15	(surg* or tuboplasty or tubo-plasty or "tubo plasty" or microsurg* or macrosurg*)
16	(reconstruct* or re-construct* or (re AND construct*) or adhesiolysis or ((tubocornual or tubo-cornual or cornual or tubo-uterine or "tubo uterine" or tubouterine) AND anastomosis))
17	"Electrosurgery"[mh]
18	"Electrocoagulation"[mh]
19	(electrosurg* or electromicrosurg* or electrocoagulat*)
20	"Laparoscopy"[mh]
21	"Laparoscopes"[mh]
22	"Hand-Assisted Laparoscopy"[mh]
23	"Laparotomy"[mh]
24	(celioscop* or laparoscop* or peritoneoscop* or laparotom* or minilaparotom*)
25	"Embolization, Therapeutic"[mh]
26	"Endoscopic Ultrasound-Guided Fine Needle Aspiration"[mh]
27	"Sclerotherapy"[mh]
28	(emboli* or embolotherap* or recanali* or re-canali* or (re AND canali*) or aspirat* or FNA or EUSFNA or sclerotherap*)
29	#28 OR #27 OR #26 OR #25 OR #24 OR #23 OR #22 OR #21 OR #20 OR #19 OR #18 OR #17 OR #16 OR #15 OR #14 OR #13 OR #12 OR #11 OR #10 OR #9
30	#29 AND #8

4

## 5 Database: HTA via CRD

## 6 Date of last search: 27/11/2023

#	Searches
1	((tube* or tubal*) near4 (infertil* or subfertil* or fertil* or factor*))

#	Searches
2	MESH DESCRIPTOR Fallopian Tube Diseases EXPLODE ALL TREES
3	MESH DESCRIPTOR Pelvic Inflammatory Disease
4	MESH DESCRIPTOR Fallopian Tubes
5	((fallopian or uter* or proximal or distal) near4 (tube* or tubal*) near4 (patholog* or block* or obstruct* or occlu* or fibros* or damag* or injur* or adhesion* or disten* or malform* or abnormal* or spasm* or polyp* or plug* or infect* or scar* or inflam* or disease* or lesion*))
6	((peritubal* or oviduct* or cornual) near4 (patholog* or block* or obstruct* or occlu* or fibros* or damag* or injur* or adhesion* or disten* or malform* or abnormal* or spasm* or polyp* or plug* or infect* or scar* or inflam* or disease* or lesion*))
7	((hydrosalpin* or hydro-salpin* or salpingiti*))
8	#1 or #2 or #3 or #4 or #5 or #6 or #7
9	MESH DESCRIPTOR Gynecologic Surgical Procedures
10	MESH DESCRIPTOR Salpingectomy
11	MESH DESCRIPTOR Salpingostomy
12	MESH DESCRIPTOR Microsurgery
13	MESH DESCRIPTOR Minimally Invasive Surgical Procedures
14	((salpingectom* or tubectom* or salpingostom* or neosalpingostomy or fimbrioplast* or ((tube* or tubal* or oviduct* or cornual or salpinx) near2 excision*))
15	((surg* or tuboplasty or tubo-plasty or microsurg* or macrosurg*))
16	((reconstruct* or re-construct* or adhesiolysis or ((tubocornual or tubo-cornual or cornual or tubo-uterine or tubouterine) near2 anastomosis)))
17	MESH DESCRIPTOR Electrosurgery
18	MESH DESCRIPTOR Electrocoagulation
19	((electrosurg* or electromicrosurg* or electrocoagulat*))
20	MESH DESCRIPTOR Laparoscopy
21	MESH DESCRIPTOR Laparoscopes
22	MESH DESCRIPTOR Hand-Assisted Laparoscopy
23	MESH DESCRIPTOR Laparotomy
24	((celioscop* or laparoscop* or peritoneoscop* or laparotom* or minilaparotom*))
25	MESH DESCRIPTOR Embolization, Therapeutic
26	MESH DESCRIPTOR Endoscopic Ultrasound-Guided Fine Needle Aspiration
27	MESH DESCRIPTOR Sclerotherapy
28	((emboli* or embolotherap* or recanal* or re-canal* or aspirat* or FNA or EUSFNA or sclerotherap*))
29	#9 or #10 or #11 or #12 or #13 or #14 or #15 or #16 or #17 or #18 or #19 or #20 or #21 or #22 or #23 or #24 or #25 or #26 or #27 or #28
30	#8 and #29
31	(#8 and #29) IN HTA FROM 2016 TO 2023

