

ORCA - Online Research @ Cardiff

This is an Open Access document downloaded from ORCA, Cardiff University's institutional repository:https://orca.cardiff.ac.uk/id/eprint/149421/

This is the author's version of a work that was submitted to / accepted for publication.

Citation for final published version:

Slade, E., Daly, C., Mavranezouli, I., Dias, S., Kearney, R., Hasler, E., Carter, P., Mahoney, C., Macbeth, F. and Delgado Nunes, V. 2020. Primary surgical management of anterior pelvic organ prolapse: a systematic review, network meta-analysis and cost-effectiveness analysis. BJOG: An International Journal of Obstetrics and Gynaecology 127 (1), p. 26. 10.1111/1471-0528.15959

Publishers page: http://dx.doi.org/10.1111/1471-0528.15959

Please note:

Changes made as a result of publishing processes such as copy-editing, formatting and page numbers may not be reflected in this version. For the definitive version of this publication, please refer to the published source. You are advised to consult the publisher's version if you wish to cite this paper.

This version is being made available in accordance with publisher policies. See http://orca.cf.ac.uk/policies.html for usage policies. Copyright and moral rights for publications made available in ORCA are retained by the copyright holders.



SUPPORTING TABLES

- Table S1. Input parameters utilised in the economic model.
- Table S2. Included studies in the NMA.
- Table S3. Final data file for the NMA.
- Table S4. Results of deterministic sensitivity analyses.

Table S1. Input parameters utilised in the economic model for adult women with anterior POP.

Input parameter	Mean value	Probabilistic distribution	Source of data - comments
HR of recurrence (vs. AC only)		Based on the NMA	NMA; distributions formed by 10,000 iterations.
AC with synthetic non-absorbable mesh	0.392		Given that the longest follow-up of RCTs included in the NMA was
AC with synthetic partially absorbable	0.291		clustered around 12-36 months mesh treatment effect was
mesh	0.456		applied for 3 years only.
AC with biological mesh			, ,
Baseline risk of recurrence – primary		Beta distribution	
repair	0.090	alpha: 777, beta: 7549	Lowenstein 2017.
Surgically managed recurrence – at 20	0.490	alpha: 40, beta: 42	Rudnicki 2014.
years		, , , , , , , , , , , , , , , , , , , ,	The reported rates were annualised and expressed as annual
Overall (anatomical) recurrence – at 3			probabilities.
years			
Risk of surgically managed recurrence	0.280	Beta distribution	Denman 2008.
(secondary repair) - 12 years		alpha: 31, beta: 80	The reported rate was annualised and expressed as an annual probability.
Risk of anatomical recurrence	0.509	Beta distribution	Glazener 2016.
(secondary repair) – 1 year		alpha: 54, beta: 52	
Recurrence (less surgically managed	0.500	Beta distribution	Committee expert opinion.
recurrence) requiring conservative		SE: 20% of mean values	
management		(assumption)	
Risk of mesh extrusion with synthetic		Beta distribution	Jacquetin 2013.
mesh	0.13	alpha: 11, beta: 71	The rates were annualised and expressed as annual probabilities.
Year 1	0.03	alpha: 2, beta: 69	The probability of mesh extrusion in year 5 was carried over and
Year 2-3	0.03	alpha: 2, beta: 67	used in each year for the duration of the model.
Year 4-5			
Risk ratio of mesh extrusion with	0.14	Log-normal distribution	Guideline systematic review.
biological mesh vs. synthetic mesh		Fitted using 95% CI (0.03,	
		0.60)	
Risk of mesh-related pain - 5 years	0.05	Beta distribution	Laso-Garcia 2017.
		alpha: 4, beta 71	

