

## Supplementary Material

**Table 1. Demographic Characteristics of Post-ACOG Patients Not Prescribed Aspirin vs Prescribed Aspirin**

	Post-ACOG (n=203)		P-value
	Not Prescribed Aspirin (n = 61) 30%	Prescribed Aspirin (n = 142) 70%	
Maternal age	30.1 +/- 6.10	32.7 +/- 6.07	<b>0.007</b>
Race			
• African American	35 (57.4)	93 (65.5)	0.34
• White	16 (26.2)	30 (21.1)	0.47
• Hispanic	4 (6.6)	9 (6.3)	1.00
• Asian	0 (0)	7 (4.9)	0.11
• Other	6 (9.8)	3 (2.1)	0.02
Gravida	4.05 +/- 2.95	3.96 +/- 2.60	0.84
Nulliparous	16 (26.2)	37 (26.0)	1.0
Preterm birth	13 (21.3)	47 (33.1)	0.10
BMI	33.39 +/- 8.60	35.5 +/- 8.07	0.09
Obesity (BMI > 30)	39 (63.9)	102 (71.8)	0.52

History of preeclampsia	8 (13.1)	53 (37.3)	<b>&lt;0.01</b>
Pregestational diabetes	7 (11.5)	22 (15.5)	0.52
Thyroid disorders	3 (4.91)	7 (4.9)	1.0
Antiphospholipid syndrome	0	0	-
Autoimmune disorder	1 (1.64)	4 (2.8)	1.0
Vascular disease	1 (1.64)	0	-
Sickle cell disease	0	1 (0.7)	-
Thromboembolism	1 (1.64)	1 (0.7)	0.51
Renal disease	3 (4.91)	2 (1.4)	0.16
Smoking	10 (16.4)	24 (16.9)	1.0
Quit smoking during pregnancy	4 (6.56)	6 (4.2)	0.49
Substance abuse	4 (6.56)	11 (7.7)	1.0
Antihypertensive medication (Y/N)	14 (23.0)	47 (33.1)	0.18
2 antihypertensive agents	4 (6.56)	6 (4.2)	0.49

Values reported as n (%) or mean  $\pm$  standard deviation.

ACOG: American College of Obstetricians and Gynecologists

BMI: Body mass index

**Table 2. Maternal Outcomes of Post-ACOG Patients Not Prescribed Aspirin vs Prescribed Aspirin**

	Post-ACOG (n=203)		Adjusted Odds Ratios
	Not Prescribed Aspirin (n = 61) 30%	Prescribed Aspirin (n = 142) 70%	
<b>Superimposed Preeclampsia</b>	15 (24.6)	57 (40.1)	1.81 (0.90 – 3.64)
Without severe features	4 (6.6)	5 (3.5)	0.44 (0.11 – 1.87)
With severe features	11 (18.0)	52 (36.6)	<b>2.36 (1.10 – 5.06)</b>
<b>Delivery Indications</b>			
Completed 37 weeks	41 (67.2)	90 (63.4)	0.93 (0.48 – 1.80)
Fetal indication	7 (11.5)	23 (16.2)	1.50 (0.59 – 3.85)
Lab abnormalities	1 (1.6)	12 (8.5)	7.45 (0.88 – 61.1)
Uncontrolled severe BP	6 (9.8)	30 (21.1)	2.58 (0.98 – 6.78)
Persistent maternal symptoms	0 (0)	14 (9.9)	-
Spontaneous onset of labor	12 (19.7)	19 (13.4)	0.62 (0.27 – 1.43)
Placental abruption	0 (0)	4 (2.8)	-
Eclampsia	0 (0)	0 (0)	-

