

APPENDIX: SUPPLEMENTAL TABLES

Table A.1: Description of Study Participants by Race and Case Status, Expanded Case Definition

Table A.2. Description of Study Participants by Race and Case Status, Laparoscopy Case Definition

Table A.3. Fraction of Tubal Factor Infertility (TFI) Attributable to Chlamydia, Adjusted for Selected Covariates, by Race

Table A.1. Description of Study Participants by Race and Case Status, Expanded Case Definition^a

Characteristic	All Participants			Black Race			Non-Black Race ^b		
	Cases	Controls	<i>p</i> ^c	Cases	Controls	<i>p</i> ^c	Cases	Controls	<i>p</i> ^c
	(n=231) n (%)	(n=540) n (%)		(n=57) n (%)	(n=60) n (%)		(n=174) n (%)	(n=480) n (%)	
Study site			0.672			0.768			0.146
Birmingham	81 (35.1)	198 (36.7)		31 (54.4)	31 (51.7)		50 (28.7)	167 (34.8)	
Pittsburgh	150 (64.9)	342 (63.3)		26 (45.6)	29 (48.3)		124 (71.3)	313 (65.2)	
Age (median, IQR)	33 (29-36)	31 (29-35)	0.044	33 (29-38)	32 (28-37)	0.396	32 (29-36)	31 (29-35)	0.111
Household income			0.005			0.024			0.359
<\$50,000	57 (27.4)	66 (13.2)		27 (56.2)	15 (30.6)		30 (18.7)	51 (11.3)	
\$50,000 - <\$75,000	34 (16.3)	116 (23.1)		6 (12.5)	11 (22.4)		28 (17.5)	105 (23.2)	
≥\$75,000	117 (56.2)	319 (63.7)		15 (31.2)	23 (46.9)		102 (63.7)	296 (65.5)	
Education			0.117			0.433			0.599
<Bachelor's degree	95 (41.1)	177 (32.8)		33 (57.9)	31 (51.7)		62 (33.6)	146 (30.4)	
Bachelor's / 4-yr degree	70 (30.3)	202 (37.4)		14 (24.6)	15 (25.0)		56 (32.2)	187 (39.0)	
Master's degree or higher	66 (28.6)	161 (29.8)		10 (17.5)	14 (23.3)		56 (32.2)	147 (30.6)	
Duration of infertility, months (median, IQR)	31 (17-63)	23 (15-38)	<0.001	40 (24-71)	25 (17-54)	0.034	26 (16-58)	22 (15-37)	0.002
History of intrauterine pregnancy without ART	90 (39.0)	188 (34.8)	0.273	29 (50.9)	31 (51.7)	0.932	61 (35.1)	157 (32.7)	0.574
History of live birth without ART	47 (20.3)	101 (18.7)	0.596	18 (31.6)	15 (25.0)	0.431	29 (16.7)	86 (17.9)	0.712
History of smoking	83 (35.9)	169 (31.3)	0.209	18 (33.3)	14 (23.3)	0.293	64 (36.8)	156 (32.3)	0.300

History of marijuana use	119 (51.5)	250 (46.3)	0.184	36 (63.2)	29 (48.3)	0.107	83 (47.7)	221 (46.0)	0.707
History of other illicit drug use	37 (16.0)	64 (11.8)	0.116	10 (17.5)	3 (5.0)	0.031	27 (15.5)	61 (12.7)	0.352
History of combined hormonal contraception	190 (83.3)	486 (90.5)	0.005	40 (71.4)	54 (90.0)	0.011	150 (87.2)	432 (90.6)	0.215
History of progestin-only contraception	43 (18.9)	80 (15.1)	0.185	18 (32.1)	18 (30.0)	0.803	25 (14.6)	62 (13.2)	0.634
Age at first vaginal sex (median, IQR)	17 (16-19)	18 (16-20)	0.030	16 (15-18)	16 (15-18)	0.358	18 (16-20)	18 (16-20)	0.342
Lifetime number of male sex partners (median, IQR)	5 (3-9)	5 (2-8)	0.030	6 (4-10)	7 (4-10)	0.859	5 (2-9)	4 (2-7)	0.109
History of chlamydia	35 (15.1)	44 (8.1)	0.003	20 (35.1)	17 (28.3)	0.432	15 (8.6)	27 (5.6)	0.167
History of gonorrhea	9 (3.9)	12 (2.2)	0.191	8 (14.0)	8 (13.3)	0.912	1 (0.6)	4 (0.8)	1.000
History of bacterial vaginosis	21 (9.1)	27 (5.0)	0.031	13 (22.8)	14 (23.3)	0.946	8 (4.6)	13 (2.7)	0.226
History of trichomoniasis	16 (6.9)	9 (1.7)	<0.001	10 (17.5)	7 (11.7)	0.367	6 (3.4)	2 (0.4)	0.006
History of PID	19 (8.2)	14 (2.6)	<0.001	11 (19.3)	5 (8.3)	0.084	8 (4.6)	9 (1.9)	0.090
History of ectopic pregnancy	43 (18.6)	N/A	N/A	18 (31.6)	N/A	N/A	25 (14.4)	N/A	N/A
Surgically-confirmed endometriosis	54 (23.4)	80 (14.8)	0.004	9 (15.8)	6 (10.0)	0.349	45 (25.9)	74 (15.4)	0.002
History of abdominal / pelvic surgery	68 (29.4)	100 (18.5)	<0.001	21 (36.8)	14 (23.3)	0.112	47 (27.0)	86 (17.9)	0.011
History of abdominal / pelvic inflammation	22 (9.5)	37 (6.8)	0.201	5 (8.8)	0 (0.0)	0.025	17 (9.8)	37 (7.7)	0.397

