Figure S1. Risk of bias assessments for RCTs; a) Summary by domain b) Risk of bias for each included study and domain.
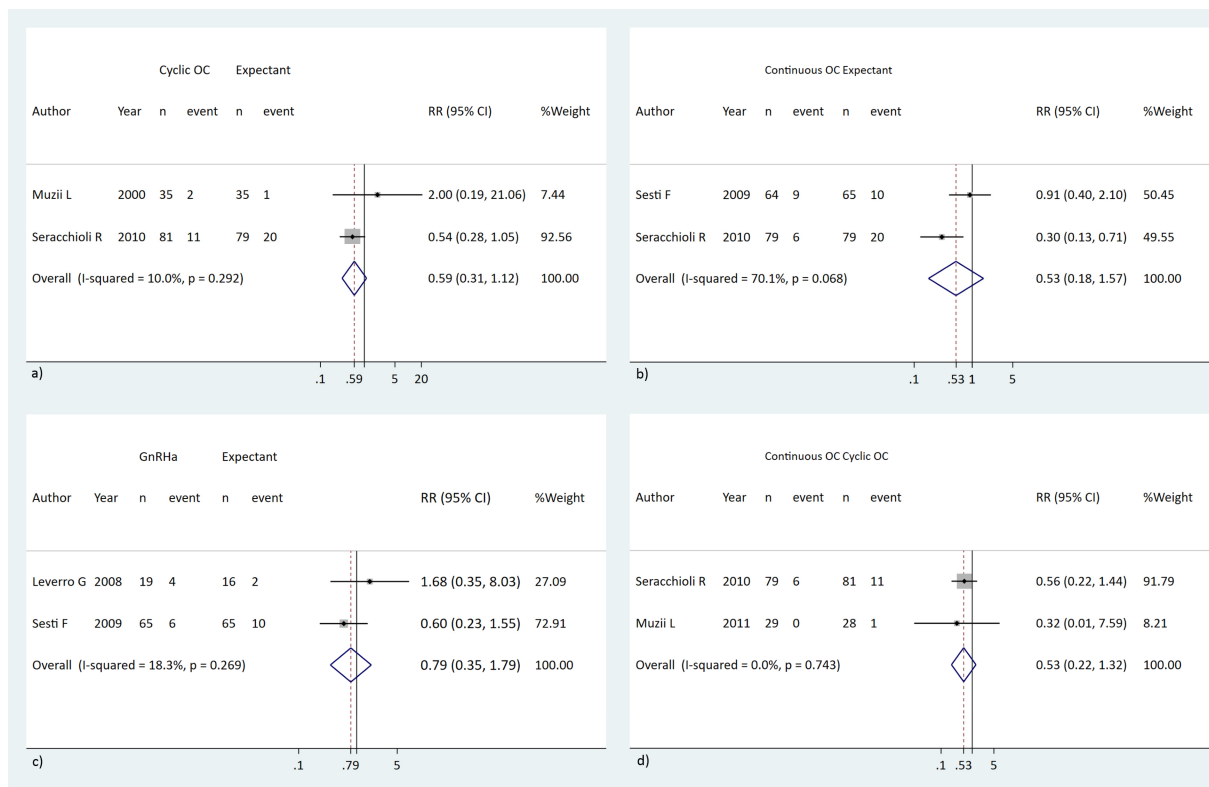
Figure S2. Forest plot of pairwise meta-analysis of endometrioma recurrence based on RCT network; a) Cyclic OC vs. expectant, b) Continuous OC vs. expectant, c) GnRHa vs. expectant, d) Continuous OC vs. cyclic OC.
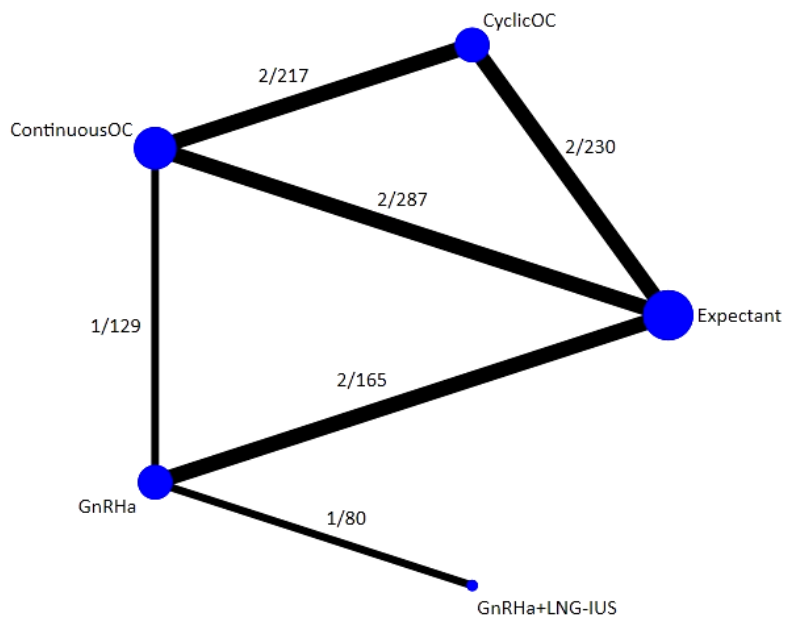
Figure S3. Network map of RCTs comparing among hormonal treatments for prevention of endometrioma recurrence; Numbers above edge are number of studies and included subjects in the corresponding comparison.