1

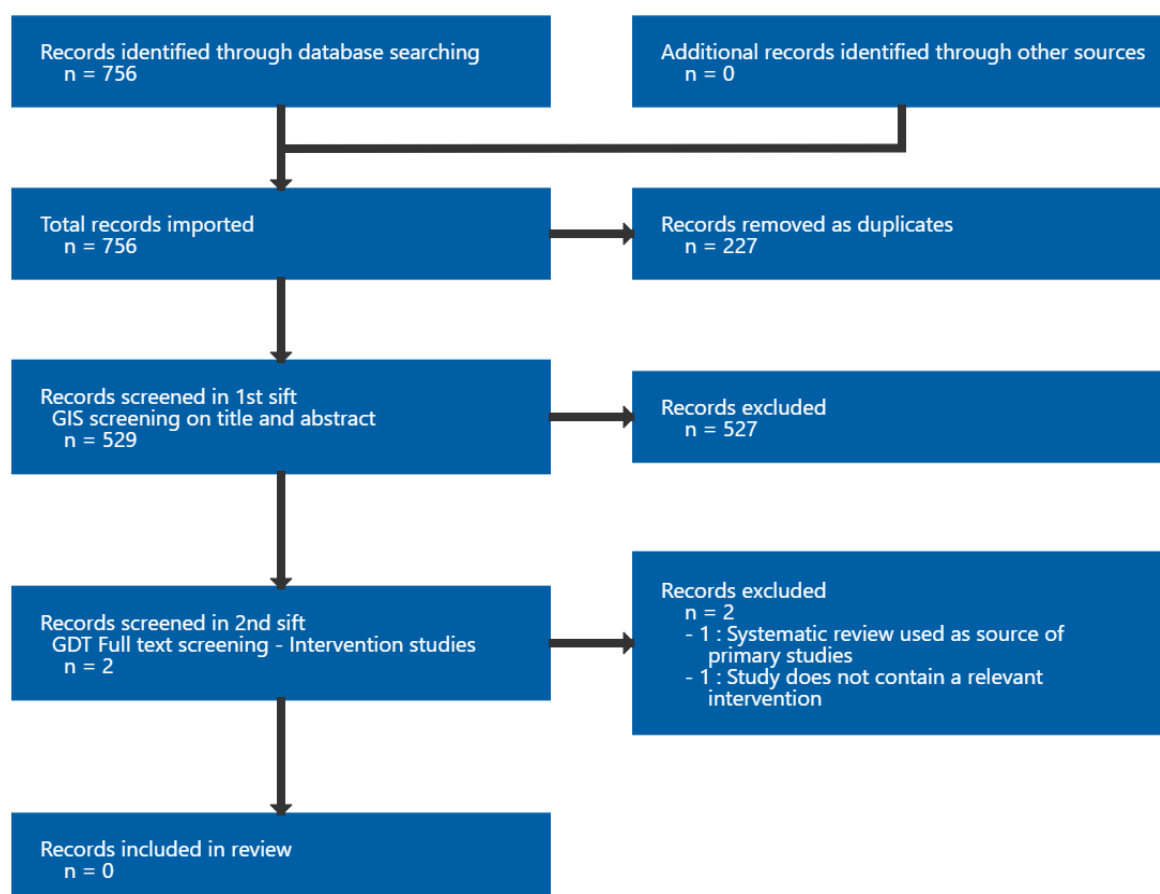
2

3

## 1 Appendix C Effectiveness

2 **Study selection for review question: What is the clinical and cost effectiveness of**  
3 **tubal surgery (as a standalone treatment) compared to expectant management or**  
4 **in vitro fertilisation (IVF) for fertility problems associated with tubal disease?**

5 **Figure 1: Study selection flow chart**



6  
7

8

## 1 **Appendix D Evidence tables**

2 **Evidence tables for review question: What is the clinical and cost effectiveness of**  
3 **tubal surgery (as a standalone treatment) compared to expectant management or**  
4 **in vitro fertilisation (IVF) for fertility problems associated with tubal disease?**

5 No evidence was identified which was applicable to this review question.

6

## 1 **Appendix E Forest plots**

2 **Forest plots for review question: What is the clinical and cost effectiveness of**  
3 **tubal surgery (as a standalone treatment) compared to expectant management or**  
4 **in vitro fertilisation (IVF) for fertility problems associated with tubal disease?**

