

Table S1. Datasets of maternal-fetal interface transcriptome for the associated factors and the subtypes.

Tissue/condition	Sample size (n=eligible/original)			
Discovery sets, the associated factors				
Endometrium	GSE4888 (n=15/27)	GSE6364 (n=13/37)	Total	
Proliferative phase	2	2		4
Early-secretory phase	2	3		5
Mid-secretory phase	8	8		16
Late-secretory phase	3	0		3
Decidua	EMTAB680 (n=21/24)		Total	
Ectopic, none	5			5
Ectopic, intermediate	6			6
Intrauterine, intermediate	5			5
Intrauterine, confluent	5			5
Placenta	GSE12767 (n=8/12)	GSE9984 (n=10/12)	Total	
First trimester	8	4		12
Second trimester	0	3		3
Term	0	3		3
Placenta	GSE75010* (n=103/109)	GSE98224 (n=43/48)	Total	
Second trimester, non-chorioamnionitis	3	1		4
Second trimester, chorioamnionitis	4	0		4
Third trimester, non-chorioamnionitis	85	42		127
Third trimester, chorioamnionitis	11	0		11
Placenta	GSE75010* (n=103/109)	GSE98224 (n=43/48)	Total	
Second trimester, non-HELLP	5	0		5
Second trimester, HELLP	2	1		3
Third trimester, non-HELLP	81	38		119
Third trimester, HELLP	15	4		19
Condition	Sample size (n=eligible/original)			Total
	GSE75010* (n=83/109)	GSE98224 (n=39/48)	GSE100415 (n=17/20)	
Discovery sets, the subtypes				
Control				
Normotensive pregnancy	12	6	0	18
PE				
Early-onset, mild-to-moderate †	0	1	0	1
Late-onset, mild-to-moderate †	2	0	0	2
Early-onset, severe	12	3	0	15
Late-onset, severe	4	3	0	7
PE, FGR				
Early-onset, mild-to-moderate	3	1	0	4
Late-onset, mild-to-moderate	1	2	0	3
Early-onset, severe	7	4	0	11
Late-onset, severe	4	3	0	7
Superimposed PE				
Late-onset, mild-to-moderate	2	1	0	3
Early-onset, severe	6	3	0	9
Late-onset, severe †	0	2	0	2
Superimposed PE, FGR				
Late-onset, mild-to-moderate †	0	1	0	1
Early-onset, severe	3	3	0	6
Late-onset, severe †	2	0	0	2
Gestational hypertension				
Early-onset	5	1	0	6
Late-onset	4	1	0	5
Gestational hypertension, FGR				
Late-onset	0	0	6	6
Chronic hypertension				
Early-onset †	1	0	0	1
Late-onset	5	0	0	5
Chronic hypertension, FGR				
Early-onset	4	4	0	8
Late-onset	6	0	0	6
FGR				
Late-onset	0	0	11	11

Condition	Sample size (<i>n</i> =eligible/original)							Total
	GSE30186 (<i>n</i> =8/12)	GSE10588 (<i>n</i> =29/43)	GSE24129 (<i>n</i> =19/24)	GSE25906 (<i>n</i> =27/60)	GSE4707 (<i>n</i> =4/14)	GSE44711 (<i>n</i> =7/16)	GSE128381 (<i>n</i> =148/183)	
<i>Validation sets, the subtypes</i>								
<i>Control</i>								
Normotensive pregnancy	6	23	8	23	4	6	141	211
<i>PE</i>								
Early-onset, severe †	0	0	1	0	0	1	0	2
Late-onset, severe	0	3	4	0	0	0	0	7
<i>PE, FGR</i>								
Late-onset, mild-to-moderate †	1	0	0	0	0	0	0	1
Late-onset, severe	1	2	0	0	0	0	0	3
<i>Gestational hypertension</i>								
Late-onset	0	0	0	0	0	0	7	7
<i>FGR</i>								
Late-onset	0	1	6	4	0	0	0	11

*, excluding the samples that overlap with those of GSE98224; †, ineligible due to small sample size; FGR, fetal growth restriction; HELLP, hemolysis, elevated liver enzymes, and low platelets; PE, preeclampsia.

Table S2. List of samples in discovery and validation datasets for the associated factors and the subtypes.

Variable	Set	Tissue	Description	Series	Samples
Associated factor	Discovery set	Endometrium	Proliferative phase	GSE4888	GSM109814, GSM109815
				GSE6364	GSM150198, GSM150201
			Early-secretory phase	GSE4888	GSM109820, GSM109821
				GSE6364	GSM150208, GSM150209, GSM150210
			Mid-secretory phase	GSE4888	GSM109824, GSM109825, GSM109826, GSM109827, GSM109828, GSM109829, GSM109830, GSM109831
				GSE6364	GSM150220, GSM150221, GSM150222, GSM150223, GSM150224, GSM150225, GSM150226, GSM150227
			Late-secretory phase	GSE4888	GSM109836, GSM109838, GSM109839
		Decidua	Ectopic, none	EMTAB680	3-12.CEL, 3-13.CEL, 3-4.CEL, 3-5.CEL, 3-9.CEL
			Ectopic, intermediate	EMTAB680	3-1.CEL, 3-10.CEL, 3-11.CEL, 3-3.CEL, 3-6.CEL, 3-7.CEL
			Intrauterine, intermediate	EMTAB680	1-6.CEL, 2-2.CEL, 2-3.CEL, 2-8.CEL, 2-9.CEL
			Intrauterine, confluent	EMTAB680	1-2.CEL, 1-4.CEL, 2-1.CEL, 2-12.CEL, 2-7.CEL
		Placenta	First trimester	GSE12767	GSM320282, GSM320285, GSM320286, GSM320287, GSM320289, GSM320290, GSM320291, GSM320293
				GSE9984	GSM252349, GSM252350, GSM252351, GSM252352
			Second trimester	GSE9984	GSM252353, GSM252354, GSM252355
		Placenta	Term	GSE9984	GSM252357, GSM252358, GSM252359
			Second trimester, non-chorioamnionitis	GSE75010	GSM1940562, GSM1940568, GSM1940620
				GSE98224	GSM1940589
			Second trimester, chorioamnionitis	GSE75010	GSM1940538, GSM1940585, GSM1940588, GSM1940605
			Third trimester, non-chorioamnionitis	GSE75010	GSM1940492, GSM1940493, GSM1940494, GSM1940497, GSM1940498, GSM1940503, GSM1940504, GSM1940510, GSM1940512, GSM1940514, GSM1940515, GSM1940516, GSM1940521, GSM1940523, GSM1940525, GSM1940528, GSM1940530, GSM1940531, GSM1940532, GSM1940533, GSM1940536, GSM1940537, GSM1940540, GSM1940541, GSM1940543, GSM1940546, GSM1940550, GSM1940551, GSM1940552, GSM1940554, GSM1940555, GSM1940557, GSM1940558, GSM1940560, GSM1940561, GSM1940563, GSM1940564, GSM1940565, GSM1940566, GSM1940567, GSM1940570, GSM1940571, GSM1940572, GSM1940573, GSM1940574, GSM1940575, GSM1940577, GSM1940578, GSM1940579, GSM1940580, GSM1940584, GSM1940590, GSM1940591, GSM1940592, GSM1940595, GSM1940596, GSM1940597, GSM1940598, GSM1940599, GSM1940600, GSM1940604, GSM1940610, GSM1940611, GSM1940612, GSM1940613, GSM1940615, GSM1940616, GSM1940617, GSM1940619, GSM1940624, GSM1940627, GSM1940628, GSM1940629, GSM1940631, GSM1940632, GSM1940633, GSM1940634, GSM1940635, GSM1940637, GSM1940639, GSM1940640, GSM1940641, GSM1940643, GSM1940646, GSM1940648
				GSE98224	GSM1940495, GSM1940496, GSM1940499, GSM1940500, GSM1940501, GSM1940502, GSM1940505, GSM1940506, GSM1940507, GSM1940508, GSM1940509, GSM1940518, GSM1940520, GSM1940524, GSM1940534, GSM1940535, GSM1940542, GSM1940545, GSM1940548, GSM1940549, GSM1940553, GSM1940582, GSM1940583, GSM1940586, GSM1940593, GSM1940594, GSM1940602, GSM1940603, GSM1940606, GSM1940608, GSM1940614, GSM1940618, GSM1940621,

