## **Appendix 2**

Characteristics of studies included in the systematic review of randomised trials comparing hysterectomy, endometrial ablation and Mirena for heavy menstrual bleeding

Paper/number of women randomised	Patients	Intervention	Stated key outcome measures	Patient satisfaction and how it was measured	IPD received?
Hysterectomy vs	first-generation EA				
Dickersin <i>et al.</i> , 2007 <sup>92</sup> (design and methods paper also published <sup>147</sup> ) Raw data available n=237	Women with DUB. Up to 3 fibroids allowed, must each be smaller than 3 cm	EA vs hysterectomy	Major problem solved (primary outcome) Resolution of problem Bleeding Pain Fatigue QoL Adverse events Reoperation rate Follow-up reported at 12 months, 2 and 5 years; IPD at 6 months, 3 and 4 years also received	Women were asked if their major problem was solved from baseline Answers were given using the following scale: Yes No	Yes
Zupi <i>et al.</i> , 2003 <sup>78</sup> Raw data available n=203	Women with HMB. Fibroids excluded	TCRE vs laparoscopic supracervical hysterectomy	Primary outcome unclear Duration of hospitalisation Period of convalescence Perioperative complications Resumption of usual activities QoL Follow-up reported at 3 months, 1 and 2 years	No comparable measure	Yes
Crosignani <i>et</i> <i>al.</i> ,1997 <sup>45</sup> <i>n</i> =92	Women with HMB < 50 years old with a mobile uterus smaller than a 12-week pregnancy. Fibroids excluded if > 3 cm	TCRE vs vaginal hysterectomy	Satisfaction (primary outcome) Improvement in menstrual blood loss Operating time Complications Postoperative hospital stay Resumption of usual activities Resumption of work activities QoL Follow-up reported at 2 years	Women were asked how satisfied they were with their operation Answers were given using the following scale: Very satisfied Satisfied Uncertain Dissatisfied Very dissatisfied	No

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Paper/number of women randomised	Patients	Intervention	Stated key outcome measures	Patient satisfaction and how it was measured	IPD received?
O'Connor <i>et al.</i> , 1997 <sup>44</sup> Raw data	Women with symptomatic HMB. Fibroids excluded if	TCRE vs abdominal + vaginal hysterectomy	Satisfaction (primary outcome) Need for further surgery QoL	Women were asked how satisfied they were with their treatment	Yes
available $n = 202$	larger than 5 cm		Duration of surgery	Answers were given using the following	
			Duration of hospital stay	scale:	
			Operative and postoperative complications	Very satisfied Satisfied	
			Resumption of work activities	Not sure	
			Resumption of usual activities	Dissatisfied	
			Resumption of sexual activities Follow-up reported at 3 months, then 1, 2 and 3 years	Very dissatisfied	
Pinion <i>et</i> <i>al.</i> ,199443	Women who would have otherwise had	TCRE + laser vs abdominal	Satisfaction (primary outcome)	Women were asked how satisfied they were with	Yes
Raw data	a hysterectomy for	hysterectomy	Operative complications	their treatment	
available	HMB. IPD showed		Postoperative recovery	Answers were given	
n=204	that fibroids were included; exact		Relief of menstrual symptoms Relief of other symptoms	using the following scale:	
	eligibility details regarding this parameter not given in paper		Follow-up reported at 6 and 12 months	Very satisfied	
				Moderately satisfied	
				Dissatisfied	
				Very dissatisfied	
Dwyer <i>et al.,</i> 1993 <sup>42</sup> (health economics papers also	Women needing surgical treatment for HMB. IPD	surgical treatment hysterectomy for HMB. IPD showed that fibroids were included; exact eligibility details regarding this	Satisfaction (primary outcome) Postoperative complications Duration of operation	Women were asked how satisfied they were with their operation	Yes
published <sup>132,148</sup> ) Raw data	fibroids were included; exact		Length of hospital stay Resumption of work activities	Answers were given using the following scale:	
available	eligibility details		Resumption of usual activities	Very satisfied	
n=200	regarding this parameter not		Resumption of sexual activities	Quite satisfied	
	given in paper		Changes in pre-menstrual	Not very satisfied	
			symptoms QoL	Dissatisfied	
			Need for further surgery		
			Total health service resource cost		
			Follow-up reported at 4 months and 2 years		
Gannon <i>et al</i> ., 199141	Women with HMB. Fibroids excluded		Primary outcome unclear	No comparable measure	Yes
Raw data	י ואיטועט פאטועטפע	hysterectomy	Length of operating time Hospitalisation		
available			Recovery		
n=54			Cost of surgery		
			Change in menstrual blood loss		
			Postoperative complications		
			Need for further surgery		
			Resource cost of surgery		
			Follow-up reported at 12 months		