HELLP Syndrome	0 (0)	3 (2.1)	-
Pulmonary edema	0 (0)	1 (0.7)	-
Magnesium at delivery	10 (16.4)	38 (26.8)	1.80 (0.81 – 4.03)
<b>Mode of Delivery</b>			
Cesarean	21 (34.4)	73 (51.4)	0.55 (0.29 – 1.05)
<b>Maternal Complications</b>			
Postpartum hemorrhage	4 (6.6)	28 (19.7)	<b>3.95 (1.28 – 12.3)</b>
Maternal ICU admission	0 (0)	2 (1.4)	-
Maternal brain imaging	0 (0)	4 (2.8)	-
Maternal mortality	0 (0)	0 (0)	-
<b>Fetal Outcomes</b>			
Antenatal steroids	11 (18.0)	28 (19.7)	0.81 (0.36 – 1.85)
Intrauterine growth restriction	6 (9.8)	11 (7.7)	0.72 (0.23 – 2.21)
Abnormal umbilical artery Doppler	1 (1.6)	5 (3.5)	1.92 (0.20 – 18.5)
Stillbirth	1 (1.6)	1 (0.7)	0.13 (0.00 – 3.72)
<b>Neonatal Outcomes</b>			
Gestational Age at Delivery	37.1 +/- 2.87	36.6 +/- 3.30	P = 0.99
PTD < 37	12 (19.7)	41 (28.9)	1.66 (0.80 – 3.43)
PTD <34	5 (8.2)	20 (14.1)	1.84 (0.66 – 5.14)

PTD <28	1 (1.6)	5 (3.5)	2.19 (0.25 – 19.1)
NICU Admission	17 (27.8)	52 (17.6)	1.43 (0.72 – 2.84)
SGA	6 (9.8)	13 (9.2)	0.59 (0.19 -1.79)
Birthweight	3031 +/- 650	3043 +/- 2588	P = 0.83

Values reported as n (%) or mean  $\pm$  standard deviation. Adjusted odds ratios were calculated using logistic regression for binomial variables and linear regression for continuous variables, adjusting for maternal age and history of preeclampsia. For continuous variables, adjusted p-value was reported rather than odds ratios.

ACOG: American College of Obstetricians and Gynecologists; BP: Blood pressure; HELLP: hemolysis, elevated liver enzymes, low platelet count; ICU Intensive care unit; PTD: Incidence of preterm delivery, NICU: Neonatal intensive care unit. RDS: Respiratory distress syndrome; IVH: Intraventricular hemorrhage; NEC: Necrotizing enterocolitis. SGA: small for gestational age based on neonatal charts

<sup>a</sup> Uncontrolled severe BP is defined as not controlled after several intravenous doses of antihypertensive medications.

**Table 3. Demographic Characteristics of Patients with Superimposed Preeclampsia with Severe Features Only**

	Superimposed Preeclampsia with Severe Features		P-value
	Pre ACOG (n = 55)	Post ACOG (n=63)	
Maternal age	33.1 +/- 5.84	32.2 +/- 6.43	0.40
Race			
• African American (2)	31 (56.3)	44 (69.8)	0.18
• White (1)	9 (16.4)	12 (19.0)	0.81
• Hispanic (3)	1 (1.81)	5 (7.94)	0.21
• Asian (4)	7 (12.7)	0 (0)	<b>&lt;0.01</b>
• Other (5)	7 (12.7)	2 (3.17)	0.08
Gravida	3.8 +/- 2.34	3.89 +/- 2.65	0.85
Nulliparous	16 (29.1)	19 (30.2)	1.00
Preterm birth	15 (27.3)	24 (38.1)	0.84
BMI	34.0 +/- 9.69	34.3 +/- 8.06	0.86

Obesity (BMI > 30)	34 (61.8)	45 (71.4)	0.33
History of preeclampsia	21 (38.2)	25 (39.7)	1.00
Pregestational diabetes	8 (14.5)	9 (14.3)	1.00
Thyroid disorders	2 (3.64)	4 (6.35)	0.68
Autoimmune disorder	2 (3.64)	4 (6.35)	0.68
Renal disease	4 (7.27)	2 (3.17)	0.42
Smoking	8 (14.5)	8 (12.7)	0.79
Quit smoking during pregnancy	4 (7.27)	3 (4.76)	0.70
Substance Abuse	2 (3.64)	4 (6.35)	0.68
Prescribed Aspirin	5 (9)	52 (82.5)	<0.0001
Antihypertensive medication (Y/N)	<b>35 (63.6)</b>	<b>19 (30.2)</b>	<b>&lt;0.01</b>
2 antihypertensive agents	6 (10.9)	4 (6.35)	0.51

Values reported as n (%) or mean  $\pm$  standard deviation.

