

**Supplementary Table 1.** Search strategy used in the systematic review

<b>Medline database – Search strategy</b>			
#	Database	Search term	Results
1	Medline	exp "ABORTION, HABITUAL"/	8085
2	Medline	("recurrent miscarriage*").ti,ab	2070
3	Medline	(1 OR 2)	8848
4	Medline	exp THROMBOPHILIA/	24961
5	Medline	("acquired thrombophilia").ti,ab	317
6	Medline	*"PROTEIN C DEFICIENCY"/	979
7	Medline	*"PROTEIN S DEFICIENCY"/	750
8	Medline	*"ANTIPHOSPHOLIPID SYNDROME"/	6568
9	Medline	*"LUPUS COAGULATION INHIBITOR"/	1040
10	Medline	*"ANTIBODIES, ANTICARDIOLIPIN"/	1461
11	Medline	*"BETA 2-GLYCOPROTEIN I"/	568
12	Medline	("factor V Leiden").ti,ab	3998
13	Medline	("prothrombin gene mutation").ti,ab	300
14	Medline	(4 OR 5 OR 6 OR 7 OR 8 OR 9 OR 10 OR 11 OR 12 OR 13)	35905
15	Medline	(3 AND 14)	889
16	Medline	15 [DT 1990-2020] [Languages English]	760
<b>Embase database – Search strategy</b>			
#	Database	Search term	Results
1.	EMBASE	exp "ABORTION, HABITUAL"/	6141
2.	EMBASE	("recurrent miscarriage*").ti,ab	3620
3.	EMBASE	(21 OR 22)	8255
4.	EMBASE	exp THROMBOPHILIA/	13382
5.	EMBASE	("acquired thrombophilia").ti,ab	623
6.	EMBASE	*"PROTEIN C DEFICIENCY"/	954
7.	EMBASE	*"PROTEIN S DEFICIENCY"/	781
8.	EMBASE	*"ANTIPHOSPHOLIPID SYNDROME"/	9102
9.	EMBASE	*"LUPUS COAGULATION INHIBITOR"/	2122
10.	EMBASE	*"ANTIBODIES, ANTICARDIOLIPIN"/	2548
11.	EMBASE	*"BETA 2-GLYCOPROTEIN I"/	1237
12.	EMBASE	("factor V Leiden").ti,ab	6368
13.	EMBASE	("prothrombin gene mutation").ti,ab	578
14.	EMBASE	(24 OR 25 OR 26 OR 27 OR 28 OR 29 OR 30 OR 31 OR 32 OR 33)	31404
15.	EMBASE	(23 AND 34)	1327

16.	EMBASE	35 [DT 1990-2020] [English language] [Humans]	1059
<b>Cochrane database – Search strategy</b>			
#	Database	Search term	Results
1.	Cochrane	MeSH descriptor: [Abortion, Habitual] 1 tree(s) exploded	
2.	Cochrane	"recurrent miscarriage*"	
3.	Cochrane	#1 OR #2	
4.	Cochrane	MeSH descriptor: [Thrombophilia] explode all trees	
5.	Cochrane	"acquired thrombophilia"	
6.	Cochrane	MeSH descriptor: [Protein C Deficiency] this term only	
7.	Cochrane	MeSH descriptor: [Protein S Deficiency] this term only	
8.	Cochrane	MeSH descriptor: [Antiphospholipid Syndrome] this term only	
9.	Cochrane	MeSH descriptor: [Lupus Coagulation Inhibitor] explode all trees	
10.	Cochrane	MeSH descriptor: [Antibodies, Anticardiolipin] this term only	
11.	Cochrane	MeSH descriptor: [Antibodies, Anticardiolipin] explode all trees	
12.	Cochrane	"factor V Leiden"	
13.	Cochrane	"prothrombin gene mutation*"	
14.	Cochrane	#4 OR #5 OR #6 OR #7 OR #8 OR #9 OR #10 OR #11 OR #12	
15.	Cochrane	#3 AND #14	

**Supplementary Table 2.** Meta-analysis demonstrating the summary statistics for prevalence of heterozygous Factor V Leiden (FVL) in the recurrent miscarriage and control groups with the prevalence difference (95% confidence intervals (CI) and effect size of the prevalence difference, expressed as relative risk (RR) with 95% CI.