			The rate was annualised and expressed as the annual probability. The annual probability was applied to each year for the duration of the model.
Proportion of mesh complications that resolve by 2 years	0.90	Beta distribution SE: 20% of mean value (assumption)	Committee expert opinion.
Procedure costs		Normal distribution	Intermediate open lower genital tract procedures with CC Score 0-
AC only	£2,522	SE: 20% of mean value (assumption)	2, elective inpatient procedure (MA04C/D); plus 2 consultations with urogynaecologist/gynaecologist (1 non-admitted face-to-face attendance [first] and 1 non-admitted face-to-face attendance [follow-up]); plus haematology and clinical biochemistry, directly accessed pathology services, NHS reference costs 2016/17 (DHSC, 2018).
Mesh costs		Gamma distribution	Glazener 2016.
Synthetic non-absorbable mesh Synthetic partially absorbable mesh Biological mesh Mesh kits	£115 £115 £315 £666	SE: 20% of mean values (assumption)	All costs uplifted to 2016/17 prices using the hospital & community health services (HCHS) inflation indexes (Curtis & Burns, 2017).
_	£2,451	NA (dependant on the above)	Estimated as the average cost of AC, AC & synthetic non- absorbable mesh, AC & synthetic partially absorbable mesh, AC & synthetic absorbable mesh, AC biological mesh, and also apical repair.
			For apical repair the unit cost associated with major open lower genital tract procedure with CC score 0-2, elective inpatient procedure (MA03D) was assigned, NHS reference costs 2016/17 (DHSC, 2018).
			Plus 2 consultations with urogynaecologist/gynaecologist (1 non-admitted face-to-face attendance [first] and 1 non-admitted face-to-face attendance [follow-up]); plus haematology and clinical biochemistry, directly accessed pathology services (NHS reference costs 2016/17 (DHSC, 2018).
Cost of conservative management (annual)	£546	Gamma distribution	Glazener 2016.

		alpha: 15.37; beta: 22.54 (taken from Glazener 2016)	The cost were uplifted to 2016/17 prices using the hospital & community health services (HCHS) inflation indexes (Curtis & Burns, 2017).
Cost of being well (following mesh or non-mesh procedure)	£130	Log-normal distribution SE: 20% of mean values (assumption)	One consultant-led non-admitted follow-up face-to-face attendance in gynaecology (WF01C), NHS reference costs 2016/17 (DHSC, 2018).
Cost of managing mesh extrusion (annual)	£1,207 £80 (persistent)	NA (dependant on distributions associated with treatment	Based on the assumption that 57% require surgical revision (Jacquetin 2017), 21% topical oestrogen, and 21% surveillance only.
		probabilities and treatment costs)	Surgical revision assigned the unit cost of £1,584 (minor lower genital tract procedures, MA22Z, elective inpatient, NHS reference costs 2016/17 (DHSC, 2018); plus 2 consultations with urogynaecologist/gynaecologist.
			For topical oestrogen a unit cost of £24.98 associated with Estriol 0.01% cream 15 g with applicator (Drug Tariff, 2018). The dose of 0.5 g at a time applied daily for $2-3$ weeks, then reduced to 1
			applicator twice weekly, discontinued every 2–3 months for 4 weeks (BNF, 2018); plus 2 consultations with urogynaecologist/gynaecologist.
			For surveillance 6-monthly consultations with urogynaecologist/gynaecologist were modelled. For urogynaecologist/gynaecologist a consultant-led non-admitte
			follow-up face-to-face attendance in gynaecology was used, WF01C, NHS reference costs 2016/17 (DHSC, 2018).
			Persistent cases incur the same cost as above for the initial management of mesh extrusion. However, since persistent mesh complications last for the duration of the model this cost was apportioned over 15 years to approximate the annual cost
Cost of managing pain complications (annual)	£754 £69 (persistent)	NA (dependant on distributions associated with treatment	associated with managing persistent cases. Committee expert opinion: 95% require pharmacological treatment, 50% topical oestrogen, 10% dilators, 20% psychosexua counselling, 50% physiotherapy, and 5% mesh removal.

probabilities and treatment costs)

Pharmacological treatment: paracetamol (4 g/day), codeine (240mg/day), co-codamol (120/4000 mg/day), and pregabalin (150 mg/day) (BNF, 2018). The unit cost of paracetamol (500 mg, 32 tbs., £0.31), codeine (60mg, 28 tbs., £1.32), co-codamol (15/500 mg, 100 tbs., £4.93) and pregabalin (150 mg, 56 tbs., £5.88) (Drug Tariff, 2018). The average cost of all pharmacological treatments was used.