Direct comparisons in the network

	AvsB	AvsC	AvsD	BvsC	CvsD	DvsE
Mixed estimates						
AvsB	48.4	13.0	8.5	21.6	8.5	·
AvsC	20.4	25.7	16.8	20.4	16.8	·
AvsD	10.3	13.1	42.9	10.3	23.4	·
BvsC	24.3	14.7	9.6	41.8	9.6	·
CvsD	10.8	13.7	24.6	10.8	40.0	
DvsE	·	·	·	·	·	100.0
Indirect estimates						
AvsE	6.2	7.9	25.8	6.2	14.1	39.9
BvsD	26.7	0.5	26.1	23.1	23.6	·
BvsE	17.8	0.3	17.5	15.4	15.8	33.2
CvsE	6.6	8.8	14.9	6.6	24.3	39.2
Entire network	16.6	8.9	19.5	15.2	18.4	21.4
Included studies	2	2	2	2	1	1

(Row axis label: Network meta-analysis estimates)

Figure S4. Network contribution plot of RCTs for endometrioma recurrence outcome; Values are percentages; A, expectant; B, Cyclic OC; C, Continuous OC; D, GnRHa; E, GnRHa+LNG-IUS.
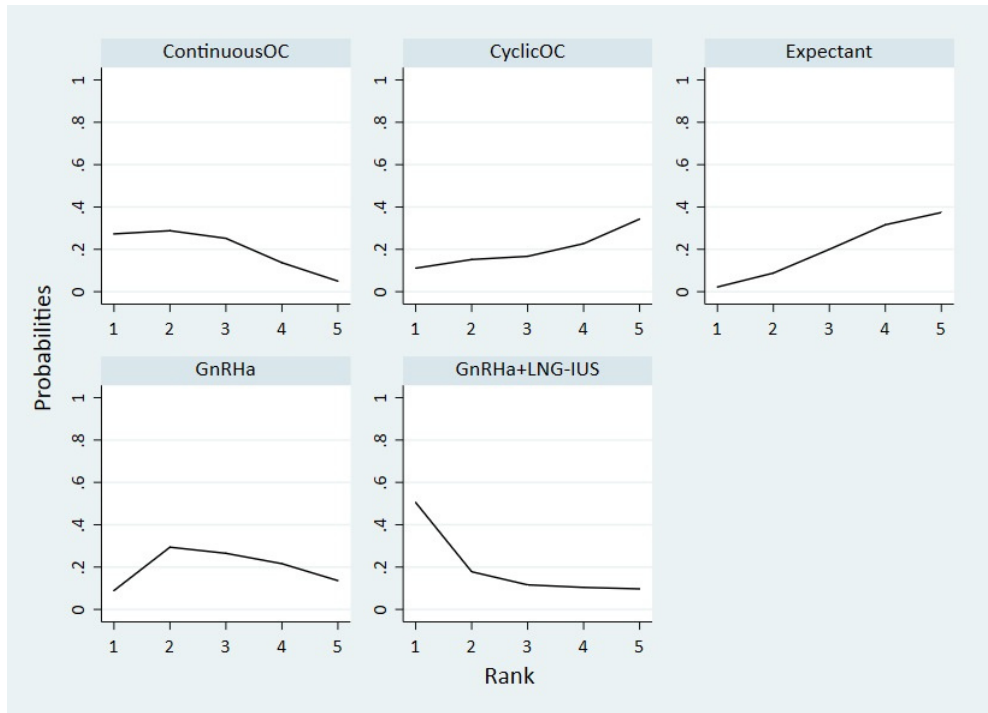
