SUPPLEMENTAL FIGURE 1

Study or Subgroup	PCOS Mother Events	Total	Control Events	Total	Weight	Risk Ratio M–H, Random, 95% CI	Year
Yilmaz 2005	9	40	2	20	28.2%	2.25 [0.54, 9.45]	2005
Dunaif and Legro	26	464	38	193	35.6%	0.28 [0.18, 0.46]	2011
Davies 2011	20	41	172	674	36.2%	1.91 [1.36, 2.68]	2011
Total (95% CI)		545		887	100.0%	1.02 [0.21, 4.88]	
Total events	55		212				

Heterogeneity: $Tau^2 = 1.74$; $Chi^2 = 46.80$, df = 2 (P < 0.00001); $I^2 = 96\%$
Test for overall effect: Z = 0.02 (P = 0.99)
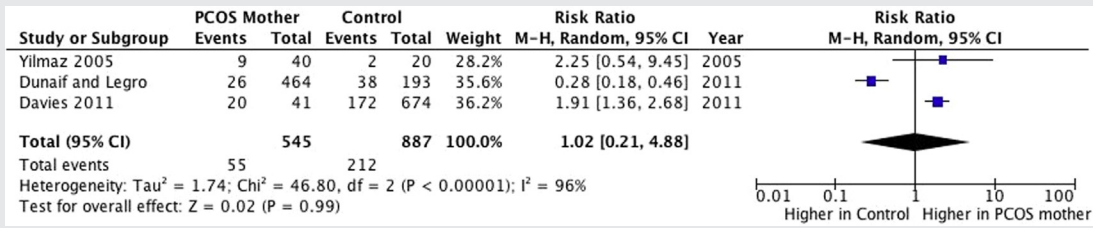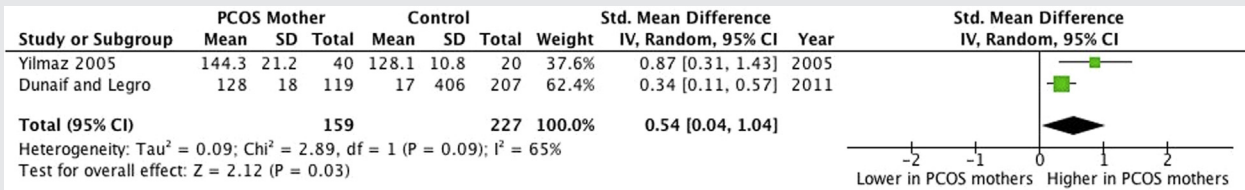
Forest plot of hypertension prevalence in mothers of patients with polycystic ovary syndrome (PCOS) and controls. CI = confidence interval; M–H = Mantel–Haenszel.

Yilmaz. Metabolic disturbances in PCOS relatives. Fertil Steril 2017.

SUPPLEMENTAL FIGURE 2

Study or Subgroup	PCOS Mother Mean	SD	Total	Control Mean	SD	Total	Weight	Std. Mean Difference IV, Random, 95% CI	Year
Yilmaz 2005	144.3	21.2	40	128.1	10.8	20	37.6%	0.87 [0.31, 1.43]	2005
Dunaif and Legro	128	18	119	17	406	207	62.4%	0.34 [0.11, 0.57]	2011
Total (95% CI)			159			227	100.0%	0.54 [0.04, 1.04]	

Heterogeneity: Tau² = 0.09; Chi² = 2.89, df = 1 (P = 0.09); I² = 65%
Test for overall effect: Z = 2.12 (P = 0.03)

Lower in PCOS mothers   Higher in PCOS mothers

Forest plot of systolic blood pressure in mothers of patients with polycystic ovary syndrome (PCOS) and controls. CI = confidence interval; M–H = Mantel–Haenszel.

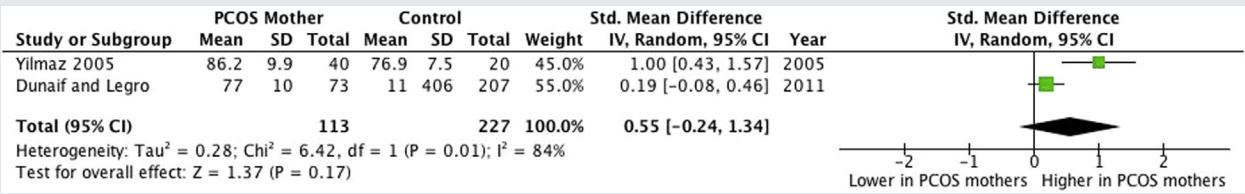*Yilmaz. Metabolic disturbances in PCOS relatives. Fertil Steril 2017.*

SUPPLEMENTAL FIGURE 3

Study or Subgroup	PCOS Mother			Control			Weight	Std. Mean Difference IV, Random, 95% CI	Year	Std. Mean Difference IV, Random, 95% CI
	Mean	SD	Total	Mean	SD	Total				
Yilmaz 2005	86.2	9.9	40	76.9	7.5	20	45.0%	1.00 [0.43, 1.57]	2005	
Dunaif and Legro	77	10	73	11	406	207	55.0%	0.19 [−0.08, 0.46]	2011	
Total (95% CI)			113			227	100.0%	0.55 [−0.24, 1.34]		

Heterogeneity: Tau² = 0.28; Chi² = 6.42, df = 1 (P = 0.01); I² = 84%
Test for overall effect: Z = 1.37 (P = 0.17)

Lower in PCOS mothers   Higher in PCOS mothers

Forest plot of diastolic blood pressure in mothers of patients with polycystic ovary syndrome (PCOS) and controls. CI = confidence interval; M–H = Mantel–Haenszel.

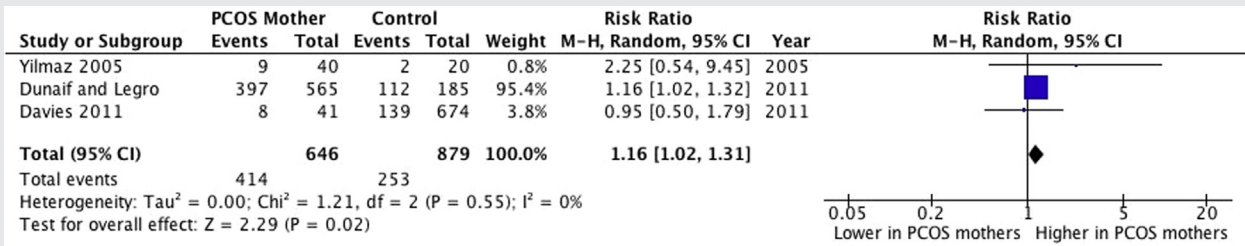*Yilmaz. Metabolic disturbances in PCOS relatives. Fertil Steril 2017.*

SUPPLEMENTAL FIGURE 4

Study or Subgroup	PCOS Mother Events	Total	Control Events	Total	Weight	Risk Ratio M–H, Random, 95% CI	Year
Yilmaz 2005	9	40	2	20	0.8%	2.25 [0.54, 9.45]	2005
Dunaif and Legro	397	565	112	185	95.4%	1.16 [1.02, 1.32]	2011
Davies 2011	8	41	139	674	3.8%	0.95 [0.50, 1.79]	2011
Total (95% CI)		646		879	100.0%	1.16 [1.02, 1.31]	
Total events	414		253				

Heterogeneity: Tau^2 = 0.00; Chi^2 = 1.21, df = 2 (P = 0.55); I^2 = 0%
Test for overall effect: Z = 2.29 (P = 0.02)

Forest plot of dyslipidemia prevalence in mothers of patients with polycystic ovary syndrome (PCOS) and controls. CI = confidence interval; M–H = Mantel–Haenszel.