Vaginal oestrogen costs were estimated as above for the management of mesh extrusion.

For dilators the Femmax device, Medical Devices Technology, was used at a cost of £26.66 (Drug Tariff, 2018).

For psychosexual counselling 6 sessions, 50 min each, delivered by Band 6 therapist at a unit cost of £43/h (Curtis & Burns, 2017). For physiotherapy 6 sessions, 50 min each, delivered by Band 7 therapist at a unit cost of £53/h (Curtis & Burns, 2018).

Plus all women were modelled to have 1 consultation with consultant urogynaecologist/gynaecologist.

For mesh removal a unit cost of £1,584 associated with minor lower genital tract procedures (MA22Z), elective inpatient, NHS reference costs 2016/17 (DHSC, 2018); plus 2 consultations with urogynaecologist/gynaecologist was assigned.

For urogynaecologist/gynaecologist a consultant-led non-admitted follow-up face-to-face attendance in gynaecology was used, WF01C, NHS reference costs 2016/17 (DHSC, 2018).

For persistent pain 2 additional consultations with pain consultant were modelled.

For pain consultant a consultant-led non-admitted initial and follow-up face-to-face attendance for pain management was used, WF01B/A, NHS reference costs 2016/17 (DHSC, 2018). Since it was assumed that persistent mesh complications will last

Since it was assumed that persistent mesh complications will last for the duration of the model the cost of pain was apportioned over 15 years to approximate the annual cost associated with managing persistent pain complications.

Quality of life adjustments		Beta distribution	Glazener 2016; EQ-5D-3L utility weights.
Well	0.83	SE: 20% of mean values	For mesh extrusion the proportion managed surgically (57%) was
Reoperation	0.65	(assumption)	obtained from Jacquetin 2017.
Conservative management	0.80		For pain, the proportion requiring surgical mesh removal (5%) was
Symptomatic POP	0.71		based on the committee expert opinion.
Utility decrement - surgically managed	0.19		
complications	0.09		
Utility decrement - non-surgically			
managed complications			
Discount rate for costs and outcomes	3.5%	NA	NICE (2013)

AC: anterior colporrhaphy, CI: confidence interval, EQ-5D-3L: EuroQol five dimensions, three level questionnaire HR: hazard ratio, NA: not applicable, NMA: network meta-analysis, POP: pelvic organ prolapse, RCT: randomised controlled trial, SE: standard error

Table S2. Characteristics of the included studies in the NMA and references.

No.	Study ID	Country	POP type	Grade of prolapse (POP-Q staging)	Primary/Second ary repair	Concomita nt surgery	Reference
1	Glazener 2017a			≥2	Majority primary	As required	Glazener CM, Breeman S, Elders A, Hemming C, Cooper KG, Freeman RM, et al. Mesh, graft, or standard repair for women having primary transvaginal anterior or posterior compartment prolapse surgery: two parallel-group, multicentre, randomised, controlled trials (PROSPECT). <i>The Lancet</i> . 2017;389:381-92. STRATIFIED DATA PROVIDED BY AUTHORS
2	El Nazer 2012	Egypt	Anterior	≥2	Primary only	No additional	El-Nazer MA, Gomaa IA, Ismail Madkour WA, Swidan KH, El-Etriby MA. Anterior colporrhaphy versus repair with mesh for anterior vaginal wall prolapse: a comparative clinical study, <i>Archives of Gynecology & Obstetrics</i> . 2012;286:965-72.
3	Hiltunen 2007	Finland	Anterior	≥2	Majority primary	As required	Hiltunen R, Nieminen K, Takala T, Heiskanen E, Merikari M, Niemi K, et al. Low-weight polypropylene mesh for anterior vaginal wall prolapse: a randomized controlled trial. <i>Obstetrics and</i> <i>Gynecology</i> . 2007;110:455-62.
4	Nguyen 2008	USA	Anterior	≥2	Majority primary	As required	Nguyen JN, Burchette RJ. Outcome after anterior vaginal prolapse repair: a randomized controlled trial. <i>Obstetrics & Gynecology.</i> 2008;111;891-8.