5 No evidence was identified which was applicable to this review question.

6

## 1 **Appendix F GRADE tables**

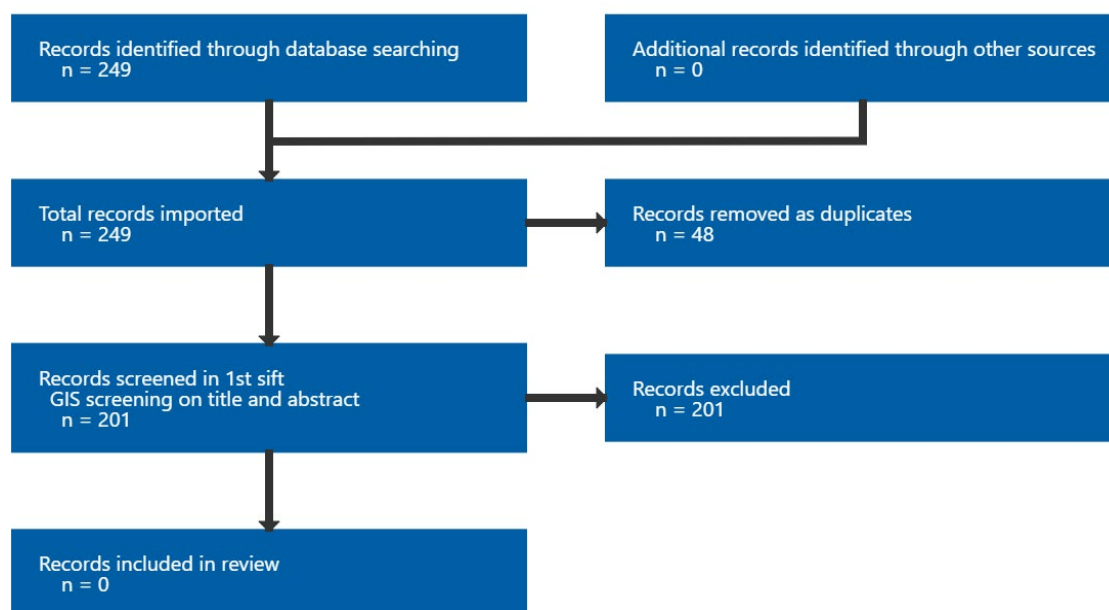
- 2 **GRADE tables for review question: What is the clinical and cost effectiveness of**
- 3 **tubal surgery (as a standalone treatment) compared to expectant management or**
- 4 **in vitro fertilisation (IVF) for fertility problems associated with tubal disease?**
- 5 No evidence was identified which was applicable to this review question.

## 1 Appendix G Economic evidence study selection

2 Study selection for: What is the clinical and cost effectiveness of tubal surgery  
3 (as a standalone treatment) compared to expectant management or in vitro  
4 fertilisation (IVF) for fertility problems associated with tubal disease?

5

Figure 2: Study selection flow chart





## 1 **Appendix H Economic evidence tables**

- 2 **Economic evidence tables for review question: What is the clinical and cost**
- 3 **effectiveness of tubal surgery (as a standalone treatment) compared to**
- 4 **expectant management or in vitro fertilisation (IVF) for fertility problems**
- 5 **associated with tubal disease?**
- 6 No evidence was identified which was applicable to this review question.

## 1 **Appendix I Economic model**

2 **Economic model for review question: What is the clinical and cost**  
3 **effectiveness of tubal surgery (as a standalone treatment) compared to**  
4 **expectant management or in vitro fertilisation (IVF) for fertility problems**  
5 **associated with tubal disease?**

6 No economic analysis was conducted for this review question.

7

## 1 Appendix J Excluded studies

2 Excluded studies for review question: What is the clinical and cost  
3 effectiveness of tubal surgery (as a standalone treatment) compared to  
4 expectant management or in vitro fertilisation (IVF) for fertility problems  
5 associated with tubal disease?

### 6 Excluded effectiveness studies

#### 7 Table 3: Excluded studies and reasons for their exclusion

Study	Reason for exclusion
<a href="#">Chua, Su Jen; Akande, Valentine A; Mol, Ben Willem J (2017) Surgery for tubal infertility.</a> The Cochrane database of systematic reviews 1: cd006415	- Systematic review used as source of primary studies (no relevant RCTs were identified by the authors of the review)
<a href="#">Melo, Pedro, Georgiou, Ektoras X, Johnson, Neil et al. (2020) Surgical treatment for tubal disease in women due to undergo in vitro fertilisation.</a> The Cochrane database of systematic reviews 10: cd002125	- Study does not contain a relevant intervention The intervention in the study is tubal surgery prior to ART rather than as a standalone treatment

### 8 Excluded economic studies

9 No economic evidence was identified for this review.

10

## 1 **Appendix K Research recommendations – full details**

- 2 **Research recommendations for review question: What is the clinical and cost**
- 3 **effectiveness of tubal surgery (as a standalone treatment) compared to**
- 4 **expectant management or in vitro fertilisation (IVF) for fertility problems**
- 5 **associated with tubal disease?**
- 6 No research recommendations were made for this review question.