

Supplemental Table 1. T-test (mean) and Wilcoxon Rank-Sum tests (distribution) comparisons of characteristics and outcomes by hours in latent phase duration at mean, median, 80th, 90th, 95th percentiles among low-risk women in spontaneous labor

<i>Nulliparous women, overall n=665</i> Each cell shows hours of latent labor (sample size continuing labor at and beyond point of distribution)															
Point of distribution	Overall sample	Not married/partnered	Married/partnered	P value	No hypertension	Hypertension	P value	No diabetes	Diabetes	P value	Birthweight small for gestational age	P value (compared to at gestational age)	Birthweight at gestational age	Birthweight large for gestational age	P value (compared to at gestational age)
Mean	11.77 (220)	11.71 (213)	15.36 (5)	.230	11.71 (215)	14.20 (6)	.394	11.75 (201)	12.01 (19)	.877	13.97 (13)	.437	11.36 (157)	10.50 (25)	.406
Median	9 (305)	9 (292)	10.6 (7)	.302	9 (298)	9 (7)	.721	9 (280)	11.25 (21)	.339	11 (14)	.437	8.50 (216)	8.50 (33)	.958
80th percentile	17 (124)	17 (118)	22.09 (3)		17 (120)	22.65 (3)		17 (113)	19.66 (9)		21.01 (6)		16.24 (86)	14.40 (13)	
90th percentile	24 (62)	24 (60)	27.30 (2)		24 (59)	27.50 (2)		24 (59)	22 (8)		22.20 (3)		22.90 (43)	19.78 (7)	
95th percentile	30 (31)	30 (30)	38.17 (1)		30 (30)	37.29 (1)		30.33 (28)	25.34 (3)		28.10 (2)		29.70 (22)	25.21 (4)	

Nulliparous women, overall n=665

Each cell shows hours of latent labor (sample size continuing labor at and beyond point of distribution)

Point of distribution	Overall sample	Maternal age <35	Maternal age 35+	P value	Overweight BMI	P value (compared to Normal/underweight BMI)	Normal/underweight BMI	Obese BMI	P value (compared to Normal/underweight BMI)	Lowest 10% height	P value (compared to middle 10-80%)	Middle 10-80% height	Highest 10% height	P value (compared to middle 10-80%)	CDC weight gain recommended	CDC weight gain over	P value
Mean	11.77 (220)	11.93 (179)	11.78 (38)	.885	12.89 (46)	.174	11.33 (159)	12.68 (21)	.372	12.88 (15)	.555	11.82 (163)	11.63 (22)	.590	11.76 (212)	12.02 (6)	.923
Median	9 (305)	9.37 (225)	9.250 (63)	.353	10.5 (57)	.132	8.50 (214)	10.38 (28)	.168	10 (21)	.890	9.17 (218)	9.50 (31)	.831	9 (291)	10.5 (9)	.533
80th percentile	17 (124)	17.77 (90)	16.50 (26)		17.80 (23)		17 (85)	17.87 (12)		21.58 (9)		17 (89)	16 (12)		17.15 (114)	13.96 (4)	
90th percentile	24 (62)	24.00 (48)	24.00 (14)		24.41 (12)		23.25 (42)	25.80 (6)		25.28 (5)		24 (45)	22.5 (6)		24 (60)	19.90 (2)	
95th percentile	30 (31)	30.00 (24)	29.75 (7)		32.2 (6)		29.05 (21)	34.66 (3)		30 (3)		30.2 (22)	26.4 (3)		30 (30)	29.20 (1)	

Nulliparous women, overall n=665

Each cell shows hours of latent labor (sample size continuing labor at and beyond point of distribution)

Point of distribution	Overall sample	No GBS	GBS	P value	No PROM	PROM	P value	Early term delivery	P value (compared to term delivery)	Term delivery	Late term delivery	P value (compared to term delivery)	OA presentation	OP/OT presentation	P value	No chorionamnionitis	Chorioamnionitis	P value
Mean	11.77 (220)	11.74 (167)	11.79 (53)	.964	11.71 (213)	13.63 (8)	.484	11.57 (27)	.925	11.45 (139)	12.68 (51)	.255	11.59 (195)	16.21 (15)	.010	11.69 (207)	13.22 (11)	.440
Median	9 (305)	9 (232)	9.50 (68)	.579	9 (295)	13.33 (8)	.220	9.48 (39)	.874	8.5 (189)	10 (75)	.284	9 (265)	11.75 (20)	.023	9 (289)	9.50 (16)	.250
80th percentile	17 (124)	17 (92)	17.78 (27)		17 (120)	17 (4)		16.86 (16)		17 (76)	17.83 (29)		17 (106)	22.40 (8)		17 (117)	24 (7)	
90th percentile	24 (62)	24 (48)	22.57 (14)		24 (60)	21.50 (2)		24 (9)		22.28 (38)	26 (15)		24 (53)	30.23 (4)		23.27 (56)	27 (4)	
95th percentile	30 (31)	30.18 (23)	27.68 (7)		30 (30)	28.75 (1)		28.08 (4)		29 (20)	32.27 (8)		29.1 (26)	53.11 (2)		30 (29)	31.70 (2)	

