

SUPPLEMENTAL MATERIAL

Table S1. Demographic, hemodynamic, circulating protein and pregnancy outcome characteristics of healthy pregnant and screen-positive.

	Healthy Pregnant Women	Screen-Positive Women	P
Second Trimester Assessment	n=20	n=26	
Maternal age, years	32 ± 3.0	34 ± 3.8	0.10
Gestational age, weeks	25 (23-25)	25 (23-25)	0.92
Ethnicity			0.13
Caucasian	15 (75)	13 (50)	
Black/Caribbean	0 (0)	3 (12)	
Asian/Indian	5 (25)	10 (38)	
BMI, kg/m ²	25 ± 3.7	28 ± 4.3	0.04
Uric acid, μmol/L	202 (168-226)	234 (189-274)	0.09
Maternal Hemodynamics			
Mean arterial pressure, mmHg	77 ± 6	85 ± 9	0.003
Heart rate, bpm	75 ± 7	82 ± 12	0.03
Stroke volume, mL	95 (86-110)	76 (66-85)	0.002
Cardiac output, L/min	7.5 (6.5-8.3)	5.8 (5.3-6.6)	<0.0001
Total peripheral resistance, dyn·s/cm ⁵	877 (789-1083)	1179 (1015-1358)	<0.0001
Pulsatility index of uterine artery	0.90 (0.79-0.95)	1.82 (1.5-2.1)	0.0002
Circulating proteins			
PlGF, pg/mL	444 (356-540)	185 (67-341)	0.0002
sFlt-1, pg/mL	1072 (310-1683)	1871 (655-3259)	0.27
Endoglin, ng/mL	6.2 (4.9-7.3)	9.7 (5.7-14.6)	0.004
MPO, ng/mL	25 (16-41)	19 (9.5-29)	0.11
Endothelin, pg/mL	0.69 (0.6-1.1)	0.9 (0.6-1.7)	0.15
Pregnancy Outcome	n=19	n=25	
Gestational age, weeks	39 (38-40)	34 (33-38)	< 0.0001
≤34 weeks	0 (0)	13 (52)	0.0001
Mode of delivery			0.07
Vaginal	14 (74)	11 (44)	
Cesarean section	5 (26)	14 (56)	
Birthweight, kg	3.32 (3.1-3.7)	1.80 (1.3-2.6)	< 0.0001
<10 th centile	2 (11)	11 (44)	0.02
Hypertensive disorder of pregnancy	1 (5)	10 (40)	0.01
Preeclampsia	1 (5)	7 (28)	0.11
Gestational hypertension	0 (0)	3 (12)	0.25

Data are presented as mean ± SD, median (interquartile range) or n (%) as appropriate.

BMI indicates body mass index; PlGF indicates placental growth factor; sFlt-1 indicates soluble fms-like tyrosine kinase-1; MPO indicates myeloperoxidase.

Table S2. Screening test characteristics of the individual and consolidated variables (peripheral resistance, endoglin, cardiac output and PIGF) for the prediction of hypertension in pregnancy.

	AUC	95% CI	Threshold	Specificity	Sensitivity	Accuracy
Peripheral resistance	0.95	0.88-1.00	0.19	0.89	0.90	0.89
Endoglin	0.93	0.86-1.00	0.11	0.81	1.00	0.85
Mean arterial pressure	0.91	0.83-1.00	0.14	0.75	1.00	0.80
PIGF	0.82	0.63-1.00	0.45	0.94	0.70	0.89
Cardiac output	0.81	0.70-0.95	0.17	0.64	0.90	0.70
Pulsatility index	0.81	0.67-0.95	0.10	0.56	1.00	0.65
Stroke volume	0.75	0.59-0.92	0.20	0.69	0.90	0.74
sFlt-1	0.70	0.46-0.94	0.29	0.92	0.60	0.85
Endothelin	0.66	0.46-0.86	0.42	1.00	0.30	0.85
BMI	0.59	0.38-0.79	0.19	0.36	0.90	0.48
Heart rate	0.58	0.38-0.79	0.24	0.75	0.50	0.70
Uric acid	0.56	0.35-0.77	0.20	0.53	0.71	0.57
MPO	0.53	0.34-0.72	0.20	0.33	0.90	0.46
Maternal age	0.53	0.28-0.77	0.31	1.00	0.20	0.83
Consolidated factors	0.98	0.93-1.00	0.39	0.97	0.90	0.96

PIGF indicates placental growth factor; sFlt-1 indicates soluble fms-like tyrosine kinase-1; BMI indicates body mass index; MPO indicates myeloperoxidase.