Author	Recurrent miscarriage group		Control group		Prevalence difference	Relative risk
	Total	N (%;95% CI)	Total	N (%; 95% CI)	% (95% CI)	RR (95% CI)
Rai <i>et al.</i> , 2001 [14]	904	59 (6.5; 5.0-8.3)	150	12 (8.0; 4.2-13.6)	-1.5 (-6.0-3.0)	0.82 (0.46-1.48)
Altintas <i>et al.</i> , 2007 [31]	114	9 (7.9; 3.7-14.5)	185	13 (7.0; 3.8-11.7)	0.9 (-5.5-7.2)	1.12 (0.50-2.48)
Mougiou <i>et al.</i> , 2008 [32]	212	8 (3.8; 1.6-7.3)	181	7 (3.9; 1.6-7.8)	-0.1 (-4.0-3.8)	0.98 (0.37-2.55)
Serrano <i>et al.</i> , 2011 [33]	100	5 (5.0; 1.6-11.3)	100	5 (5.0; 1.6-11.3)	-	1.00 (0.32-3.14)
Farahmand <i>et al.</i> , 2015 [34]	254	11 (4.3; 2.2-7.6)	350	10 (2.9; 1.4-5.2)	1.5 (-1.5-4.5)	1.52 (0.67-3.43)
<b>Summary statistics</b>						
Fixed effects model	1584	92 (5.9; 4.8-7.1)	966	47 (4.9; 3.6-6.3)	0.4 (-1.6-2.3)	1.03 (0.72-1.49)
Random effects model	1584	92 (5.8; 4.6-7.1)	966	47 (5.2; 3.3-7.5)	0.4 (-1.6-2.3)	1.02 (0.71-1.48)
Cochrane's Q (p value)		4.401 (0.354)		8.414 (0.078)	1.135 (0.889)	1.456 (0.835)
I <sup>2</sup> statistic (%; 95%CI)		9.1 (0 to 67.3)		52.5 (0 to 80.6)	0 (0 to 64.1)	0 (0 to 64.1)
Bias (p value)		-0.886 (0.524)		3.969 (0.256)	-1.016 (0.542)	1.003 (0.465)

CI: confidence interval; RR: relative risk

**Supplementary Table 3.** Meta-analysis demonstrating the summary statistics for prevalence of heterozygous Prothrombin gene mutation (PGM) in the recurrent miscarriage and control groups with the prevalence difference (95% confidence intervals (CI) and effect size of the prevalence difference, expressed as relative risk (RR) with 95% CI.

Author	Recurrent miscarriage group		Control group		Prevalence difference	Relative risk
	Total	n (%;95% CI)	Total	n (%; 95% CI)	% (95% CI)	RR (95% CI)
Altintas <i>et al.</i> , 2007 [31]	114	2 (1.8; 0.2-6.2)	185	3 (1.6; 0.3-4.7)	0.1 (-2.9- 3.2)	1.08 (0.22-5.33)
Mougiou <i>et al.</i> , 2008 [32]	212	8 (3.8; 1.6-7.3)	181	7 (3.9; 1.6-7.8)	-0.1 (-4.0-3.8)	0.98 (0.37-2.55)
Serrano <i>et al.</i> , 2011 [33]	100	3 (3.0; 0.6-8.5)	100	1 (1.0; 0.0-5.4)	2.0 (-1.9-5.9)	3.00 (0.44-20.77)
Lino <i>et al.</i> , 2014 [35]	106	3 (2.8; 0.6-8.0)	98	1 (1.0; 0.0-5.6)	1.8 (-2.0-5.7)	2.78 (0.40-19.21)
Farahmand <i>et al.</i> , 2015 [34]	254	13 (5.1; 2.8-8.6)	350	10 (2.9; 1.4-5.2)	2.3 (-0.9-5.4)	1.79 (0.81-3.94)
<b>Summary statistics</b>						
Fixed effects model	786	29 (3.9; 2.7-5.4)	914	22 (2.6; 1.6-3.7)	1.2 (-0.4-2.8)	1.52 (0.88-2.62)
Random effects model	786	29 (3.9; 2.7-5.4)	914	22 (2.6; 1.6-3.7)	1.2 (-0.4-2.8)	1.50 (0.86-2.60)
Cochrane's Q (p value)		2.548 (0.636)		3.293 (0.510)	1.556 (0.817)	1.689 (0.793)
I <sup>2</sup> statistic (%; 95%CI)		0 (0 to 64.1)		0 (0 to 64.1)	0 (0 to 64.1)	0 (0 to 64.1)
Bias (p value)		-1.718 (0.613)		-0.560 (0.841)	0.683 (0.823)	0.473 (0.592)

CI: confidence interval; RR: relative risk