Variable	Set	Tissue	Description	Series	Samples
		Placenta	Third trimester, chorioamnionitis	GSE75010	GSM1940622, GSM1940623, GSM1940625, GSM1940626, GSM1940630, GSM1940638, GSM1940642, GSM1940644, GSM1940645
					GSM1940511, GSM1940513, GSM1940517, GSM1940529, GSM1940539, GSM1940544, GSM1940581, GSM1940587, GSM1940601, GSM1940609, GSM1940647
			Second trimester, non-HELLP	GSE75010	GSM1940538, GSM1940568, GSM1940585, GSM1940588, GSM1940605
			Second trimester, HELLP	GSE75010 GSE98224	GSM1940562, GSM1940620 GSM1940589
			Third trimester, non-HELLP	GSE75010	GSM1940492, GSM1940493, GSM1940494, GSM1940497, GSM1940503, GSM1940504, GSM1940510, GSM1940511, GSM1940512, GSM1940513, GSM1940514, GSM1940515, GSM1940516, GSM1940517, GSM1940521, GSM1940523, GSM1940525, GSM1940528, GSM1940529, GSM1940530, GSM1940531, GSM1940532, GSM1940533, GSM1940536, GSM1940537, GSM1940539, GSM1940540, GSM1940541, GSM1940543, GSM1940544, GSM1940546, GSM1940550, GSM1940551, GSM1940554, GSM1940555, GSM1940557, GSM1940560, GSM1940561, GSM1940563, GSM1940566, GSM1940567, GSM1940570, GSM1940571, GSM1940574, GSM1940575, GSM1940578, GSM1940579, GSM1940580, GSM1940581, GSM1940584, GSM1940587, GSM1940590, GSM1940591, GSM1940592, GSM1940595, GSM1940596, GSM1940597, GSM1940598, GSM1940600, GSM1940601, GSM1940609, GSM1940610, GSM1940611, GSM1940613, GSM1940615, GSM1940619, GSM1940624, GSM1940627, GSM1940628, GSM1940629, GSM1940631, GSM1940634, GSM1940635, GSM1940637, GSM1940639, GSM1940640, GSM1940641, GSM1940643, GSM1940646, GSM1940647, GSM1940648
				GSE98224	GSM1940495, GSM1940496, GSM1940499, GSM1940500, GSM1940501, GSM1940502, GSM1940506, GSM1940507, GSM1940509, GSM1940518, GSM1940524, GSM1940534, GSM1940535, GSM1940542, GSM1940545, GSM1940548, GSM1940549, GSM1940553, GSM1940582, GSM1940583, GSM1940586, GSM1940594, GSM1940602, GSM1940603, GSM1940606, GSM1940608, GSM1940614, GSM1940618, GSM1940621, GSM1940622, GSM1940623, GSM1940625, GSM1940626, GSM1940630, GSM1940638, GSM1940642, GSM1940644, GSM1940645
			Third trimester, HELLP	GSE75010	GSM1940498, GSM1940552, GSM1940558, GSM1940564, GSM1940565, GSM1940572, GSM1940573, GSM1940577, GSM1940599, GSM1940604, GSM1940612, GSM1940616, GSM1940617, GSM1940632, GSM1940633
				GSE98224	GSM1940505, GSM1940508, GSM1940520, GSM1940593
			Control, normotensive pregnancy	GSE75010	GSM1940503, GSM1940531, GSM1940532, GSM1940533, GSM1940551, GSM1940555, GSM1940615, GSM1940627, GSM1940629, GSM1940637, GSM1940640, GSM1940643
				GSE98224	GSM1940545, GSM1940608, GSM1940621, GSM1940622, GSM1940623, GSM1940638
			PE, early-onset, mild-to-moderate	GSE98224	GSM1940501
Subtype	Discovery set	Placenta	Control, normotensive pregnancy	GSE75010	GSM1940503, GSM1940531, GSM1940532, GSM1940533, GSM1940551, GSM1940555, GSM1940615, GSM1940627, GSM1940629, GSM1940637, GSM1940640, GSM1940643
			PE, early-onset, mild-to-moderate	GSE98224	GSM1940545, GSM1940608, GSM1940621, GSM1940622, GSM1940623, GSM1940638

Variable	Set	Tissue	Description	Series	Samples
			PE, late-onset, mild-to-moderate	GSE75010	GSM1940560, GSM1940647
			PE, early-onset, severe	GSE75010	GSM1940504, GSM1940515, GSM1940521, GSM1940540, GSM1940558, GSM1940574, GSM1940596, GSM1940611, GSM1940612, GSM1940617, GSM1940632, GSM1940648
			PE, late-onset, severe	GSE98224	GSM1940593, GSM1940602, GSM1940644
				GSE75010	GSM1940525, GSM1940564, GSM1940565, GSM1940631
			PE, early-onset, mild-to-moderate, FGR	GSE98224	GSM1940495, GSM1940502, GSM1940534
				GSE75010	GSM1940512, GSM1940537, GSM1940546
				GSE98224	GSM1940553
			PE, FGR, late-onset, mild-to-moderate	GSE75010	GSM1940528
				GSE98224	GSM1940535, GSM1940582
			PE, FGR, early-onset, severe	GSE75010	GSM1940514, GSM1940550, GSM1940552, GSM1940584, GSM1940590, GSM1940604, GSM1940616
				GSE98224	GSM1940505, GSM1940520, GSM1940542, GSM1940625
			PE, late-onset, severe	GSE75010	GSM1940492, GSM1940567, GSM1940573, GSM1940641
				GSE98224	GSM1940506, GSM1940518, GSM1940603
			Superimposed PE, late-onset, mild-to-moderate	GSE75010	GSM1940510, GSM1940619
				GSE98224	GSM1940606
			Superimposed PE, early-onset, severe	GSE75010	GSM1940498, GSM1940571, GSM1940572, GSM1940577, GSM1940599, GSM1940633
				GSE98224	GSM1940508, GSM1940549, GSM1940626
			Superimposed PE, late-onset, severe	GSE98224	GSM1940509, GSM1940614
			Superimposed PE, FGR, late-onset, mild-to-moderate	GSE98224	GSM1940499
			Superimposed PE, FGR, early-onset, severe	GSE75010	GSM1940530, GSM1940541, GSM1940635
				GSE98224	GSM1940496, GSM1940500, GSM1940583
			Superimposed PE, FGR, late-onset, severe	GSE75010	GSM1940592, GSM1940610
			Gestational hypertension, early-onset	GSE75010	GSM1940517, GSM1940536, GSM1940544, GSM1940570, GSM1940609
				GSE98224	GSM1940524
			Gestational hypertension, late-onset	GSE75010	GSM1940497, GSM1940613, GSM1940639, GSM1940646
				GSE98224	GSM1940618
			Gestational hypertension, FGR, late-onset	GSE100415	GSM2680543, GSM2680544, GSM2680547, GSM2680552, GSM2680555, GSM2680559
			Chronic hypertension, early-onset	GSE75010	GSM1940579
			Chronic hypertension, late-onset	GSE75010	GSM1940493, GSM1940494, GSM1940575, GSM1940578, GSM1940580
			Chronic hypertension, FGR, early-onset	GSE75010	GSM1940591, GSM1940597, GSM1940598, GSM1940624
				GSE98224	GSM1940586, GSM1940594, GSM1940630, GSM1940642
			Chronic hypertension, FGR, late-onset	GSE75010	GSM1940523, GSM1940543, GSM1940566, GSM1940595, GSM1940600, GSM1940628
			FGR, late-onset	GSE100415	GSM2680540, GSM2680541, GSM2680542, GSM2680545, GSM2680546, GSM2680549, GSM2680553, GSM2680554, GSM2680556, GSM2680557, GSM2680558

Variable	Set	Tissue	Description	Series	Samples
Validation set		Placenta	Control, normotensive pregnancy	GSE30186	GSM747304, GSM747305, GSM747306, GSM747307, GSM747308, GSM747309
				GSE10588	GSM225470, GSM225471, GSM225472, GSM225473, GSM225474, GSM225475, GSM225476, GSM225477, GSM225478, GSM225479, GSM225480, GSM225484, GSM225485, GSM225486, GSM225488, GSM225489, GSM225490, GSM225491, GSM225492, GSM225493, GSM225494, GSM225496, GSM225497
				GSE24129	GSM594041, GSM594042, GSM594043, GSM594044, GSM594045, GSM594046, GSM594047, GSM594048
				GSE25906	GSM635909, GSM635910, GSM635913, GSM635917, GSM635918, GSM635919, GSM635921, GSM635925, GSM635929, GSM635934, GSM635939, GSM635941, GSM635942, GSM635944, GSM635946, GSM635949, GSM635952, GSM635954, GSM635955, GSM635956, GSM635958, GSM635959, GSM635963
				GSE4707	GSM106249, GSM106250, GSM106274, GSM106275
				GSE44711	GSM1089237, GSM1089238, GSM1089239, GSM1089241, GSM1089243, GSM1089244
				GSE128381	GSM3673224, GSM3673225, GSM3673227, GSM3673228, GSM3673229, GSM3673230, GSM3673232, GSM3673233, GSM3673237, GSM3673241, GSM3673242, GSM3673246, GSM3673247, GSM3673248, GSM3673250, GSM3673252, GSM3673253, GSM3673254, GSM3673255, GSM3673257, GSM3673259, GSM3673261, GSM3673262, GSM3673264, GSM3673265, GSM3673270, GSM3673271, GSM3673272, GSM3673273, GSM3673274, GSM3673275, GSM3673277, GSM3673278, GSM3673279, GSM3673280, GSM3673282, GSM3673283, GSM3673284, GSM3673285, GSM3673289, GSM3673290, GSM3673291, GSM3673292, GSM3673293, GSM3673294, GSM3673295, GSM3673296, GSM3673297, GSM3673298, GSM3673299, GSM3673300, GSM3673301, GSM3673302, GSM3673303, GSM3673304, GSM3673306, GSM3673307, GSM3673309, GSM3673310, GSM3673311, GSM3673313, GSM3673315, GSM3673317, GSM3673318, GSM3673319, GSM3673320, GSM3673321, GSM3673322, GSM3673323, GSM3673324, GSM3673326, GSM3673327, GSM3673328, GSM3673331, GSM3673332, GSM3673333, GSM3673334, GSM3673336, GSM3673338, GSM3673339, GSM3673340, GSM3673341, GSM3673342, GSM3673343, GSM3673344, GSM3673345, GSM3673346, GSM3673347, GSM3673348, GSM3673349, GSM3673350, GSM3673351, GSM3673352, GSM3673353, GSM3673354, GSM3673355, GSM3673356, GSM3673357, GSM3673358, GSM3673359, GSM3673361, GSM3673363, GSM3673364, GSM3673366, GSM3673368, GSM3673369, GSM3673372, GSM3673373, GSM3673374, GSM3673375, GSM3673376, GSM3673377, GSM3673378, GSM3673379, GSM3673380, GSM3673381, GSM3673382, GSM3673383, GSM3673384, GSM3673385, GSM3673386, GSM3673387, GSM3673388, GSM3673389, GSM3673390, GSM3673391, GSM3673392, GSM3673393, GSM3673394, GSM3673395, GSM3673396, GSM3673397, GSM3673398, GSM3673399, GSM3673400, GSM3673401, GSM3673402, GSM3673403, GSM3673404, GSM3673405, GSM3673406
				GSE24129	GSM594060