5	Tamanini 2015	Brazil	Anterior	≥2	Unclear	As required	Tamanini JTN, Castro RCDOS, Tamanini JM, Castro RA, Sartori MGF, Girão MJBC. A prospective, randomized, controlled trial of the treatment of anterior vaginal wall prolapse: medium term follow up. <i>The Journal of urology</i> . 2015; 193:1298-304.
6	Turgal 2013	Turkey	Anterior	≥2	All primary	No additional	Turgal M, Sivaslioglu A, Yildiz A, Dolen I. Anatomical and functional assessment of anterior colporrhaphy versus polypropylene mesh surgery in cystocele treatment. <i>European Journal of Obstetrics,</i> <i>Gynecology, & Reproductive Biology</i> . 2013;170:555-8.
7	Delroy 2013	Brazil	Anterior predominant	≥2	Majority primary	As required	Delroy CA, De A Castro R, Dias MM., Feldner Jr, P. C., Bortolini, M. A. T., Girao, M. J. B. C., Sartori, M. G. F., The use of transvaginal synthetic mesh for anterior vaginal wall prolapse repair: A randomized controlled trial, <i>International Urogynecology Journal</i> . 2013;24:1899-907.
8	Dias 2016	Brazil	Anterior predominant	≥2	Majority primary	As required	Dias MM, De A Castro R, Bortolini MAT, Delroy CA, Martins PCF, Girao MJBC, et al. Two-years results of native tissue versus vaginal mesh repair in the treatment of anterior prolapse according to different success criteria: A randomized controlled trial. <i>Neurourology and Urodynamics</i> . 2016;35:509-14.
9	Vollebregt 2011	Netherlands	Anterior predominant	≥2	All primary	As required	Vollebregt A, Fischer K, Gietelink D, van der Vaart CH. Primary surgical repair of anterior vaginal prolapse: a randomised trial comparing anatomical and functional

							outcome between anterior colporrhaphy and trocar-guided transobturator anterior mesh. <i>BJOG: An International Journal of Obstetrics & Gynaecology.</i> 2011;118:1518-27.
10	Sivaslioglu 2008	Turkey	Anterior	Unclear	All primary	Not reported	Sivaslioglu AA, Unlubilgin E, Dolen I. A randomized comparison of polypropylene mesh surgery with site-specific surgery in the treatment of cystocoele. <i>International Urogynecology Journal</i> . 2008;19:467-71.
11	Gupta 2014	India	Anterior	≥2	Majority primary	As required	Gupta B, Vaid NB, Suneja A, Guleria K, Jain S. Anterior vaginal prolapse repair: A randomised trial of traditional anterior colporrhaphy and self-tailored mesh repair. South African journal of obstetrics and gynaecology. 2014; 20:47-50.
12	Glazener 2017b	UK	Anterior	≥2	All primary	As required	Glazener CM, Breeman S, Elders A, Hemming C, Cooper KG, Freeman RM, et al. Mesh, graft, or standard repair for women having primary transvaginal anterior or posterior compartment prolapse surgery: two parallel-group, multicentre, randomised, controlled trials (PROSPECT). <i>The Lancet</i> . 2017;389:381-92. STRATIFIED DATA PROVIDED BY AUTHORS
13	Gandhi 2005	USA	Anterior	≥2	Unclear	As required	Gandhi S, Goldberg RP, Kwon C, Koduri S, Beaumont JL, Abramov Y, et al. A prospective randomized trial using solvent dehydrated fascia lata for the prevention of recurrent anterior vaginal wall prolapse. <i>American Journal of Obstetrics & Gynecology</i> . 2005;192:1649-54.

