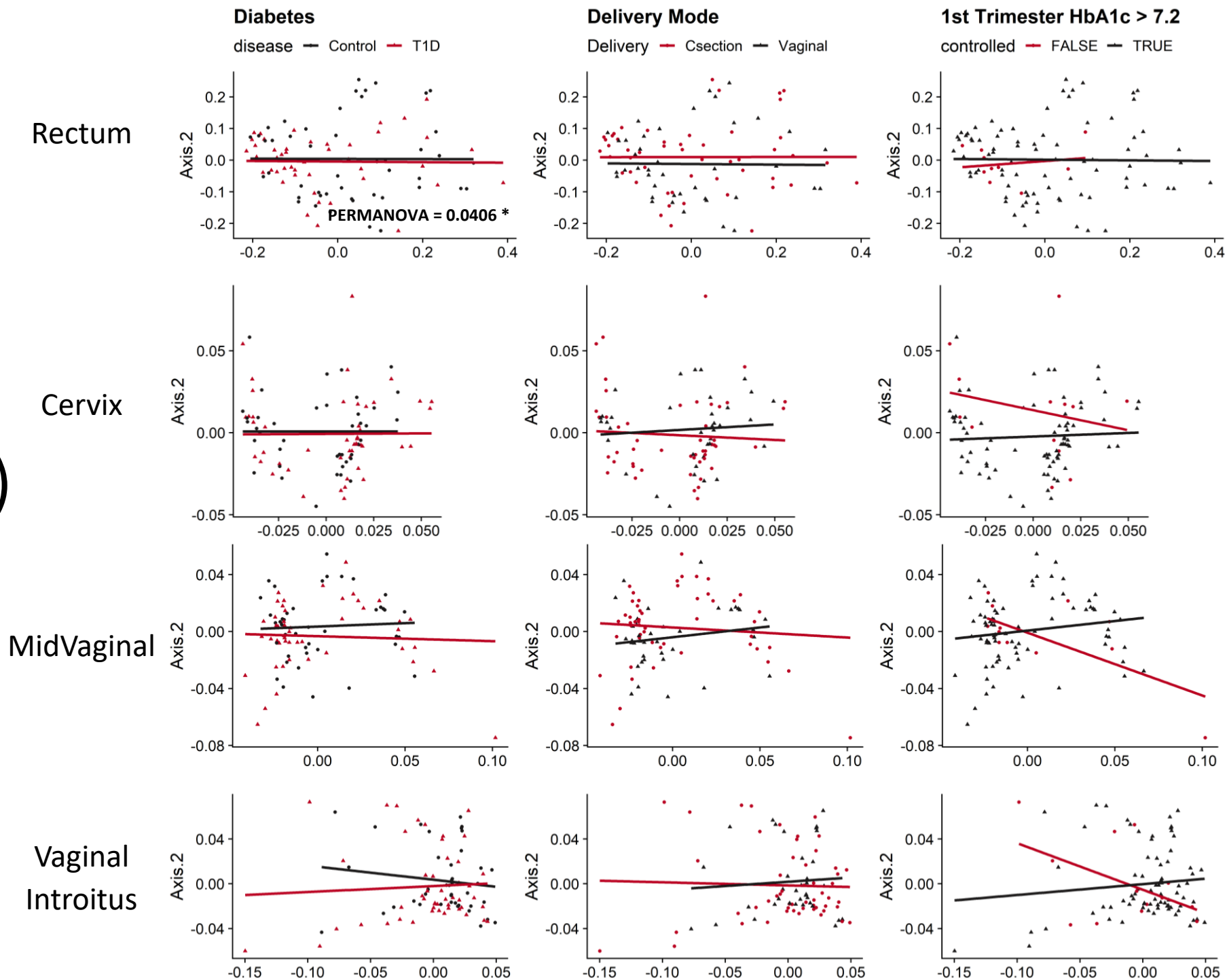
