Supplemental Table S1: Summary of the included studies

Study ID	Study Type	Study arms	Inclusion criteria	Follow up (years)	Primary outcomes	Conclusion
A: First generation versus second generation:						
Bain 2002 (70)	Randomized Controlled Trial	-Microwave endometrial ablation, n=120 -Trans-cervical endometrial resection, n=129	- Recent (within 6 months) benign endometrial histologic sample. -Uterine size of less than or equivalent to 10 weeks on bimanual examination. -Patients with fibroids and irregular cavities were not excluded. -Women excluded if they were perimenopausal (FSH greater than 30 U/L), adnexal pathology was present, or if further pregnancy was contemplated.	2	Amenorrhea, pain score and bleeding score	"Microwave endometrial ablation is an effective alternative to trans-cervical endometrial resection for dysfunctional uterine bleeding."
Brun 2006 (26)	Randomized Controlled Trial	-Trans-cervical endometrial resection, n=31 -Thermal balloon (Cavaterm), n=20	-Women who no longer wished to become pregnant were eligible to participate if they had a Higham blood loss score18 >100 -Their internal uterine cavity length was between 4 and 12 cm. -Normal endometrial biopsy, normal cervical cytologic study result, had completed her family, and was using a reliable method of contraception, excluding progestins.	1	Amenorrhea rate and the amount of uterine bleeding.	"Cavaterm thermal balloon ablation was as effective as hysteroscopic endometrial resection to treat menorrhagia, both resulting in a significant reduction in menstrual blood loss and high patient satisfaction."
Cooper 1999 (71)	Randomized Controlled Trial	-Microwave endometrial ablation, n=129 -Trans-cervical endometrial resection, n=134	- patients were premenopausal. -They had completed their families. -They had dysfunctional uterine bleeding (uterine size equivalent to 10 weeks' pregnancy or less and no histopathological abnormalities of the endometrium)	1	Patients' satisfaction with and the acceptability of the two procedures.	"Both techniques achieved high rates of satisfaction and acceptability and both improved quality of life after 1 year. However, we cannot exclude a difference in satisfaction between

						the groups of less than 15%. MEA seems a suitable alternative to TCRE"
Cooper 2002 (20)	Randomized Controlled Trial	-Bipolar radio frequency (Novasure), n=175 -Rollerball ablation, n=90	-Patients' ages were required to be between 25 and 50 years. -Screening consisted of pelvic examination and assessment of the uterine cavity, menstrual bleeding level assessment, blood chemistry, cultures for gonorrhea and Chlamydia, Papanicolaou smear, and endometrial biopsy. -Women's premenopausal status was confirmed by follicle-stimulating hormone values below 40 IU/L.	1	PBLAC Score and adverse events.	"The NovaSure system was safe and effective in treatment of women with menorrhagia. The procedure is both quick and effective and eliminates the expense and side effects of endometrial pretreatment."
Cooper 2004 (72)	Randomized Controlled Trial	-Microwave endometrial ablation, n=195 -Rollerball ablation, n=107	-Participants were non pregnant premenopausal women older than 30 years of age with no plans to become pregnant in the future. -They must have failed or refused medical therapy or have proved unable to tolerate such therapy. -A PBAC score of 185 or higher (documented for 1 month or, in the absence of earlier documented menorrhagia, average PBAC score over a 3-month period) was required. -At enrollment, follicle stimulating hormone levels were required to be 30 IU/mL or less and the uterine cavity sounding length to be from 6 to 14 cm.	1	PBLAC Score and adverse events.	"Microwave endometrial ablation is an efficacious and safe procedure for the treatment of menorrhagia. Over half of patients treated with MEA achieve amenorrhea, and the procedure is suitable for women with myomas and irregular uterine cavities. The procedure is easily learned and can be performed rapidly, under IV sedation in most cases."

Cooper 2005 (15)	Randomized Controlled Trial	-Microwave endometrial ablation, n=116 -Rollerball ablation, n=120	-Women had heavy menstrual loss and their family was complete. -There was no endometrial atypia, and the uterus was not greater than 10 weeks size.	5	Quality of life and patient's satisfaction.	"Both techniques achieve significant and comparable improvements in menstrual symptoms, and health-related quality of life. While high rates of satisfaction with treatment and acceptability of treatment are achieved by TCRE, these are significantly lower than levels following MEA. These long-term data, when combined with the trials' operative findings and known costs of both procedures, now inform us that MEA is a more effective and efficient treatment for heavy menstrual loss than TCRE."
Corson 1999 (43)	Randomized Controlled Trial	-Microwave endometrial ablation, n=132 -Rollerball ablation, n=123	-A validated pictorial blood loss assessment chart (PBAC) was used to quantify monthly menstrual blood loss, with a minimal score of 150 as a selection criterion. -Women with significantly elevated follicle-stimulating hormone levels (>40 mIU/ml) suggestive of impending menopause were excluded from the study.	After application	Quality of life and PBLAC Score.	"Vesta is an attractive alternative to traditional methods of endometrial ablation."
Corson 2000 (73)	Randomized Controlled Trial	-Thermal balloon (Vesta), n=144 -Transcervical endometrial resection, n=123	-Patients' ages were between 30–49 years, Completion of family, Non Hormonal contraception, No uterine cavity lesions. - PBAC ≥150. -Undistorted uterine cavity. -Previous failed medical therapy.	1	Quality of life and PBLAC Score.	"The Vesta system of endometrial ablation is equally effective and safe as classic resectoscopic methods. Potential advantages include avoidance of fluid and electrolyte disturbance associated with intravasation of distending media, and ability to perform the

						procedure under local anesthesia in an office setting with less total operating time."
Corson 2001 (74)	Randomized Controlled Trial	-Hydro ThermAblator, n=177 -Rollerball ablation, n=85	-Patients' ages were between 30 to 50 years, and family planning was complete. -Documentation of excessive bleeding, uterine cavity measuring 10.5 cm or less, and history of failed, not tolerated, or refused medical therapy.	1	Quality of life and Amenorrhea rate.	"Endometrial ablation with the HTA is safe and effective. It offers an advantage over rollerball ablation of being an office-based procedure, which reduces anesthesia requirements and obviates problems of fluid absorption."
Duleba 2003 (75)	Randomized Controlled Trial	-Cryoablation (HerOption), n=193 -Rollerball ablation, n=86	-Women's ages were between 30 and 50 years, in general good health, and with a documented history of excessive uterine bleeding for at least 3 months. -All subjects failed traditional therapy such as oral contraceptives, medroxyprogesterone, or dilation and curettage within the previous 6 months. -No desire for future fertility.	1	Amenorrhea	"Endometrial cryoablation is a safe and effective procedure in treatment of dysfunctional uterine bleeding. Its advantages include technical ease of performance, direct ultrasonographic view of depth of ablation, little anesthetic, and avoidance of potential complications related to distention media."
Goldrath 2003 (76)	Randomized Controlled Trial	-Hydro ThermAblator, n=167 -Rollerball ablation, n=83	-Patients' ages were 30 to 50 years and childbearing completed. -History of at least 3 months of excessive bleeding documented by a pictorial bleeding assessment chart (PBAC). -Uterine cavity measuring between 4 and 10.5 cm, and failed, not tolerated, or refused medical therapy.	1	Amenorrhea and reduction of bleeding	"Endometrial ablation with the HTA is a safe, effective, and durable treatment of menorrhagia in a broad patient population. It offers advantages over RB by reducing anesthesia requirements, reducing operating time, and eliminating risks of excessive fluid absorption, and is more easily learned."

Grainger 2000 (77)	Randomized Controlled Trial	-Uterine balloon ablation, n=131, -Rollerball ablation, n=124	-Subjects were required to be at least 30 years of age. -Premenopausal, with a documented history of 3 months of excessive uterine bleeding and failure of medical therapy. -They were required to have a normal Papanicolaou smear and endometrial biopsy within the past 6 months.	2	Amenorrhea and quality of Life	"Endometrial ablation by both procedures was highly successful in avoiding hysterectomy and relieving symptoms of menorrhagia. Additional benefits were reduction in dysmenorrhea and premenstrual syndrome."
Laberge 2016 (78)	Randomized Controlled Trial	-Minerva endometrial ablation, n=102, -Rollerball ablation, n=51	-Subjects were required to be pre-menopausal (FSH ≤ 40 mIU/ml). -Patients' ages were between 25 and 50 years and have completed childbearing. -Bleeding levels were assessed pre-operatively and all candidates had to satisfy a minimum bleeding level of 160 ml per cycle (for one cycle) to qualify for study participation. -Uterine sounding length was limited to a maximum of 10-cm.	1	Amenorrhea, adverse events, and quality of Life	"The results of this multicenter Randomized Controlled Trial (RCT) demonstrate that at the 12-month follow-up the Minerva procedure produces statistically significantly higher rates of success, amenorrhea, and patient satisfaction as well as shorter procedure time, when compared to the historical "gold standard" rollerball ablation. Safety results were excellent and similar for both procedures."
Loffer 2001 (64)	Randomized Controlled Trial	-Uterine balloon ablation, n=131 -Rollerball ablation, n=124	-Women had to be at least 30 years of age, premenopausal, with normal Papanicolaou smears and endometrial biopsies within the past 6 months. -They had a documented history of at least 3 months of excessive uterine bleeding that failed to respond to medical therapy.	3	Amenorrhea and quality of Life	"Endometrial ablation with the ThermaChoice uterine balloon or rollerball continues at 3 years to be a successful method for treating menorrhagia, avoiding hysterectomy, decreasing dysmenorrhea and premenstrual symptoms, and improving quality of life."
Loffer 2002 (65)	Randomized Controlled Trial	-Uterine balloon ablation, n=131 -Rollerball ablation, n=124	-Participants were menorrhagia and premenopausal, had no evidence of cervical or uterine malignancy and no uterine anatomical abnormalities, and desired no further fertility	5	Amenorrhea and quality of Life	"UBT continues to be an effective, simple treatment of menorrhagia, with clinical outcomes like those of rollerball ablation at 5-year follow-up."