14	Guerette 2009	USA	Anterior	≥2	Majority primary	As required	Guerette NL, Peterson TV, Aguirre OA, Vandrie DM, Biller DH, Davila GW. Anterior repair with or without collagen matrix reinforcement: a randomized controlled trial. <i>Obstetrics & Gynecology</i> . 2009;114:59-65.
15	Feldner 2010	Brazil	Anterior	≥2	Majority primary	As required	Feldner Jr PC, Castro RA, Cipolotti LA, Delroy CA, Sartori MGF, Girao MJBC. Anterior vaginal wall prolapse: A randomized controlled trial of SIS graft versus traditional colporrhaphy. <i>International Urogynecology Journal</i> . 2010;21:1057-63.
16	Hviid 2010	Denmark	Anterior	≥2	All primary	No additional	Hviid U, Hviid TVF, Rudnicki M. Porcine skin collagen implants for anterior vaginal wall prolapse: A randomised prospective controlled study. <i>International Urogynecology Journal</i> . 2010; 21:529-34.
17	Robert 2014	Canada	Anterior	≥2	Majority secondary	As required	Robert M, Girard I, Brennand E, Tang S, Birch C, Murphy M, Ross S. Absorbable mesh augmentation compared with no mesh for anterior prolapse: a randomized controlled trial. <i>Obstetrics & Gynecology</i> . 2014;123:288-94.
18	Lyer 2018	USA	Anterior	≥2	Majority primary	As required	Iyer S, Seitz M, Tran A, Scalabrin Reis R, Botros C, Lozo S, et al. Anterior Colporrhaphy With and Without Dermal Allograft: A Randomized Control Trial With Long-Term Follow-Up. Female Pelvic Medicine & Reconstructive Surgery Female pelvic med. 2018.

19	Rudnicki 2014	Denmark	Anterior	≥2	All primary	No additional	Rudnicki M, Laurikainen E, Pogosean R, Kinne I, Jakobsson U, Teleman P. Anterior colporrhaphy compared with collagencoated transvaginal mesh for anterior vaginal wall prolapse: a randomised controlled trial. <i>BJOG: An International Journal of Obstetrics & Gynaecology</i> . 2014;121:102-10.
20	deTayrac 2013	France	Anterior	≥2	Majority primary	As required	de Tayrac R, Cornille A, Eglin G, Guilbaud O, Mansoor A, Alonso S, et al. Comparison between trans-obturator trans-vaginal mesh and traditional anterior colporrhaphy in the treatment of anterior vaginal wall prolapse: results of a French RCT. <i>International Urogynecology Journal</i> . 2013;24:1651-61.
21	Weber 2001	USA	Anterior	1 to 4 (majority 2 or more)	Majority primary	As required	Weber AM, Walters MD, Piedmonte MR, Ballard LA. Anterior colporrhaphy: a randomized trial of three surgical techniques, <i>American Journal of Obstetrics</i> & <i>Gynecology</i> . 2001;185: 1299-304.
22	Menefee 2011	USA	Anterior	≥2	Majority primary	As required	Menefee SA, Dyer KY, Lukacz ES, Simsiman AJ, Luber KM, Nguyen JN. Colporrhaphy compared with mesh or graft-reinforced vaginal paravaginal repair for anterior vaginal wall prolapse: a randomized controlled trial. <i>Obstetrics & Gynecology</i> . 2011;118:1337-44.
23	Yuk 2012	South Korea	Anterior	≥2	Unclear	As required	Yuk JS, Jin CH, Yi KW, Kim T, Hur JY, Shin JH. Anterior Transobturator Polypropylene Mesh in the Correction of Cystocele: 2- Point Method vs 4-Point Method. <i>Journal</i>