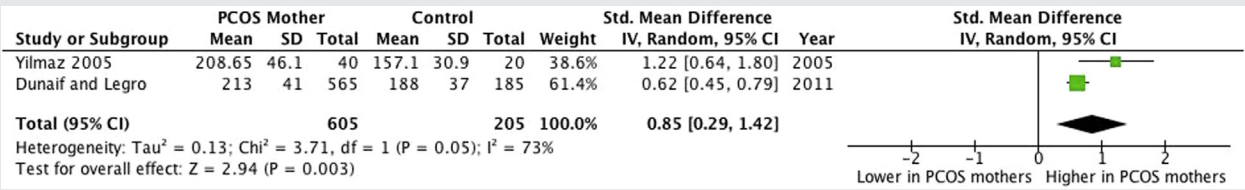*Yilmaz. Metabolic disturbances in PCOS relatives. Fertil Steril 2017.*

SUPPLEMENTAL FIGURE 5

Study or Subgroup	PCOS Mother Mean	SD	Total	Control Mean	SD	Total	Weight	Std. Mean Difference IV, Random, 95% CI	Year
Yilmaz 2005	208.65	46.1	40	157.1	30.9	20	38.6%	1.22 [0.64, 1.80]	2005
Dunaif and Legro	213	41	565	188	37	185	61.4%	0.62 [0.45, 0.79]	2011
Total (95% CI)			**605**			**205**	**100.0%**	**0.85 [0.29, 1.42]**	

Heterogeneity: Tau² = 0.13; Chi² = 3.71, df = 1 (P = 0.05); I² = 73%
Test for overall effect: Z = 2.94 (P = 0.003)

Std. Mean Difference
IV, Random, 95% CI

Lower in PCOS mothers   Higher in PCOS mothers

Forest plot of total cholesterol in mothers of patients with polycystic ovary syndrome (PCOS) and controls. CI = confidence interval; M–H = Mantel–Haenszel.

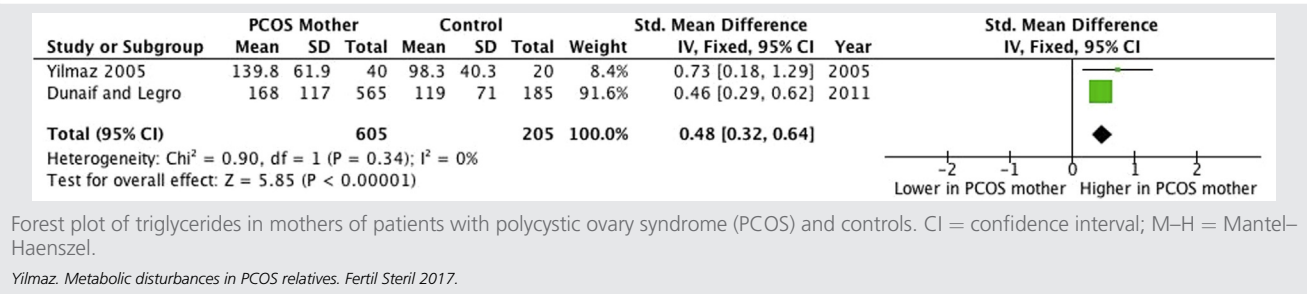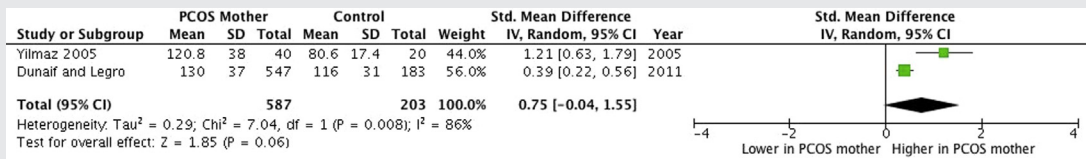*Yilmaz. Metabolic disturbances in PCOS relatives. Fertil Steril 2017.*

SUPPLEMENTAL FIGURE 6

Study or Subgroup	PCOS Mother			Control			Weight	Std. Mean Difference IV, Fixed, 95% CI	Year	Std. Mean Difference IV, Fixed, 95% CI
	Mean	SD	Total	Mean	SD	Total				
Yilmaz 2005	139.8	61.9	40	98.3	40.3	20	8.4%	0.73 [0.18, 1.29]	2005	
Dunaif and Legro	168	117	565	119	71	185	91.6%	0.46 [0.29, 0.62]	2011	
Total (95% CI)			**605**			**205**	**100.0%**	**0.48 [0.32, 0.64]**		

Heterogeneity: Chi² = 0.90, df = 1 (P = 0.34); I² = 0%
Test for overall effect: Z = 5.85 (P < 0.00001)

Lower in PCOS mother   Higher in PCOS mother

Forest plot of triglycerides in mothers of patients with polycystic ovary syndrome (PCOS) and controls. CI = confidence interval; M–H = Mantel–Haenszel.

Yilmaz. Metabolic disturbances in PCOS relatives. Fertil Steril 2017.
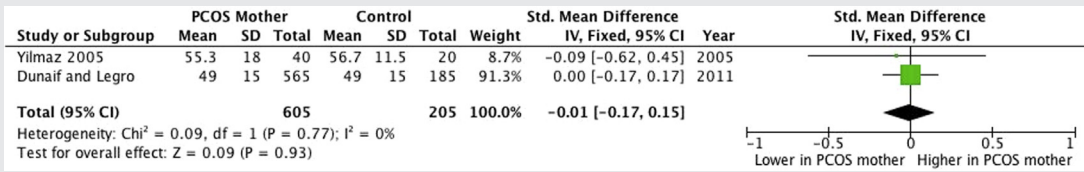
SUPPLEMENTAL FIGURE 7

Study or Subgroup	PCOS Mother			Control			Weight	Std. Mean Difference IV, Random, 95% CI	Year	Std. Mean Difference IV, Random, 95% CI
	Mean	SD	Total	Mean	SD	Total				
Yilmaz 2005	120.8	38	40	80.6	17.4	20	44.0%	1.21 [0.63, 1.79]	2005	
Dunaif and Legro	130	37	547	116	31	183	56.0%	0.39 [0.22, 0.56]	2011	
Total (95% CI)			**587**			**203**	**100.0%**	**0.75 [−0.04, 1.55]**		

Heterogeneity: Tau² = 0.29; Chi² = 7.04, df = 1 (P = 0.008); I² = 86%
Test for overall effect: Z = 1.85 (P = 0.06)

Lower in PCOS mother   Higher in PCOS mother

Forest plot of low-density lipoprotein cholesterol in mothers of patients with polycystic ovary syndrome (PCOS) and controls. CI = confidence interval; M–H = Mantel–Haenszel.