Meyer 1998 (21)	Randomized Controlled Trial	-Uterine balloon ablation, n=128 -Rollerball ablation, n=117	-Participants were required to be at least 30 years old and premenopausal. -They had normal Papanicolaou smears and endometrial biopsies within the past 6 months. -They had a documented history of 3 months of excessive uterine bleeding, and had failed medical therapy.	1	Improvement in dysmenorrhea symptoms, inability to work and PBAC score	"In the treatment of dysfunctional uterine bleeding, uterine balloon therapy is as efficacious as hysteroscopic rollerball ablation and may be safer."
Pellicano 2002 (66)	Randomized Controlled Trial	-Thermal balloon (sali), n=40, -Roller balloon, n=42	-Women aged below 50 years who weighed <100 kg not desiring pregnancy. -They had a documented history of at least 3 months of failed medical therapy.	1	Satisfaction, operative time, discharge time	"Thermal destruction of the endometrium for the treatment of menorrhagia should be considered an effective therapeutic option because of its acceptability among patients, shorter operative time, and lower blood loss"
Perino 2004 (67)	Randomized Controlled Trial	-Endometrial laser intrauterine thermal therapy, n=56 -Transcervical endometrial resection, n=56	-Dysfunctional uterine bleeding (DUB) not associated with organic pathology and not responding to medical therapy.	3	Satisfaction, bleeding status, duration of procedure, pain	"Results of this randomized study demonstrate that both procedures are equally effective in the treatment of menorrhagia. However, the ELITT procedure has proven to be superior in inducing amenorrhea."
Sambrook 2009 (68)	Randomized Controlled Trial	-Microwave endometrial ablation n=94 -Transcervical endometrial resection n=95	-Women with heavy menstrual loss, their family was complete. -The uterus was not greater than 10-week size and there was no endometrial atypia.	10	Satisfaction, PBAC score, Dysmenorrhea, quality of life Pain due to surgery	"Both techniques achieve significant and comparable improvements in menstrual symptoms, health-related quality of life and high rates of satisfaction. With the known operative advantages, lower costs, and fewer hysterectomies, it is clear that MEA is a more effective and efficient treatment for heavy menstrual loss than TCRE."
Soysal 2001 (69)	Randomized	-Thermal balloon (Thermachoice), n=45	-Patients completed of childbearing, age over 40 years.	1	Satisfaction, menstrual	"Thermal balloon ablation under local anesthesia for myoma-

	Controlled Trial	-Rollerball, n=48	-they complained of menorrhagia documented by pictorial blood loss assessment chart (PBAC) scores >150, a myomatous uterus diagnosed by a high-resolution transvaginal and/or transabdominal ultrasound examination.		blood flow reduction, duration of procedure, complication rates, post-operative pain scores, amenorrhea rates	induced menorrhagia provided both significant and statistically similar reductions in menstrual blood flow and increases in hemoglobin values with no intraoperative complication compared to rollerball endometrial ablation."
Van Zon-Rabelink 2004 (24)	Randomized Controlled Trial	-Thermal balloon (Thermachoice), n=60, -Rollerball, n=77	-Women with dysfunctional uterine bleeding. IPD showed that fibroids were included; exact eligibility details regarding this parameter were not given in the paper.	1	Satisfaction, menstrual blood loss, quality of life, menstrual status	"Endometrial ablation by uterine balloon thermal ablation (Thermachoice™) is equally effective as hysteroscopic RBE of the endometrium."
B: Second generation versus medical treatment:						
Barrington 2003 (55)	Randomized Controlled Trial	-Thermal Balloon ablation, n=23, -Levonorgestrel intrauterine system, n=21	-Fifty women referred by their general practitioner with menorrhagia refractory to medical therapy	0.5	Menstrual scores	"Both Thermachoice endometrial ablation and a Mirena LNG-IUS are equally effective in the management of menorrhagia. The choice of treatment should be tailored to the woman's needs and preferences."
Beelen 2020 (56)	Randomized Controlled Trial	-NovaSure ablation, n=132 -Levonorgestrel intrauterine system, n=138	-Women were eligible if they had HMB, with a PBAC score exceeding 150 points. -Women could have received previous treatment (oral) for HMB.	2	PBAC score and satisfaction rates	"Both the levonorgestrel-releasing intrauterine system and endometrial ablation strategies lead to a large decrease in menstrual blood loss in women with heavy menstrual bleeding, with comparable quality of life scores after treatment."
Busfield	Rando	-Thermal balloon	-Women were eligible for entry if they had	2	Amenorrhea,	"At 12 and 24 months of follow up,

2006 (57)	mized Controlled Trial	(Cavaterm), n=42 -Levonorgestrel intrauterine system, n=41	self-described heavy menstrual bleeding, and had completed their family. -they were 25–50 years old at initial assessment and had a regular cycle, with discrete episodes of menstruation occurring every 3–6 weeks.		PBAC and quality of Life	women with heavy menstrual bleeding treated with the LNG-IUS have significantly lower PBAC scores than women treated with thermal balloon ablation. Both the treatments resulted in a significant increase in overall quality of life, but there were no significant differences between either treatment in quality of life, patient satisfaction or the number of women requesting an alternative treatment during 24 months of follow up."
De Souza 2010 (58)	Randomized Controlled Trial	-Thermal Balloon ablation, n=28, -levonorgestrel intrauterine system, n=30	-Clinical HMB refractory to medical treatment (for example, oral contraceptive pills, estro/progestin preparations, nonsteroidal anti-inflammatory drugs), a 3-month washout period, regular menstrual cycles, age ≥35 years. -Menstrual blood loss N80 mL as measured by PBAC	1	PBAC scores	"Both the LNG-IUS and TBA appear to be effective in controlling HMB; however, posttreatment uterine bleeding patterns are different."
Famuyide 2017 (59)	Randomized Controlled Trial	-Radiofrequency endometrial ablation, n=34 -Medical treatment, n=33	-Patient's ages were between 30–55. -Subjective symptom of excessive menstrual bleeding, at least one normal Pap test within the previous 3 years. -Prior history of permanent sterilization, or use of a reliable non-hormonal contraceptive or reliance on partner's vasectomy.	1	PBLAC scores	"For women with heavy menstrual bleeding, initial radiofrequency endometrial ablation compared to medical therapy offered superior reduction in menstrual blood loss and improvement in quality of life without significant differences in total costs of care."
Ghazizadeh 2014 (60)	Randomized Controlled Trial	-NovaSure ablation, n=30 -Hysteroscopic endometrial resection, n=32 -Levonorgestrel intrauterine system, n=48	-Patients ranged in age from 35 to 45 years and were candidates for hysterectomy. -They had all been treated with hormonal therapy for at least 6 months and had shown no response to this therapy.	1	Post-operative status and satisfaction rates	"According to the results obtained in our study, it may be concluded that NovaSure is a better treatment for menorrhagia compared with the Mirena and hysteroscopic endometrial

						resection."
Shaw 2007 (61)	Randomized Controlled Trial	-Thermal Balloon (Thermachoice), n=28 -levonorgestrel intrauterine system, n=30	-Age 25–49 years. -Failed on appropriate first-line oral medical therapy. -PBAC score exceeding 120 (mean of two control cycles).	1	PBAC scores	"Both TBA and LNG-IUS achieved significant decreases in PBAC scores, with those for the LNG-IUS being significantly greater at 12 months. However, prolonged days of bleeding resulted in fewer women continuing with the LNG-IUS at two years."
Silva-Filho 2013 (33)	Randomized Controlled Trial	-Thermal Balloon (Thermachoice), n=28, -levonorgestrel intrauterine system, n=30	-Clinical HMB refractory to medical treatment (i.e., oral contraceptive pills, estrogen–progestin preparations, nonsteroidal anti-inflammatory drugs). -A 3-month washout period, regular menstrual cycles, age ≥35 years, -Menstrual blood loss N80 mL as measured by the Pictorial Bleeding Assessment Chart (PBAC)	5	PBAC score and satisfaction rates	"Five-year follow-up of HMB treatment with LNG-IUS was associated with higher efficacy and satisfaction ratings compared to TBA."
Soysal 2002 (62)	Randomized Controlled Trial	-Thermal Balloon ablation (Thermachoice), n=36, -Levonorgestrel intrauterine system, n=36	-Women, aged over 40 years with no further desire for childbearing. -They were complaining of dysfunctional menorrhagia who refused or not responded to medical treatment were considered for recruitment to the study	1	PBAC scores	"The non-contraceptive benefit of LNG IUD is evident in menorrhagic women. It is not as effective as TBA, in reducing the menstrual diary scores but as effective as TBA in increasing the hemoglobin values; however its side effect profile may alter its acceptability in menorrhagic women with no further desire for childbearing."