							of Minimally Invasive Gynecology. 2012;19:737-41.
24	Meschia 2007	Italy	Anterior	≥2	All primary	As required	Meschia M, Pifarotti P, Bernasconi F, Magatti F, Riva D, Kocjancic E. Porcine skin collagen implants to prevent anterior vaginal wall prolapse recurrence: a multicenter, randomized study. <i>Journal of Urology</i> . 2007;177:192-5.
25	Natale 2009	Italy	Anterior	≥2	All secondary	As required	Natale F, La Penna C, Padoa A, Agostini M, De Simone E, Cervigni M. A prospective, randomized, controlled study comparing Gynemesh, a synthetic mesh, and Pelvicol, a biologic graft, in the surgical treatment of recurrent cystocele. <i>International Urogynecology Journal</i> . 2009;20:75-81.
26	Farthmann 2013	Germany	Anterior	≥2	Majority primary	As required	Farthmann J, Watermann D, Niesel A, Funfgeld C, Kraus A, Lenz F, et al. Lower exposure rates of partially absorbable mesh compared to nonabsorbable mesh for cystocele treatment: 3-year follow-up of a prospective randomized trial, <i>International Urogynecology Journal</i> . 2013;24:749-58.
27	Minassian 2014	USA	Anterior	≥2	Unclear	As required	Minassian VA, Parekh M, Poplawsky D, Gorman J, Litzy L. Randomized controlled trial comparing two procedures for anterior vaginal wall prolapse. Neurourology & Urodynamics. 2014;33:72-7.

Table S3. Final data file for the NMA.

t[,1]	r[,1]	n[,1]	t[,2]	r[,2]	n[,2]	t[,3]	r[,3]	n[,3]	na[]	#	Study ID
1	117	184	2	114	187	NA	NA	NA	2	#	Glazener 2017(a)
1	3	23	2	1	21	NA	NA	NA	2	#	El-Nazer 2012
1	37	97	2	7	105	NA	NA	NA	2	#	Hiltunen 2007
1	17	38	2	5	38	NA	NA	NA	2	#	Nguyen 2008
1	18	55	2	10	45	NA	NA	NA	2	#	Tamanini 2015
1	5	20	2	1	20	NA	NA	NA	2	#	Turgal 2013
1	17	39	2	7	40	NA	NA	NA	2	#	Delroy 2013*
1	28	45	2	26	43	NA	NA	NA	2	#	Dias 2016*
1	33	64	2	5	61	NA	NA	NA	2	#	Vollebregt 2011
1	12	45	2	4	45	NA	NA	NA	2	#	Sivaslioglu 2008
1	2	55	3	1	53	NA	NA	NA	2	#	Gupta 2014
1	14	21	3	11	25	NA	NA	NA	2	#	Glazener 2017(b)
1	23	78	3	16	76	NA	NA	NA	2	#	Gandhi 2005
1	10	47	3	5	47	NA	NA	NA	2	#	Guerette 2009
1	11	27	3	4	29	NA	NA	NA	2	#	Feldner 2010
1	4	31	3	2	30	NA	NA	NA	2	#	Hviid 2010
1	27	29	3	19	28	NA	NA	NA	2	#	Robert 2014
1	24	70	3	10	44	NA	NA	NA	2	#	Lyer 2018
1	40	82	4	6	79	NA	NA	NA	2	#	Rudnicki 2014
1	39	82	4	21	80	NA	NA	NA	2	#	deTayrac 2013
1	47	76	5	22	38	NA	NA	NA	2	#	Webber 2001
1	14	32	6	5	36	8	12	31	3	#	Menefee 2011
2	5	45	2	8	42	NA	NA	NA	2	#	Yuk 2012
2	20	106	3	7	100	NA	NA	NA	2	#	Meschia 2007
2	27	96	3	41	94	NA	NA	NA	2	#	Natale 2009
2	15	102	4	12	98	NA	NA	NA	2	#	Farthmann 2013
5	8	35	7	10	35	NA	NA	NA	2	#	Minassian 2014