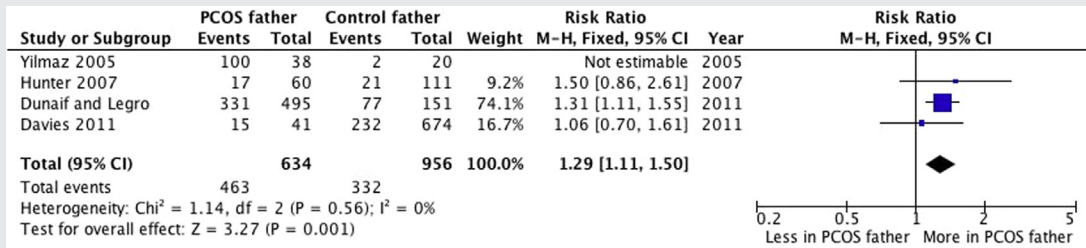*Yilmaz. Metabolic disturbances in PCOS relatives. Fertil Steril 2017.*

SUPPLEMENTAL FIGURE 8

Study or Subgroup	PCOS Mother Mean	SD	Total	Control Mean	SD	Total	Weight	Std. Mean Difference IV, Fixed, 95% CI	Year
Yilmaz 2005	55.3	18	40	56.7	11.5	20	8.7%	−0.09 [−0.62, 0.45]	2005
Dunaif and Legro	49	15	565	49	15	185	91.3%	0.00 [−0.17, 0.17]	2011
Total (95% CI)			605			205	100.0%	−0.01 [−0.17, 0.15]	

Heterogeneity: Chi^2 = 0.09, df = 1 (P = 0.77); I^2 = 0%
Test for overall effect: Z = 0.09 (P = 0.93)

Std. Mean Difference IV, Fixed, 95% CI
−1 −0.5 0 0.5 1
Lower in PCOS mother   Higher in PCOS mother

Forest plot of high-density lipoprotein cholesterol in mothers of patients with polycystic ovary syndrome (PCOS) and controls. CI = confidence interval; M–H = Mantel–Haenszel.

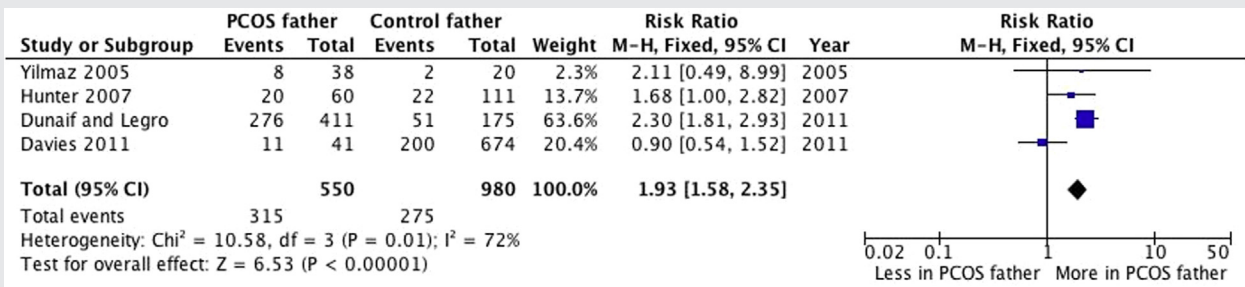*Yilmaz. Metabolic disturbances in PCOS relatives. Fertil Steril 2017.*

SUPPLEMENTAL FIGURE 9

Study or Subgroup	PCOS father Events	Total	Control father Events	Total	Weight	Risk Ratio M–H, Fixed, 95% CI	Year
Yilmaz 2005	100	38	2	20		Not estimable	2005
Hunter 2007	17	60	21	111	9.2%	1.50 [0.86, 2.61]	2007
Dunaif and Legro	331	495	77	151	74.1%	1.31 [1.11, 1.55]	2011
Davies 2011	15	41	232	674	16.7%	1.06 [0.70, 1.61]	2011
Total (95% CI)		634		956	100.0%	1.29 [1.11, 1.50]	
Total events	463		332				

Heterogeneity: Chi^2 = 1.14, df = 2 (P = 0.56); I^2 = 0%
Test for overall effect: Z = 3.27 (P = 0.001)

Forest plot of dyslipidemia prevalence in fathers of patients with polycystic ovary syndrome (PCOS) and controls. CI = confidence interval; M–H = Mantel–Haenszel.

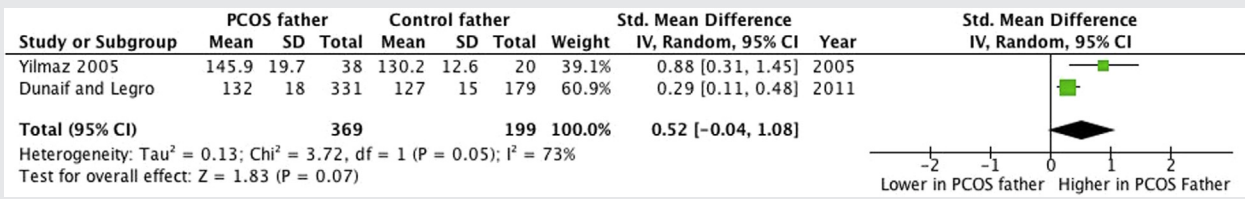*Yilmaz. Metabolic disturbances in PCOS relatives. Fertil Steril 2017.*

SUPPLEMENTAL FIGURE 10

Study or Subgroup	PCOS father Events	PCOS father Total	Control father Events	Control father Total	Weight	Risk Ratio M–H, Fixed, 95% CI	Year
Yilmaz 2005	8	38	2	20	2.3%	2.11 [0.49, 8.99]	2005
Hunter 2007	20	60	22	111	13.7%	1.68 [1.00, 2.82]	2007
Dunaif and Legro	276	411	51	175	63.6%	2.30 [1.81, 2.93]	2011
Davies 2011	11	41	200	674	20.4%	0.90 [0.54, 1.52]	2011
Total (95% CI)		550		980	100.0%	1.93 [1.58, 2.35]	
Total events	315		275				

Heterogeneity: Chi^2 = 10.58, df = 3 (P = 0.01); I^2 = 72%
Test for overall effect: Z = 6.53 (P < 0.00001)

Risk Ratio M–H, Fixed, 95% CI

0.02 0.1 1 10 50
Less in PCOS father   More in PCOS father

Forest plot of hypertension prevalence in fathers of patients with polycystic ovary syndrome (PCOS) and controls. CI = confidence interval; M–H = Mantel–Haenszel.

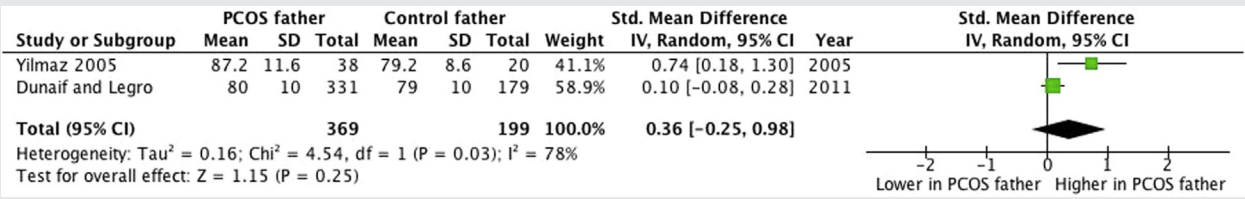*Yilmaz. Metabolic disturbances in PCOS relatives. Fertil Steril 2017.*

SUPPLEMENTAL FIGURE 11

Study or Subgroup	PCOS father Mean	SD	Total	Control father Mean	SD	Total	Weight	Std. Mean Difference IV, Random, 95% CI	Year
Yilmaz 2005	145.9	19.7	38	130.2	12.6	20	39.1%	0.88 [0.31, 1.45]	2005
Dunaif and Legro	132	18	331	127	15	179	60.9%	0.29 [0.11, 0.48]	2011
Total (95% CI)			**369**			**199**	**100.0%**	**0.52 [−0.04, 1.08]**	

Heterogeneity: Tau^2 = 0.13; Chi^2 = 3.72, df = 1 (P = 0.05); I^2 = 73%
Test for overall effect: Z = 1.83 (P = 0.07)

Forest plot of systolic blood pressure in fathers of patients with polycystic ovary syndrome (PCOS) and controls. CI = confidence interval; M–H = Mantel–Haenszel.