Tam 2006 (63)	Randomized Controlled Trial	-Thermal Balloon (Thermachoice), n=15, -Levonorgestrel intrauterine system, n=18	-Women with excessive menstrual bleeding attending the outpatient gynecology clinic were evaluated. -The inclusion criteria included pre-menopausal women aged over 40 years with a documented history of heavy menstruation for at least 3 months.	1	Menstrual status	"TBEA appears to offer better health status function at 1 year follow-up and to be more acceptable to our Chinese population in the treatment of idiopathic menorrhagia following failed medical treatment."
C: Second generation versus surgery:						
Hua 2006 (54)	Randomized Controlled Trial	-Microwave endometrial ablation n=30 -Total hysterectomy, n=30	-Patients (aged 39 to 54 years; mean 47 years) with menorrhagia and mild or moderate anemia were treated in our hospital.	1.67	Operating time and amenorrhea	"The curative effect of MEA is similar to that of total hysterectomy. When considering preservation of the uterus and postoperative recovery, MEA is obviously superior to total hysterectomy."
Sesti 2011 (51)	Randomized Controlled Trial	-Thermal balloon (Thermachoice), n=34, -Laparoscopic Supracervical hysterectomy, n=34	-Patients with presence of HMB in reproductive age (age 35–50 years), completed childbearing. -They failed on appropriate first-line oral medical therapy. -PBAC score ≧ 100 (average of two consecutive cycles).	2	PBAC scores	"The effectiveness of TBA as a possible treatment of HMB is confirmed. However, LSH showed a definitive improvement of the symptoms, and a better life quality profile. Further controlled prospective studies are required for identifying the best surgical approach in women with HMB."
Cooper 2019 (53)	Randomized Controlled Trial	-Second generation ablation, n=330 -laparoscopic supracervical hysterectomy, n=330	-Inclusion criteria were eligibility for endometrial ablation (fibroids <3 cm, uterine cavity size <11 cm, and absence of endometrial pathology on biopsy) and normal cervical cytology.	1	Patients' satisfaction	"Laparoscopic supracervical hysterectomy is superior to endometrial ablation in terms of clinical effectiveness and has a similar proportion of complications, but takes longer to perform and is associated with a longer recovery."

Dickersin 2007 (79)	Randomized Controlled Trial	-Second generation ablation, n=123 -Hysterectomy, n=114	-patients were required to be at least 18 years of age, premenopausal, with dysfunctional uterine bleeding for at least 6 months (characterized by one or a combination of excess duration, amount, or unpredictability of flow), and refractory to medical therapy for at least 3 months.	1	bleeding, pain, and fatigue	Both endometrial ablation and hysterectomy are effective treatments in women with dysfunctional uterine bleeding. Hysterectomy (as the index surgery) was associated with more adverse events and a substantial number of patients receiving endometrial ablation had reoperation
D: Second generation Second generation:						
Abbot 2003 (40)	Randomized Controlled Trial	-Bipolar radio frequency (Novasure), n=37 -Thermal balloon (Cavaterm), n=18	-Women had a pictorial blood loss assessment chart score > 150, no intrauterine pathology demonstrated by inpatient or outpatient hysteroscopy, a normal endometrial biopsy, a uterine length of < 12 cm, premenopausal gonadotropin levels, a normal Papanicolaou smear, and if they had completed their family.	1	Amenorrhea	"Both the Cavaterm™ and the Novasure™ endometrial ablation systems are effective in reducing menstrual loss in women with DUB and achieve high rates of patient satisfaction. The Novasure™ system achieved a statistically significantly higher rate of amenorrhea in this study."
Athanatos 2015 (30)	Randomized Controlled Trial	-Bipolar radio frequency (Novasure), n=33 -Microwave endometrial ablation, n=33	-Women included in the trial suffered from AUB for more than a year, unresponsive to medical therapy, and had already completed their family planning. -All patients were younger than 50 years old, had to have a normal cervical cytology test, a negative pregnancy test, and a follicular stimulating hormone (FSH) level of less than 20 mIU/ml.	1	Amenorrhea	"In women with DUB, endometrial ablation with Novasure bipolar radiofrequency impedance-controlled system is associated with increased rates of amenorrhea at 12-months post-treatment as compared to the MEA method."
Bongers 2004 (41)	Randomized Controlled	-Bipolar radio frequency (Novasure), n=83 -Thermal balloon (Thermachoice), n=43	-Women with menorrhagia as indicated on the pictorial chart described by Higham et al., with a score of 150 points or more, were eligible for the trial.	1	Amenorrhea rate, PBAC score, satisfaction	"The bipolar radio-frequency impedance-controlled endometrial ablation system is more effective than balloon ablation in the

	Trial					treatment of menorrhagia."
Clark 2011 (42)	Randomized Controlled Trial	-Bipolar radio frequency (Novasure), n=42 -Thermal balloon (Thermachoice), n=39	-Women with menstrual bleeding without organic pathology that had not responded to previous medical therapy and who had no desire to preserve their fertility- They had no contraindications to endometrial ablation (uterine cavity length more than 11 cm or previous open myomectomy, endometrial ablation or resection, and classical cesarean delivery)	1	Amenorrhea rate	"Office endometrial ablation using the bipolar radiofrequency or thermal balloon procedures is feasible and effective. The bipolar procedure was significantly quicker and achieved a greater degree of endometrial destruction than the thermal balloon, although there was no significant difference in amenorrhea rates at 6 months."
Hawe 2003 (44)	Randomized Controlled Trial	-Thermal balloon (Cavaterm), n=37 -Endometrial laser ablation, n=33	-Women with symptoms that indicated an endometrial ablation were eligible to participate if they had Higham blood loss score > 100, measured premenopausal gonadotrophin levels. -Uterine length of <12 cm	1	Amenorrhea rate	"The results with the Cavaterm thermal balloon endometrial ablation system are as good as those obtained with the Nd:YAG laser when used for the treatment of dysfunctional uterine bleeding in the short term. It results in a significant reduction in menstrual blood loss, patient satisfaction and improvement in patient quality of life. Larger studies with longer follow up are required to determine its place in the modern treatment of dysfunctional uterine bleeding."
Herman 2013 (28)	Randomized Controlled Trial	-Bipolar radio frequency (Novasure), n=69 -Thermal balloon (Thermachoice), n=35	-Women with HMB as indicated on the pictorial chart described by Higham et al., with a minimum score of 150 points and no intra-cavitary pathology, were eligible for the trial.	10	Amenorrhea rates, reintervention, and patient satisfaction.	"Ten years after treatment, the superiority of bipolar ablation over balloon ablation in the treatment of heavy menstrual bleeding was no longer evident."
Ibrahem 2020 (45)	Randomized Control	-Thermal balloon, n=50 -Hysteroscopic endometrial resection,	-Patients 40 years of age or older with no desire for further pregnancy with refractory abnormal uterine bleeding.	0.5	Operative time, complications, and menstrual	"Both thermal and chemical methods of endometrial ablation were as effective as REA in the

	led Trial	n=50 -chemical ablation, n=50	-They failed both hormonal treatment (for a minimum of 3-6 months) and endometrial curettage.		changes	management of DUB and had a significantly shorter operative time and shorter hospital stay with more rapid return to daily and sexual activity. Chemical endometrial ablation can be performed without general anesthesia especially for high risk patients and in low resource settings."
Kleijn 2007 (46)	Randomized Controlled Trial	-Bipolar radio frequency (Novasure), n=42 -Thermal balloon (Thermachoice), n=39	-Women were eligible if they had a menorrhagia, indicated on a pictorial chart with a Higham score of 150 points or more.	5	Amenorrhea	"At 5 years follow up, bipolar thermal ablation was superior to balloon ablation in the treatment of menorrhagia."
Laberge 2003 (47)	Randomized Controlled Trial	-Bipolar radio frequency (Novasure), n=37 -Thermal balloon (Thermachoice), n=30	-subjects (age 25–50 yrs.) received a diagnosis of menorrhagia. -Screening consisted of pelvic examination and assessment of the uterine cavity, blood chemistry, sexually transmitted disease testing (if necessary), Papanicolaou smear, and endometrial sampling with Pipelle biopsy or dilatation and curettage (D&C).	After application	Post-operative status pain	"The NovaSure system is associated with statistically significantly lower intraoperative and postoperative pain than the ThermaChoice system, and endometrial ablation with NovaSure could become an office-based procedure."
Penninx 2010 (48)	Randomized Controlled Trial	-Bipolar radio frequency (Novasure), n=82 -ThermAblator, n=78	-Women with menorrhagia were eligible for the trial indicated on the pictorial chart described by Higham et al. During their period, the patient records the use of tampons and towels and the loss of clots on a scoring system. - One period is counted and a minimum score of 150 points was described as menorrhagia.	1	Amenorrhea	"In the treatment of menorrhagia, bipolar radiofrequency endometrial ablation system is superior to hydro thermablation."

Penninx 2011 (49)	Randomized Controlled Trial	-Bipolar radio frequency (Novasure), n=74 -ThermAblator, n=65	-Women with menorrhagia as indicated on the pictorial chart described by Higham et al8 with a minimum score of 150 points were eligible for the trial.	5	Amenorrhea	"After treatment, bipolar radio frequency endometrial ablation system is more effective at 5 years than hydro thermablation in the treatment of menorrhagia."
Penninx 2016 (50)	Randomized Controlled Trial	-Bipolar radio frequency (Novasure), n=52 -Thermal balloon (Thermachoice), n=52	-Women with HMB were eligible for the trial with a minimum score of 150 points, counted during one period on the pictorial chart	1	Amenorrhea	"In the treatment of heavy menstrual bleeding, bipolar radiofrequency endometrial ablation is superior to balloon endometrial ablation as an office procedure in amenorrhea rate, patient satisfaction and quality of life."
Sambrook 2009 (52)	Randomized Controlled Trial	b -Microwave endometrial ablation, n=157 -Thermal Balloon endometrial ablation, n=157	-Patients were eligible if they were pre-menopausal, and had completed their families. -Also if they had a uterine size equivalent to a 12-week pregnancy or less with no histopathological abnormalities of the endometrium and no fibroids obstructing the uterine cavity.	1	Satisfaction and menstrual scores	"Both treatments are acceptable to women, with high levels of satisfaction. Microwave is quicker to perform with faster hospital discharge."
Smith 2014 (80)	Randomized Controlled Trial	-Bipolar radio frequency (Novasure), n=52 -Thermal balloon (Thermachoice), n=52	-Patients had heavy menstrual bleeding that affected their quality of life and opted for ablative treatment in the office setting.	5	Amenorrhea	"There was no difference in the effectiveness of bipolar radiofrequency ablation and thermal balloon ablation performed in an office setting at 5-year follow-up."