Paper/number of women randomised	Patients	Intervention	Stated key outcome measures	Patient satisfaction and how it was measured	IPD received?
Hysterectomy v	s Mirena				
Hurskainen et al., 2001 <sup>93</sup> (5-year follow- up study also published <sup>27</sup> ) Raw data available n=236	Women with HMB. Fibroids excluded	Mirena vs hysterectomy (abdominally, vaginally or laparoscopically)	QoL (EQ-5D) (primary outcome) QoL (SF-36) Cost-effectiveness Adverse events General health (visual analogue scale, VAS) Anxiety/depression Sexual functioning Follow-up reported at 12 months and 5 years; IPD at 6 months also received	No comparable measure	Yes
First- vs secona	l-generation EA				
Brun <i>et al.</i> , 2006 <sup>103</sup> Raw data available n=62	Women with HMB unresponsive to medical treatment. Submucous fibroids excluded, other fibroids included (further details not given)	TCRE vs thermal balloon (Cavaterm)	Amenorrhoea rate (primary outcome) Satisfaction PBAC (Higham blood loss) score Operative time Discharge time Complication rate Resumption of normal activities Follow-up reported at 6 and 12 months; IPD at 3 months also received	Refers to 'satisfaction rate' Answers were given using the following scale: Excellent Good Moderate Bad	Yes
Cooper <i>et al.</i> , 2004 <sup>99</sup> Raw data available n=322	Women with documented HMB due to benign causes. Fibroids excluded if > 3 cm	RB vs microwave	Satisfaction Amenorrhoea rate Duration of procedure Anaesthesia Type of anaesthesia Device-related complications Adverse events Dysmenorrhoea QoL questionnaire (SF-36) Acceptability of treatment Follow-up reported at 3, 6 and 12 months	Women were asked how satisfied they were with their treatment Answers were given using the following scale: Very satisfied Satisfied Dissatisfied	Yes
Perino <i>et al.</i> , 2004 <sup>100</sup> <i>n</i> =116	Women with abnormal uterine bleeding. Not stated if fibroids were excluded	TCRE vs ELITT	Amenorrhoea rate (primary outcome) Satisfaction Bleeding status Intraoperative complication rate Duration of procedure Pain Further treatment with hysterectomy Follow-up reported at 12 months and 3 years	Refers to 'patient satisfaction' Answers were given using the following scale: Very satisfied Satisfied Dissatisfied	No

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Paper/number of women randomised	Patients	Intervention	Stated key outcome measures	Patient satisfaction and how it was measured	IPD received?
Duleba <i>et al.</i> , 2003 <sup>98</sup> <i>n</i> =279	Women with HMB due to benign causes. Fibroids excluded if > 2 cm	RB vs endometrial cryoablation	PBAC (Higham blood loss) score (primary outcome) Satisfaction	Women were asked how satisfied they were with the outcome of the procedure	No
			Bleeding Pain Adverse events	Answers were given using the following scale:	
			Anaesthesia	Very	
			Pre-menstrual symptoms	Slightly	
			Follow-up reported at 12 months	Not at all	
Hawe <i>et al.,</i> 2003 <sup>94</sup>	Women with DUB requesting conservative	Nd:Yag laser vs thermal balloon (Cavaterm)	Amenorrhoea rate (primary outcome)	Women were asked how satisfied they were with their treatment	Yes
Raw data available n=72	surgical management of their condition.	(Cavaterm)	Satisfaction Effect on blood loss QoL	Answers were given using the following scale:	
	Fibroids excluded		Sexual activity	Very satisfied	
			Acceptability of procedure	Moderately satisfied	
			Follow-up reported at 6 and 12 months	Dissatisfied	
				Very dissatisfied	
van Zon- Rabelink <i>et al</i> .,	Women with DUB. IPD showed that	IPD showed that balloon fibroids were included; exact eligibility details regarding this parameter not	PBAC (Higham blood loss) score (primary outcome)	Refers to 'patient satisfaction'	Yes
2004 <sup>95</sup> (technical fibroids were safety report also included; exact published <sup>149</sup> ) eligibility details	included; exact eligibility details		QoL using the follow scale:	Answers were given using the following scale:	
Raw data available <i>n</i> =139	regarding this parameter not given in paper		Menstrual status Follow-up reported at 6 and 12 months and 2 years	Satisfied Not satisfied	
Cooper <i>et al.</i> , Women with 2002 <sup>56</sup> symptomatic HMB. n=265 Fibroids excluded	symptomatic HMB.	mptomatic HMB. + RB vs bipolar	PBAC (Higham blood loss) score (primary outcome) Satisfaction Procedure time	Women were asked how satisfied they were with the outcome of the procedure	No
		Sedation Intraoperative complications Postoperative complications Follow-up reported at 6 and 12 months	No precise information was given on the scale used to answer this question and IPD were not received. Percentage of women very satisfied or satisfied was quoted		
Pellicano <i>et al.,</i> 2002 <sup>102</sup> <i>n</i> =82	Women with HMB unresponsive to medical treatment. Fibroids excluded	destruction	Satisfaction (primary outcome) Operative time Discharge time Complication rate Reintervention rate Resumption of normal activities	Women were asked about the improvement of their health state after the procedure	No
				Answers were given using the following scale:	
			Follow-up reported at 3 and 12	Excellent	
			months and 2 years	Good	
				Moderate	
				No improvement	