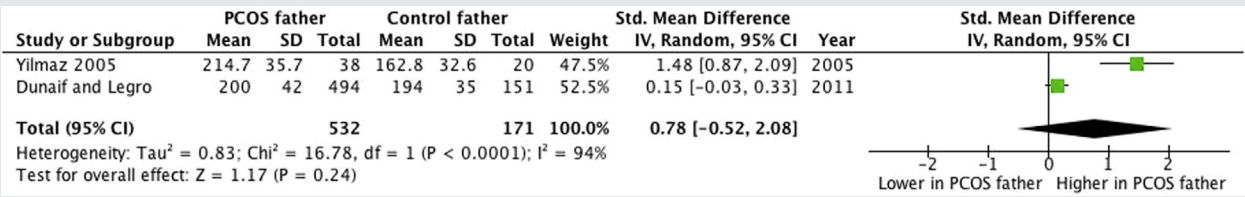*Yilmaz. Metabolic disturbances in PCOS relatives. Fertil Steril 2017.*

SUPPLEMENTAL FIGURE 12

Study or Subgroup	PCOS father Mean	SD	Total	Control father Mean	SD	Total	Weight	Std. Mean Difference IV, Random, 95% CI	Year
Yilmaz 2005	87.2	11.6	38	79.2	8.6	20	41.1%	0.74 [0.18, 1.30]	2005
Dunaif and Legro	80	10	331	79	10	179	58.9%	0.10 [−0.08, 0.28]	2011
Total (95% CI)			369			199	100.0%	0.36 [−0.25, 0.98]	

Heterogeneity: Tau^2 = 0.16; Chi^2 = 4.54, df = 1 (P = 0.03); I^2 = 78%
Test for overall effect: Z = 1.15 (P = 0.25)

Std. Mean Difference
IV, Random, 95% CI

−2 −1 0 1 2
Lower in PCOS father   Higher in PCOS father

Forest plot of diastolic blood pressure in fathers of patients with polycystic ovary syndrome (PCOS) and controls. CI = confidence interval; M–H = Mantel–Haenszel.

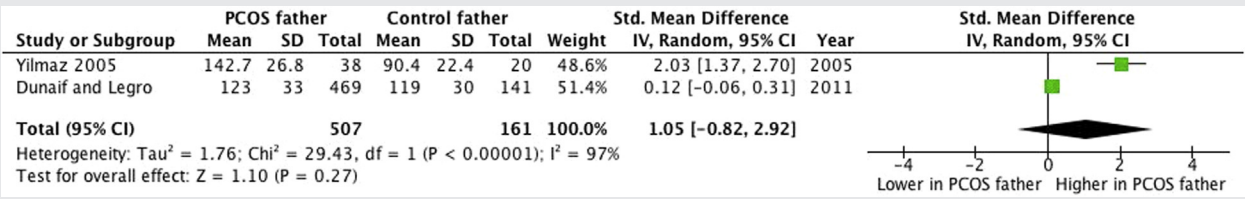*Yilmaz. Metabolic disturbances in PCOS relatives. Fertil Steril 2017.*

SUPPLEMENTAL FIGURE 13

Study or Subgroup	PCOS father Mean	SD	Total	Control father Mean	SD	Total	Weight	Std. Mean Difference IV, Random, 95% CI	Year
Yilmaz 2005	214.7	35.7	38	162.8	32.6	20	47.5%	1.48 [0.87, 2.09]	2005
Dunaif and Legro	200	42	494	194	35	151	52.5%	0.15 [-0.03, 0.33]	2011
Total (95% CI)			532			171	100.0%	0.78 [-0.52, 2.08]	

Heterogeneity: Tau² = 0.83; Chi² = 16.78, df = 1 (P < 0.0001); I² = 94%
Test for overall effect: Z = 1.17 (P = 0.24)

Forest plot of total cholesterol in fathers of patients with polycystic ovary syndrome (PCOS) and controls. CI = confidence interval; M–H = Mantel–Haenszel.

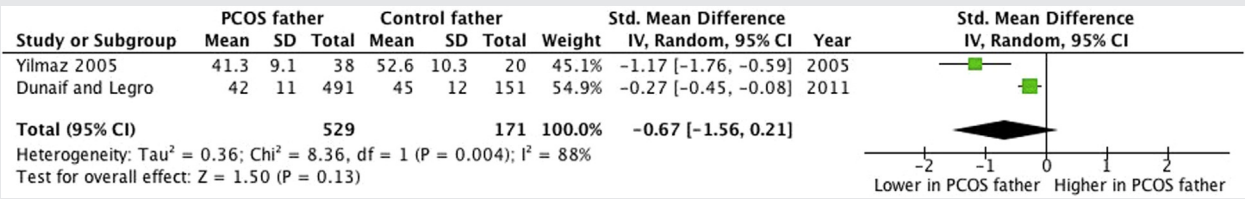*Yilmaz. Metabolic disturbances in PCOS relatives. Fertil Steril 2017.*

SUPPLEMENTAL FIGURE 14

Study or Subgroup	PCOS father Mean	SD	Total	Control father Mean	SD	Total	Weight	Std. Mean Difference IV, Random, 95% CI	Year
Yilmaz 2005	142.7	26.8	38	90.4	22.4	20	48.6%	2.03 [1.37, 2.70]	2005
Dunaif and Legro	123	33	469	119	30	141	51.4%	0.12 [−0.06, 0.31]	2011
Total (95% CI)			507			161	100.0%	1.05 [−0.82, 2.92]	

Heterogeneity: Tau² = 1.76; Chi² = 29.43, df = 1 (P < 0.00001); I² = 97%
Test for overall effect: Z = 1.10 (P = 0.27)

Forest plot of low-density lipoprotein cholesterol in fathers of patients with polycystic ovary syndrome (PCOS) and controls. CI = confidence interval; M–H = Mantel–Haenszel.

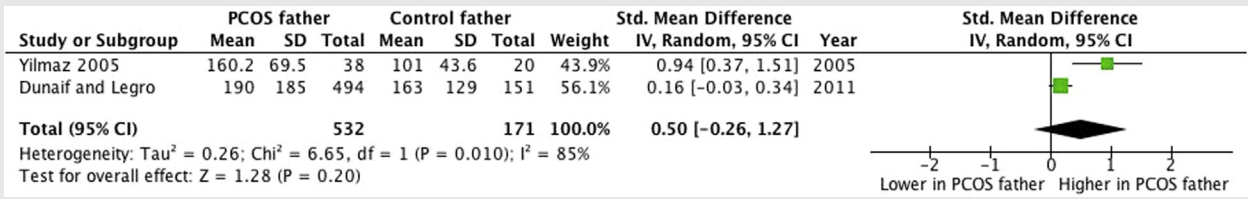*Yilmaz. Metabolic disturbances in PCOS relatives. Fertil Steril 2017.*

SUPPLEMENTAL FIGURE 15

Study or Subgroup	PCOS father Mean	SD	Total	Control father Mean	SD	Total	Weight	Std. Mean Difference IV, Random, 95% CI	Year
Yilmaz 2005	41.3	9.1	38	52.6	10.3	20	45.1%	−1.17 [−1.76, −0.59]	2005
Dunaif and Legro	42	11	491	45	12	151	54.9%	−0.27 [−0.45, −0.08]	2011
Total (95% CI)			**529**			**171**	**100.0%**	**−0.67 [−1.56, 0.21]**	

Heterogeneity: Tau² = 0.36; Chi² = 8.36, df = 1 (P = 0.004); I² = 88%
Test for overall effect: Z = 1.50 (P = 0.13)

Forest plot of high-density lipoprotein cholesterol in fathers of patients with polycystic ovary syndrome (PCOS) and controls. CI = confidence interval; M–H = Mantel–Haenszel.