Supplemental Table S2: Baseline characteristics of the enrolled patients in the included studies

Study ID	Study arms	Sample size	Age, mean (SD)	Pain score, mean (SD)	Bleeding score, mean (SD)	Body mass index, mean (SD)
Bain 2002 (70)	Microwave endometrial ablation	120	41.4 (5.4)	18.9 (11.4)	28.1 (9.4)	
	Transcervical endometrial resection	129	42.4 (5.8)	16.4 (12.4)	27.8 (9.1)	
Brun 2006 (26)	Thermal balloon (Cavaterm)	31	45 (15.54)		310.3 (345.8)	26.3 (16.3)
	balloon ablation	20	44 (16.75)		329.6 (308.77)	27.6 (19.9)
Cooper 1999 (71)	Microwave endometrial ablation	129	41.1 (6.7)	19.6 (13.5)	28.3 (10.5)	
	Transcervical endometrial resection	134	41 (8.4)	16 (13.5)	27.3 (9.74)	
Cooper 2002 (20)	NovaSure ablation	175	39.7 (5.5		562 (381)	27.6 (6.3)
	Rollerball ablation	90	39.9 (5.1)		562 (487)	28.4 (7.5)
Cooper 2004 (72)	Microwave endometrial ablation	195	40.5 (4.6)		451.8 (356.6)	28 (7.1)
	Rollerball ablation	107	40.9 (4.6)		524.6 (429.5)	27 (6.6)
Cooper 2005 (15)	Microwave endometrial ablation	116	41.4 (5.3)	18.9 (11.2)	28.4 (9.1)	
	Transcervical endometrial resection	120	42.4 (5.6)	16.4 (12.3)	28.1 (9.3)	
Corson 1999 (43)	Thermal balloon (Vesta)	132				
	Transcervical endometrial resection	123				
Corson 2000 (73)	Thermal balloon (Vesta) Second generation ablation	122	41.0 (4.9)	11.8 (11.5)	535 (612)	29.1 (7.1)
	Transcervical endometrial resection	112	40.1 (4.7)	11.2 (8.9)	445 (313)	29.2 (4.7)
Corson 2001 (74)	Hydro ThermAblator	177	40.7 (5.2)	29.0 (7.4)		
	Rollerball ablation	85	40.6 (5.3)	28.8 (7.8)		
Cooper 2019 (53)	Second generation ablation	309	42 (5)			29·1 (6)
	Laparoscopic supracervical hysterectomy	330	42 (5)			29 (5.3)
Dickersin 2007 (79)	Second generation ablation	123				
	Hysterectomy	114				
Duleba 2003 (75)	Cryoablation (HerOption)	193	41.2 (5.1)		576 (457)	29.3 (8.4)
	Rollerball ablation	86	41.1 (4.8)		466 (376)	28.6 (6.7)
Goldrath 2003 (76)	Hydro ThermAblator	167				
	Rollerball ablation	83				

Grainger 2000 (77)	Uterine balloon ablation	131				
	Rollerball ablation	124				
Laberge 2016 (78)	Minerva endometrial ablation	102	42.6 (4.2)			30 (7.1)
	Rollerball ablation	51	42.5 (4.7)			28.8 (5.3)
Loffer 2001 (64)	Uterine balloon ablation	131	40.4 (5)			
	Rollerball ablation	124	40.9 (5)			
Loffer 2002 (65)	Uterine balloon ablation	131	40.4 (5)			
	Rollerball ablation	124	40.9 (5)			
Smith 2014 (80)	Thermal balloon (Thermachoice)	30	49.2 (4.6)	29.3 (6.6)		
	Bipolar radio frequency (Novasure)	29	47 (4.4)	29.7 (5.9)		
Meyer 1998 (21)	Uterine balloon ablation	128	40.2 (4.9)			24 (6.5)
	Rollerball ablation	117	40.9 (5.2)			22.9 (5.5)
Pellicano (66)	Thermal balloon (Cavaterm)	40	42.6 (4.4)			29.8 (1.9)
	Roller balloon	42	43.2 (3.5)			28.3 (1.4)
Perino 2004 (67)	Endometrial laser intrauterine thermal therapy	56	41.4 (4.3)	5.1 (3.3)	167.2 (36.5)	
	Transcervical endometrial resection	55	41. (3.89)	5.6 (1.9)	162.5 (41.2)	
Sambrook 2009 (68)	Microwave endometrial ablation	94	42 (5.2)	17.7 (11.1)	27.9 (9.2)	
	Transcervical endometrial resection	95	40 (12.6)	15. (12.3)	28.3 (9.2)	
Soysal 2001 (69)	Thermal Balloon ablation	45	43.6 (2.5)		383.1 (97.2)	
	Roller balloon	48	44.3 (2.6)		387.1 (101)	
Van Zon-Rabelink 2004 (24)	Thermal Balloon ablation	60	43.1 (4.3)			
	Roller balloon	77	43.1 (4.9)			
Barrington 2003 (55)	Thermal Balloon ablation	23				
	Levonorgestrel intrauterine system	21				
Beelen 2020 (56)	NovaSure ablation	132	44.7 (4.6)		616.3 (524.3)	27.5 (5.4)
	Levonorgestrel intrauterine system	138	45.3 (4.9)		630 (551.8)	27.8 (5.8)
Busfield 2006 (57)	Levonorgestrel intrauterine system	42			490 (419)	28.8 (8)
	Thermal Balloon ablation	41			502 (422)	29.7 (5.4)
De Souza 2010 (58)	Levonorgestrel intrauterine system	30	41.9 (0.7)		541.9 (97.8)	
	Thermal Balloon ablation	28	43.7 (0.7)		419.7 (72.1)	

Famuyide 2017 (59)	Radiofrequency endometrial ablation	34	41.9 (6)	4 (3.1)	338.6 (205.9)	28.4 (5.4)
	Medical treatment	33	42.8 (5.5)	6 (1.5)	298.6 (148.8)	29.5 (5.9)
Ghazizadeh 2014 (60)	NovaSure ablation	30	40.47 (4.13)			27.24 (4.69)
	Hysteroscopic endometrial resection	32	41.53 (3.7)			29.32 (3.32)
	Levonorgestrel intrauterine system	48	40.02 (4.63)			28.94 (4.98)
Shaw 2007 (61)	Levonorgestrel intrauterine system	33	43.1 (4.25)		450 (263.5)	27 (4.75)
	Thermal Balloon ablation	33	42.4 (4.5)		410 (418.5)	28 (5.5)
Silva-filho 2013 (33)	Levonorgestrel intrauterine system	30	42 (0.7)		522.1 (90.3)	
	Thermal Balloon ablation	28	43.4 (0.7)		492.2 (56.8)	
Soysal 2002 (62)	Levonorgestrel intrauterine system	36	43.8 (2.7)		408 (101)	
	Thermal Balloon ablation	36	44.1 (2.4)		417 (81.4)	
Tam 2006 (63)	Levonorgestrel intrauterine system	18	44.7 (2.7)		460 (270)	
	Thermal Balloon ablation	15	44.1 (3.5)		543 (525)	
Hua 2006 (54)	microwave endometrial ablation	30	47.2 (3.6)			
	Total hysterectomy	30	47.0 (3.1)			
Sesti 2011 (51)	Thermal balloon ablation	34	47 (8.2)		881 (209)	23.9 (2.9)
	Laparoscopic supracervical hysterectomy	34	47.5 (7.4)		869 (226)	24.7 (3.3)
Abbot 2003 (40)	Bipolar radio frequency (Novasure)	37	40.5 (6)		789 (462)	26.9 (6.2)
	Thermal balloon (Cavaterm)	18	40.5 (8.1)		439.5 (194)	22.9 (4.9)
Athanatos 2015 (30)	Bipolar radio frequency (Novasure)	33	45 (5)	3 (5)	622 (218.6)	26.1 (4.6)
	Microwave endometrial ablation	33	46 (5)	4 (7)	554 (119.1)	27.3 (3)
Bongers 2004 (41)	Bipolar radio frequency (Novasure)	82	42.6 (4.9)		515 (541.8)	
	Thermal balloon (Thermachoice)	43	43.1 (3.8)		660 (758)	
Clark 2011 (42)	Bipolar radio frequency (Novasure)	42	41.8 (2.2)		535 (612)	30.2 (5.8)
	Thermal balloon (Thermachoice)	39	43.8 (4.4)		445 (313)	26.5 (6.7)
Hawe 2003 (44)	Thermal balloon (Cavaterm)	37	41.4 (5.5)			27.3 (6.4)
	Endometrial laser ablation	33	41.4 (5)			27.9 (6.9)
Herman 2013 (28)	Bipolar radio frequency (Novasure)	69				
	Thermal balloon (Thermachoice)	35				
Ibrahem 1994 (45)	Thermal balloon	50	45.7 (5.1)			30.3 (8.5)
	Hysteroscopic endometrial resection	50	44.9 (4.8)			29.1 (7.8)
	chemical ablation	50	46.5 (4.5)			30.9 (8.4)