IQR, interquartile range; ART, assisted reproductive technology; PID, pelvic inflammatory disease

^a TFI case = unilateral or bilateral fallopian tube blockage or other tubal abnormalities on HSG, or prior history of tubal ectopic pregnancy, hydrosalpinx, or surgery to repair blocked tubes; Control = bilateral patent tubes and no other tubal abnormalities on HSG and no prior history of tubal ectopic pregnancy or surgery to repair blocked tubes

^b Non-black race included: 628 white, 20 Asian, 6 other race

^c Chi-square, Fisher's Exact, or Cochran-Mantel-Haenszel test for categorical variables and Wilcoxon Mann Whitney test for continuous variables. Statistically significant ($P < 0.05$) results are indicated by bold print.

Table A.2. Description of Study Participants by Race and Case Status, Laparoscopy Case Definition^a

Characteristic	All Participants			Black Race			Non-Black Race ^b		
	Cases	Controls	<i>p</i> ^c	Cases	Controls	<i>p</i> ^c	Cases	Controls	<i>p</i> ^c
	(n=81) n (%)	(n=88) n (%)		(n=15) n (%)	(n=16) n (%)		(n=66) n (%)	(n=72) n (%)	
Study site			0.003			0.654			<0.001
Birmingham	45 (55.6)	68 (77.3)		13 (86.7)	12 (75.0)		32 (48.5)	56 (77.8)	
Pittsburgh	36 (44.4)	20 (22.7)		2 (13.3)	4 (25.0)		34 (51.5)	16 (22.2)	
Age (median, IQR)	33 (29-36)	32 (30-36)	0.932	36 (30-39)	36 (31-39)	0.921	32 (29-35)	32 (29-35)	0.836
Household income			0.431			0.774			0.298
<\$50,000	11 (16.2)	11 (14.9)		2 (20.0)	5 (38.5)		9 (15.5)	6 (9.8)	
\$50,000 - <\$75,000	14 (20.6)	11 (14.9)		2 (20.0)	0 (0.0)		12 (20.7)	11 (18.0)	
≥\$75,000	43 (63.2)	52 (70.3)		6 (60.0)	8 (61.5)		37 (63.8)	44 (72.1)	
Education			0.599			0.931			0.569
<Bachelor's degree	31 (38.3)	29 (32.9)		8 (53.3)	8 (50.0)		23 (34.8)	21 (29.2)	
Bachelor's / 4-yr degree	23 (28.4)	41 (46.6)		2 (13.3)	4 (25.0)		21 (31.8)	37 (51.4)	
Master's degree or higher	27 (33.3)	18 (20.4)		5 (33.3)	4 (25.0)		22 (33.3)	14 (19.4)	
Duration of infertility, months (median, IQR)	32 (18-74)	23 (18-39)	0.018	36 (13-77)	37 (16-48)	0.844	32 (19-73)	22 (18-35)	0.010
History of intrauterine pregnancy without ART	33 (40.7)	40 (45.4)	0.538	8 (53.3)	6 (37.5)	0.384	25 (37.9)	34 (47.2)	0.271
History of live birth without ART	17 (21.0)	21 (23.9)	0.656	4 (26.7)	4 (25.0)	>0.999	13 (19.7)	17 (23.6)	0.579
History of smoking	27 (33.3)	21 (23.9)	0.174	3 (20.0)	1 (6.2)	0.549	24 (36.4)	20 (27.8)	0.283