Yilmaz. Metabolic disturbances in PCOS relatives. Fertil Steril 2017.

SUPPLEMENTAL FIGURE 16

Study or Subgroup	PCOS father Mean	SD	Total	Control father Mean	SD	Total	Weight	Std. Mean Difference IV, Random, 95% CI	Year
Yilmaz 2005	160.2	69.5	38	101	43.6	20	43.9%	0.94 [0.37, 1.51]	2005
Dunaif and Legro	190	185	494	163	129	151	56.1%	0.16 [−0.03, 0.34]	2011
Total (95% CI)			532			171	100.0%	0.50 [−0.26, 1.27]	

Heterogeneity: Tau² = 0.26; Chi² = 6.65, df = 1 (P = 0.010); I² = 85%
Test for overall effect: Z = 1.28 (P = 0.20)

Forest plot of triglycerides in fathers of patients with polycystic ovary syndrome (PCOS) and controls. CI = confidence interval; M–H = Mantel–Haenszel.

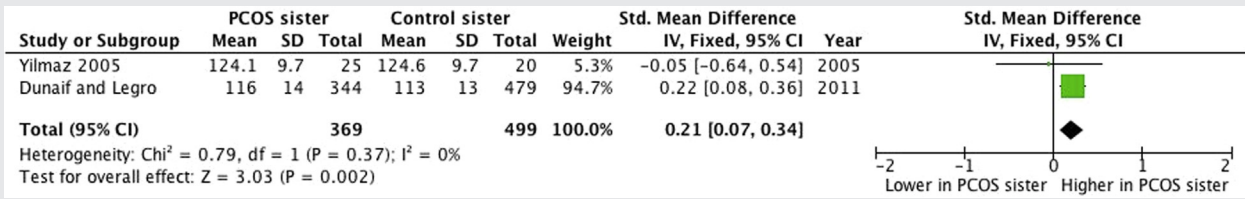*Yilmaz. Metabolic disturbances in PCOS relatives. Fertil Steril 2017.*

SUPPLEMENTAL FIGURE 17

Study or Subgroup	PCOS sister Events	Total	Control sister Events	Total	Weight	Risk Ratio M–H, Fixed, 95% CI	Year
Dunaif and Legro	65	352	28	443	100.0%	2.92 [1.92, 4.45]	2011
Total (95% CI)		352		443	100.0%	2.92 [1.92, 4.45]	
Total events	65		28				
Heterogeneity: Not applicable							
Test for overall effect: Z = 5.00 (P < 0.00001)							

Forest plot of hypertension prevalence in sisters of patients with polycystic ovary syndrome (PCOS) and controls. CI = confidence interval; M–H = Mantel–Haenszel.

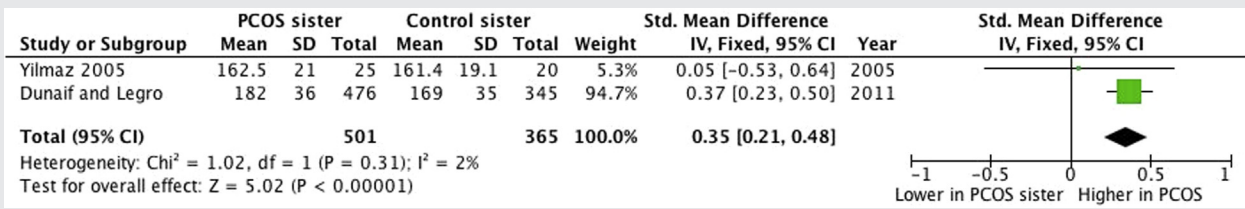*Yilmaz. Metabolic disturbances in PCOS relatives. Fertil Steril 2017.*

SUPPLEMENTAL FIGURE 18

Study or Subgroup	PCOS sister			Control sister			Weight	Std. Mean Difference IV, Fixed, 95% CI	Year	Std. Mean Difference IV, Fixed, 95% CI
	Mean	SD	Total	Mean	SD	Total				
Yilmaz 2005	124.1	9.7	25	124.6	9.7	20	5.3%	−0.05 [−0.64, 0.54]	2005	
Dunaif and Legro	116	14	344	113	13	479	94.7%	0.22 [0.08, 0.36]	2011	
Total (95% CI)			369			499	100.0%	0.21 [0.07, 0.34]		

Heterogeneity: Chi² = 0.79, df = 1 (P = 0.37); I² = 0%
Test for overall effect: Z = 3.03 (P = 0.002)

Lower in PCOS sister   Higher in PCOS sister

Forest plot of systolic blood pressure in sisters of patients with polycystic ovary syndrome (PCOS) and controls. CI = confidence interval; M–H = Mantel–Haenszel.

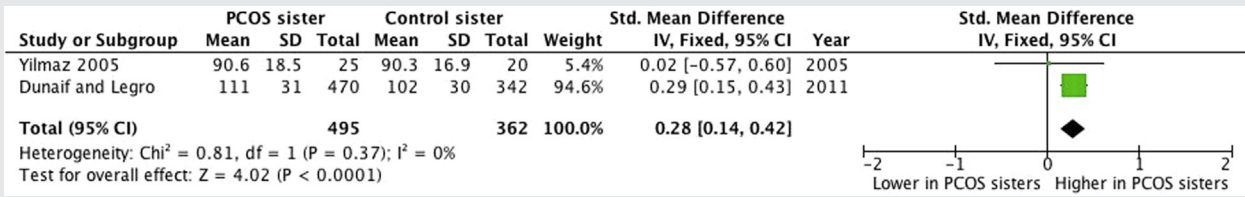*Yilmaz. Metabolic disturbances in PCOS relatives. Fertil Steril 2017.*

SUPPLEMENTAL FIGURE 19

Study or Subgroup	PCOS sister			Control sister			Weight	Std. Mean Difference IV, Fixed, 95% CI	Year
	Mean	SD	Total	Mean	SD	Total			
Yilmaz 2005	162.5	21	25	161.4	19.1	20	5.3%	0.05 [−0.53, 0.64]	2005
Dunaif and Legro	182	36	476	169	35	345	94.7%	0.37 [0.23, 0.50]	2011
Total (95% CI)			501			365	100.0%	0.35 [0.21, 0.48]	

Heterogeneity: Chi² = 1.02, df = 1 (P = 0.31); I² = 2%
Test for overall effect: Z = 5.02 (P < 0.00001)

Forest plot of total cholesterol in sisters of patients with polycystic ovary syndrome (PCOS) and controls. CI = confidence interval; M–H = Mantel–Haenszel.