Kleijn 2007 (46)	Bipolar radio frequency (Novasure)	81				
	Thermal balloon (Thermachoice)	39				
Laberge 2003 (47)	Bipolar radio frequency (Novasure)	37	42.3 (5.4)			
	Thermal balloon (Thermachoice)	30	42.3 (5.1)			
Penninx 2010 (48)	Bipolar radio frequency (Novasure)	82	44.7 (4.8)		810 (616.6)	
	ThermAblator	78	44.8 (4.9)		792 (316.6)	
Penninx 2011 (49)	Bipolar radio frequency (Novasure)	74	49.5 (5.0)		824.6 (626.6)	
	ThermAblator	65	49.3 (4.7)		783.6 (450)	
Penninx 2016 (50)	Bipolar radio frequency (Novasure)	52	45.4 (4.7)		979 (525)	
	Thermal balloon (Thermachoice)	52	44.1 (4.4)		931 (512)	
Sambrook 2009 (52)	Microwave endometrial ablation	157	43.1 (5.5)	16.5 (2.3)	184 (42.8)	25.7 (1.25)
	Thermal balloon	157	43.2 (5.1)	16 (2.5)	194 (54)	26.6 (1.22)

Supplemental Table S3, Quality assessment of RCTs by Cochrane tool:

Study ID	Risk of bias	Judgments of the authors
Bain2002		
Random sequence generation (selection bias)	Low risk	"Computer-generated random number tables were used."
Allocation concealment (selection bias)	Low risk	"The treatment allocation was by telephone. A secretary opened the next in line of a series of sealed opaque, sequentially numbered envelopes, which contained the treatment code."
Blinding of participants and personnel (performance bias)	Low risk	No blinding or incomplete blinding, and the outcome or outcome measurement is likely to be influenced by lack of blinding
Blinding of outcome assessment (Detection bias)	High risk	Not reported but outcome assessors seemed to be unblinded.
Incomplete outcome data (attrition bias)	Low risk	"The analyses were by intention to treat."
Selective reporting (reporting bias)	Unclear	The study protocol was not reported.

Other Bias	High risk	The study protocol was not reported.
Brun2006		
Random sequence generation (selection bias)	Low risk	"Women were assigned to Cavaterm therapy or endometrial resection by means of a computer-generated randomization telephone number sequence in a 1:1 allocation ratio."
'Allocation concealment (selection bias)	Low risk	"Women were assigned to Cavaterm therapy or endometrial resection by means of a computer-generated randomization telephone number sequence in a 1:1 allocation ratio."
Blinding of participants and personnel (performance bias)	Low risk	No blinding or incomplete blinding, and the outcome or outcome measurement is likely to be influenced by lack of blinding
Blinding of outcome assessment (Detection bias)	High risk	Outcome assessors seemed to be unblinded.
Incomplete outcome data (attrition bias)	Low risk	Missing outcome data balanced in numbers across intervention groups, with similar reasons for missing data across groups
Selective reporting (reporting bias)	Unclear	The study protocol was not reported.
Other Bias	High risk	The study protocol was not reported.
Cooper1999		
Random sequence generation (selection bias)	Low risk	"The sequence was predetermined by computer-generated random-number tables in balanced blocks o f2 0."
Allocation concealment (selection bias)	Low risk	"Treatment allocation was obtained by telephone after the woman had given informed consent. A secretary opened the next in a series of sealed, opaque, sequentially numbered envelopes showing the treatment code in a one-to-one individual randomization ratio."
Blinding of participants and personnel (performance bias)	Low risk	No blinding or incomplete blinding, and the outcome or outcome measurement is likely to be influenced by lack of blinding
Blinding of outcome assessment (Detection bias)	High risk	Outcome assessors seemed to be unblinded.
Incomplete outcome data (attrition bias)	Low risk	"The analysis was by intention to treat."
Selective reporting (reporting bias)	Unclear	The study protocol was not reported.
Other Bias	High risk	The study protocol was not reported.

Cooper2002		
Random sequence generation (selection bias)	Unclear	The method of randomization was not reported
Allocation concealment (selection bias)	Unclear	Insufficient information to permit judgement
Blinding of participants and personnel (performance bias)	Low risk	No blinding or incomplete blinding, and the outcome or outcome measurement is likely to be influenced by lack of blinding
Blinding of outcome assessment (Detection bias)	High risk	Outcome assessors seemed to be unblinded.
Incomplete outcome data (attrition bias)	Low risk	Missing outcome data balanced in numbers across intervention groups, with similar reasons for missing data across groups
Selective reporting (reporting bias)	Unclear	The study protocol was not reported.
Other Bias	High risk	The study protocol was not reported.
Cooper2004		
Random sequence generation (selection bias)	Low risk	“Treatment group assignments were made using computer-generated random numbers.”
Allocation concealment (selection bias)	Unclear	Insufficient information to permit judgement
Blinding of participants and personnel (performance bias)	Low risk	No blinding or incomplete blinding, and the outcome or outcome measurement is likely to be influenced by lack of blinding
Blinding of outcome assessment (Detection bias)	High risk	Outcome assessors seemed to be unblinded
Incomplete outcome data (attrition bias)	Low risk	“Study data were analysed for the intent-to-treat.”
Selective reporting (reporting bias)	Unclear	The study protocol was not reported.
Other Bias	High risk	The study protocol was not reported.
Cooper2005		

Random sequence generation (selection bias)	Low risk	"Computer-generated random number tables were used."
Allocation concealment (selection bias)	Low risk	"The treatment allocation was by telephone. A secretary opened the next in line of a series of sealed opaque, sequentially numbered envelopes, which contained the treatment code."
Blinding of participants and personnel (performance bias)	Low risk	No blinding or incomplete blinding, and the outcome or outcome measurement is likely to be influenced by lack of blinding
Blinding of outcome assessment (Detection bias)	Low risk	"Independent data collector/inputter and statistician, none of the three clinicians had access to the patient data set and patients were not reminded of their initial allocation."
Incomplete outcome data (attrition bias)	Low risk	Missing outcome data balanced in numbers across intervention groups, with similar reasons for missing data across groups
Selective reporting (reporting bias)	Unclear	The study protocol was not reported.
Other Bias	High risk	The study protocol was not reported.
Corson2000		
Random sequence generation (selection bias)	Low risk	"They were randomized to treatment by computer-generated block method initially ."
Allocation concealment (selection bias)	Unclear	Insufficient information to permit judgement
Blinding of participants and personnel (performance bias)	Low risk	No blinding or incomplete blinding, and the outcome or outcome measurement is likely to be influenced by lack of blinding
Blinding of outcome assessment (Detection bias)	High risk	Outcome assessors seemed to be unblinded.
Incomplete outcome data (attrition bias)	Low risk	Missing outcome data balanced in numbers across intervention groups, with similar reasons for missing data across groups
Selective reporting (reporting bias)	Unclear	The study protocol was not reported.
Other Bias	High risk	The study protocol was not reported.
Corson2001		

Random sequence generation (selection bias)	Unclear	Insufficient information about the sequence generation process to permit judgement.
Allocation concealment (selection bias)	Unclear	Insufficient information about the sequence generation process to permit judgement.
Blinding of participants and personnel (performance bias)	Low risk	No blinding or incomplete blinding, and the outcome or outcome measurement is likely to be influenced by lack of blinding
Blinding of outcome assessment (Detection bias)	High risk	Outcome assessors seemed to be unblinded.
Incomplete outcome data (attrition bias)	Low risk	"Analyses were done using intent-to-treat (ITT)."
Selective reporting (reporting bias)	Unclear	The study protocol was not reported.
Other Bias	High risk	The study protocol was not reported.
Duleba2003		
Random sequence generation (selection bias)	Unclear	Insufficient information about the sequence generation process to permit judgement.
Allocation concealment (selection bias)	Unclear	Insufficient information about the sequence generation process to permit judgement.
Blinding of participants and personnel (performance bias)	Low risk	No blinding or incomplete blinding, and the outcome or outcome measurement is likely to be influenced by lack of blinding
Blinding of outcome assessment (Detection bias)	High risk	Outcome assessors seemed to be unblinded.
Incomplete outcome data (attrition bias)	High risk	"As-treated" analysis done with substantial departure of the intervention received from that assigned at randomization.
Selective reporting (reporting bias)	Unclear	The study protocol was not reported.
Other Bias	High risk	The study protocol was not reported.
Goldrath2003		

Random sequence generation (selection bias)	Low risk	"Those who met inclusion criteria were randomized by computer generated block."
Allocation concealment (selection bias)	Unclear	Insufficient information about the sequence generation process to permit judgement.
Blinding of participants and personnel (performance bias)	Low risk	No blinding or incomplete blinding, and the outcome or outcome measurement is likely to be influenced by lack of blinding
Blinding of outcome assessment (Detection bias)	High risk	Outcome assessors seemed to be unblinded.
Incomplete outcome data (attrition bias)	Low risk	Missing outcome data balanced in numbers across intervention groups, with similar reasons for missing data across groups
Selective reporting (reporting bias)	Unclear	The study protocol was not reported.
Other Bias	High risk	The study protocol was not reported.
Grainger2000		
Random sequence generation (selection bias)	Unclear	Insufficient information about the sequence generation process to permit judgement.
Allocation concealment (selection bias)	Unclear	Insufficient information about the sequence generation process to permit judgement.
Blinding of participants and personnel (performance bias)	Low risk	No blinding or incomplete blinding, and the outcome or outcome measurement is likely to be influenced by lack of blinding
Blinding of outcome assessment (Detection bias)	High risk	Outcome assessors seemed to be unblinded.
Incomplete outcome data (attrition bias)	Low risk	Missing outcome data balanced in numbers across intervention groups, with similar reasons for missing data across groups
Selective reporting (reporting bias)	Unclear	The study protocol was not reported.
Other Bias	High risk	The study protocol was not reported.
Laberge2016		

