Table 1. Obstetric data of the women included in the study.

Variable	Total (n=270)
Age (years), md [95%CI]	29.0 [27.6-29.5]
Race/ethnicity, n (%)	
White	196 (726)
Nonwhite	74 (27.4)
Marital status, n (%)	
Single	223 (82.6)
Married or cohabitating	47 (17.4)
Educational attainment, n (%)	
Incomplete primary education	64 (23.7)
Completed primary education	48 (17.8)
Incomplete secondary education	38 (14.1)
Completed secondary education	83 (30.7)
Incomplete higher education	24 (8.9)
Completed higher education	13 (4.8)
Gestational age at sampling (days), md [95%CI]	245.0 [237.3-249.3]
Gestational age < 35 weeks (days), n (%)	131 (48.7)
Gestational age at birth (days), md [95%CI]	270.0 [261.5-266.5]
Parity, n (%)	
Nulliparous	106 (39.3)
Primiparous	72 (26.7)
Multiparous	92 (34.1)
Number of antenatal appointments, md [95%CI]	8.0 [7.9-8.8]
Mode of delivery, n (%)	
Cesarean	134 (49.6)
Vaginal	126 (46.7)
Missing	10 (37)

Complications, n (%)	
Yes	33 (12.2)
No	227 (84.1)
Missing	10 (3.7)
Type of complications, n (%)	
Uterine hypotonicity	21 (58.3)
Chorioamnionitis	6 (16.7)
Reintervention	4 (11.1)
ICU admission	2 (5.6)
Postpartum fever	2 (5.6)
Endometritis	1 (2.8)
Sample collection setting – n (%)	
Inpatient	103 (38.1)
Outpatient	167 (61.9)

n, absolute frequency; %, relative frequency; md, median; 95%CI, 95% confidence interval; ICU, Intensive Care Unit.

Table 2. Fetal characteristics and neonatal outcomes.

Variables	**Total (n=282)***
Prematurity – n (%)	
Yes	84 (29.8)
No	187 (66.3)
Missing	11 (3.9)
Preterm birth – n (%)	
Extremely preterm (GA ≤194 days)	4 (4.8)
Very preterm (GA 195-223 days)	7 (8.3)
Moderate to late preterm (GA 224-258 days)	73 (86.9)
Fetal malformations – n (%)	
Yes	11 (3.9)
No	271 (96.1)
Birthweight – n (%)	
Extremely low (≤999 g)	5 (1.8)
Very low (1000–1499 g)	4 (1.4)
Low (1500–2499 g)	67 (23.8)
Adequate (≥2500 g)	195 (69.1)
Missing	11 (3.9)
Neonatal death – n (%)	
Yes	7 (2.5)
No	262 (92.9)
Fetal death	2 (0.7)
Missing	11 (3.9)
Apgar score, 5-minute – md[95%CI]	8.9 [8.8-9.1]
Neonatal asphyxia– n (%)	
Yes	17 (6.1)
No	221 (78.9)

Missing	42 (15.0)
NICU admission – n (%)	
Yes	92 (32.6)
No	176 (62.4)
Fetal death	2 (0.7)
Missing	12 (4.3)
Cause of NICU admission – n (%)	
Respiratory distress	49 (53.3)
Jaundice	20 (21.7)
Prematurity	20 (21.7)
Sepsis	19 (20.7)
Fetal falformation	11 (12.0)
Congenital syphilis	10 (10.9)
Hypoglycemia	9 (9.8)
Low birthweight	3 (3.3)
Maternal condition	2 (2.2)
Cyanosis and hypertonia	1 (1.1)
Workup of cutaneous lesions	1 (1.1)
Workup of urinary tract malformation	1 (1.1)
Ischemic–hypoxic encephalopathy	1 (1.1)
Causes of neonatal death – n (%)	
Fetal malformation	5 (71.4)
Extreme prematurity	2 (28.6)

n, absolute frequency; %, relative frequency; md, median; 95%CI, 95% confidence interval; NICU, Neonatal Intensive Care Unit; *n=282, including twins

Table 3. Results of antepartum GBS screening by real-time PCR, Xpert GBS, and culture.