Paper/number of women randomised	Patients	Intervention	Stated key outcome measures	Patient satisfaction and how it was measured	IPD received?
Corson, 2001 <sup>79</sup> n = 276	Women with HMB due to benign causes. Fibroids excluded if > 4 cm	RB vs HA	PBAC (Higham blood loss) score (primary outcome)	No comparable measure	Yes
			Amenorrhoea rate		
			Adverse events		
			Need for further surgery		
			Operative complications		
			Follow-up reported at 6 and 12 months		
Soysal <i>et al.,</i> 2001 <sup>96</sup>	Menorrhagic women over 40	RB vs thermal balloon	PBAC (Higham blood loss) score (primary outcome)	Women were asked how satisfied they were with	No
n=96	with a mobile		Satisfaction	their operation	
	myomatous uterus smaller than 12-		Duration of procedure	Answers were given	
	week pregnancy.		Complication rates	using the following scale: Very satisfied Satisfied	
	Fibroids excluded if		Postoperative pain scores		
	>3cm		Amenorrhoea rates		
			Follow-up reported at 12 months	Dissatisfied	
Corson <i>et al.</i> , 2000 <sup>101</sup>	Women with HMB, without organic	TCRE + RB vs thermal balloon	PBAC (Higham blood loss) score (primary outcome)	No comparable measure.	No
n=276	uterine disease, who failed or poorly tolerated medical therapy. Fibroids excluded if > 2 cm	(Vesta)	Amenorrhoea		
			Adverse events		
			QoL		
			Follow-up reported at 12 months and 2 years		
Cooper <i>et al</i> ., 1999 <sup>54</sup> (2-year <sup>55</sup> and 5-year <sup>115</sup>	Women referred for EA surgery. Fibroids included:	for EA surgery. microwave Fibroids included; exact eligibility details regarding this parameter not	Satisfaction (primary outcome) Acceptability of treatment	Women were asked how satisfied they were with their treatment	Yes
follow-up study also published)	exact eligibility details regarding		Menstrual status QoL	Answers were given using the following	
Raw data	this parameter not		Morbidity	scale:	
available	given in paper		Duration of procedure	Totally satisfied	
n=263			Intraoperative complications	Generally satisfied	
			Postoperative pain relief	Fairly satisfied	
			Postoperative stay.	Fairly dissatisfied	
			Absence from work	Generally dissatisfied	
			Follow-up reported at 12 months, 2 years, 5 years and 10 years	Totally dissatisfied	
Meyer <i>et al.,</i> 1998 <sup>53</sup>	Women with HMB. Fibroids excluded		PBAC (Higham blood loss) score (primary outcome)	Women were asked how satisfied they were with	Yes
Raw data			Satisfaction	their treatment	
available n=275			Improvement in dysmenorrhoea symptoms	Answers were given using the following scale:	
			Inability to work	Very satisfied	
			Complication rate	Satisfied	
			Duration of procedure	Not satisfied	
			Requirement for additional surgery		
			Follow-up reported at 3, 6 and 12 months		