Variable	Set	Tissue	Description	Series	Samples
			PE, early-onset, severe	GSE44711	GSM1089236
			PE, late-onset, severe	GSE10588	GSM225498, GSM225512, GSM225513
			PE, FGR, late-onset, mild-to-moderate	GSE24129 GSE30186	GSM594057, GSM594059, GSM594061, GSM594063 GSM747303
			PE, FGR, late-onset, severe	GSE30186	GSM747299
			Gestational hypertension, late-onset	GSE10588 GSE128381	GSM225499, GSM225502 GSM3673256, GSM3673267, GSM3673269, GSM3673286, GSM3673288, GSM3673329, GSM3673365
			FGR, late-onset	GSE10588 GSE24129 GSE25906	GSM225487 GSM594050, GSM594051, GSM594053, GSM594054, GSM594055, GSM594056 GSM635916, GSM635924, GSM635935, GSM635950

FGR, fetal growth restriction; HELLP, hemolysis, elevated liver enzymes, and low platelets; PE, preeclampsia.

Table S3. Phenotype characteristics of discovery sets of maternal-fetal interface transcriptome for the associated factors.

Tissue*	Variable	Value	Event	Nonevent
Endometrium	Condition	Control	<i>Early-secretory phase</i>	<i>Proliferative phase</i>
		Leiomyomata (SCH) Celexa	3/5 (60%)	3/4 (75%)
		Leiomyomata (TAH)	1/5 (20%)	0/4 (0%)
Endometrium	Condition	Control	<i>Mid-secretory phase</i>	<i>Proliferative phase</i>
		Leiomyomata (LAVH no endometriosis)	12/16 (75%)	3/4 (75%)
		Leiomyomata (TAH)	1/16 (6.2%)	0/4 (0%)
		Pelvic pain, no endometriosis at laparoscopy (TVH/TAH)	0/16 (0%)	1/4 (25%)
		Uterine prolapse (TVH) Allegra, Advil	1/16 (6.2%)	0/4 (0%)
Endometrium	Condition	Uterine prolapse, stress urinary incontinence (TVH)	1/16 (6.2%)	0/4 (0%)
		Control	<i>Late-secretory phase</i>	<i>Proliferative phase</i>
		Leiomyomata (TAH)	0/3 (0%)	3/4 (75%)
Placenta†	Gestational age	(weeks)	2/3 (67%)	1/4 (25%)
			1/3 (33%)	0/4 (0%)
			<i>First trimester</i>	<i>Term</i>
Placenta†	Gestational age	(weeks)	8.43 ± 0 (n=12; outlier=0; missing=8)	41 ± 0 (n=3; outlier=0; missing=0)
			<i>Second trimester</i>	<i>Term</i>
			16.43 ± 0 (n=3; outlier=0; missing=0)	41 ± 0 (n=3; outlier=0; missing=0)
Placenta	Attempted vaginal delivery	No	<i>Chorioamnionitis, second trimester</i>	<i>Non-chorioamnionitis, second trimester</i>
		Yes	0/4 (100%)	4/4 (100%)
	Delivery	C-Section	4/4 (100%)	0/4 (100%)
		Vaginal	2/4 (50%)	4/4 (100%)
	Gestational age	(weeks)	2/4 (50%)	0/4 (100%)
			26.21 ± 0.3 (n=4; outlier=0; missing=0)	26.36 ± 0.59 (n=4; outlier=0; missing=0)
	HELLP	No	4/4 (100%)	1/4 (25%)
		Yes	0/4 (0%)	3/4 (75%)
	FGR	No	4/4 (100%)	4/4 (100%)
		Yes	0/4 (0%)	0/4 (0%)
	Max. DBP during pregnancy	(mm Hg)	73.75 ± 13.67 (n=4; outlier=0; missing=0)	104.5 ± 9.26 (n=4; outlier=0; missing=0)
	Max. SBP during pregnancy	(mm Hg)	131.75 ± 10.31 (n=4; outlier=0; missing=0)	170.5 ± 20.29 (n=4; outlier=0; missing=0)
	Newborn weight	(Z-score)	-0.1 ± 0.93 (n=4; outlier=0; missing=0)	-0.88 ± 0.06 (n=4; outlier=0; missing=0)
Placenta	PE	No	4/4 (100%)	1/4 (25%)
		Yes	0/4 (0%)	3/4 (75%)
	Previous hypertension	NA	4/4 (100%)	4/4 (100%)
	Attempted vaginal delivery	No	<i>Chorioamnionitis, third trimester</i>	<i>Non-chorioamnionitis, third trimester</i>
		Yes	0/11 (0%)	79/127 (62.2%)
	Delivery	C-Section	11/11 (100%)	48/127 (37.8%)
		Vaginal	4/11 (36.4%)	98/127 (77.17%)
	Gestational age	(weeks)	7/11 (63.6%)	29/127 (22.83%)
			30.27 ± 3.4 (n=11; outlier=0; missing=0)	34.07 ± 3.9 (n=127; outlier=0; missing=0)
	HELLP	No	11/11 (100%)	108/127 (85.04%)
		Yes	0/11 (0%)	19/127 (14.96%)
	FGR	No	11/11 (100%)	89/127 (70.08%)
		Yes	0/11 (0%)	38/127 (29.92%)
	Max. DBP during pregnancy	(mm Hg)	78 ± 13.43 (n=11; outlier=0; missing=0)	99.4 ± 15.44 (n=127; outlier=0; missing=0)
	Max. SBP during pregnancy	(mm Hg)	123.09 ± 18.25 (n=11; outlier=0; missing=0)	157.57 ± 25.96 (n=127; outlier=0; missing=0)
	Newborn weight	(Z-score)	0.74 ± 0.69 (n=11; outlier=0; missing=0)	-0.84 ± 1.02 (n=127; outlier=0; missing=0)
	PE	No	10/11 (90.9%)	55/127 (43.31%)
		Yes	1/11 (9.1%)	72/127 (56.69%)

Tissue*	Variable	Value	Event	Nonevent
Placenta	Previous hypertension	NA	8/11 (72.7%)	75/127 (59.06%)
		No	3/11 (27.3%)	32/127 (25.2%)
		Yes	0/11 (0%)	20/127 (15.75%)
	HELLP, second trimester	HELLP, second trimester	HELLP, second trimester	Non-HELLP, second trimester
	Attempted vaginal delivery	No	3/3 (100%)	1/5 (20%)
		Yes	0/3 (0%)	4/5 (80%)
	Chorio-amnionitis	No	3/3 (100%)	1/5 (20%)
		Yes	0/3 (0%)	4/5 (80%)
	Delivery	C-Section	3/3 (100%)	3/5 (60%)
		Vaginal	0/3 (0%)	2/5 (40%)
	Gestational age (weeks)		26.48 ± 0.66 (n=3; outlier=0; missing=0)	26.17 ± 0.27 (n=5; outlier=0; missing=0)
			3/3 (100%)	5/5 (100%)
	FGR	No	0/3 (0%)	0/5 (0%)
		Yes	109 ± 2.65 (n=3; outlier=0; missing=0)	77.2 ± 14.13 (n=5; outlier=0; missing=0)
	Max. DBP during pregnancy	(mm Hg)	176 ± 20.88 (n=3; outlier=0; missing=0)	136.2 ± 13.37 (n=5; outlier=0; missing=0)
			176 ± 20.88 (n=3; outlier=0; missing=0)	136.2 ± 13.37 (n=5; outlier=0; missing=0)
	Max. SBP during pregnancy	(mm Hg)	176 ± 20.88 (n=3; outlier=0; missing=0)	136.2 ± 13.37 (n=5; outlier=0; missing=0)
			176 ± 20.88 (n=3; outlier=0; missing=0)	136.2 ± 13.37 (n=5; outlier=0; missing=0)
	Newborn weight (Z-score)		-0.88 ± 0.08 (n=3; outlier=0; missing=0)	-0.26 ± 0.88 (n=5; outlier=0; missing=0)
			-0.88 ± 0.08 (n=3; outlier=0; missing=0)	-0.26 ± 0.88 (n=5; outlier=0; missing=0)
Placenta	PE	No	0/3 (0%)	5/5 (100%)
		Yes	3/3 (100%)	0/5 (0%)
	Previous hypertension	NA	3/3 (100%)	5/5 (100%)
			3/3 (100%)	5/5 (100%)
	HELLP, third trimester	HELLP, third trimester	HELLP, third trimester	Non-HELLP, third trimester
	Attempted vaginal delivery	No	15/19 (78.9%)	64/119 (53.78%)
		Yes	4/19 (21.1%)	55/119 (46.22%)
	Chorio-amnionitis	No	19/19 (100%)	108/119 (90.76%)
		Yes	0/19 (0%)	11/119 (9.24%)
	Delivery	C-Section	18/19 (94.7%)	84/119 (70.59%)
		Vaginal	1/19 (5.3%)	35/119 (29.41%)
	Gestational age (weeks)		31.03 ± 3.02 (n=19; outlier=0; missing=0)	34.21 ± 3.96 (n=119; outlier=0; missing=0)
			31.03 ± 3.02 (n=19; outlier=0; missing=0)	34.21 ± 3.96 (n=119; outlier=0; missing=0)
	FGR	No	15/19 (78.9%)	85/119 (71.43%)
		Yes	4/19 (21.1%)	34/119 (28.57%)
	Max. DBP during pregnancy	(mm Hg)	112.26 ± 11.19 (n=19; outlier=0; missing=0)	95.37 ± 15.82 (n=119; outlier=0; missing=0)
			112.26 ± 11.19 (n=19; outlier=0; missing=0)	95.37 ± 15.82 (n=119; outlier=0; missing=0)
	Max. SBP during pregnancy	(mm Hg)	179.26 ± 21.12 (n=19; outlier=0; missing=0)	150.92 ± 25.89 (n=119; outlier=0; missing=0)
			179.26 ± 21.12 (n=19; outlier=0; missing=0)	150.92 ± 25.89 (n=119; outlier=0; missing=0)
	Newborn weight (Z-score)		-0.89 ± 0.65 (n=19; outlier=0; missing=0)	-0.69 ± 1.14 (n=119; outlier=0; missing=0)
			-0.89 ± 0.65 (n=19; outlier=0; missing=0)	-0.69 ± 1.14 (n=119; outlier=0; missing=0)
Placenta	PE	No	0/19 (0%)	65/119 (54.62%)
		Yes	19/19 (100%)	54/119 (45.38%)
	Previous hypertension	NA	17/19 (89.5%)	66/119 (55.46%)
		No	1/19 (5.3%)	34/119 (28.57%)
		Yes	1/19 (5.3%)	19/119 (15.97%)