Treatment codes: 1 – anterior colporrhaphy (AC), 2 - AC & synthetic non-absorbable mesh, 3 - AC & biological mesh, 4 - AC & synthetic partially absorbable mesh, 5 - AC & synthetic absorbable mesh, 6 - Paravaginal repair & synthetic non-absorbable mesh, 7 - Paravaginal defect repair (abdominal), 8 - Paravaginal repair & biological mesh

^{*}During the peer-review process, it was discovered that Delroy 2013 and Dias 2016 are based on the same RCT. A sensitivity analysis was undertaken where a duplicate study was removed (Delroy 2013). However, due to its small sample and weight in the NMA, the effect estimates were unchanged (Table A4, Supplementary Appendices). As a result, the original dataset and analysis was retained.

Table S4. Summary of deterministic sensitivity analyses. (Results of deterministic sensitivity analyses on NMB using £20,000 per QALY threshold. The results indicate that under most scenarios explored the NMB remains the highest for AC without mesh. For example, when the probability of anatomical recurrence that requires further management is varied between 0.40 and 0.60, NMB for AC is between £190,515-189,656, which is more than NMB for biological mesh of £189,496-188,786, synthetic partially absorbable mesh £187,509-186,848, and synthetic non-absorbable mesh £187,560-186,869).