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Paper/number of women randomised	Patients	Intervention	Stated key outcome measures	Patient satisfaction and how it was measured	IPD received?
Romer, 1998 <sup>97</sup> n=20	Women with recurrent therapy for refractory HMB. Fibroids excluded (intrauterine abnormalities excluded, so assumed this included fibroids)	RB vs thermal balloon (Cavaterm)	Amenorrhoea rate (primary outcome) Hypomenorrhoea rate Follow-up reported at 12 months	No comparable measure	No
Mirena vs first-g	eneration EA				
Malak, 2006 <sup>104</sup> n=60	Women with excessive uterine bleeding. Up to 3 fibroids allowed, must each be < 3 cm	TCRE vs Mirena	Primary outcome unclear PBAC (Higham blood loss) score LNG IUS discontinuation rate Effect of menstrual bleeding on general well-being, work performance, physical activity and sexual activity assessed using VAS	No comparable measure	No
			Follow-up reported at 12 months		
Kittelsen and lstre, $1998^{105}$ (long-term follow-up paper also published <sup>150</sup> ) $n = 60$	Women with HMB. Fibroids excluded	TCRE vs Mirena	Primary outcome unclear QoL Additional treatments received Adverse events Follow-up reported at 12 months, 2 years and 3 years	No comparable measure	No
Crosignani <i>et al.</i> , 1997 <sup>80</sup> <i>n</i> =70	Women with DUB. Fibroids excluded	TCRE vs Mirena	Primary outcome unclear Satisfaction Reduction in menstrual bleeding Health-related QoL Amenorrhoea rates Additional treatments Adverse events Follow-up reported at 6 and 12 months	Women were asked how satisfied they were with their treatment Answers were given using the following scale: Very satisfied Satisfied Uncertain Dissatisfied	No
Mirena vs secon	d-generation EA				
Shaw <i>et al.</i> , 2007 <sup>108</sup> <i>n</i> =66	Women with HMB. Fibroids excluded	Thermal balloon vs Mirena	PBAC (Higham blood loss) score (primary outcome) Satisfaction Continuation with treatment Hysterectomy rates Follow-up reported at 3, 6, 9 and 12 months, and 2 years	Women were asked for their perception of their treatment effect Answers were given using the following scale: Very good Good Poor	No

Paper/number of women randomised	Patients	Intervention	Stated key outcome measures	Patient satisfaction and how it was measured	IPD received?
Tam <i>et al.</i> , 2006 <sup>109</sup> Raw data available n=44	Women with excessive menstrual bleeding attending the outpatient gynaecology clinic. IPD showed that fibroids were included; exact eligibility details regarding this parameter not given in paper	Thermal balloon vs Mirena	Primary outcome unclear Health status function SF-36 Follow-up reported at 12 months; IPD at 6 months also received	No comparable measure	Yes
Busfield <i>et al.</i> , 2006 <sup>107</sup> (cost- effectiveness paper carried out by Brown <i>et al.</i> , 2006 <sup>114</sup> ) Raw data available n=79	Women with HMB. Fibroids excluded if > 3 cm	Thermal balloon vs Mirena	PBAC (Higham blood loss) score (primary outcome) Satisfaction QoL Menstrual symptoms Adverse events Treatment failures Follow-up reported at 3, 6 and 12 months, and 2 years	Women were asked if the menstrual symptoms had been successfully treated Answers were given using the following scale: Definitely yes Probably yes Not sure Probably no Definitely no	Yes
Barrington <i>et al.</i> , 2003 <sup>81</sup> Raw data available n=50	Women with HMB. Fibroids excluded	Thermal balloon vs Mirena	Primary outcome unclear PBAC (Higham blood loss) score Amenorrhoea Follow-up reported at 6 months	No comparable measure	Yes
Soysal <i>et al.</i> , 2002 <sup>106</sup> <i>n</i> =72	Women with dysfunctional HMB. Fibroids excluded if > 2 cm	Thermal balloon vs Mirena	PBAC (Higham blood loss) score (primary outcome) Satisfaction Health-related QoL Additional treatments Adverse events Follow-up reported at 12 months	Women were asked about their degree of satisfaction/ recommendation Answers were given using the following scale: Highly recommends Recommends Did not know Did not recommend	No