Figure S5. Rankograms for hormonal network of RCTs showing the probability for each regimen being at a particular order in lowering endometrioma recurrence.
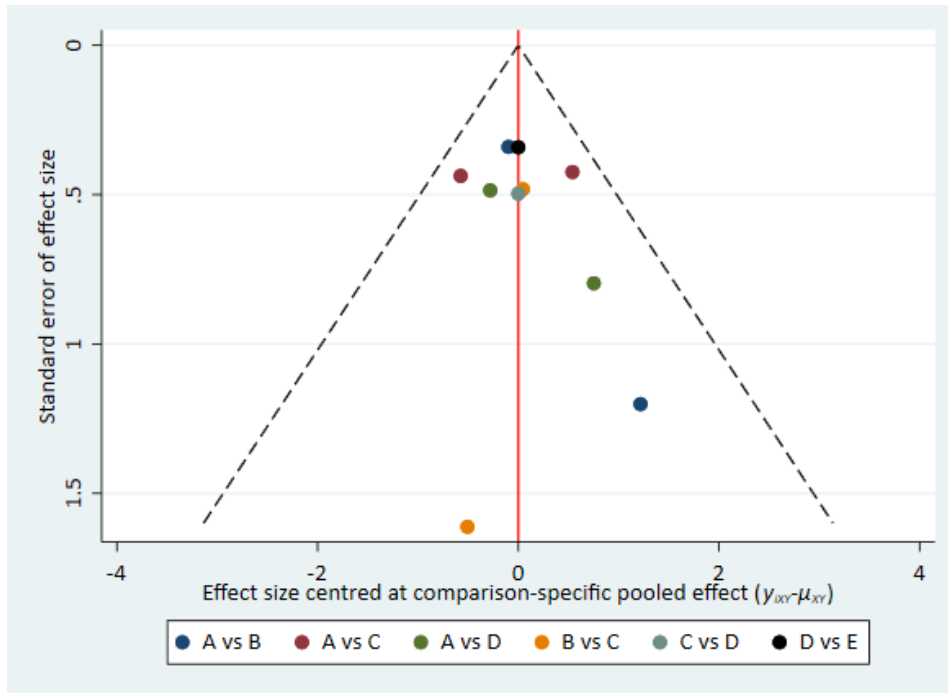
Figure S6. Comparison-adjusted funnel plot for network meta-analysis of RCTs on endometrioma recurrence outcome; A, expectant; B, Cyclic OC; C, Continuous OC; D, GnRHa; E, GnRHa+LNG-IUS.

a)

Author	Year	Cyclic OC n	event	Expectant n	event	RR (95% CI)	%Weight
Vercellini P	2008	231	48	46	26	0.37 (0.26, 0.53)	30.90
Takamura M	2009	48	3	39	17	0.14 (0.05, 0.45)	17.24
Porpora MG	2010	18	2	103	5	2.29 (0.48, 10.91)	12.24
Cucinella G	2013	130	8	38	13	0.18 (0.08, 0.40)	23.03
Koshiba A	2018	32	3	83	12	0.65 (0.20, 2.15)	16.59
Overall (I-squared = 65.5%, p = 0.021)						0.36 (0.18, 0.72)	100.00