*, no information for other phenotypes of the decidua transcriptome; †, all the samples were from the subjects undergone C-section without HELLP, FGR, PE, and previous hypertension; FGR, fetal growth restriction; HELLP, hemolysis, elevated liver enzymes, and low platelets; LAVH, laparoscopically-assisted vaginal hysterectomy; NA, not available; PE, preeclampsia; SCH, subtotal Cesarean hysterectomy; TAH, total abdominal hysterectomy; TVH, transvaginal hysterectomy.

Table S4. Phenotype characteristics of discovery and validation sets (if any) of placental transcriptome for the subtypes.

PE discovery and validation sets						
Set	Variable	Value	Early-onset, severe	Late-onset, severe	Control	
Discovery set	Attempted vaginal delivery	No	10/15 (66.7%)	1/7 (14%)	12/18 (66.7%)	
		Yes	5/15 (33.3%)	6/7 (86%)	6/18 (33.3%)	
	Chorio-amnionitis	No	15/15 (100%)	7/7 (100%)	18/18 (100%)	
		Yes	0/15 (0%)	0/7 (0%)	0/18 (0%)	
	Delivery	C-Section	15/15 (100%)	2/7 (29%)	13/18 (72.2%)	
		Vaginal	0/15 (0%)	5/7 (71%)	5/18 (27.8%)	
	Gestational age	(weeks)	30.66 ± 1.41 (n=15; outlier=0; missing=0)	36.47 ± 1.78 (n=7; outlier=0; missing=0)	39.06 ± 0.91 (n=18; outlier=0; missing=0)	
			10/15 (66.7%)	5/7 (71%)	18/18 (100%)	
	HELLP	No	5/15 (33.3%)	2/7 (29%)	0/18 (0%)	
		Yes				
	Max. DBP during pregnancy	(mm Hg)	108.27 ± 8.74 (n=15; outlier=0; missing=0)	104.29 ± 5.99 (n=7; outlier=0; missing=0)	76.72 ± 6.94 (n=18; outlier=0; missing=0)	
	Max. SBP during pregnancy	(mm Hg)	176 ± 12.68 (n=15; outlier=0; missing=0)	178.71 ± 13.76 (n=7; outlier=0; missing=0)	119.56 ± 6.49 (n=18; outlier=0; missing=0)	
	Newborn weight	(Z-score)	-0.43 ± 0.49 (n=15; outlier=0; missing=0)	-0.23 ± 0.58 (n=7; outlier=0; missing=0)	0.11 ± 0.71 (n=18; outlier=0; missing=0)	
Validation set	Delivery	NA		7/7 (100%)	188/211 (89.10%)	
		C-Section		0/7 (0%)	0/211 (0%)	
		Vaginal		0/7 (0%)	23/211 (10.90%)	
	Gestational age	(weeks)		35.12 ± 1.26 (n=7; outlier=0; missing=3)	39.17 ± 1.24 (n=211; outlier=0; missing=29)	
				NA	39.55 ± 1.07 (n=211; outlier=0; missing=70)	
	HELLP	(weeks)				
		NA		7/7 (100%)	206/211 (97.63%)	
		No		0/7 (0%)	5/211 (2.37%)	
	Max. DBP during pregnancy	(mm Hg)		0/7 (0%)	0/211 (0%)	
				103.47 ± 13.27 (n=7; outlier=0; missing=3)	65.7 ± 8.73 (n=211; outlier=0; missing=197)	
	Max. SBP during pregnancy	(mm Hg)		162.1 ± 3.56 (n=7; outlier=0; missing=3)	113.84 ± 6.78 (n=211; outlier=0; missing=197)	
	Newborn weight	(Z-score)		2390.57 ± 742.2 (n=7; outlier=0; missing=0)	3460.53 ± 457.69 (n=211; outlier=0; missing=10)	
	Previous hypertension	NA		4/7 (57%)	182/211 (86.26%)	
		No		3/7 (43%)	29/211 (13.74%)	
Yes			0/7 (0%)	0/211 (0%)		

PE, FGR discovery and validation sets							
Set	Variable	Value	Early-onset, mild-to-moderate	Late-onset, mild-to-moderate	Early-onset, severe	Late-onset, severe	Control
Discovery set	Attempted vaginal delivery	No	4/4 (100%)	3/3 (100%)	10/11 (90.9%)	0/7 (0%)	12/18 (66.7%)
		Yes	0/4 (0%)	0/3 (0%)	1/11 (9.1%)	7/7 (100%)	6/18 (33.3%)
	Chorio-amnionitis	No	4/4 (100%)	3/3 (100%)	11/11 (100%)	7/7 (100%)	18/18 (100%)
		Yes	0/4 (0%)	0/3 (0%)	0/11 (0%)	0/7 (0%)	0/18 (0%)
	Delivery	C-Section	4/4 (100%)	3/3 (100%)	11/11 (100%)	4/7 (57%)	13/18 (72.2%)
		Vaginal	0/4 (0%)	0/3 (0%)	0/11 (0%)	3/7 (43%)	5/18 (27.8%)
	Gestational age	(weeks)	31.36 ± 1.48 (n=4; outlier=0; missing=0)	36.67 ± 2.36 (n=3; outlier=0; missing=0)	30.49 ± 2 (n=11; outlier=0; missing=0)	36.31 ± 1.17 (n=7; outlier=0; missing=0)	39.06 ± 0.91 (n=18; outlier=0; missing=0)
			4/4 (100%)	3/3 (100%)	6/11 (54.5%)	6/7 (86%)	18/18 (100%)
	HELLP	No					0/18 (0%)
		Yes	0/4 (0%)	0/3 (0%)	5/11 (45.5%)	1/7 (14%)	76.72 ± 6.94 (n=18; outlier=0; missing=0)
	Max. DBP during pregnancy	(mm Hg)	100 ± 8.64 (n=4; outlier=0; missing=0)	96 ± 5.29 (n=3; outlier=0; missing=0)	109.45 ± 13.23 (n=11; outlier=0; missing=0)	110.29 ± 6.97 (n=7; outlier=0; missing=0)	

PE, FGR discovery and validation sets

Set	Variable	Value	Early-onset, mild-to-moderate	Late-onset, mild-to-moderate	Early-onset, severe	Late-onset, severe	Control
Validation set	Max. SBP during pregnancy	(mm Hg)	149 ± 1.83 (n=4; outlier=0; missing=0)	142.67 ± 6.43 (n=3; outlier=0; missing=0)	175.09 ± 18.69 (n=11; outlier=0; missing=0)	164.71 ± 9.79 (n=7; outlier=0; missing=0)	119.56 ± 6.49 (n=18; outlier=0; missing=0)
	Newborn weight	(Z-score)	-2.3 ± 0.74 (n=4; outlier=0; missing=0)	-1.99 ± 0.53 (n=3; outlier=0; missing=0)	-1.82 ± 0.43 (n=11; outlier=0; missing=0)	-1.5 ± 0.24 (n=7; outlier=0; missing=0)	0.11 ± 0.71 (n=18; outlier=0; missing=0)
	Previous hypertension	NA No	3/4 (75%) 1/4 (25%)	2/3 (67%) 1/3 (33%)	9/11 (81.8%) 2/11 (18.2%)	6/7 (86%) 1/7 (14%)	6/18 (33.3%) 12/18 (66.7%)
	Delivery	Yes	0/4 (0%)	0/3 (0%)	0/11 (0%)	0/7 (0%)	0/18 (0%)
		NA				3/3 (100%)	188/211 (89.10%)
		C-Section				0/3 (0%)	0/211 (0%)
		Vaginal				0/3 (0%)	23/211 (10.90%)
	Gestational age	(weeks)				NA	39.17 ± 1.24 (n=211; outlier=0; missing=29)
	Gestational age at delivery	(weeks)				NA	39.55 ± 1.07 (n=211; outlier=0; missing=70)
	HELLP	NA				3/3 (100%)	206/211 (97.63%)
		No				0/3 (0%)	5/211 (2.37%)
	Max. DBP during pregnancy	Yes				0/3 (0%)	0/211 (0%)
		(mm Hg)				111 (n=3; outlier=0; missing=2)	65.7 ± 8.73 (n=211; outlier=0; missing=197)
	Max. SBP during pregnancy	(mm Hg)				168 (n=3; outlier=0; missing=2)	113.84 ± 6.78 (n=211; outlier=0; missing=197)
	Newborn weight	(Z-score)				1673.33 ± 1289.01 (n=3; outlier=0; missing=0)	3460.53 ± 457.69 (n=211; outlier=0; missing=10)
	Previous hypertension	NA				0/3 (0%)	182/211 (86.26%)
		No				3/3 (100%)	29/211 (13.74%)
		Yes				0/3 (0%)	0/211 (0%)