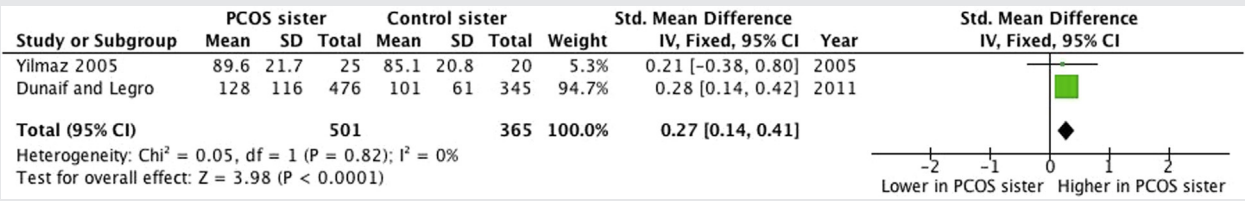*Yilmaz. Metabolic disturbances in PCOS relatives. Fertil Steril 2017.*

SUPPLEMENTAL FIGURE 20

Forest plot of low-density lipoprotein cholesterol in sisters of patients with polycystic ovary syndrome (PCOS) and controls. CI = confidence interval; M–H = Mantel–Haenszel.

Yilmaz. Metabolic disturbances in PCOS relatives. Fertil Steril 2017.

SUPPLEMENTAL FIGURE 21

Study or Subgroup	PCOS sister Mean	SD	Total	Control sister Mean	SD	Total	Weight	Std. Mean Difference IV, Fixed, 95% CI	Year
Yilmaz 2005	89.6	21.7	25	85.1	20.8	20	5.3%	0.21 [−0.38, 0.80]	2005
Dunaif and Legro	128	116	476	101	61	345	94.7%	0.28 [0.14, 0.42]	2011
Total (95% CI)			501			365	100.0%	0.27 [0.14, 0.41]	

Heterogeneity: Chi² = 0.05, df = 1 (P = 0.82); I² = 0%
Test for overall effect: Z = 3.98 (P < 0.0001)

Forest plot of triglycerides in sisters of patients with polycystic ovary syndrome (PCOS) and controls. CI = confidence interval; M–H = Mantel–Haenszel.

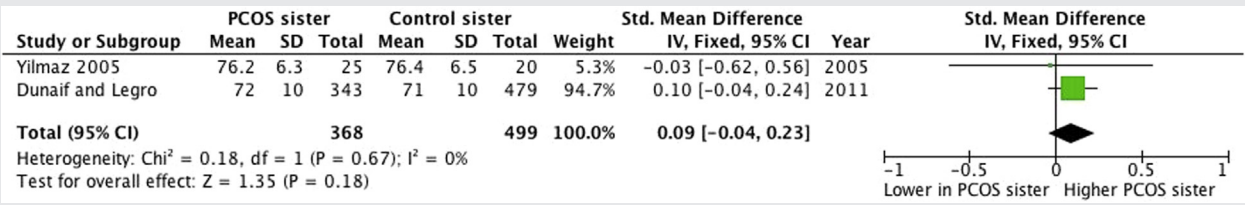*Yilmaz. Metabolic disturbances in PCOS relatives. Fertil Steril 2017.*

SUPPLEMENTAL FIGURE 22

Study or Subgroup	PCOS sister			Control sister			Weight	Std. Mean Difference IV, Fixed, 95% CI	Year	Std. Mean Difference IV, Fixed, 95% CI
	Mean	SD	Total	Mean	SD	Total				
Yilmaz 2005	76.2	6.3	25	76.4	6.5	20	5.3%	−0.03 [−0.62, 0.56]	2005	
Dunaif and Legro	72	10	343	71	10	479	94.7%	0.10 [−0.04, 0.24]	2011	
Total (95% CI)			368			499	100.0%	0.09 [−0.04, 0.23]		

Heterogeneity: Chi² = 0.18, df = 1 (P = 0.67); I² = 0%
Test for overall effect: Z = 1.35 (P = 0.18)

Lower in PCOS sister   Higher PCOS sister

Forest plot of diastolic blood pressure in sisters of patients with polycystic ovary syndrome (PCOS) and controls. CI = confidence interval; M–H = Mantel–Haenszel.

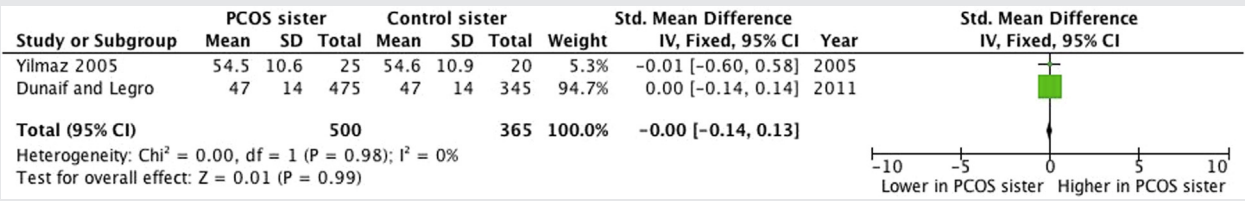*Yilmaz. Metabolic disturbances in PCOS relatives. Fertil Steril 2017.*

SUPPLEMENTAL FIGURE 23

Study or Subgroup	PCOS sister			Control sister			Weight	Std. Mean Difference IV, Fixed, 95% CI	Year	Std. Mean Difference IV, Fixed, 95% CI
	Mean	SD	Total	Mean	SD	Total				
Yilmaz 2005	54.5	10.6	25	54.6	10.9	20	5.3%	−0.01 [−0.60, 0.58]	2005	
Dunaif and Legro	47	14	475	47	14	345	94.7%	0.00 [−0.14, 0.14]	2011	
Total (95% CI)			500			365	100.0%	−0.00 [−0.14, 0.13]		

Heterogeneity: Chi² = 0.00, df = 1 (P = 0.98); I² = 0%
Test for overall effect: Z = 0.01 (P = 0.99)

Lower in PCOS sister   Higher in PCOS sister

Forest plot of high-density lipoprotein cholesterol in sisters of patients with polycystic ovary syndrome (PCOS) and controls. CI = confidence interval; M–H = Mantel–Haenszel.

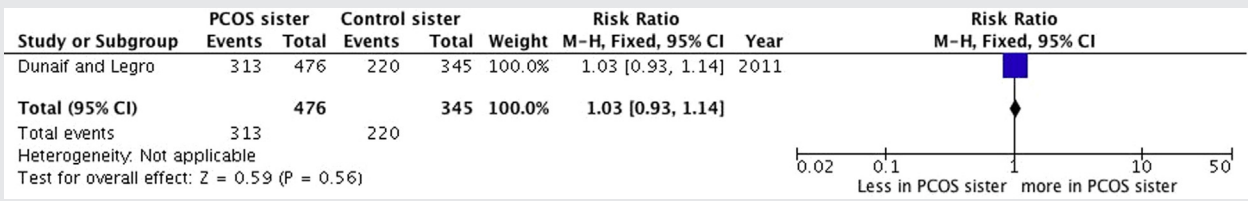*Yilmaz. Metabolic disturbances in PCOS relatives. Fertil Steril 2017.*

SUPPLEMENTAL FIGURE 24

Study or Subgroup	PCOS sister Events	PCOS sister Total	Control sister Events	Control sister Total	Weight	Risk Ratio M–H, Fixed, 95% CI	Year
Dunaif and Legro	313	476	220	345	100.0%	1.03 [0.93, 1.14]	2011
Total (95% CI)		476		345	**100.0%**	**1.03 [0.93, 1.14]**	
Total events	313		220				

Heterogeneity: Not applicable
Test for overall effect: Z = 0.59 (P = 0.56)

Forest plot of dyslipidemia prevalence in sisters of patients with polycystic ovary syndrome (PCOS) and controls. CI = confidence interval; M–H = Mantel–Haenszel.

