

Supplementary Table 1. Continuous clinical characteristics of the 48 samples across the transcriptional clusters.

	Cluster 1 N=19	Cluster 2 N=19	Cluster 3 N=5	Cluster 5 N=5	
Clinical Attribute	Mean (SD)¹				P-value
Parental demographics					
Maternal age (years)	32.5 (4.6)	35.1 (5.0)	37.0 (4.3)	31.6 (7.7)	0.19
Maternal BMI (kg/m ²)	26.5 (5.6)	26.1 (3.8)	24.9 (0.5)	24.7 (4.6)	0.79
Maternal height (cm)	163 (6)	163 (7)	161 (5)	161 (11)	0.95
Uteroplacental blood flow/Ultrasound data					
Mean uterine artery PI ²	0.86 (0.25)	1.84 (0.33)	1.64 (0.65)	--	0.03
Max uterine artery PI ²	1.02 (0.34)	2.20 (0.26)	2.15 (0.79)	--	0.02
Mean umbilical artery PI ²	0.98 (0.10)	1.56 (0.42)	1.42 (0.35)	1.45 (0.11)	< 0.01
Max umbilical artery PI ²	1.10 (0.17)	1.71 (0.40)	1.64 (0.32)	1.63 (0.24)	< 0.01
Mean middle cerebral artery PI ²	1.73 (0.11)	1.47 (0.24)	1.49 (0.15)	1.85 (0.40)	0.03
Min middle cerebral artery PI ²	1.58 (0.19)	1.26 (0.19)	1.27 (0.13)	1.55 (0.31)	0.02
Mean middle cerebral artery peak systolic velocity (cm/sec)	54.3 (15.1)	51.4 (11.1)	48.2 (12.0)	48.8 (6.3)	0.80
Max middle cerebral artery peak systolic velocity (cm/sec)	58.8 (20.2)	58.8 (11.3)	57.5 (9.6)	54.4 (8.1)	0.94
Mean biophysical profile score (/10)	7.86 (0.34)	7.56 (0.69)	7.23 (0.92)	8.00 (0)	0.21
Min biophysical profile score (/10)	7.56 (0.88)	7.13 (1.02)	6.80 (1.10)	8.00 (0)	0.27
Preeclampsia diagnostic criteria					
Max systolic pressure (mm Hg)	137 (24)	175 (17)	160 (22)	154 (23)	< 0.01
Max diastolic pressure (mm Hg)	86 (14)	111 (13)	98 (7)	98 (12)	< 0.01
Max mean arterial pressure (mm Hg)	102 (16)	131 (14)	116 (11)	116 (16)	< 0.01
Max proteinuria level (dipstick)	+1.3 (1.3)	+3.5 (0.9)	+2.0 (1.0)	+2.8 (1.9)	< 0.01
Fetal demographics					
Gestational age at delivery (weeks)	36 (3)	31 (3)	32 (4)	33 (3)	< 0.01
Newborn weight z-score	0.15 (1.06)	-1.51 (0.59)	-1.77 (0.46)	-1.25 (1.05)	< 0.01
Apgar score at 1 minute (/10)	8.0 (1.5)	7.5 (1.7)	7.5 (1.7)	7.2 (2.4)	0.50
Apgar score at 5 minutes (/10)	8.8 (0.5)	8.9 (0.4)	8.8 (0.5)	8.4 (1.3)	0.87
Placental and umbilical cord data					
Placental weight z-score	-0.06 (0.89)	-1.40 (0.74)	-1.58 (0.70)	-1.00 (0.80)	< 0.01
Placental thickness (cm)	3.18 (0.72)	2.38 (1.43)	1.86 (0.80)	2.20 (0.23)	< 0.01
Placental asymmetry (ratio)	0.12 (0.09)	0.16 (0.09)	0.13 (0.08)	0.21 (0.13)	0.35
Cord insertion distance from placental margin (cm)	3.93 (1.17)	2.32 (0.86)	2.70 (1.03)	2.80 (0.75)	0.01
Cord diameter (cm)	1.30 (0.25)	1.16 (0.42)	0.86 (0.23)	1.16 (0.23)	0.03

¹Only included if values were available for at least 3 samples in the cluster

²PI = pulsatility index