ACOG: American College of Obstetricians and Gynecologists

BMI: Body mass index

**Table 4. Maternal Outcomes of Patients with Superimposed Preeclampsia with Severe Features Only**

	Superimposed Preeclampsia with Severe Features		Adjusted Odds Ratios
	Pre ACOG (n = 55)	Post ACOG (n=63)	
<b>Delivery Indications</b>			
Completed 37 weeks	13 (23.6)	29 (46.0)	1.92 (0.82 – 4.50)
Fetal indication	7 (12.7)	7 (11.1)	1.58 (0.35 – 3.82)
Lab abnormalities	4 (7.3)	12 (19.0)	2.94 (0.84 – 10.33)
Uncontrolled severe BP <sub>b</sub>	26 (47.3)	33 (52.4)	1.67 (0.75 – 3.72)
Persistent maternal symptoms	15 (27.3)	14 (22.2)	0.77 (0.32 – 1.89)
Spontaneous onset of labor	3 (5.5)	5 (7.9)	2.07 (0.43 – 9.94)
Placental abruption	4 (7.3)	3 (4.8)	0.72 (0.14 – 3.71)
Eclampsia	0 (0)	0 (0)	-
HELLP Syndrome	0 (0)	3 (4.8)	-
Pulmonary edema	1 (1.8)	1 (1.6)	0.87 (0.05 – 14.3)
Magnesium at delivery	47 (85.5)	43 (68.3)	0.43 (0.16 – 1.12)
<b>Mode of Delivery</b>			
Cesarean	20 (36.4)	34 (54.0)	<b>3.05 (1.30 – 7.14)</b>



<b>Maternal Complications</b>			
Postpartum hemorrhage	7 (12.7)	17 (27.0)	2.42 (0.87 – 6.70)
Maternal ICU admission	2 (3.6)	2 (3.2)	0.91 (0.11 – 7.58)
Maternal brain imaging	1 (1.8)	4 (6.3)	3.85 (0.38 – 39.0)
Maternal mortality	0 (0)	0 (0)	-
<b>Fetal Outcomes</b>			
Antenatal steroids	20 (36.3)	19 (3.0)	1.28 (0.53 – 3.06)
Intrauterine growth restriction	8 (14.5)	4 (6.3)	0.51 (0.13 – 1.91)
Abnormal umbilical artery Doppler	3 (5.5)	1 (1.6)	0.39 (0.04 – 4.22)
Stillbirth	4 (7.3)	1 (1.6)	0.22 (0.02 – 2.18)
<b>Neonatal Outcomes</b>			
Gestational Age at Delivery	34.7 +/- 3.6	35.4 +/- 3.5	P = 0.92
PTD < 37	35 (63.6)	33 (52.4)	0.63 (0.30 – 1.32)
PTD < 34	15 (27.3)	13 (20.6)	1.44 (0.61 – 3.78)
PTD < 28	3 (5.5)	2 (3.1)	1.76 (0.28 – 11)
NICU Admission	33 (60)	28 (44.4)	0.78 (0.35 – 1.73)
SGA	12 (21.8)	6 (9.5)	<b>0.28 (0.10 – 0.82)</b>
Birthweight	2330 +/- 908	2682 +/- 788	P = 0.267

Values reported as n (%) or mean  $\pm$  standard. Odds ratios were adjusted for a higher proportion of post-ACOG patients who received anti-hypertensive medications prior to delivery using logistic regression for binomial variables and linear regression for continuous variables. For continuous variables, adjusted p-values were reported rather than odds ratios.

ACOG: American College of Obstetricians and Gynecologists; BP: Blood pressure; HELLP: hemolysis, elevated liver enzymes, low platelet count; ICU Intensive care unit; PTD: Incidence of preterm delivery, NICU: Neonatal intensive care unit.

<sup>a</sup> Uncontrolled severe BP is defined as not controlled after several intravenous doses of antihypertensive medications.