.01 .1 .36 1 3 10

b)

Author	year	GnRHa n	event	Expectant n	event	RR (95% CI)	%Weight
Jee BC	2009	72	12	37	6	1.03 (0.42, 2.52)	14.93
Porpora MG	2010	30	6	103	5	4.12 (1.35, 12.56)	11.82
Hayasaka S	2011	39	18	134	60	1.03 (0.70, 1.52)	24.49
Anastasiu C	2012	9	3	16	8	0.67 (0.23, 1.90)	12.72
Campo S	2013	46	12	102	15	1.77 (0.90, 3.48)	18.85
Yang XH	2014	63	8	62	17	0.46 (0.22, 0.99)	17.19
Overall (I-squared = 62.2%, p = 0.021)						1.11 (0.67, 1.83)	100.00

.01 .1 1.11 10

c)

Author	Year	DNG n	event	Expectant n	event	RR (95% CI)	%Weight
Ota Y	2015	151	4	417	93	0.12 (0.04, 0.32)	80.42
Koshiba A	2018	27	1	83	12	0.26 (0.03, 1.88)	19.58
Overall (I-squared = 0.0%, p = 0.498)						0.14 (0.06, 0.33)	100.00

.01 .14 1 35

d)

Author	Year	GnRHa+OC n	event	Expectant n	event	RR (95% CI)	%Weight
Porpora MG	2010	15	2	103	5	2.75 (0.58, 12.91)	46.35
Seo JW	2017	231	7	189	25	0.23 (0.10, 0.52)	53.65
Overall (I-squared = 87.1%, p = 0.005)						0.72 (0.06, 8.21)	100.00

.01 .1 .72 5

e)

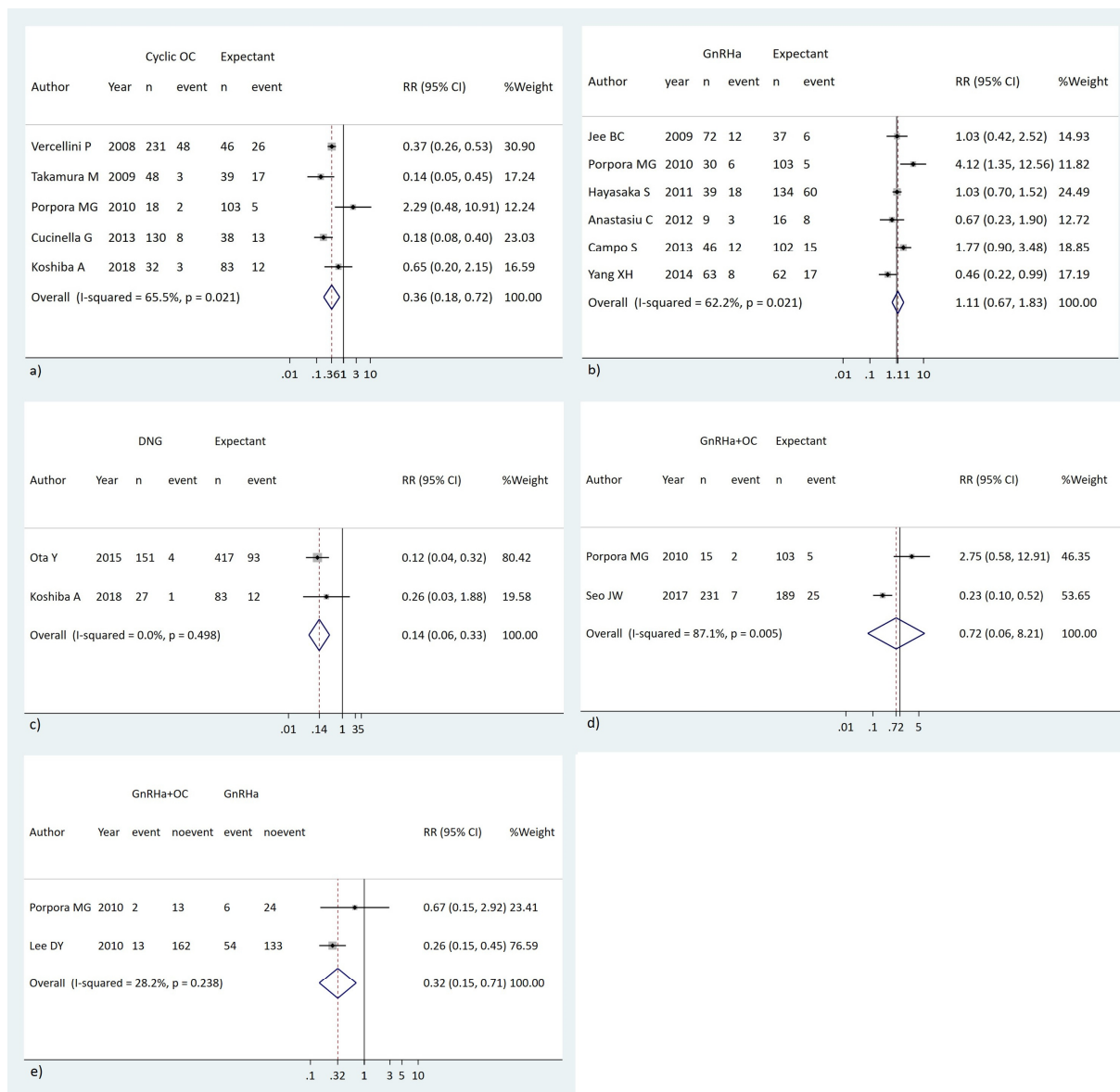| Author	Year	GnRHa+OC event	noevent	GnRHa event	noevent	RR (95% CI)	%Weight
Porpora MG	2010	2	13	6	24	0.67 (0.15, 2.92)	23.41
Lee DY	2010	13	162	54	133	0.26 (0.15, 0.45)	76.59
Overall (I-squared = 28.2%, p = 0.238)						0.32 (0.15, 0.71)	100.00