History of marijuana use	42 (51.8)	42 (47.7)	0.592	7 (46.7)	6 (37.5)	0.605	35 (53.0)	36 (50.0)	0.722
History of other illicit drug use	8 (9.9)	15 (17.0)	0.174	0 (0.0)	2 (12.5)	0.484	8 (12.1)	13 (18.1)	0.332
History of combined hormonal contraception	70 (87.5)	84 (95.4)	0.062	9 (64.3)	16 (100.0)	0.014	61 (92.4)	68 (94.4)	0.737
History of progestin-only contraception	13 (16.2)	8 (9.3)	0.178	3 (21.4)	2 (12.5)	0.642	10 (15.1)	6 (8.6)	0.234
Age at first vaginal sex (median, IQR)	17 (16-19)	18 (17-20)	0.023	17 (16-19)	18 (15-20)	0.873	17 (16-20)	18 (17-20)	0.016
Lifetime number of male sex partners (median, IQR)	5 (3-9)	5 (2-8)	0.388	5 (3-7)	6 (4-9)	0.403	5 (3-9)	4 (2-8)	0.203
History of chlamydia	11 (13.6)	4 (4.5)	0.039	4 (26.7)	3 (18.7)	0.685	7 (10.6)	1 (1.4)	0.028
History of gonorrhea	3 (3.7)	1 (1.1)	0.351	2 (13.3)	1 (6.2)	0.600	1 (1.5)	0 (0.0)	0.478
History of bacterial vaginosis	6 (7.4)	2 (2.3)	0.155	2 (13.3)	2 (12.5)	1.000	4 (6.1)	0 (0.0)	0.050
History of trichomoniasis	5 (6.2)	0 (0.0)	0.024	2 (13.3)	0 (0.0)	0.226	3 (4.6)	0 (0.0)	0.107
History of PID	5 (6.2)	2 (2.3)	0.262	1 (6.7)	2 (12.5)	1.000	4 (6.1)	0 (0.0)	0.050
History of ectopic pregnancy	11 (13.6)	1 (1.1)	0.002	4 (26.7)	0 (0.0)	0.043	7 (10.6)	1 (1.4)	0.028
Surgically-confirmed endometriosis	42 (51.8)	62 (70.4)	0.013	3 (20.0)	8 (50.0)	0.081	39 (59.1)	54 (75.0)	0.047
History of abdominal / pelvic surgery	28 (34.6)	17 (19.3)	0.025	4 (26.7)	7 (43.7)	0.320	24 (36.4)	10 (13.9)	0.002
History of abdominal / pelvic inflammation	10 (12.3)	2 (2.3)	0.001	2 (13.3)	1 (6.2)	0.600	8 (12.1)	1 (1.4)	0.014

IQR, interquartile range; ART, assisted reproductive technology; PID, pelvic inflammatory disease

^a TFI case = laparoscopy showing evidence of tubal damage; Control = laparoscopy within one year of study showing no evidence of tubal damage

^b Non-black race included: 134 white, 4 Asian

^c Chi-square, Fisher's Exact, or Cochran-Mantel-Haenszel test for categorical variables and Wilcoxon Mann Whitney test for continuous variables. Statistically significant ($P < 0.05$) results are indicated by bold print.

Table A.3. Fraction of Tubal Factor Infertility (TFI)^a Attributable to Chlamydia, Adjusted for Selected Covariates, by Race

Definition of <i>C. trachomatis</i> Seropositivity	Adjusted PAF (95% CI)	
	Race	
	Black ^b	Non-Black ^c
Positive by Medac IgG MOMP	1% (-36%, 24%)	3% (-1%, 6%)
Positive by EB-ELISA (IgG1 or IgG3)	1% (-100%, 43%)	4% (0%, 9%)
Positive by EB-ELISA IgG1	-12% (-100%, 35%)	3% (0%, 6%)
Positive by EB-ELISA IgG3	-18% (-93%, 19%)	5% (2%, 9%)
Positive by Medac IgG MOMP or EB-ELISA	5% (-100%, 48%)	4% (-2%, 8%)
Positive by Medac IgG MOMP and EB-ELISA	0% (-38%, 23%)	4% (1%, 7%)

PAF, population attributable fraction; CI, confidence interval; MOMP, major outer membrane protein; EB, elementary body; ELISA, enzyme-linked immunosorbent assay

^a Tubal Factor Infertility (TFI) defined by hysterosalpingogram (HSG) case definition; TFI case = unilateral or bilateral fallopian tube blockage on HSG; Control = bilateral patent tubes and no other tubal abnormalities on HSG and no prior history of tubal ectopic pregnancy or surgery to repair blocked tubes

^b PAF estimates adjusted for study site, age, income, illicit drug use, combined hormonal contraceptive use

^c PAF estimates adjusted for study site, age, income, history of trichomoniasis, endometriosis