

1 **S4 Table. Detection rate and area under the receiver operating characteristic curve of the prediction models for**
2 **birthweight above the 95th centile.**

Models *	Training dataset			Validation dataset		
	10% FPR	25% FPR	AUC (95%CI)	10% FPR	25% FPR	AUC (95%CI)
1 MBW	15%	35%	0.57 (0.53 - 0.62)	17%	38%	0.58 (0.51 - 0.64)
2 MBW, gluc, and LDL (14-16w)	19%	41%	0.61 (0.57 - 0.65)	10%	29%	0.53 (0.46 - 0.59)
3 MBW, GWG, AC, HC, and UtRI (19-21w)	34%	59%	0.74 (0.70 - 0.77)	29%	51%	0.69 (0.63 - 0.75)
4 MBW, gluc (14-16w), GWG, AC, HC, UtRI, and gluc (19-21w)	37%	63%	0.75 (0.72 - 0.79)	26%	50%	0.67 (0.61 - 0.73)
5 MBW, gluc (14-16w), GWG, AC, HC, UtRI, and gluc (19-21w), VEGFR1 and NGAL (14-16w)	40%	66%	0.78 (0.74 - 0.81)	27%	54%	0.70 (0.64 - 0.75)

3 Abbreviations: AC - fetal abdominal circumference, AUC – area under the receiver operating characteristic, gluc - glucose, GWG –
4 gestational weight gain between 14-16 and 19-21 weeks, FPR – false positive rate, HC - fetal head circumference, LDL - LDL-
5 cholesterol, MBW - maternal birthweight, NGAL - neutrophil gelatinase-associated lipocalin, UtRI - uterine artery resistance index,
6 VEGFR1 - vascular endothelial growth factor receptor type 1, w - weeks’.

7 * Model 1 - clinical factors at 14-16 weeks; Model 2 - clinical factors and candidate biomarkers at 14-16 weeks; Model 3 - clinical
8 factors and ultrasound at 14-16 and 19-21 weeks; Model 4 - clinical factors, ultrasound and candidate biomarkers at 14-16 and 19-
9 21 weeks; Model 5 - full model including additional list of biomarkers.