Multiparous women (n=616)

Each cell shows hours of latent labor (sample size continuing labor at and beyond point of distribution)

Point of distribution	Overall sample	Not married/partnered	Married/partnered	P value	No hypertension	Hypertension	P value	No diabetes	Diabetes	P value	Birthweight small for gestational age	P value (compared to at gestational age)	Birthweight at gestational age	Birthweight large for gestational age	P value (compared to at gestational age)
Mean	9.28 (211)	14.19 (8)	9.16 (205)	.057	9.30 (205)	8.41 (6)	.718	9.43 (201)	6.91 (13)	.139	11.09 (7)	.236	9.15 (161)	10.09 (16)	.305
Median	6.83 (287)	15.41 (7)	6.50 (290)	.022	6.83 (279)	6.63 (8)	.744	7 (273)	5.18 (18)	.163	5.50 (13)	.890	6.92 (217)	6.42 (28)	.764
80th percentile	13.50 (116)	18.89 (3)	13 (120)		13.50 (113)	13.15 (4)		13.50 (112)	11.52 (7)		14.10 (5)		13.50 (90)	12.57 (11)	
90th percentile	19 (59)	23.56 (2)	18.80 (56)		19.15 (56)	15.32 (2)		19.41 (54)	14.90 (4)		14.55 (3)		19.26 (44)	19.60 (6)	
95th percentile	24.50 (29)	29.79 (1)	24.17 (28)		24.50 (29)	17.63 (1)		24.51 (27)	19.53 (2)		47.81 (2)		24.50 (23)	23 (3)	

Multiparous women (n=616) Each cell shows hours of latent labor (sample size continuing labor at and beyond point of distribution)																	
Point of distribution	Overall sample	Maternal age <35 years	Maternal age 35+ years	P value	Overweight BMI	P value (compared to Normal/underweight BMI)	Normal/underweight BMI	Obese BMI	P value (compared to Normal/underweight BMI)	Lowest 10% height	P value (compared to middle 10-80%)	Middle 10-80% height	Highest 10% height	P value (compared to middle 10-80%)	CDC weight gain recommended	CDC weight gain over	P value
Mean	9.28 (211)	8.85 (156)	10.23 (58)	.136	9.19 (40)	.990	9.2 (142)	9.95 (27)	.585	9.20 (15)	0.860	9.48 (149)	8.53 (29)	.698	9.34 (202)	6.63 (6)	.261
Median	6.83 (287)	6.75 (205)	6.75 (78)	.638	7.42 (61)	.977	6.33 (195)	8.50 (30)	.059	7.67 (23)	.566	7 (203)	6 (38)	.769	7 (276)	5.50 (9)	.313
80th percentile	13.50 (116)	13.00 (85)	14.50 (32)		13.12 (25)		13 (81)	16.03 (12)		14.01 (9)		14 (82)	12 (17)		13.50 (112)	12.62 (4)	
90th percentile	19 (59)	17.00 (44)	20.63 (16)		19.33 (13)		18.52 (39)	19.60 (6)		20.50 (6)		19.46 (41)	16.95 (8)		19.37 (56)	14.40 (2)	
95th percentile	24.50 (29)	23.65 (21)	25.62 (8)		24.88 (7)		24.36 (20)	23.21 (3)		22.99 (3)		24.44 (21)	23.45 (4)		24.5 (29)	15.21 (1)	

Multiparous women (n=616)

Each cell shows hours of latent labor (sample size continuing labor at and beyond point of distribution)

Point of distribution	Overall sample	No GBS	GBS	P value	No PROM	PROM	P value	Early term delivery	P value (compared to term delivery)	Term delivery	Late term delivery	P value (compared to term delivery)	OA presentation	OP/OT presentation	P value	No chorioamnionitis	Chorioamnionitis	P value
Mean	9.28 (211)	9.47 (157)	8.73 (54)	.439	9.22 (203)	11.16 (6)	.422	9.59 (31)	.345	8.59 (135)	10.97 (45)	.012	9.29 (196)	8.48 (7)	.673	9.05 (205)	18.33 (5)	<.001
Median	6.83 (287)	6.75 (217)	7.33 (69)	.999	6.58 (278)	8 (9)	.199	7 (47)	.934	6.50 (177)	7.50 (66)	.125	7 (265)	5.75 (14)	.585	6.50 (290)	15.90 (7)	.001
80th percentile	13.50 (116)	13.50 (89)	12.81 (28)		13.50 (113)	12 (5)		13 (21)		13 (73)	15.20 (26)		13.5 (107)	15.08 (6)		13 (118)	23.07 (3)	
90th percentile	19 (59)	19.29 (44)	18.29 (14)		18.86 (56)	22.40 (2)		18.97 (10)		17.30 (35)	24 (14)		18.83 (53)	22.74 (3)		18.30 (56)	31.44 (2)	
95th percentile	24.50 (29)	24.52 (22)	23.02 (7)		24.21 (28)	26.60 (1)		24.32 (5)		22.81 (18)	33.78 (7)		24.39 (27)	23.70 (2)		24.01 (28)	40.78 (1)	