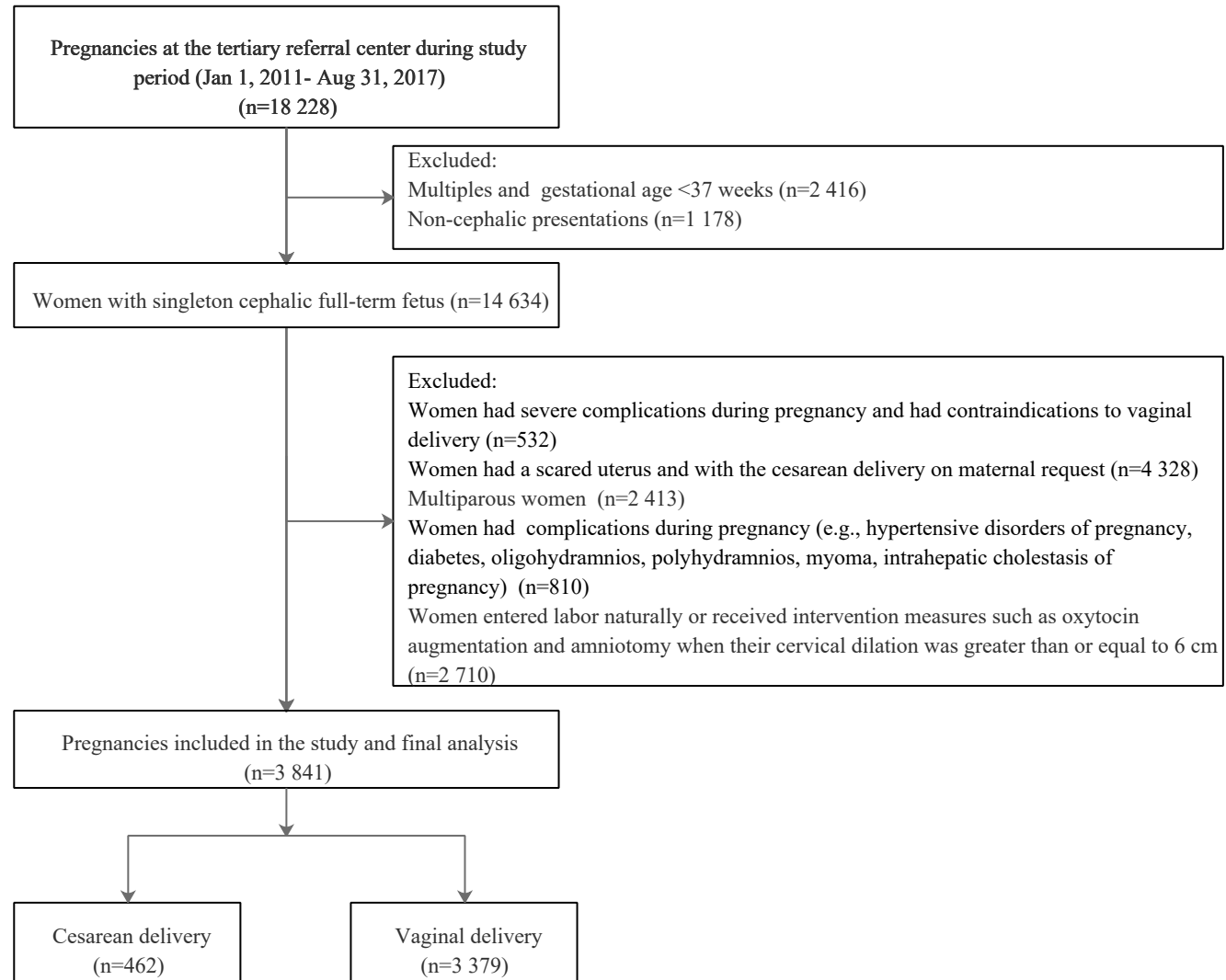




Supplementary Fig. 1: Study population profile in the development cohort.

Supplementary Table 1: Characteristics of maternal and neonatal in the derivation and the validation cohort.

Variable	Derivation Cohort (n=3 841)	Validation Cohort (n=3 421)	<i>p</i>
Maternal characteristics			
Maternal age (y)	26.95±3.05	25.67±4.10	<0.001
Height (cm)	161.46±4.61	161.57±4.59	0.304
Baseline BMI (kg/m ²)	20.97±2.58	20.89±2.54	0.180
Weight change during pregnancy (kg)	14.40±4.24	14.25±4.37	0.133
Gestational age (w)	279.82±7.17	280.17±7.04	0.036
Labour and others characteristics			
PROM	768 (20.0%)	484(14.1%)	<0.001
Induction methods			<0.001
Oxytocin Induction group	1128(29.4%)	1173(34.3%)	
Amniotomy group	2457(64.0%)	1810(52.9%)	
Disposable Cervical Dilator Balloon group	80(2.1%)	0(0.0%)	
Prostaglandin group*	176(4.6%)	438(12.8%)	
Meconium-stained amniotic fluid			<0.001
None	3458(90.0%)	2921(85.4%)	
I	152(4.0%)	230(6.7%)	
II	114(3.0%)	127(3.7%)	
III/ bloody	117(3.0%)	143(4.2%)	
Neonatal characteristics			
Neonatal sex(male)	1966(51.2%)	1732(50.6%)	0.636

*In the derivation cohort, Propess was used for induction of cervical ripening; in the validation cohort, misoprostol was used for induction of cervical ripening.