Random sequence generation (selection bias)	Low risk	"All subjects qualifying for study participation and treatment were block randomized from a centralized electronic patient database in a 2:1 scheme to either the Test or Control Group."
Allocation concealment (selection bias)	Unclear	Insufficient information about the allocation process to permit judgement.
Blinding of participants and personnel (performance bias)	Low risk	No blinding or incomplete blinding, and the outcome or outcome measurement is likely to be influenced by lack of blinding
Blinding of outcome assessment (Detection bias)	High risk	Outcome assessors seemed to be unblinded.
Incomplete outcome data (attrition bias)	Low risk	"All primary effectiveness and safety results were summarized for the Intent-To-Treat (ITT)."
Selective reporting (reporting bias)	Unclear	The study protocol was not reported.
Other Bias	High risk	The study protocol was not reported.
Loffer2001		
Random sequence generation (selection bias)	Unclear	Insufficient information about the sequence generation process to permit judgement.
Allocation concealment (selection bias)	Unclear	Insufficient information about the allocation process to permit judgement.
Blinding of participants and personnel (performance bias)	Low risk	No blinding or incomplete blinding, and the outcome or outcome measurement is likely to be influenced by lack of blinding
Blinding of outcome assessment (Detection bias)	High risk	Outcome assessors seemed to be unblinded.
Incomplete outcome data (attrition bias)	Low risk	Missing outcome data balanced in numbers across intervention groups, with similar reasons for missing data across groups
Selective reporting (reporting bias)	Unclear	The study protocol was not reported.
Other Bias	High risk	The study protocol was not reported.
Loffer2002		

Random sequence generation (selection bias)	Unclear	Insufficient information about the sequence generation process to permit judgement.
Allocation concealment (selection bias)	Unclear	Insufficient information about the allocation process to permit judgement.
Blinding of participants and personnel (performance bias)	Low risk	No blinding or incomplete blinding, and the outcome or outcome measurement is likely to be influenced by lack of blinding
Blinding of outcome assessment (Detection bias)	High risk	Outcome assessors seemed to be unblinded.
Incomplete outcome data (attrition bias)	High risk	Reason for missing outcome data likely to be related to true outcome, with either imbalance in numbers or reasons for missing data across intervention groups.
Selective reporting (reporting bias)	Unclear	The study protocol was not reported.
Other Bias	High risk	The study protocol was not reported.
Meyer1998		
Random sequence generation (selection bias)	Low risk	"Patients who met entry criteria were randomized within their study center to either the rollerball or the uterine balloon group in a 1:1 allocation ratio by the generation of a random numbers table."
Allocation concealment (selection bias)	Unclear	Insufficient information about the allocation process to permit judgement.
Blinding of participants and personnel (performance bias)	Low risk	No blinding or incomplete blinding, and the outcome or outcome measurement is likely to be influenced by lack of blinding
Blinding of outcome assessment (Detection bias)	High risk	Outcome assessors seemed to be unblinded.
Incomplete outcome data (attrition bias)	Low risk	Missing outcome data balanced in numbers across intervention groups, with similar reasons for missing data across groups
Selective reporting (reporting bias)	Unclear	The study protocol was not reported.
Other Bias	High risk	The study protocol was not reported.
Pellicano2002		

Random sequence generation (selection bias)	Low risk	"Patients were randomly assigned to TD or HTER by means of a computer-generated randomization number sequence."
Allocation concealment (selection bias)	Unclear	Insufficient information about the allocation process to permit judgement.
Blinding of participants and personnel (performance bias)	Low risk	No blinding or incomplete blinding, and the outcome or outcome measurement is likely to be influenced by lack of blinding
Blinding of outcome assessment (Detection bias)	High risk	Outcome assessors seemed to be unblinded.
Incomplete outcome data (attrition bias)	Low risk	No loss of follow-up
Selective reporting (reporting bias)	Unclear	The study protocol was not reported.
Other Bias	High risk	The study protocol was not reported.
Perino2004		
Random sequence generation (selection bias)	Low risk	"Computer-generated list of randomizations was used"
Allocation concealment (selection bias)	Unclear	Insufficient information about the allocation process to permit judgement.
Blinding of participants and personnel (performance bias)	Low risk	No blinding or incomplete blinding, and the outcome or outcome measurement is likely to be influenced by lack of blinding
Blinding of outcome assessment (Detection bias)	High risk	Outcome assessors seemed to be unblinded.
Incomplete outcome data (attrition bias)	Low risk	No loss of follow-up
Selective reporting (reporting bias)	Unclear	The study protocol was not reported.
Other Bias	High risk	The study protocol was not reported.
Sambrook2009		

Random sequence generation (selection bias)	Low risk	"The randomization sequence was created by an independent statistician using computer-generated random number tables which were in balanced blocks of 20."
Allocation concealment (selection bias)	Low risk	"A series of sealed opaque sequentially numbered envelopes was created revealing the treatment code in a 1:1 individual randomization ratio"
Blinding of participants and personnel (performance bias)	Low risk	No blinding or incomplete blinding, and the outcome or outcome measurement is likely to be influenced by lack of blinding
Blinding of outcome assessment (Detection bias)	High risk	Outcome assessors seemed to be unblinded.
Incomplete outcome data (attrition bias)	Low risk	"Analysis was performed as intention to treat"
Selective reporting (reporting bias)	Unclear	The study protocol was not reported.
Other Bias	High risk	The study protocol was not reported.
Soysal2001		
Random sequence generation (selection bias)	Low risk	"Eligible subjects were randomized to RBA or TBA (1:1): in accordance with a computer-generated randomization using numbered opaque, sealed envelopes."
Allocation concealment (selection bias)	Unclear	Insufficient information about the allocation process to permit judgement.
Blinding of participants and personnel (performance bias)	Low risk	No blinding or incomplete blinding, and the outcome or outcome measurement is likely to be influenced by lack of blinding
Blinding of outcome assessment (Detection bias)	High risk	Outcome assessors seemed to be unblinded.
Incomplete outcome data (attrition bias)	Low risk	Missing outcome data balanced in numbers across intervention groups, with similar reasons for missing data across groups
Selective reporting (reporting bias)	Unclear	The study protocol was not reported.
Other Bias	High risk	The study protocol was not reported.
Vanzon-Rebelink2004		

Random sequence generation (selection bias)	Unclear	Insufficient information about the sequence generation process to permit judgement.
Allocation concealment (selection bias)	Unclear	Insufficient information about the allocation process to permit judgement.
Blinding of participants and personnel (performance bias)	Low risk	No blinding or incomplete blinding, and the outcome or outcome measurement is likely to be influenced by lack of blinding
Blinding of outcome assessment (Detection bias)	High risk	Outcome assessors seemed to be unblinded.
Incomplete outcome data (attrition bias)	Low risk	No loss of follow-up.
Selective reporting (reporting bias)	Unclear	The study protocol was not reported.
Other Bias	High risk	The study protocol was not reported.
Barrington2003		
Random sequence generation (selection bias)	Unclear	Insufficient information about the sequence generation process to permit judgement.
Allocation concealment (selection bias)	Unclear	Insufficient information about the allocation process to permit judgement.
Blinding of participants and personnel (performance bias)	Low risk	No blinding or incomplete blinding, and the outcome or outcome measurement is likely to be influenced by lack of blinding
Blinding of outcome assessment (Detection bias)	High risk	Outcome assessors seemed to be unblinded.
Incomplete outcome data (attrition bias)	Low risk	Missing outcome data balanced in numbers across intervention groups, with similar reasons for missing data across groups
Selective reporting (reporting bias)	Unclear	The study protocol was not reported.
Other Bias	High risk	The study protocol was not reported.
Beelen2020		

Random sequence generation (selection bias)	Low risk	"Consenting women were randomly allocated in a 1:1 ratio to 1 of 2 treatment arms by research nurses at the local centers, using an internet-based randomization module. "
Allocation concealment (selection bias)	Unclear	Insufficient information about the allocation process to permit judgement.
Blinding of participants and personnel (performance bias)	Low risk	No blinding or incomplete blinding, and the outcome or outcome measurement is likely to be influenced by lack of blinding
Blinding of outcome assessment (Detection bias)	High risk	Outcome assessors seemed to be unblinded.
Incomplete outcome data (attrition bias)	Low risk	"Analysis was performed as intention to treat"
Selective reporting (reporting bias)	Unclear	The study protocol was not reported.
Other Bias	High risk	The study protocol was not reported.
Busfield2006		
Random sequence generation (selection bias)	Low risk	"Computer generated randomization in blocks of 20 had been prepared prior to the commencement of the study and placed in consecutively numbered opaque envelopes. ."
Allocation concealment (selection bias)	Unclear	Insufficient information about the allocation process to permit judgement.
Blinding of participants and personnel (performance bias)	Low risk	No blinding or incomplete blinding, and the outcome or outcome measurement is likely to be influenced by lack of blinding
Blinding of outcome assessment (Detection bias)	High risk	Outcome assessors seemed to be unblinded.
Incomplete outcome data (attrition bias)	Low risk	Missing outcome data balanced in numbers across intervention groups, with similar reasons for missing data across groups
Selective reporting (reporting bias)	Unclear	The study protocol was not reported.
Other Bias	High risk	The study protocol was not reported.
De Souza2010		