Superimposed PE discovery set

Set	Variable	Value	Late-onset, mild-to-moderate	Early-onset, severe	FGR, early-onset, severe	Control
Discovery set	Attempted vaginal delivery	No	2/3 (67%)	8/9 (89%)	5/6 (83%)	12/18 (66.7%)
		Yes	1/3 (33%)	1/9 (11%)	1/6 (17%)	6/18 (33.3%)
	Chorio-amnionitis	No	3/3 (100%)	9/9 (100%)	6/6 (100%)	18/18 (100%)
		Yes	0/3 (0%)	0/9 (0%)	0/6 (0%)	0/18 (0%)
	Delivery	C-Section	2/3 (67%)	8/9 (89%)	5/6 (83%)	13/18 (72.2%)
		Vaginal	1/3 (33%)	1/9 (11%)	1/6 (17%)	5/18 (27.8%)
	Gestational age	(weeks)	36.95 ± 0.82 (n=3; outlier=0; missing=0)	30.24 ± 2.26 (n=9; outlier=0; missing=0)	30.64 ± 1.82 (n=6; outlier=0; missing=0)	39.06 ± 0.91 (n=18; outlier=0; missing=0)
	HELLP	No Yes	3/3 (100%) 0/3 (0%)	3/9 (33%) 6/9 (67%)	6/6 (100%) 0/6 (0%)	18/18 (100%) 0/18 (0%)

Superimposed PE discovery set

Set	Variable	Value	Late-onset, mild-to-moderate	Early-onset, severe	FGR, early-onset, severe	Control
	Max. DBP during pregnancy	(mm Hg)	97.67 ± 6.81 (n=3; outlier=0; missing=0)	112.11 ± 7.93 (n=9; outlier=0; missing=0)	116.67 ± 11.31 (n=6; outlier=0; missing=0)	76.72 ± 6.94 (n=18; outlier=0; missing=0)
	Max. SBP during pregnancy	(mm Hg)	150 ± 7 (n=3; outlier=0; missing=0)	180.44 ± 20.28 (n=9; outlier=0; missing=0)	173 ± 20.32 (n=6; outlier=0; missing=0)	119.56 ± 6.49 (n=18; outlier=0; missing=0)
	Newborn weight	(Z-score)	-0.84 ± 0.1 (n=3; outlier=0; missing=0)	-0.94 ± 0.38 (n=9; outlier=0; missing=0)	-1.83 ± 0.35 (n=6; outlier=0; missing=0)	0.11 ± 0.71 (n=18; outlier=0; missing=0)
	Previous hypertension	NA	0/3 (0%)	6/9 (67%)	1/6 (17%)	6/18 (33.3%)
		No	0/3 (0%)	0/3 (0%)	0/3 (0%)	12/18 (66.7%)
		Yes	3/3 (100%)	3/9 (33%)	5/6 (83%)	0/3 (0%)

Gestational hypertension discovery and validation sets

Set	Variable	Value	Early-onset	Late-onset	FGR, early-onset	Control
Discovery set	Attempted vaginal delivery	NA	0/6 (0%)	0/5 (0%)	6/6 (100%)	0/18 (0%)
		No	0/6 (0%)	1/5 (20%)	0/6 (0%)	12/18 (66.7%)
		Yes	6/6 (100%)	4/5 (80%)	0/6 (0%)	6/18 (33.3%)
	Chorio-amnionitis	NA	0/6 (0%)	0/5 (0%)	6/6 (100%)	0/18 (0%)
		No	3/6 (50%)	5/5 (100%)	0/6 (0%)	18/18 (100%)
		Yes	3/6 (50%)	0/5 (0%)	0/6 (0%)	0/18 (0%)
	Delivery	C-Section	3/6 (50%)	2/5 (40%)	2/6 (33%)	13/18 (72.2%)
		Vaginal	3/6 (50%)	3/5 (60%)	4/6 (67%)	5/18 (27.8%)
	Gestational age	(weeks)	29.43 ± 2.37 (n=6; outlier=0; missing=0)	38.97 ± 1.29 (n=5; outlier=0; missing=0)	37 ± 1.93 (n=6; outlier=0; missing=0)	39.06 ± 0.91 (n=18; outlier=0; missing=0)
	HELLP	NA	0/6 (0%)	0/5 (0%)	6/6 (100%)	0/18 (0%)
		No	6/6 (100%)	5/5 (100%)	0/6 (0%)	18/18 (100%)
		Yes	0/6 (0%)	0/5 (0%)	0/6 (0%)	0/18 (0%)
	Max. DBP during pregnancy	(mm Hg)	87.83 ± 6.88 (n=6; outlier=0; missing=0)	89.2 ± 5.81 (n=5; outlier=0; missing=0)	90 ± 6.42 (n=6; outlier=0; missing=0)	76.72 ± 6.94 (n=18; outlier=0; missing=0)
	Max. SBP during pregnancy	(mm Hg)	132.5 ± 11.38 (n=6; outlier=0; missing=0)	143 ± 23.64 (n=5; outlier=0; missing=0)	140.67 ± 6.47 (n=6; outlier=0; missing=0)	119.56 ± 6.49 (n=18; outlier=0; missing=0)
	Newborn weight	(Z-score)	0.52 ± 0.78 (n=6; outlier=0; missing=0)	-0.07 ± 0.47 (n=5; outlier=0; missing=0)	-1.95 ± 0.72 (n=6; outlier=0; missing=0)	0.11 ± 0.71 (n=18; outlier=0; missing=0)
	Previous hypertension	NA	2/6 (33%)	3/5 (60%)	6/6 (100%)	6/18 (33.3%)
		No	4/6 (67%)	2/5 (40%)	0/6 (0%)	12/18 (66.7%)
		Yes	0/6 (0%)	0/5 (0%)	0/6 (0%)	0/18 (0%)
Validation set	Delivery	NA		7/7 (100%)		188/211 (89.10%)
		C-Section		0/7 (0%)		0/211 (0%)
		Vaginal		0/7 (0%)		23/211 (10.90%)
	Gestational age	(weeks)		39.43 ± 0.79 (n=7; outlier=0; missing=0)		39.17 ± 1.24 (n=211; outlier=0; missing=29)
	Gestational age at delivery	(weeks)		39.43 ± 0.79 (n=7; outlier=0; missing=0)		39.55 ± 1.07 (n=211; outlier=0; missing=70)
	HELLP	NA		7/7 (100%)		206/211 (97.63%)
		No		0/7 (0%)		5/211 (2.37%)
		Yes		0/7 (0%)		0/211 (0%)
	Max. DBP during pregnancy	(mm Hg)		NA		65.7 ± 8.73 (n=211; outlier=0; missing=197)
	Max. SBP during pregnancy	(mm Hg)		NA		113.84 ± 6.78 (n=211; outlier=0; missing=197)
	Newborn weight	(Z-score)		3171.43 ± 369.48 (n=7; outlier=0; missing=0)		3460.53 ± 457.69 (n=211; outlier=0; missing=10)
	Previous hypertension	NA		7/7 (100%)		182/211 (86.26%)
		No		0/7 (0%)		29/211 (13.74%)
		Yes		0/7 (0%)		0/211 (0%)

Chronic hypertension discovery set

Set	Variable	Value	Late-onset	FGR, early-onset	FGR, late-onset	Control
Discovery set	Attempted vaginal delivery	No	4/5 (80%)	8/8 (100%)	5/6 (83%)	12/18 (66.7%)
		Yes	1/5 (20%)	0/8 (0%)	1/6 (17%)	6/18 (33.3%)
	Chorio-amnionitis	No	5/5 (100%)	8/8 (100%)	6/6 (100%)	18/18 (100%)
		Yes	0/5 (0%)	0/8 (0%)	0/6 (0%)	0/18 (0%)
	Delivery	C-Section	4/5 (80%)	8/8 (100%)	6/6 (100%)	13/18 (72.2%)
		Vaginal	1/5 (20%)	NA	NA	5/18 (27.8%)
	Gestational age (weeks)		37.31 ± 0.94 (n=5; outlier=0; missing=0)	29.96 ± 1.86 (n=8; outlier=0; missing=0)	36.21 ± 1.01 (n=6; outlier=0; missing=0)	39.06 ± 0.91 (n=18; outlier=0; missing=0)
	HELLP	No	5/5 (100%)	8/8 (100%)	6/6 (100%)	18/18 (100%)
		Yes	0/5 (0%)	0/8 (0%)	0/6 (0%)	0/18 (0%)
	Max. DBP during pregnancy (mm Hg)		105.8 ± 4.6 (n=5; outlier=0; missing=0)	101.38 ± 11.44 (n=8; outlier=0; missing=0)	109.67 ± 6.65 (n=6; outlier=0; missing=0)	76.72 ± 6.94 (n=18; outlier=0; missing=0)
	Max. SBP during pregnancy (mm Hg)		166.2 ± 8.96 (n=5; outlier=0; missing=0)	171.12 ± 16.5 (n=8; outlier=0; missing=0)	169.17 ± 15.03 (n=6; outlier=0; missing=0)	119.56 ± 6.49 (n=18; outlier=0; missing=0)
	Newborn weight (Z-score)		-0.44 ± 1.18 (n=5; outlier=0; missing=0)	-1.77 ± 0.47 (n=8; outlier=0; missing=0)	-2.2 ± 0.84 (n=6; outlier=0; missing=0)	0.11 ± 0.71 (n=18; outlier=0; missing=0)
	Previous hypertension	NA	3/5 (60%)	6/8 (75%)	4/6 (67%)	6/18 (33.3%)
		No	0/5 (40%)	2/8 (25%)	1/6 (17%)	12/18 (66.7%)
		Yes	2/5 (40%)	0/8 (25%)	1/6 (17%)	9/18 (50%)