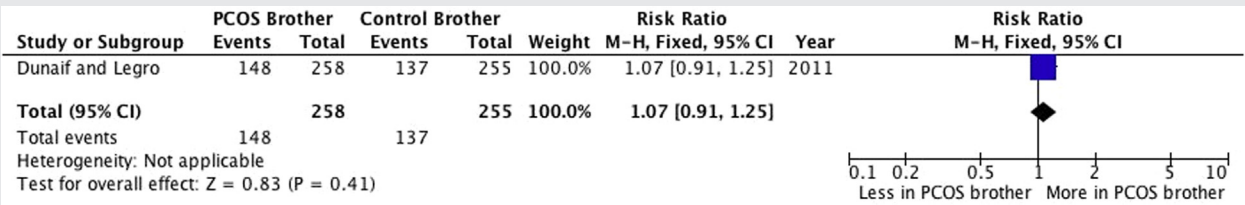*Yilmaz. Metabolic disturbances in PCOS relatives. Fertil Steril 2017.*

SUPPLEMENTAL FIGURE 25

Study or Subgroup	PCOS Brother Events	Total	Control Brother Events	Total	Weight	Risk Ratio M–H, Fixed, 95% CI	Year
Dunaif and Legro	148	258	137	255	100.0%	1.07 [0.91, 1.25]	2011
Total (95% CI)		258		255	100.0%	**1.07 [0.91, 1.25]**	
Total events	148		137				

Heterogeneity: Not applicable
Test for overall effect: Z = 0.83 (P = 0.41)

Forest plot of dyslipidemia prevalence in brothers of patients with polycystic ovary syndrome (PCOS) and controls. CI = confidence interval; M–H = Mantel–Haenszel.

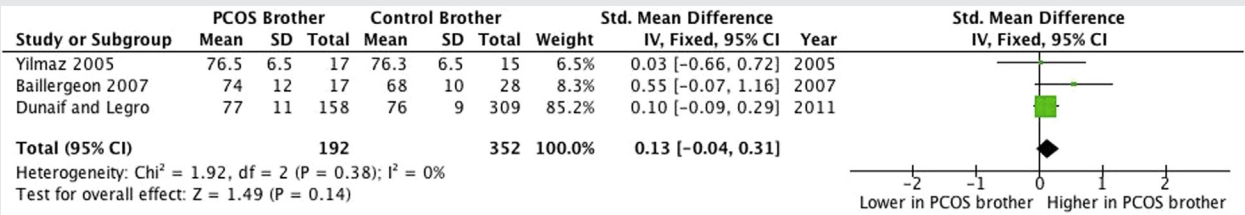*Yilmaz. Metabolic disturbances in PCOS relatives. Fertil Steril 2017.*

SUPPLEMENTAL FIGURE 26

Study or Subgroup	PCOS Brother Mean	SD	Total	Control Brother Mean	SD	Total	Weight	Std. Mean Difference IV, Fixed, 95% CI	Year
Yilmaz 2005	76.5	6.5	17	76.3	6.5	15	6.5%	0.03 [−0.66, 0.72]	2005
Baillergeon 2007	74	12	17	68	10	28	8.3%	0.55 [−0.07, 1.16]	2007
Dunaif and Legro	77	11	158	76	9	309	85.2%	0.10 [−0.09, 0.29]	2011
Total (95% CI)			**192**			**352**	**100.0%**	**0.13 [−0.04, 0.31]**	

Heterogeneity: Chi^2 = 1.92, df = 2 (P = 0.38); I^2 = 0%
Test for overall effect: Z = 1.49 (P = 0.14)

Forest plot of diastolic blood pressure in brothers of patients with polycystic ovary syndrome (PCOS) and controls. CI = confidence interval; M–H = Mantel–Haenszel.

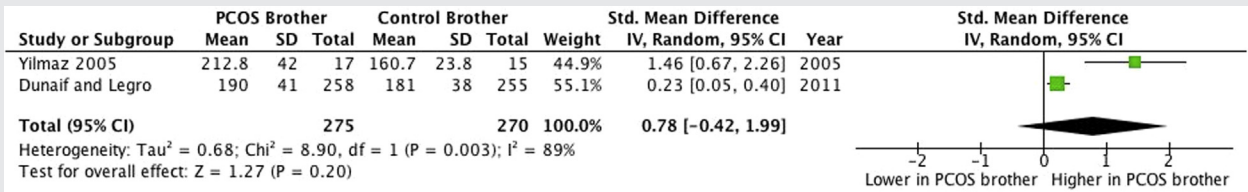*Yilmaz. Metabolic disturbances in PCOS relatives. Fertil Steril 2017.*

SUPPLEMENTAL FIGURE 27

Study or Subgroup	PCOS Brother Mean	SD	Total	Control Brother Mean	SD	Total	Weight	Std. Mean Difference IV, Random, 95% CI	Year
Yilmaz 2005	212.8	42	17	160.7	23.8	15	44.9%	1.46 [0.67, 2.26]	2005
Dunaif and Legro	190	41	258	181	38	255	55.1%	0.23 [0.05, 0.40]	2011
Total (95% CI)			275			270	100.0%	0.78 [−0.42, 1.99]	

Heterogeneity: Tau² = 0.68; Chi² = 8.90, df = 1 (P = 0.003); I² = 89%
Test for overall effect: Z = 1.27 (P = 0.20)

Lower in PCOS brother   Higher in PCOS brother

Forest plot of total cholesterol in brothers of patients with polycystic ovary syndrome (PCOS) and controls. CI = confidence interval; M–H = Mantel–Haenszel.

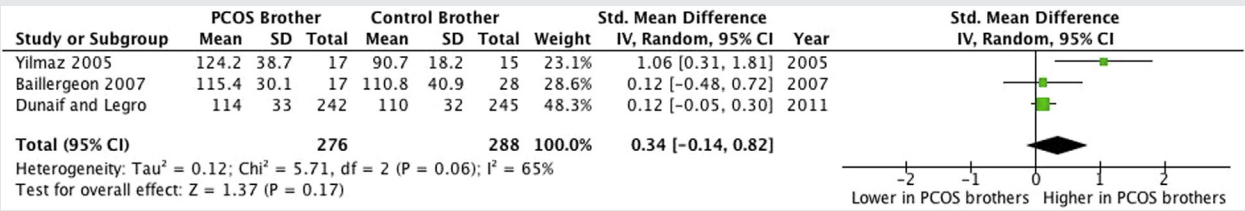*Yilmaz. Metabolic disturbances in PCOS relatives. Fertil Steril 2017.*

SUPPLEMENTAL FIGURE 28

Study or Subgroup	PCOS Brother Mean	SD	Total	Control Brother Mean	SD	Total	Weight	Std. Mean Difference IV, Random, 95% CI	Year
Yilmaz 2005	124.2	38.7	17	90.7	18.2	15	23.1%	1.06 [0.31, 1.81]	2005
Baillergeon 2007	115.4	30.1	17	110.8	40.9	28	28.6%	0.12 [−0.48, 0.72]	2007
Dunaif and Legro	114	33	242	110	32	245	48.3%	0.12 [−0.05, 0.30]	2011
Total (95% CI)			276			288	100.0%	0.34 [−0.14, 0.82]	

Heterogeneity: Tau² = 0.12; Chi² = 5.71, df = 2 (P = 0.06); I² = 65%
Test for overall effect: Z = 1.37 (P = 0.17)

Std. Mean Difference IV, Random, 95% CI

Lower in PCOS brothers — Higher in PCOS brothers

Forest plot of low-density lipoprotein cholesterol in brothers of patients with polycystic ovary syndrome (PCOS) and controls. CI = confidence interval; M–H = Mantel–Haenszel.