		Δ	AC .	AC plus bi	ological mesh		hetic partially ble mesh	AC plus syntl absorbabl	
Model input	Base case values, and upper and lower values explored in the sensitivity analyses	NMB using low estimate	NMB using high estimate	NMB using low estimate	NMB using high estimate	NMB using low estimate	NMB using high estimate	NMB using low estimate	NMB using high estimate
Anatomical recurrence requiring further management	0.50 (0.40, 0.60)	£190,515	£189,656	£189,496	£188,786	£187,509	£186,848	£187,560	£186,869
Cost mesh erosion (initial)	£1207 (£965, £1448)	£190,086	£190,086	£189,152	£189,130	£187,254	£187,103	£187,283	£187,146
Cost mesh erosion (persistent)	£80 (£0, £97)	£190,086	£190,086	£189,147	£189,140	£187,216	£187,171	£187,252	£187,207
Cost of biological mesh	£315 (£157, £472)	£190,086	£190,086	£189,293	£188,989	£187,178	£187,178	£187,214	£187,214
Cost of conservative management	£546 (£436, £655)	£190,277	£189,894	£189,299	£188,983	£187,325	£187,031	£187,368	£187,060
Cost of non-absorbable mesh	£115 (£57, £172)	£190,086	£190,086	£189,141	£189,141	£187,178	£187,178	£187,270	£187,159
Cost of pain management	£754 (£604, £905)	£190,086	£190,086	£189,157	£189,125	£187,194	£187,162	£187,231	£187,198
Cost of partially absorbable mesh	£115 (£57, £172)	£190,086	£190,086	£189,141	£189,141	£187,234	£187,123	£187,214	£187,214
Cost of persistent pain management	£69 (£55, £82)	£190,086	£190,086	£189,143	£189,139	£187,180	£187,176	£187,216	£187,212
Cost of revision surgery	£2912 (£2330, £3494)	£190,107	£190,065	£189,159	£189,123	£187,196	£187,161	£187,232	£187,196
Cost of well - mesh (one off cost)	£130 (£104, £156)	£190,114	£190,057	£189,179	£189,103	£187,217	£187,140	£187,253	£187,176
Cost of well - non-mesh (one-off cost)	£130 (£104, £156)	£190,086	£190,086	£189,141	£189,141	£187,178	£187,178	£187,214	£187,214
HR of biological mesh (vs. AC)	0.46 (0.26, 0.73)	£190,086	£190,086	£189,300	£188,923	£187,178	£187,178	£187,214	£187,214
HR of non-absorbable mesh (vs. AC)	0.39 (0.24, 0.59)	£190,086	£190,086	£189,141	£189,141	£187,178	£187,178	£187,340	£187,053
HR of partially absorbable mesh (vs. AC)	0.29 (0.11, 0.62)	£190,086	£190,086	£189,141	£189,141	£187,330	£186,909	£187,214	£187,214
Proportion of complications that resolve by year 2	0.90 (0.72, 1.00)	£190,086	£190,086	£188,670	£189,403	£185,501	£188,110	£185,512	£188,160
Rate of anatomical recurrence (secondary repair) at year 1	0.51 (0.41, 0.61)	£190,095	£190,076	£189,153	£189,130	£187,190	£187,168	£187,226	£187,204
Rate of surgically managed recurrence (secondary repair) over 12 years	0.28 (0.22, 0.34)	£190,087	£190,084	£189,142	£189,140	£187,179	£187,177	£187,216	£187,213
RR of mesh erosion with biological (vs. synthetic) mesh	0.14 (0.03, 0.6)	£190,086	£190,086	£189,457	£187,878	£187,178	£187,178	£187,214	£187,214
The rate of anatomical recurrence (primary repair) over 7 years	0.34 (0.27, 0.41)	£190,506	£189,675	£189,489	£188,797	£187,502	£186,858	£187,553	£186,880
The rate of mesh extrusion over 15 years	0.34 (0.27, 0.41)	£190,086	£190,086	£189,221	£189,062	£187,685	£186,687	£187,697	£186,747
The rate of pain complications over 15 years	0.15 (0.12, 0.18)	£190,086	£190,086	£189,254	£189,031	£187,291	£187,068	£187,327	£187,104
The risk of surgically managed recurrence (primary repair) over 20 years	0.09 (0.07, 0.11)	£190,111	£190,060	£189,172	£189,109	£187,214	£187,141	£187,251	£187,177
The time mesh extrusion resolves (if it does so) following the appropriate management (months)	12 (3, 12)	£190,086	£190,086	£189,439	£189,141	£189,169	£187,178	£189,116	£187,214
The time pain complications resolve (if they do so) following appropriate management (months)	12 (3, 12)	£190,086	£190,086	£189,577	£189,141	£187,614	£187,178	£187,650	£187,214
Treatment effect sustained (years)	3 (2, 15)	£190,086	£190,086	£189,141	£189,935	£187,178	£188,255	£187,214	£188,119
Utility associated with active POP	0.61 (0.55, 0.67)	£190,072	£190,099	£189,129	£189,153	£187,167	£187,189	£187,203	£187,226

Utility associated with conservative management	0.80 (0.72, 0.88)	£187,289	£192,882	£186,830	£191,452	£185,027	£189,329	£184,964	£189,464
Utility associated with reoperation	0.65 (0.58, 0.71)	£190,058	£190,113	£189,117	£189,165	£187,155	£187,201	£187,191	£187,238
Utility associated with well	0.83 (0.75, 0.91)	£173,578	£206,593	£172,121	£206,161	£169,989	£204,368	£170,129	£204,299
Utility decrement associated with complications that do not	0.09 (0.08, 0.10)	£190,086	£190,086	£189,196	£189,087	£187,285	£187,071	£187,319	£187,110
require surgical management	0.09 (0.08, 0.10)								
Utility decrement associated with complications that require	0.19 (0.17, 0.20)	£190.086	£190.086	£189.171	£189.111	£187.349	£187.008	£187.379	£187,050
surgical management	0.19 (0.17, 0.20)	1190,000	1130,080	1105,1/1	1109,111	1107,349	1107,000	1107,379	1107,030

AC: anterior colporrhaphy, NMB: net monetary benefit, QALY: quality-adjusted life year