FGR discovery and validation sets

Set	Variable	Value	Late-onset	Control
Discovery set	Attempted vaginal delivery	NA	11/11 (100%)	0/18 (0%)
		No	0/11 (0%)	12/18 (66.7%)
		Yes	0/11 (0%)	6/18 (33.3%)
	Chorio-amnionitis	NA	11/11 (100%)	
		No	0/11 (0%)	18/18 (100%)
		Yes	0/11 (0%)	
	Delivery	C-Section	5/11 (45.5%)	13/18 (72.2%)
		Vaginal	6/11 (54.5%)	5/18 (27.8%)
	Gestational age (weeks)		37.22 ± 1.1 (n=11; outlier=0; missing=0)	39.06 ± 0.91 (n=18; outlier=0; missing=0)
	HELLP	NA	11/11 (100%)	0/18 (0%)
		No	0/11 (0%)	18/18 (100%)
		Yes	0/11 (0%)	0/18 (0%)
	Max. DBP during pregnancy (mm Hg)		73.55 ± 8.13 (n=11; outlier=0; missing=0)	76.72 ± 6.94 (n=18; outlier=0; missing=0)
	Max. SBP during pregnancy (mm Hg)		124 ± 11.44 (n=11; outlier=0; missing=0)	119.56 ± 6.49 (n=18; outlier=0; missing=0)
	Newborn weight (Z-score)		-1.93 ± 0.4 (n=11; outlier=0; missing=0)	0.11 ± 0.71 (n=18; outlier=0; missing=0)
	Previous hypertension	NA	11/11 (100%)	6/18 (33.3%)
		No	0/11 (0%)	12/18 (66.7%)
		Yes	0/11 (0%)	0/11 (0%)
Validation set	Delivery	NA	7/11 (73.6%)	188/211 (89.10%)
		C-Section	0/11 (0%)	0/211 (0%)
		Vaginal	4/11 (36.4%)	23/211 (10.90%)
	Gestational age (weeks)		38.13 ± 1.11 (n=11; outlier=0; missing=1)	39.17 ± 1.24 (n=211; outlier=0; missing=29)
	Gestational age at delivery (weeks)		NA	39.55 ± 1.07 (n=211; outlier=0; missing=70)
	HELLP	NA	11/11 (100%)	206/211 (97.63%)
		No	0/11 (0%)	5/211 (2.37%)
		Yes	0/11 (0%)	0/211 (0%)
	Max. DBP during pregnancy (mm Hg)		71.47 ± 9.74 (n=11; outlier=0; missing=5)	65.7 ± 8.73 (n=211; outlier=0; missing=197)
	Max. SBP during pregnancy (mm Hg)		122.07 ± 6.64 (n=11; outlier=0; missing=5)	113.84 ± 6.78 (n=211; outlier=0; missing=197)
	Newborn weight (Z-score)		1915.5 ± 470.5 (n=11; outlier=0; missing=0)	3460.53 ± 457.69 (n=211; outlier=0; missing=10)
		NA	10/11 (90.9%)	182/211 (86.26%)

FGR discovery and validation sets				
Set	Variable	Value	Late-onset	Control
	Previous	No	1/11 (9.1%)	29/211 (13.74%)
	hypertension	Yes	0/11 (0%)	0/211 (0%)

DBP, diastolic blood pressure; FGR, fetal growth restriction; HELLP, hemolysis, elevated liver enzymes, and low platelets; NA, not available; PE, preeclampsia; SBP, systolic blood pressure.

Table S5. Differential expression analysis.

Comparison	DEG (log ₂ FC)				non-DEG
	<-2	-2 to <0	>0 to 2	>2	
<i>Endometrial maturation</i>					
Early-secretory phase vs. proliferative phase	22	1350	1031	54	2661
Mid-secretory phase vs. proliferative phase	30	1450	1073	63	2502
Late-secretory phase vs. proliferative phase	23	1178	875	71	2971
<i>Decidualization</i>					
Ectopic, intermediate vs. ectopic, none	0	0	0	0	5118
Intrauterine, intermediate vs. ectopic, none	0	1	0	1	5116
Intrauterine, confluent vs. ectopic, none	1	0	0	0	5117
<i>Placentation</i>					
First trimester vs. term	53	775	1063	3	3224
Second trimester vs. term	29	79	92	1	4917
<i>Comorbidity (placenta)</i>					
Chorioamnionitis, second trimester vs. non-chorioamnionitis, second trimester	2	22	4	0	5090
Chorioamnionitis, third trimester vs. non-chorioamnionitis, third trimester	1	881	950	0	3286
HELLP, second trimester vs. non-HELLP, second trimester	0	0	0	0	5118
HELLP, third trimester vs. non-HELLP, third trimester	0	175	235	0	4708
<i>PE (placenta)</i>					
Early-onset, severe vs. normotensive pregnancy	0	463	418	2	4235
Late-onset, severe vs. normotensive pregnancy	0	44	68	1	5005
<i>PE, FGR (placenta)</i>					
Early-onset, mild-to-moderate vs. normotensive pregnancy	0	214	171	1	4732
Late-onset, mild-to-moderate vs. normotensive pregnancy	0	31	29	0	5058
Early-onset, severe vs. normotensive pregnancy	0	533	448	2	4135
Late-onset, severe vs. normotensive pregnancy	0	342	330	2	4444
<i>Superimposed PE (placenta)</i>					
Late-onset, mild-to-moderate vs. normotensive pregnancy	0	0	0	0	5118
Early-onset, severe vs. normotensive pregnancy	0	325	358	1	4434
<i>Superimposed PE, FGR (placenta)</i>					
Early-onset, severe vs. normotensive pregnancy	0	300	301	2	4515
<i>Gestational hypertension (placenta)</i>					
Early-onset vs. normotensive pregnancy	0	66	76	0	4976
Late-onset vs. normotensive pregnancy	0	0	0	0	5118
<i>Gestational hypertension, FGR (placenta)</i>					
Late-onset vs. normotensive pregnancy	0	1713	1647	1	1757
<i>Chronic hypertension (placenta)</i>					
Late-onset vs. normotensive pregnancy	0	0	0	0	5118
<i>Chronic hypertension, FGR (placenta)</i>					
Early-onset vs. normotensive pregnancy	0	161	149	2	4806
Late-onset vs. normotensive pregnancy	0	59	66	1	4992
<i>FGR (placenta)</i>					
Late-onset vs. normotensive pregnancy	0	1875	1799	0	1444

DEG, differentially expressed gene; FGR, fetal growth restriction; log₂FC, log₂ fold change; PE, preeclampsia.

Table S6. Gene-set overlap analysis.