Random sequence generation (selection bias)	Low risk	"With the use of a computer-generated randomization list, the patients were then randomly allocated to one of two groups."
Allocation concealment (selection bias)	Unclear	Insufficient information about the allocation process to permit judgement.
Blinding of participants and personnel (performance bias)	Low risk	No blinding or incomplete blinding, and the outcome or outcome measurement is likely to be influenced by lack of blinding
Blinding of outcome assessment (Detection bias)	High risk	Outcome assessors seemed to be unblinded.
Incomplete outcome data (attrition bias)	Low risk	Missing outcome data balanced in numbers across intervention groups, with similar reasons for missing data across groups
Selective reporting (reporting bias)	Unclear	The study protocol was not reported.
Other Bias	High risk	The study protocol was not reported.
Famuyide2017		
Random sequence generation (selection bias)	Low risk	"The randomization assignment for each patient was obtained by entering the patient's stratification levels into a web-based computer application."
Allocation concealment (selection bias)	Low risk	"Women were randomized to MTP or REA using a dynamic allocation method to ensure balance between the treatment groups based on stratification attributes."
Blinding of participants and personnel (performance bias)	Low risk	No blinding or incomplete blinding, and the outcome or outcome measurement is likely to be influenced by lack of blinding
Blinding of outcome assessment (Detection bias)	High risk	Outcome assessors seemed to be unblinded.
Incomplete outcome data (attrition bias)	Low risk	"All analysis were based on the intention to treat principle"
Selective reporting (reporting bias)	Low risk	The study protocol is available and all of the study's pre-specified (primary and secondary) outcomes that are of interest in the review have been reported in the pre-specified way
Other Bias	Low risk	The study appears to be free of other sources of bias.
Ghazizadeh2014		

Random sequence generation (selection bias)	Unclear	Insufficient information about the sequence generation process to permit judgement.
Allocation concealment (selection bias)	Unclear	Insufficient information about the allocation process to permit judgement.
Blinding of participants and personnel (performance bias)	Low risk	No blinding or incomplete blinding, and the outcome or outcome measurement is likely to be influenced by lack of blinding
Blinding of outcome assessment (Detection bias)	High risk	Outcome assessors seemed to be unblinded.
Incomplete outcome data (attrition bias)	Low risk	Missing outcome data balanced in numbers across intervention groups, with similar reasons for missing data across groups.
Selective reporting (reporting bias)	Unclear	The study protocol was not reported.
Other Bias	High risk	The study protocol was not reported.
Shaw2007		
Random sequence generation (selection bias)	Low risk	"Randomization was in a ratio of 1:1 from computer generated balanced random number blocks." ."
Allocation concealment (selection bias)	Low risk	"The sequentially sealed opaque envelope was opened only once the patient had signed the consent form ."
Blinding of participants and personnel (performance bias)	Low risk	No blinding or incomplete blinding, and the outcome or outcome measurement is likely to be influenced by lack of blinding
Blinding of outcome assessment (Detection bias)	High risk	Outcome assessors seemed to be unblinded.
Incomplete outcome data (attrition bias)	High risk	Reason for missing outcome data likely to be related to true outcome, with either imbalance in numbers or reasons for missing data across intervention groups.
Selective reporting (reporting bias)	Unclear	The study protocol was not reported.
Other Bias	High risk	The study protocol was not reported.
Silva-filho2013		

Random sequence generation (selection bias)	Low risk	"Computer-generated randomization list was used."
Allocation concealment (selection bias)	Unclear	Insufficient information about the allocation process to permit judgement.
Blinding of participants and personnel (performance bias)	Low risk	No blinding or incomplete blinding, and the outcome or outcome measurement is likely to be influenced by lack of blinding
Blinding of outcome assessment (Detection bias)	High risk	Outcome assessors seemed to be unblinded.
Incomplete outcome data (attrition bias)	Low risk	Missing outcome data balanced in numbers across intervention groups, with similar reasons for missing data across groups.
Selective reporting (reporting bias)	Unclear	The study protocol was not reported.
Other Bias	High risk	The study protocol was not reported.
Soysal2002		
Random sequence generation (selection bias)	Low risk	"Patients were randomized to TBA or LNG IUD (1:1) in accordance with a computer generated randomization using numbered opaque, sealed envelopes."
Allocation concealment (selection bias)	Low risk	"Patients were randomized to TBA or LNG IUD (1:1) in accordance with a computer generated randomization using numbered opaque, sealed envelopes."
Blinding of participants and personnel (performance bias)	Low risk	No blinding or incomplete blinding, and the outcome or outcome measurement is likely to be influenced by lack of blinding
Blinding of outcome assessment (Detection bias)	High risk	Outcome assessors seemed to be unblinded.
Incomplete outcome data (attrition bias)	Low risk	Missing outcome data balanced in numbers across intervention groups, with similar reasons for missing data across groups.
Selective reporting (reporting bias)	Unclear	The study protocol was not reported.
Other Bias	High risk	The study protocol was not reported.
Tam2006		

Random sequence generation (selection bias)	Low risk	"Patients were allocated to either TBEA or LNG-IUS according to a computer-generated random number series."
Allocation concealment (selection bias)	Unclear	Insufficient information about the allocation process to permit judgement.
Blinding of participants and personnel (performance bias)	Low risk	No blinding or incomplete blinding, and the outcome or outcome measurement is likely to be influenced by lack of blinding
Blinding of outcome assessment (Detection bias)	High risk	Outcome assessors seemed to be unblinded.
Incomplete outcome data (attrition bias)	Low risk	No loss of follow-up.
Selective reporting (reporting bias)	Unclear	The study protocol was not reported.
Other Bias	High risk	The study protocol was not reported.
Lin2006		
Random sequence generation (selection bias)	Unclear	Insufficient information about the sequence generation process to permit judgement.
Allocation concealment (selection bias)	Unclear	Insufficient information about the allocation process to permit judgement.
Blinding of participants and personnel (performance bias)	Low risk	No blinding or incomplete blinding, and the outcome or outcome measurement is likely to be influenced by lack of blinding
Blinding of outcome assessment (Detection bias)	High risk	Outcome assessors seemed to be unblinded.
Incomplete outcome data (attrition bias)	Low risk	No loss of follow-up.
Selective reporting (reporting bias)	Unclear	The study protocol was not reported.
Other Bias	High risk	The study protocol was not reported.
Sesti2011		

Random sequence generation (selection bias)	Low risk	"The randomization procedure was based on a computer-generated list using serially numbered, opaque, sealed envelopes."
Allocation concealment (selection bias)	Low risk	"Each patient was blindly allocated by a physician to groups. The sequence was concealed until interventions were assigned."
Blinding of participants and personnel (performance bias)	Low risk	No blinding or incomplete blinding, and the outcome or outcome measurement is likely to be influenced by lack of blinding
Blinding of outcome assessment (Detection bias)	High risk	Outcome assessors seemed to be unblinded.
Incomplete outcome data (attrition bias)	Low risk	No loss of follow-up.
Selective reporting (reporting bias)	Unclear	The study protocol was not reported.
Other Bias	High risk	The study protocol was not reported.
Cooper2019		
Random sequence generation (selection bias)	Low risk	"Women were randomly assigned (1:1) to groups by either an Interactive Voice Response telephone system or an internet-based application with a minimization algorithm based on center and age group"
Allocation concealment (selection bias)	Low risk	"Women were randomly assigned (1:1) to groups by either an Interactive Voice Response telephone system or an internet-based application with a minimization algorithm based on center and age group"
Blinding of participants and personnel (performance bias)	Low risk	No blinding or incomplete blinding, and the outcome or outcome measurement is likely to be influenced by lack of blinding
Blinding of outcome assessment (Detection bias)	High risk	Outcome assessors seemed to be unblinded.
Incomplete outcome data (attrition bias)	Low risk	"The analysis was based on the intention to-treat principle."
Selective reporting (reporting bias)	Low risk	The study protocol is available and all of the study's pre-specified (primary and secondary) outcomes that are of interest in the review have been reported in the pre-specified way
Other Bias	Low risk	The study appears to be free of other sources of bias.
Dickersin2007		

Random sequence generation (selection bias)	Low risk	"Randomization used permuted blocks of size two, four, or eight, always starting with a block size of two, with the size randomly selected thereafter."
Allocation concealment (selection bias)	Unclear	Insufficient information about the allocation process to permit judgement.
Blinding of participants and personnel (performance bias)	Low risk	No blinding or incomplete blinding, and the outcome or outcome measurement is likely to be influenced by lack of blinding
Blinding of outcome assessment (Detection bias)	High risk	Outcome assessors seemed to be unblinded.
Incomplete outcome data (attrition bias)	Low risk	"The analysis was based on the intention to-treat principle."
Selective reporting (reporting bias)	Low risk	The study protocol is available and all of the study's pre-specified (primary and secondary) outcomes that are of interest in the review have been reported in the pre-specified way
Other Bias	Low risk	The study appears to be free of other sources of bias.
Abbot2003		
Random sequence generation (selection bias)	Low risk	"Randomization was performed using computer-generated sequences in balanced blocks of five.."
Allocation concealment (selection bias)	Low risk	"Surgical procedures concealment was achieved by placing the randomization code into an opaque envelope."
Blinding of participants and personnel (performance bias)	Low risk	No blinding or incomplete blinding, and the outcome or outcome measurement is likely to be influenced by lack of blinding
Blinding of outcome assessment (Detection bias)	High risk	Outcome assessors seemed to be unblinded.
Incomplete outcome data (attrition bias)	Low risk	"All analyses were by intention to treat"
Selective reporting (reporting bias)	Unclear	The study protocol was not reported.
Other Bias	High risk	The study protocol was not reported.
Athanatos2015		