.1 .32 1 3 5 10

Figure S7. Forest plot of pairwise meta-analysis of endometrioma recurrence based on cohort network; a) Cyclic OC vs. expectant, b) GnRHa vs. expectant, c) DNG vs. expectant, d) GnRHa+OC vs. expectant, e) GnRHa+OC vs. GnRHa.
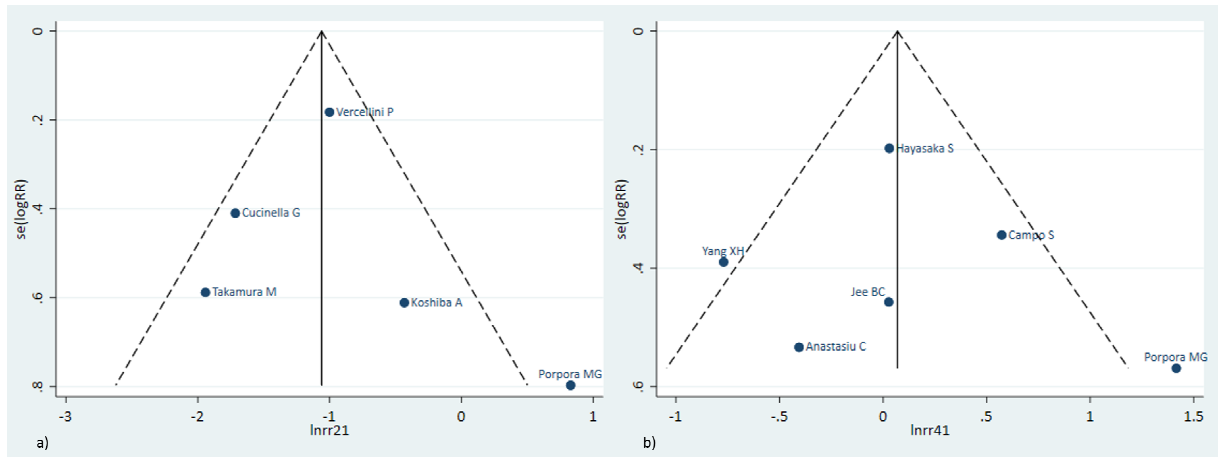
Figure S8. Funnel plot of cyclic OC vs. expectant (a); and GnRHa vs. expectant (b) for endometrioma recurrence based on cohort data.
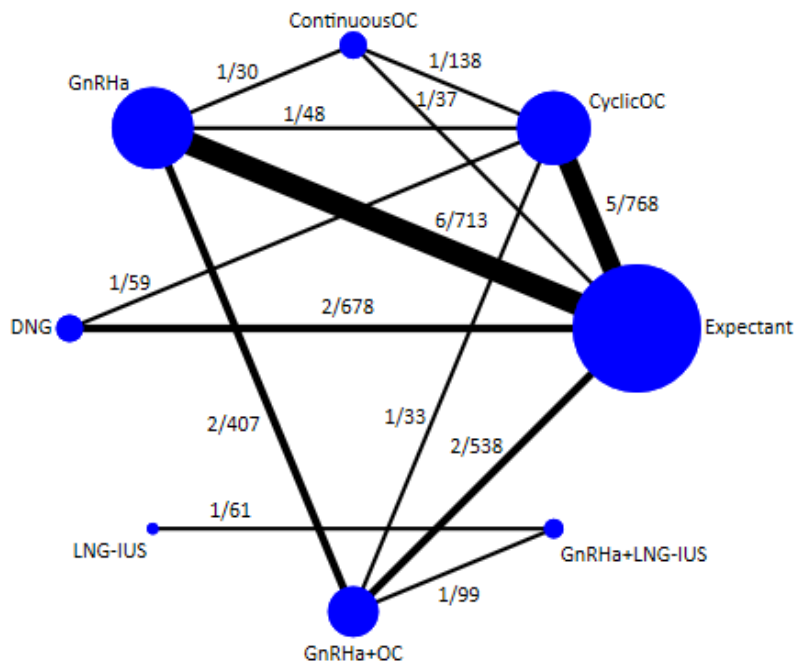
Figure S9. Network map of cohorts comparing among hormonal treatments for prevention of endometrioma recurrence; Numbers above edge are number of studies and included subjects in the corresponding comparison.