The subtype	Overlap approach	Endometrial maturation Early-secretory phase	Mid-secretory phase	Late-secretory phase
<i>PE (placenta)</i>				
Early onset, severe	Non-RSO	1.27 (1.12, Inf; <0.001)	1.13 (1, Inf; >0.05)	1.21 (1.07, Inf; 0.005)
	RSO	1.46 (1, 2.13; >0.05)	1.58 (1.08, 2.31; 0.017)	1.48 (0.98, 2.24; >0.05)
Late onset, severe	Non-RSO	1.19 (0.85, Inf; >0.05)	1.7 (1.21, Inf; 0.004)	1.47 (1.06, Inf; 0.026)
	RSO	1.45 (0.42, 5; >0.05)	1.13 (0.38, 3.33>0.05)	2.19 (0.63, 7.88; >0.05)
<i>PE, FGR (placenta)</i>				
Early onset, severe	Non-RSO	1.29 (1.15, Inf; <0.001)	1.22 (1.08, Inf; 0.003)	1.32 (1.17, Inf; <0.001)
	RSO	1.78 (1.24, 2.55; 0.001)	1.98 (1.39, 2.84; <0.001)	1.72 (1.17, 2.54; 0.005)
Late onset, severe	Non-RSO	1.28 (1.12, Inf; 0.001)	1.08 (0.94, Inf; >0.05)	1.16 (1.01, Inf; 0.041)
	RSO	1.43 (0.93, 2.22; >0.05)	1.41 (0.91, 2.2; >0.05)	1.2 (0.73, 1.96; >0.05)
Early onset, mild-to-moderate	Non-RSO	1.32 (1.1, Inf; 0.005)	1.19 (1, Inf; >0.05)	1.34 (1.12, Inf; 0.003)
	RSO	1.24 (0.7, 2.23; >0.05)	1.04 (0.59, 1.85; >0.05)	0.7 (0.37, 1.34; >0.05)
Late onset, mild-to-moderate	Non-RSO	1.75 (1.1, Inf; 0.023)	1.34 (0.85, Inf; >0.05)	1.39 (0.88, Inf; >0.05)
	RSO	0.88 (0.19, 3.93; >0.05)	1.03 (0.21, 5; >0.05)	1.55 (0.28, 8.73; >0.05)
<i>Superimposed PE (placenta)</i>				
Early onset, severe	Non-RSO	1.4 (1.22, Inf; <0.001)	1.31 (1.14, Inf; <0.001)	1.3 (1.13, Inf; <0.001)
	RSO	1.71 (1.12, 2.63; 0.01)	2.06 (1.35, 3.16; <0.001)	2.43 (1.51, 3.95; <0.001)
Late onset, mild-to-moderate	Non-RSO	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)
	RSO	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)
<i>Superimposed PE, FGR (placenta)</i>				
Early onset, severe	Non-RSO	1.42 (1.23, Inf; <0.001)	1.13 (0.97, Inf; >0.05)	1.3 (1.12, Inf; 0.002)
	RSO	1.77 (1.13, 2.8; 0.012)	1.66 (1.04, 2.64; 0.026)	1.15 (0.69, 1.93; >0.05)
<i>Gestational hypertension (placenta)</i>				
Early onset	Non-RSO	1.74 (1.29, Inf; <0.001)	1.58 (1.17, Inf; 0.005)	1.52 (1.14, Inf; 0.008)
	RSO	0.54 (0.2, 1.38; >0.05)	0.47 (0.18, 1.2; >0.05)	0.15 (0.04, 0.44; <0.001)
Late onset	Non-RSO	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)
	RSO	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)
<i>Gestational hypertension, FGR (placenta)</i>				
Late onset	Non-RSO	0.9 (0.81, Inf; >0.05)	0.92 (0.83, Inf; >0.05)	0.88 (0.79, Inf; >0.05)
	RSO	0.62 (0.5, 0.76; <0.001)	0.93 (0.76, 1.13; >0.05)	1.2 (0.96, 1.49; >0.05)
<i>Chronic hypertension (placenta)</i>				
Late onset	Non-RSO	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)
	RSO	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)
<i>Chronic hypertension, FGR (placenta)</i>				
Early onset	Non-RSO	1.37 (1.13, Inf; 0.004)	1.4 (1.15, Inf; 0.002)	1.23 (1.01, Inf; 0.042)
	RSO	1.83 (0.96, 3.52; >0.05)	2.04 (1.08, 3.9; 0.025)	2.85 (1.38, 6.03; 0.003)
Late onset	Non-RSO	2.05 (1.48, Inf; <0.001)	1.16 (0.85, Inf; >0.05)	1.54 (1.13, Inf; 0.011)
	RSO	4.19 (1.51, 12.41; 0.003)	2.55 (0.83, 8.06; >0.05)	2.09 (0.69, 6.63; >0.05)
<i>FGR (placenta)</i>				
Late onset	Non-RSO	0.87 (0.79, Inf; >0.05)	0.87 (0.78, Inf; >0.05)	0.85 (0.77, Inf; >0.05)
	RSO	0.73 (0.6, 0.89; 0.001)	0.98 (0.81, 1.18; >0.05)	1.11 (0.9, 1.37; >0.05)
The subtype	Overlap approach	Decidualization Ectopic, Intermediate	Intrauterine, Intermediate	Intrauterine, Confluent
<i>PE (placenta)</i>				
Early onset, severe	Non-RSO	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)
	RSO	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)
Late onset, severe	Non-RSO	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)
	RSO	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)
<i>PE, FGR (placenta)</i>				
Early onset, severe	Non-RSO	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)	Inf (0.22, Inf; >0.05)
	RSO	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)
Late onset, severe	Non-RSO	0 (0, Inf; >0.05)	6.6 (0.17, Inf; >0.05)	0 (0, Inf; >0.05)
	RSO	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)
Early onset, mild-to-moderate	Non-RSO	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)
	RSO	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)
Late onset, mild-to-moderate	Non-RSO	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)
	RSO	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)
<i>Superimposed PE (placenta)</i>				
Early onset, severe	Non-RSO	0 (0, Inf; >0.05)	6.49 (0.17, Inf; >0.05)	0 (0, Inf; >0.05)
	RSO	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)
Late onset, mild-to-moderate	Non-RSO	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)
	RSO	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)
<i>Superimposed PE, FGR (placenta)</i>				

The subtype	Overlap approach	Decidualization Ectopic, Intermediate	Intrauterine, Intermediate	Intrauterine, Confluent
Early onset, severe	Non-RSO	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)	Inf (0.39, Inf; >0.05)
	RSO	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)
Gestational hypertension (placenta)				
Early onset	Non-RSO	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)
	RSO	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)
Late onset	Non-RSO	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)
	RSO	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)
Gestational hypertension, FGR (placenta)				
Late onset	Non-RSO	0 (0, Inf; >0.05)	Inf (0.15, Inf; >0.05)	0 (0, Inf; >0.05)
	RSO	0 (0, Inf; >0.05)	0 (0, 39; >0.05)	0 (0, Inf; >0.05)
Chronic hypertension (placenta)				
Late onset	Non-RSO	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)
	RSO	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)
Chronic hypertension, FGR (placenta)				
Early onset	Non-RSO	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)
	RSO	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)
Late onset	Non-RSO	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)	Inf (2.09, Inf; 0.025)
	RSO	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)
FGR (placenta)				
Late onset	Non-RSO	0 (0, Inf; >0.05)	Inf (0.11, Inf; >0.05)	Inf (0.02, Inf; >0.05)
	RSO	0 (0, Inf; >0.05)	0 (0, 39; >0.05)	0 (0, Inf; >0.05)

The subtype	Overlap approach	Placental First trimester	Second trimester
PE (placenta)			
Early onset, severe	Non-RSO	1.16 (1.02, Inf; 0.025)	1.36 (1, Inf; 0.05)
	RSO	2.67 (1.7, 4.21; <0.001)	6.85 (0.79, 331.21; >0.05)
Late onset, severe	Non-RSO	1.22 (0.87, Inf; >0.05)	0.9 (0.3, Inf; >0.05)
	RSO	0.09 (0.01, 0.45; <0.001)	0 (0, Inf; >0.05)
PE, FGR (placenta)			
Early onset, severe	Non-RSO	1.25 (1.11, Inf; 0.001)	1.66 (1.25, Inf; 0.002)
	RSO	2.37 (1.56, 3.62; <0.001)	1.78 (0.44, 7.98; >0.05)
Late onset, severe	Non-RSO	1.25 (1.08, Inf; 0.005)	1.73 (1.26, Inf; 0.002)
	RSO	1.44 (0.87, 2.38; >0.05)	0.76 (0.13, 4.6; >0.05)
Early onset, mild-to-moderate	Non-RSO	1.4 (1.17, Inf; <0.001)	1.62 (1.07, Inf; 0.028)
	RSO	5.66 (2.77, 11.91; <0.001)	0.68 (0.09, 5.25; >0.05)
Late onset, mild-to-moderate	Non-RSO	1.14 (0.71, Inf; >0.05)	2.25 (0.85, Inf; >0.05)
	RSO	8.59 (1.06, 119.94; 0.033)	0 (0, Inf; >0.05)
Superimposed PE (placenta)			
Early onset, severe	Non-RSO	1.15 (1, Inf; >0.05)	1.59 (1.15, Inf; 0.009)
	RSO	2.32 (1.38, 3.91; <0.001)	Inf (1.33, Inf; 0.012)
Late onset, mild-to-moderate	Non-RSO	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)
	RSO	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)
Superimposed PE, FGR (placenta)			
Early onset, severe	Non-RSO	1.36 (1.17, Inf; <0.001)	1.86 (1.34, Inf; <0.001)
	RSO	3.92 (2.25, 6.94; <0.001)	1.06 (0.2, 6.27; >0.05)
Gestational hypertension (placenta)			
Early onset	Non-RSO	2.18 (1.62, Inf; <0.001)	4.91 (3.15, Inf; <0.001)
	RSO	525.32 (52.94, 16384; <0.001)	Inf (13.71, Inf; <0.001)
Late onset	Non-RSO	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)
	RSO	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)
Gestational hypertension, FGR (placenta)			
Late onset	Non-RSO	0.84 (0.75, Inf; >0.05)	0.73 (0.57, Inf; >0.05)
	RSO	0.72 (0.57, 0.91; 0.006)	0.82 (0.37, 1.81; >0.05)
Chronic hypertension (placenta)			
Late onset	Non-RSO	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)
	RSO	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)
Chronic hypertension, FGR (placenta)			
Early onset	Non-RSO	1.25 (1.02, Inf; 0.035)	1.75 (1.12, Inf; 0.02)
	RSO	7.99 (3.47, 19.35; <0.001)	1.09 (0.05, 74.91; >0.05)
Late onset	Non-RSO	1.28 (0.93, Inf; >0.05)	2.94 (1.66, Inf; 0.001)
	RSO	0.73 (0.21, 2.43; >0.05)	0 (0, 0.92; 0.021)
FGR (placenta)			
Late onset	Non-RSO	0.84 (0.75, Inf; >0.05)	0.73 (0.56, Inf; >0.05)
	RSO	0.73 (0.58, 0.92; 0.005)	0.73 (0.34, 1.53; >0.05)