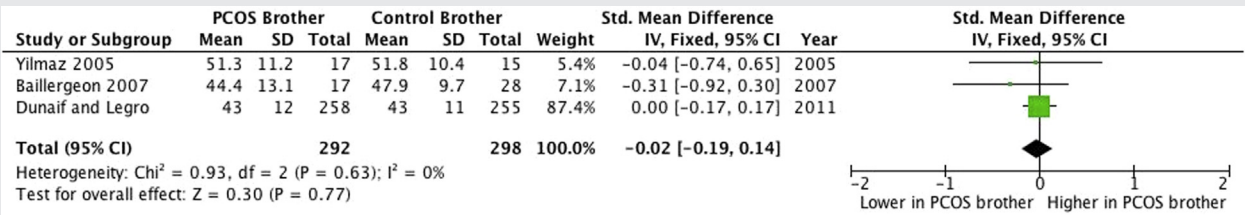*Yilmaz. Metabolic disturbances in PCOS relatives. Fertil Steril 2017.*

SUPPLEMENTAL FIGURE 29

Study or Subgroup	PCOS Brother			Control Brother			Weight	Std. Mean Difference IV, Fixed, 95% CI	Year	Std. Mean Difference IV, Fixed, 95% CI
	Mean	SD	Total	Mean	SD	Total				
Yilmaz 2005	51.3	11.2	17	51.8	10.4	15	5.4%	−0.04 [−0.74, 0.65]	2005	
Baillergeon 2007	44.4	13.1	17	47.9	9.7	28	7.1%	−0.31 [−0.92, 0.30]	2007	
Dunaif and Legro	43	12	258	43	11	255	87.4%	0.00 [−0.17, 0.17]	2011	
Total (95% CI)			**292**			**298**	**100.0%**	**−0.02 [−0.19, 0.14]**		

Heterogeneity: Chi² = 0.93, df = 2 (P = 0.63); I² = 0%
Test for overall effect: Z = 0.30 (P = 0.77)

Lower in PCOS brother   Higher in PCOS brother

Forest plot of high-density lipoprotein cholesterol in brothers of patients with polycystic ovary syndrome (PCOS) and controls. CI = confidence interval; M–H = Mantel–Haenszel.

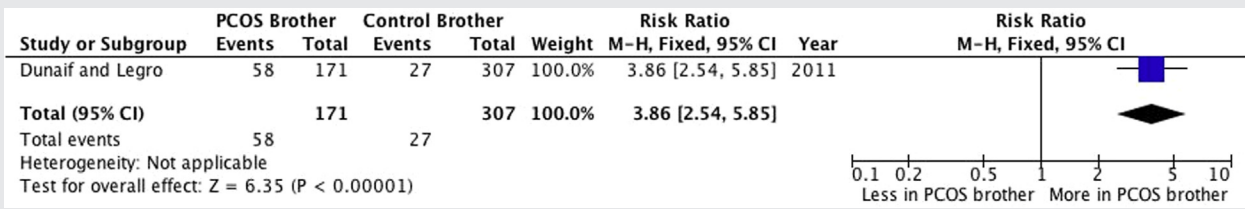*Yilmaz. Metabolic disturbances in PCOS relatives. Fertil Steril 2017.*

SUPPLEMENTAL FIGURE 30

Study or Subgroup	PCOS Brother Mean	SD	Total	Control Brother Mean	SD	Total	Weight	Std. Mean Difference IV, Random, 95% CI	Year
Yilmaz 2005	175.1	65.3	17	101.4	38.9	15	44.1%	1.32 [0.54, 2.09]	2005
Dunaif and Legro	174	150	258	148	117	255	55.9%	0.19 [0.02, 0.37]	2011
Total (95% CI)			275			270	100.0%	0.69 [−0.40, 1.78]	

Heterogeneity: Tau² = 0.55; Chi² = 7.68, df = 1 (P = 0.006); I² = 87%
Test for overall effect: Z = 1.23 (P = 0.22)

Forest plot of triglyceride in brothers of patients with polycystic ovary syndrome (PCOS) and controls. CI = confidence interval; M–H = Mantel–Haenszel.

Yilmaz. Metabolic disturbances in PCOS relatives. Fertil Steril 2017.

SUPPLEMENTAL FIGURE 31

Study or Subgroup	PCOS Brother Events	Total	Control Brother Events	Total	Weight	Risk Ratio M–H, Fixed, 95% CI	Year
Dunaif and Legro	58	171	27	307	100.0%	3.86 [2.54, 5.85]	2011
Total (95% CI)		171		307	100.0%	3.86 [2.54, 5.85]	
Total events	58		27				
Heterogeneity: Not applicable							
Test for overall effect: Z = 6.35 (P < 0.00001)							

Forest plot of hypertension prevalence in brothers of patients with polycystic ovary syndrome (PCOS) and controls. CI = confidence interval; M–H = Mantel–Haenszel.

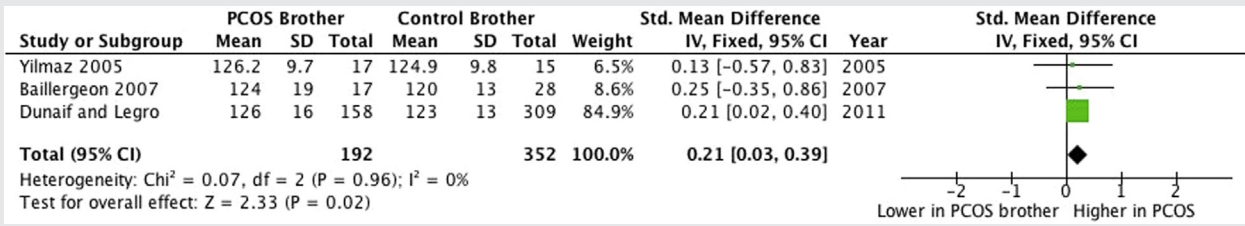*Yilmaz. Metabolic disturbances in PCOS relatives. Fertil Steril 2017.*

SUPPLEMENTAL FIGURE 32

Study or Subgroup	PCOS Brother Mean	SD	Total	Control Brother Mean	SD	Total	Weight	Std. Mean Difference IV, Fixed, 95% CI	Year
Yilmaz 2005	126.2	9.7	17	124.9	9.8	15	6.5%	0.13 [−0.57, 0.83]	2005
Baillergeon 2007	124	19	17	120	13	28	8.6%	0.25 [−0.35, 0.86]	2007
Dunaif and Legro	126	16	158	123	13	309	84.9%	0.21 [0.02, 0.40]	2011
Total (95% CI)			192			352	100.0%	0.21 [0.03, 0.39]	

Heterogeneity: Chi² = 0.07, df = 2 (P = 0.96); I² = 0%
Test for overall effect: Z = 2.33 (P = 0.02)

Forest plot of systolic blood pressure in brothers of patients with polycystic ovary syndrome (PCOS) and controls. CI = confidence interval; M–H = Mantel–Haenszel.

Yilmaz. Metabolic disturbances in PCOS relatives. Fertil Steril 2017.