Meta-Analysis: Associations of Cord Blood Metabolites with Newborn Outcomes in Infants born to Non-GDM Moms

	C-peptide		Birth Weight		Sum of Skinfolds	
	Model 2		Model 3		Model 3	
Metabolite	**Beta**	**p**	**Beta**	**p**	**Beta**	**p**
Amino Acids and Related Metabolites						
Glycine	-0.0017	**3.38E-04**	1.42	**0.027**	0.0047	0.20
Serine	-0.0035	**3.38E-04**	2.96	**0.044**	0.014	**1.54E-03**
Glutamine/Glutamic acid	-0.0015	**5.50E-03**	1.01	**7.17E-03**	0.0025	0.35
Leucine/Isoleucine	-0.0016	**8.69E-03**	1.07	**0.025**	0.003	0.38
AC C5	0.067	**0.031**	-28.91	0.21	-0.15	0.38
AC C4/Ci4	0.050	0.23	-89.38	**0.026**	-0.44	0.15
Tyrosine	-0.0034	**0.023**	1.66	0.13	0.0013	0.70
Asparagine/Aspartic acid	-0.0051	**0.037**	-0.34	0.56	-0.0052	0.65
Ornithine	-0.0028	0.068	1.96	**0.044**	0.013	**0.043**
Histidine	0.0015	0.16	3.54	**1.62E-05**	0.015	**1.54E-03**
Threonine	0.15	0.15	42.54	**8.72E-03**	0.15	0.15
Proline	2.71E-04	0.48	1.34	**0.018**	0.0073	0.051
Arginine	9.05E-04	0.40	1.64	**0.044**	0.0038	0.54
Lysine	0.081	0.44	19.66	0.17	0.081	0.44
Methionine	-0.0037	0.21	2.52	0.30	0.0061	0.65
Citrulline	8.62E-06	0.56	6.86	0.13	0.0023	0.75
3-Indolelactic acid	-0.17	0.074	-27.93	**0.044**	-0.17	0.074
Aminomalonic acid	0.050	0.74	27.99	**0.044**	0.050	0.74
NM/2AA/NE	-0.021	0.82	17.03	0.20	-0.021	0.82
Acylcarnitines and Related Metabolites						
AC C6-DC/C8-OH	0.0073	0.49	65.74	**7.26E-03**	0.063	0.65
AC C8	-0.085	**0.031**	21.25	0.36	0.08	0.65
AC C8:1-DC	0.075	0.073	55.17	0.11	0.21	0.38
AC C8:1-OH/C6:1-DC	0.062	0.16	51.03	0.13	0.096	0.65
AC C10:3	0.0039	0.50	44.22	0.18	0.10	0.65
AC C10-OH/C8-DC	0.015	0.49	80.77	**2.75E-03**	0.23	0.16
AC C12	-0.15	**0.031**	-0.71	0.61	-0.17	0.65
AC C12-OH/C10-DC	-0.021	0.41	52.53	**0.014**	0.18	0.21
AC C14	-0.14	**4.42E-03**	19.19	0.39	0.082	0.66
AC C14:1	-0.17	**0.024**	-17.29	0.45	-0.088	0.65
AC C14:2	-0.13	0.088	-7.89	0.56	-0.07	0.67
AC C16:1	-0.19	**3.38E-04**	-1.37	1.62E-05	-0.041	0.70
AC C18:1	-0.16	0.051	41.22	0.24	0.22	0.38
AC C18:2	-0.16	**0.016**	-23.62	0.38	-0.095	0.65
Fatty Acids and Related Metabolites						
NEFA	-1.01	**0.023**	119.96	0.36	-0.2	0.70
Palmitoleic Acid	-0.0039	0.91	9.75	0.4	-0.0039	0.91
Methyl Palmitate	0.088	0.47	22.23	0.13	0.088	0.47
Methyl Stearate	0.13	0.23	24.75	0.075	0.13	0.23
Methyl Eicosatrienonate	0.064	0.69	21.45	0.20	0.064	0.69
Lauric acid	0.055	0.74	42.08	**9.66E-03**	0.055	0.74
Lipids and Related Metabolites						
AC C4-OH	-0.058	0.091	57.53	**0.012**	0.21	0.051
3-Hydroxybutyrate	-0.065	**0.019**	62.90	**2.75E-03**	0.24	**1.50E-03**
Triglycerides	-0.0056	**1.04E-03**	-3.06	**3.76E-03**	-0.021	0.051
Cholesterol	0.043	0.75	32.69	**0.046**	0.043	0.75
Glycerol 1-phosphate	0.065	0.59	30.22	**0.044**	0.065	0.59
Carbohydrates and Related Metabolites						
Aldopentose	0.077	0.46	8.43	0.42	0.077	0.46
Fructose or similar ketohexose	-0.26	**1.53E-03**	-38.23	0.13	-0.26	**1.53E-03**
1,5 Anhydroglucitol	-0.12	0.25	-25.78	0.060	-0.12	0.25
Purines/Pyrimidines and Related Metabolites						
Uric Acid	0.034	0.75	22.41	0.081	0.034	0.75
Hypoxanthine	0.12	0.27	33.02	**0.041**	0.12	0.27
Pseudouridine	0.16	0.12	30.03	**0.044**	0.16	0.12
Glycolysis/TCA Cycle Intermediates and Related Metabolites						
Lactate	-0.038	**3.38E-04**	3.71	0.45	0.014	0.70
Glyceric acid	0.0031	0.91	29.35	**0.046**	0.0031	0.91

Organic Acids and Related Metabolites						
CMPF	-0.15	0.15	-31.95	**0.041**	-0.15	0.15
2-Hydroxyvaleric acid	-0.19	**0.046**	-40.67	**0.046**	-0.19	**0.046**
Other Metabolites						
Creatinine	0.11	0.29	25.29	0.060	0.11	0.29

NM/2AA/NE, N-Methylalanine/2-Aminobutanoic acid/N-Ethylglycine; CMPF, 3-Carboxy-4-methyl-5-propyl-2-furanpropanoic acid

All p-values are FDR adjusted