Random sequence generation (selection bias)	Low risk	"A computer-generated table of random numbers was used."
Allocation concealment (selection bias)	Low risk	"To ensure allocation concealment, this table of random numbers was not disclosed to the recruiting physicians. ."
Blinding of participants and personnel (performance bias)	Low risk	Double blinded study
Blinding of outcome assessment (Detection bias)	Low risk	Double blinded study
Incomplete outcome data (attrition bias)	Low risk	"All analyses were performed according to the intention-to-treat principle."
Selective reporting (reporting bias)	Low risk	The study protocol is available and all of the study's pre-specified (primary and secondary) outcomes that are of interest in the review have been reported in the pre-specified way
Other Bias	Low risk	The study appears to be free of other sources of bias.
Bongers2004		
Random sequence generation (selection bias)	Low risk	"The randomization sequence was computer generated."
Allocation concealment (selection bias)	Low risk	"to conceal the allocation, opaque sealed envelopes were used. Patients and investigating doctors were unaware of the result of the randomization, and remained uninformed of the ablation method used during the study."
Blinding of participants and personnel (performance bias)	Low risk	Double blinded study
Blinding of outcome assessment (Detection bias)	Low risk	Double blinded study
Incomplete outcome data (attrition bias)	Low risk	"The analysis was performed according to the 'intention to-treat' principle. "
Selective reporting (reporting bias)	Unclear	The study protocol was not reported.
Other Bias	High risk	The study protocol was not reported.
Clarck2011		

Random sequence generation (selection bias)	Low risk	"Computer-generated, stratified block randomization was used."
Allocation concealment (selection bias)	Low risk	"Women were not informed of their treatment allocation and were prevented from seeing equipment to minimize bias in the participant-rated primary outcome. ."
Blinding of participants and personnel (performance bias)	Low risk	Single blinded study
Blinding of outcome assessment (Detection bias)	High risk	Outcome assessors seemed to be unblinded.
Incomplete outcome data (attrition bias)	Low risk	"All analyses were by intention to treat"
Selective reporting (reporting bias)	Low risk	The study protocol is available and all of the study's pre-specified (primary and secondary) outcomes that are of interest in the review have been reported in the pre-specified way
Other Bias	Low risk	The study appears to be free of other sources of bias.
Hawe2003		
Random sequence generation (selection bias)	Low risk	"Randomization was achieved using random permuted blocks predetermined by computer-generated random number tables in balanced blocks of four."
Allocation concealment (selection bias)	Low risk	"Treatment allocation was obtained after the woman had given informed consent by opening sequentially numbered envelopes from one of two groups (<45 or 45 years) showing the treatment code."
Blinding of participants and personnel (performance bias)	Low risk	No blinding or incomplete blinding, and the outcome or outcome measurement is likely to be influenced by lack of blinding
Blinding of outcome assessment (Detection bias)	High risk	Outcome assessors seemed to be unblinded.
Incomplete outcome data (attrition bias)	Low risk	Missing outcome data balanced in numbers across intervention groups, with similar reasons for missing data across groups.
Selective reporting (reporting bias)	Unclear	The study protocol was not reported.
Other Bias	High risk	The study protocol was not reported.
Herman2013		

Random sequence generation (selection bias)	Unclear	Insufficient information about the sequence generation process to permit judgement.
Allocation concealment (selection bias)	Unclear	Insufficient information about the allocation process to permit judgement.
Blinding of participants and personnel (performance bias)	Low risk	Double blinded study
Blinding of outcome assessment (Detection bias)	Low risk	Double blinded study
Incomplete outcome data (attrition bias)	Low risk	"All analyses were by intention to treat"
Selective reporting (reporting bias)	Unclear	The study protocol was not reported.
Other Bias	High risk	The study protocol was not reported.
Ibrahem1994		
Random sequence generation (selection bias)	Low risk	"Patients were randomly allocated in a ratio of 1:1:1 using online software (http://www.randomization.com)"
Allocation concealment (selection bias)	Unclear	Insufficient information about the allocation process to permit judgement.
Blinding of participants and personnel (performance bias)	Low risk	No blinding or incomplete blinding, and the outcome or outcome measurement is likely to be influenced by lack of blinding
Blinding of outcome assessment (Detection bias)	High risk	Outcome assessors seemed to be unblinded.
Incomplete outcome data (attrition bias)	Low risk	No loss of follow-up
Selective reporting (reporting bias)	Unclear	The study protocol was not reported.
Other Bias	High risk	The study protocol was not reported.
Klejin2007		

Random sequence generation (selection bias)	Low risk	"The randomization sequence was computer generated."
Allocation concealment (selection bias)	Low risk	"To conceal the allocation, opaque sealed envelopes were used."
Blinding of participants and personnel (performance bias)	Low risk	Double blinded study
Blinding of outcome assessment (Detection bias)	Low risk	Double blinded study
Incomplete outcome data (attrition bias)	Low risk	"The analyses were by intention to treat"
Selective reporting (reporting bias)	Unclear	The study protocol was not reported.
Other Bias	High risk	The study protocol was not reported.
Laberge2003		
Random sequence generation (selection bias)	Unclear	Insufficient information about the sequence generation process to permit judgement.
Allocation concealment (selection bias)	Unclear	Insufficient information about the allocation process to permit judgement.
Blinding of participants and personnel (performance bias)	Low risk	No blinding or incomplete blinding, and the outcome or outcome measurement is likely to be influenced by lack of blinding
Blinding of outcome assessment (Detection bias)	High risk	Outcome assessors seemed to be unblinded.
Incomplete outcome data (attrition bias)	Low risk	No loss of follow-up
Selective reporting (reporting bias)	Unclear	The study protocol was not reported.
Other Bias	High risk	The study protocol was not reported.
Penninx2010		

Random sequence generation (selection bias)	Low risk	"Computer-generated randomization was performed."
Allocation concealment (selection bias)	Low risk	"Patients and investigating doctors were masked for the randomization allocation and remained so during the study. The doctors performing the endometrial ablation did know at that moment which device was used. The patient did not know."
Blinding of participants and personnel (performance bias)	Low risk	Double blinded study
Blinding of outcome assessment (Detection bias)	Low risk	Double blinded study
Incomplete outcome data (attrition bias)	Low risk	"All analyses were by intention to treat"
Selective reporting (reporting bias)	Unclear	The study protocol was not reported.
Other Bias	High risk	The study protocol was not reported.
Penninx2011		
Random sequence generation (selection bias)	Low risk	"Computer generated randomization was performed."
Allocation concealment (selection bias)	Low risk	"Patients and doctors who performed the follow-up visits and telephone calls were masked for the randomization allocation and remained so during the study."
Blinding of participants and personnel (performance bias)	Low risk	Double blinded study
Blinding of outcome assessment (Detection bias)	Low risk	Double blinded study
Incomplete outcome data (attrition bias)	Low risk	"All analyses were by intention to treat"
Selective reporting (reporting bias)	Unclear	The study protocol was not reported.
Other Bias	High risk	The study protocol was not reported.
Penninx2016		

Random sequence generation (selection bias)	Low risk	"Women were randomly allocated to bipolar or balloon ablation. A sealed opaque envelope was taken just before treatment in every center (1:1 ratio)."
Allocation concealment (selection bias)	Low risk	"Patients and doctors were masked for the randomization allocation during the study. The doctors performing the ablation did know which device was used."
Blinding of participants and personnel (performance bias)	Low risk	Double blinded study
Blinding of outcome assessment (Detection bias)	Low risk	Double blinded study
Incomplete outcome data (attrition bias)	Low risk	"All analyses were by intention to treat"
Selective reporting (reporting bias)	Low risk	The study protocol is available and all of the study's pre-specified (primary and secondary) outcomes that are of interest in the review have been reported in the pre-specified way
Other Bias	Low risk	The study appears to be free of other sources of bias.
Sambrook2009		
Random sequence generation (selection bias)	Low risk	"Computer-generated randomly permuted blocks were used with a telephone randomization service based on a separate site to achieve concealment."
Allocation concealment (selection bias)	Low risk	"Computer-generated randomly permuted blocks were used with a telephone randomization service based on a separate site to achieve concealment."
Blinding of participants and personnel (performance bias)	Low risk	Double blinded study
Blinding of outcome assessment (Detection bias)	Low risk	Double blinded study
Incomplete outcome data (attrition bias)	Low risk	"All analyses were by intention to treat"
Selective reporting (reporting bias)	Unclear	The study protocol was not reported.
Other Bias	High risk	The study protocol was not reported.
Smith2014		

Random sequence generation (selection bias)	Unclear	Insufficient information about the sequence generation process to permit judgement.
Allocation concealment (selection bias)	Unclear	Insufficient information about the allocation process to permit judgement.
Blinding of participants and personnel (performance bias)	Low risk	Single blinded study
Blinding of outcome assessment (Detection bias)	High risk	Outcome assessors seemed to be unblinded.
Incomplete outcome data (attrition bias)	Low risk	"All analyses were by intention to treat"
Selective reporting (reporting bias)	Low risk	The study protocol is available and all of the study's pre-specified (primary and secondary) outcomes that are of interest in the review have been reported in the pre-specified way
Other Bias	Low risk	The study appears to be free of other sources of bias.
Corson1999		
Random sequence generation (selection bias)	Low risk	"Women were allocated to one of two study arms in a computerized, randomized, prospective fashion using sealed individual envelopes."
Allocation concealment (selection bias)	Low risk	"Women were allocated to one of two study arms in a computerized, randomized, prospective fashion using sealed individual envelopes."
Blinding of participants and personnel (performance bias)	Low risk	No blinding or incomplete blinding, and the outcome or outcome measurement is likely to be influenced by lack of blinding
Blinding of outcome assessment (Detection bias)	High risk	Outcome assessors seemed to be unblinded.
Incomplete outcome data (attrition bias)	Unclear	Insufficient information to permit judgement
Selective reporting (reporting bias)	Unclear	The study protocol was not reported.
Other Bias	High risk	The study protocol was not reported.