Direct comparisons in the network

	AvsB	AvsC	AvsD	AvsE	AvsG	BvsC	BvsD	BvsE	BvsG	CvsD	DvsG	FvsH	GvsH
Mixed estimates													
AvsB	67.2	0.1	7.2	0.3	0.3	3.6	0.1	0.3	·	7.5	0.3	·	13.1
AvsC	0.2	51.6		4.0	1.0	8.5	8.6	4.0	4.9	0.4	4.0	·	·
AvsD	3.9	4.5	64.0		2.2	0.1	6.2	0.4	3.1	9.2	5.8	·	0.8
AvsE	0.5	4.8	1.2	74.5	0.1	3.7	1.6	11.1	0.9	1.2	0.8	·	0.1
AvsG	2.1	4.8	30.9	0.6	5.8	2.2	1.9	0.6	8.8	5.1	37.8	·	0.4
BvsC	5.4	8.1	0.4	3.2	0.4	48.2	8.8	3.2	4.7	12.9	4.2	·	1.0
BvsD	0.2	16.6	34.9	2.9	0.7	16.9	11.3	2.9	6.1	0.5	6.9	·	·
BvsE	1.7	15.2	4.4	39.5	0.5	13.2	5.7	9.2	3.3	4.2	2.8	·	0.3
BvsG	·	11.7	21.5	2.0	4.0	11.7	7.6	2.0	10.4	·	29.0	·	·
CvsD	17.0	0.6	38.8	1.6	1.5	19.7	0.4	1.6	·	14.0	0.8	·	3.3
DvsG	0.3	3.1	11.9	0.6	6.0	3.5	2.8	0.6	9.5	0.8	61.0	·	0.1
FvsH	·	·	·	·	·	·	·	·	·	·	·	100.0	·
GvsH	67.2	0.1	7.2	0.3	0.3	3.6	0.1	0.3	·	7.5	0.3	·	13.1
Indirect estimates													
AvsF		0.1	7.2	0.3	0.3	3.6	0.1	0.3	·	7.5	0.3	·	13.1
AvsH		0.1	7.2	0.3	0.3	3.6	0.1	0.3	·	7.5	0.3	·	13.1
BvsF		0.1	7.2	0.3	0.3	3.6	0.1	0.3	·	7.5	0.3	·	13.1
BvsH	67.2	0.1	7.2	0.3	0.3	3.6	0.1	0.3	·	7.5	0.3	·	13.1
CvsE		0.6	1.4	40.4	0.2	18.4	3.8	4.8	2.2	7.8	2.0	·	3.1
CvsF	67.2	0.1	7.2	0.3	0.3	3.6	0.1	0.3	·	7.5	0.3	·	13.1
CvsG		1.1	20.4	1.3	3.9	15.0	1.1	1.3	4.6	9.0	28.4	·	2.3
CvsH	67.2	0.1	7.2	0.3	0.3	3.6	0.1	0.3	·	7.5	0.3	·	13.1
DvsE		0.1	34.2	40.0	1.1	2.1	4.8	6.2	2.2	4.4	3.3	·	0.4
DvsF		0.1	7.2	0.3	0.3	3.6	0.1	0.3	·	7.5	0.3	·	13.1
DvsH		0.1	7.2	0.3	0.3	3.6	0.1	0.3	·	7.5	0.3	·	13.1
EvsF	67.2	0.1	7.2	0.3	0.3	3.6	0.1	0.3	·	7.5	0.3	·	13.1
EvsG		1.5	20.8	30.5	3.6		2.0	5.0	6.1	3.0	25.8	·	0.2
EvsH		0.1	7.2	0.3	0.3	3.6	0.1	0.3	·	7.5	0.3	·	13.1
FvsG	67.2	0.1	7.2	0.3	0.3	3.6	0.1	0.3	·	7.5	0.3	·	13.1
Entire network	27.0	5.2	15.5	10.7	1.5	8.5	2.8	2.4	3.0	5.9	9.9	2.3	5.8
Included studies	5	1	6	2	2	1	1	1	1	1	2	1	1

(Left axis label: Network meta-analysis estimates)