Variable	**Total (n=810)**	**Real-time PCR (n=270)**	**Xpert GBS (*n*=270)**	**Culture (n=270)**
Status – n (%)				
Positive	245 (30.2)	135 (50.0)	75 (27.8)	35 (13.0)
Negative	507 (62.6)	129 (47.8)	169 (62.6)	209 (77.4)
Inconclusive	1 (0.0)	0 (0.0)	1 (0.4)	0 (0.0)
Error	21 (2.6)	0 (0.0)	21 (7.8)	0 (0.0)
No result	4 (0.5)	0 (0.0)	4 (1.5)	0 (0.0)
Not done	32 (4.0)	6 (2.2)	0 (0.0)	26 (9.6)
Valid results – n	752	264	244	244
Positive	245 (32.6)	135 (51.1)	75 (30.7)	35 (14.3)
Negative	507 (67.4)	128 (48.9)	169 (69.3)	209 (85.7)

PCR, polymerase chain reaction; n, absolute frequency; %, relative frequency.

Table 4. Pairwise comparisons between diagnostic tests used for GBS screening.

n (%)		Positive	Negative	Total	*p-value	Kappa	Cronbach's α
		Real-time PCR					
Xpert GBS	Positive	66 (53.0)	8 (7.0)	74 (31.0)	≤0.0001	0.456	0.665
	Negative	58 (47.0)	107 (93.0)	165 (69.0)			
	Total	124 (100.0)	115 (100.0)	239 (100.0)			
Culture	Positive	31 (25.4)	3 (2.5)	34 (14.2)	≤0.0001	0.226	0.471
	Negative	91 (74.6)	115 (97.5)	206 (85.8)			
	Total	122 (100.0)	118 (100.0)	240 (100.0)			
		Xpert GBS					
Culture	Positive	21 (31.8)	13 (8.4)	34 (15.5)	≤0.0001	0.271	0.447
	Negative	45 (68.2)	141 (91.6)	186 (84.5)			
	Total	66 (100.0)	154 (100.0)	220 (110.0)			

n, absolute frequency; %, relative frequency; PCR, polymerase chain reaction; p, statistical significance.

*Chi-square test with adjusted residual values.

Table 5. Correlations between obstetric characteristics and GBS positivity.

	Xpert GBS		Real-time PCR		Culture	
Items	**Coefficient**	***p-value**	**Coefficient**	***p-value**	**Coefficient**	***p-value**
Age	-0.075	0.242	0.036	0.561	0.047	0.464
Educational level	0.013	0.837	0.039	0.531	0.065	0.314
Single or not living with a partner	**-0.143**	**0.025**	-0.059	0.342	-0.040	0.535
Black ethnicity	0.094	0.141	0.054	0.385	0.037	0.562
Parity	-0.002	0.970	0.012	0.844	-0.091	0.154
Maternal complications	-0.087	0.183	-0.012	0.850	0.071	0.279
Chorioamnionitis	0.027	0.680	0.047	0.456	0.008	0.906
Endometritis	-0.044	0.499	0.061	0.334	-0.027	0.676
Intrapartum fever	0.037	0.573	-0.003	0.964	0.091	0.164
Neonatal complications	0.095	0.146	0.009	0.888	-0.002	0.971
NICU admission	-0.099	0.133	0.011	0.867	-0.031	0.641
Cause of NICU admission						
Sepsis	0.035	0.761	-0.053	0.629	0.061	0.587
Prematurity	**0.242**	**0.031**	-0.111	0.310	-0.003	0.976
Respiratory distress	-0.101	0.371	-0.028	0.800	-0.153	0.172
Ischemic–hypoxic encephalopathy	0.195	0.083	0.104	0.343	**0.282**	**0.011**
Hypothermia protocol	0.097	0.139	0.061	0.334	**0.156**	**0.017**

PCR, polymerase chain reaction; n, absolute frequency, %, relative frequency; NICU, Neonatal Intensive Care Unit; p, index of statistical significance.

*Spearman correlations. Significance set at 5% for all analyses.