The subtype	Overlap approach	Comorbidity (placenta) Chorioamnionitis, Second trimester	Chorioamnionitis, Third trimester	HELLP, Second trimester	HELLP, Third trimester
<i>PE (placenta)</i>					
Early onset, severe	Non-RSO	29.5 (11.57, Inf; <0.001)	1.88 (1.65, Inf; <0.001)	0 (0, Inf; >0.05)	15.24 (12.54, Inf; <0.001)
	RSO	0 (0, 3.55; >0.05)	0.03 (0.02, 0.06; <0.001)	0 (0, Inf; >0.05)	Inf (2409.41, Inf; <0.001)
Late onset, severe	Non-RSO	18.94 (8.24, Inf; <0.001)	1.92 (1.38, Inf; <0.001)	0 (0, Inf; >0.05)	11.05 (7.84, Inf; <0.001)
	RSO	0 (0, Inf; >0.05)	0.04 (0.01, 0.21; <0.001)	0 (0, Inf; >0.05)	Inf (54.41, Inf; <0.001)
<i>PE, FGR (placenta)</i>					
Early onset, severe	Non-RSO	12.87 (5.93, Inf; <0.001)	1.71 (1.51, Inf; <0.001)	0 (0, Inf; >0.05)	7.89 (6.57, Inf; <0.001)
	RSO	0 (0, 0.38; 0.005)	0.01 (0.01, 0.03; <0.001)	0 (0, Inf; >0.05)	Inf (1692.85, Inf; <0.001)
Late onset, severe	Non-RSO	16.94 (8.03, Inf; <0.001)	2.57 (2.23, Inf; <0.001)	0 (0, Inf; >0.05)	7.44 (6.17, Inf; <0.001)
	RSO	0 (0, 2.05; 0.05)	0 (0, 0.01; <0.001)	0 (0, Inf; >0.05)	Inf (908.85, Inf; <0.001)
Early onset, mild-to-moderate	Non-RSO	27.11 (13.08, Inf; <0.001)	2.72 (2.26, Inf; <0.001)	0 (0, Inf; >0.05)	5.88 (4.73, Inf; <0.001)
	RSO	0 (0, 0.42; 0.006)	0 (0, 0; <0.001)	0 (0, Inf; >0.05)	Inf (304.42, Inf; <0.001)
Late onset, mild-to-moderate	Non-RSO	3.16 (0.15, Inf; >0.05)	0.77 (0.46, Inf; >0.05)	0 (0, Inf; >0.05)	1.53 (0.68, Inf; >0.05)
	RSO	0 (0, Inf; >0.05)	2.16 (0.13, 137.37; >0.05)	0 (0, Inf; >0.05)	Inf (0.93, Inf; 0.029)
<i>Superimposed PE (placenta)</i>					
Early onset, severe	Non-RSO	20.01 (9.22, Inf; <0.001)	1.68 (1.46, Inf; <0.001)	0 (0, Inf; >0.05)	13.54 (11.2, Inf; <0.001)
	RSO	0 (0, 1.95; 0.048)	0.01 (0.01, 0.03; <0.001)	0 (0, Inf; >0.05)	Inf (1588.85, Inf; <0.001)
Late onset, mild-to-moderate	Non-RSO	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)
	RSO	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)
<i>Superimposed PE, FGR (placenta)</i>					
Early onset, severe	Non-RSO	28.44 (12.61, Inf; <0.001)	2.85 (2.46, Inf; <0.001)	0 (0, Inf; >0.05)	9.09 (7.52, Inf; <0.001)
	RSO	0 (0, 1.86; 0.045)	0 (0, 0.01; <0.001)	0 (0, Inf; >0.05)	Inf (955.28, Inf; <0.001)
<i>Gestational hypertension (placenta)</i>					
Early onset	Non-RSO	4.27 (1.08, Inf; 0.041)	5.34 (3.83, Inf; <0.001)	0 (0, Inf; >0.05)	0.87 (0.46, Inf; >0.05)
	RSO	0 (0, Inf; >0.05)	Inf (157.41, Inf; <0.001)	0 (0, Inf; >0.05)	0.24 (0, 7.08; >0.05)
Late onset	Non-RSO	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)
	RSO	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)
<i>Gestational hypertension, FGR (placenta)</i>					
Late onset	Non-RSO	0.34 (0.16, Inf; >0.05)	0.83 (0.75, Inf; >0.05)	0 (0, Inf; >0.05)	0.82 (0.69, Inf; >0.05)
	RSO	0 (0, 1.66; >0.05)	0.67 (0.53, 0.85; <0.001)	0 (0, Inf; >0.05)	20.6 (10.28, 43.76; <0.001)
<i>Chronic hypertension (placenta)</i>					
Late onset	Non-RSO	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)
	RSO	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)	0 (0, Inf; >0.05)
<i>Chronic hypertension, FGR (placenta)</i>					
Early onset	Non-RSO	41.01 (19.33, Inf; <0.001)	2.2 (1.8, Inf; <0.001)	0 (0, Inf; >0.05)	9.08 (7.24, Inf; <0.001)
	RSO	0 (0, 2.05; 0.05)	0.02 (0, 0.04; <0.001)	0 (0, Inf; >0.05)	Inf (382.64, Inf; <0.001)
Late onset	Non-RSO	20.08 (9.07, Inf; <0.001)	10.66 (6.95, Inf; <0.001)	0 (0, Inf; >0.05)	4.94 (3.44, Inf; <0.001)
	RSO	0 (0, Inf; >0.05)	0 (0, 0; <0.001)	0 (0, Inf; >0.05)	Inf (12.79, Inf; <0.001)
<i>FGR (placenta)</i>					
Late onset	Non-RSO	0.25 (0.12, Inf; >0.05)	0.81 (0.72, Inf; >0.05)	0 (0, Inf; >0.05)	0.78 (0.64, Inf; >0.05)
	RSO	0 (0, 1.64; >0.05)	0.65 (0.52, 0.82; <0.001)	0 (0, Inf; >0.05)	12.62 (6.86, 24.06; <0.001)

Values shown in this table are respectively odds ratio and its 95% confidence interval with *p*-value. FGR, fetal growth restriction; HELLP, hemolysis, elevated liver enzymes, and low platelets; Inf, infinity; PE, preeclampsia; RSO, regulation-specific overlapping.

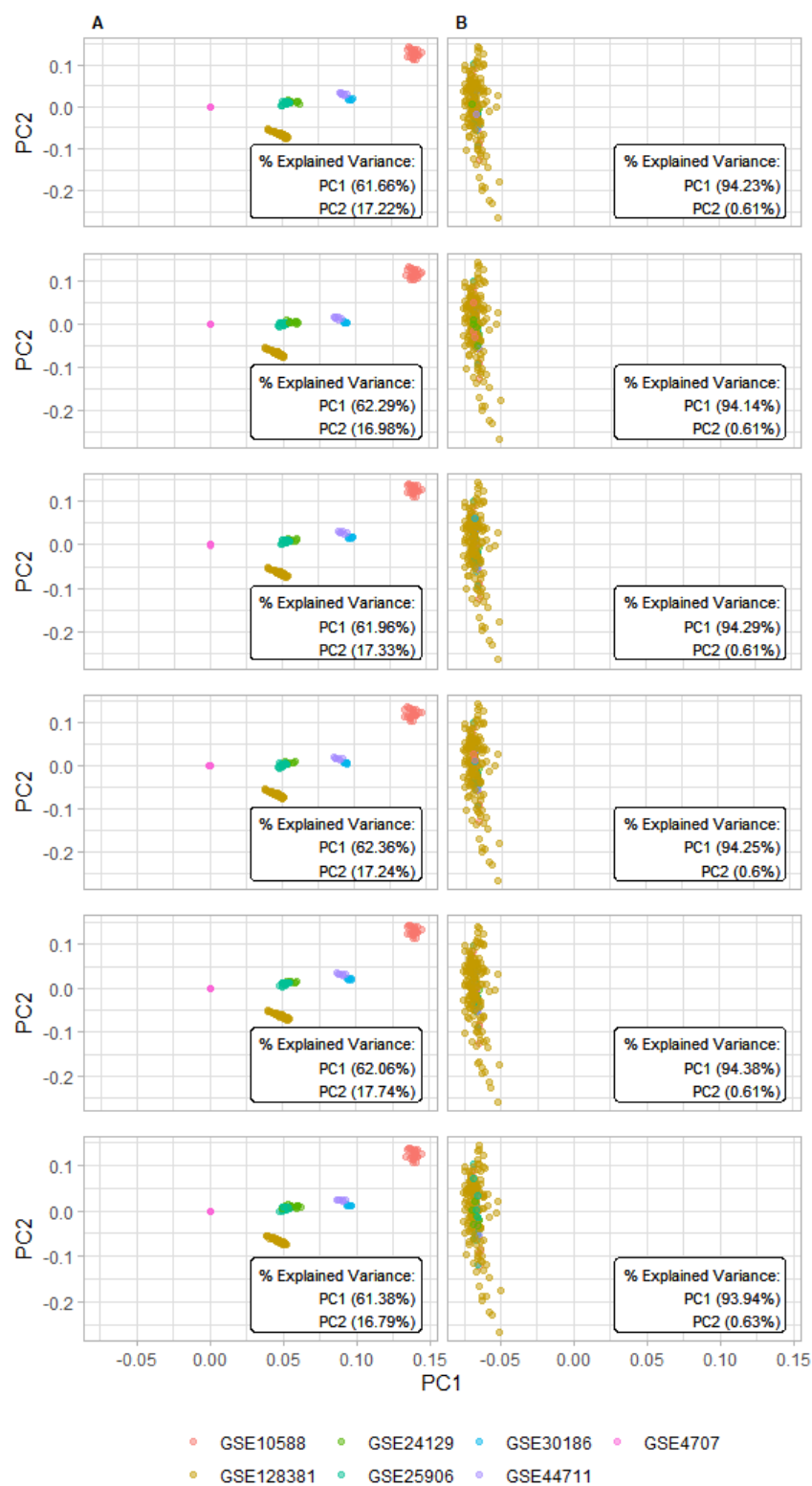


Figure S1. Principal component analysis: (A) Before data integration with batch-effect correction; (B) After data integration with batch-effect correction. PC, principal component.