Figure S10. Network contribution plot of cohorts for endometrioma recurrence outcome; Values are percentages; A, expectant; B, Cyclic OC; C, Continuous OC; D, GnRHa; E, DNG; F, LNG-IUS; G, GnRHa+OC; H, GnRHa+LNG-IUS.
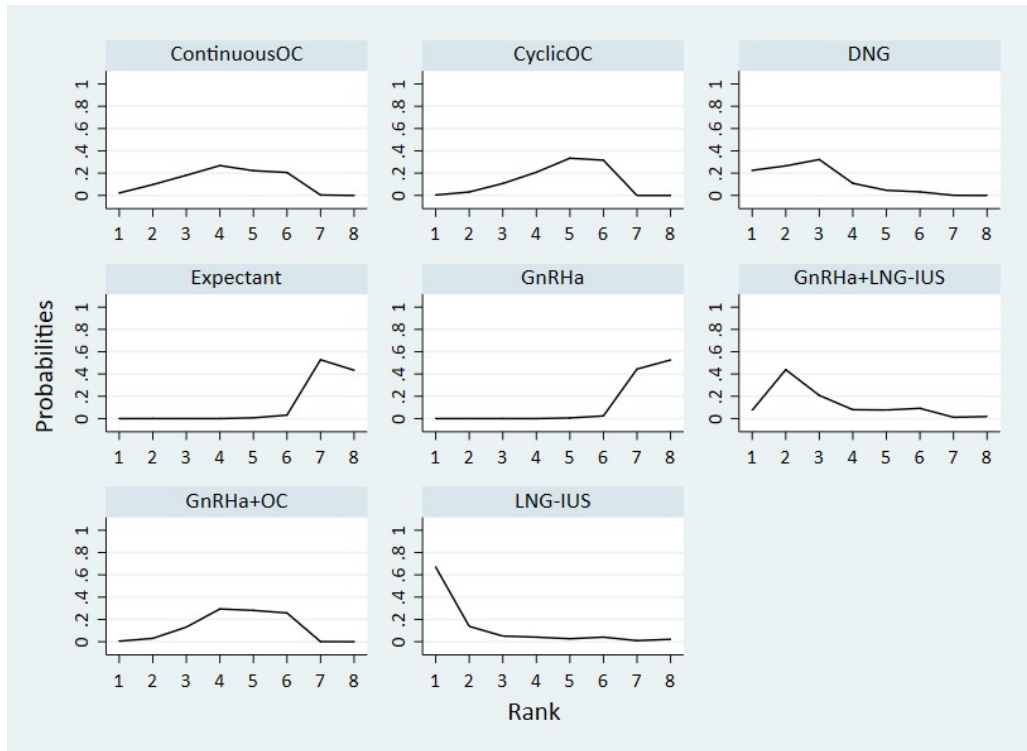
Figure S11. Rankograms for hormonal network of cohorts showing the probability for each regimen being at a particular order in lowering endometrioma recurrence.
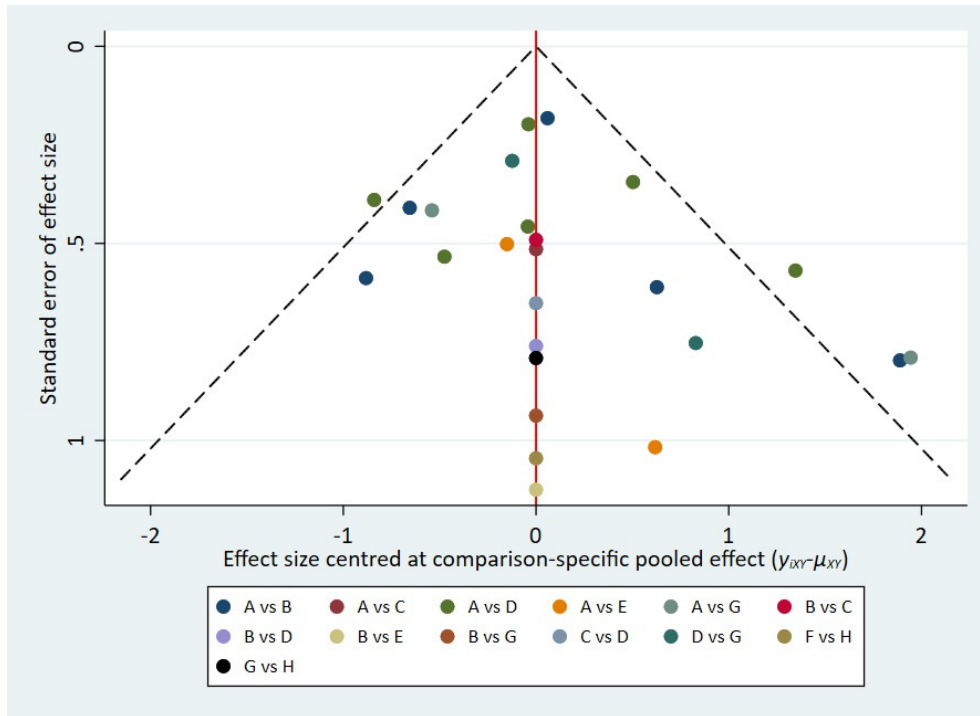
Figure S12. Comparison-adjusted funnel plot for the network meta-analysis of cohorts for endometrioma recurrence outcome; A, expectant; B, Cyclic OC; C, Continuous OC; D, GnRHa; E, DNG; F, LNG-US; G, GnRHa+OC; H, GnRHa+LNG-IUS.