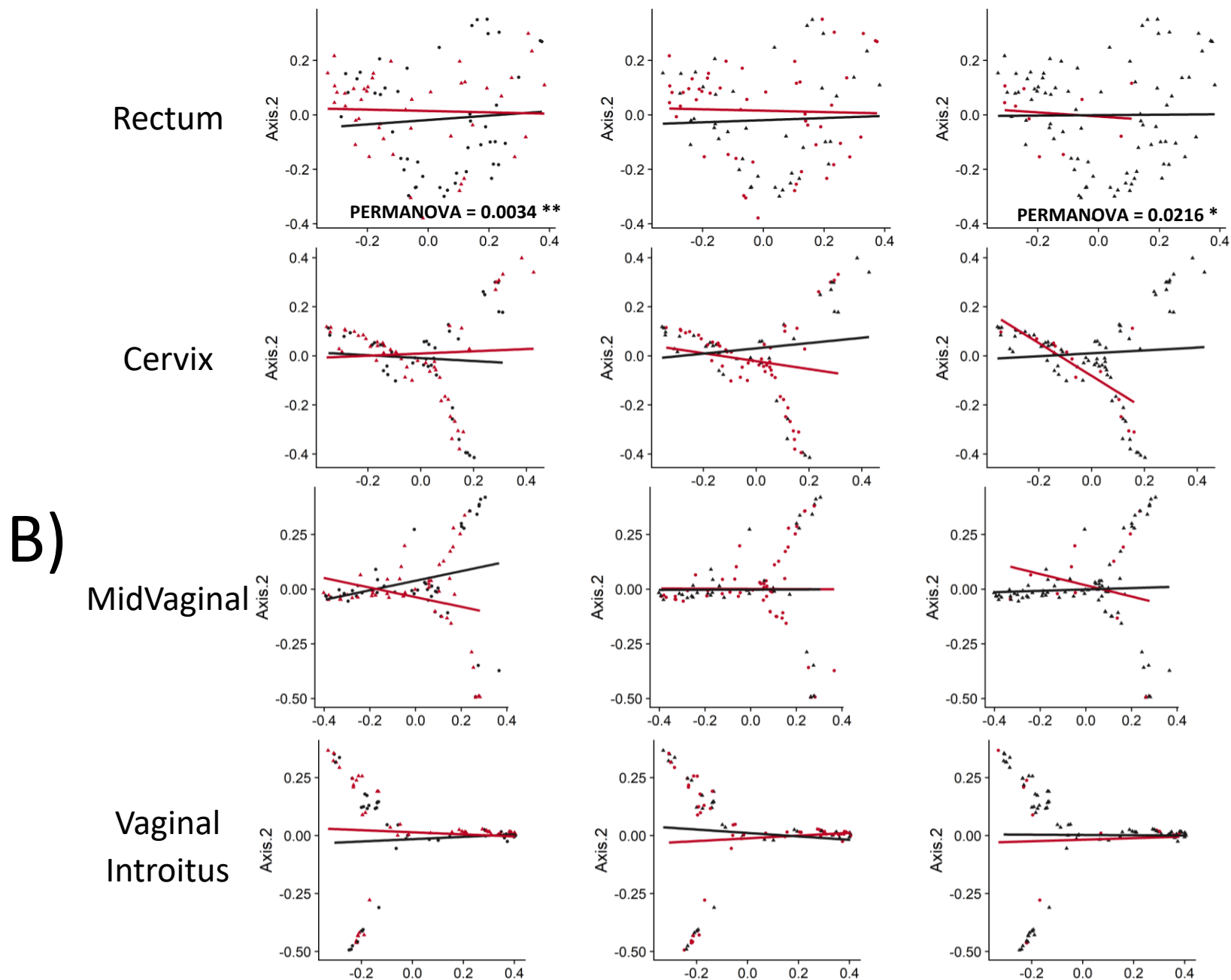
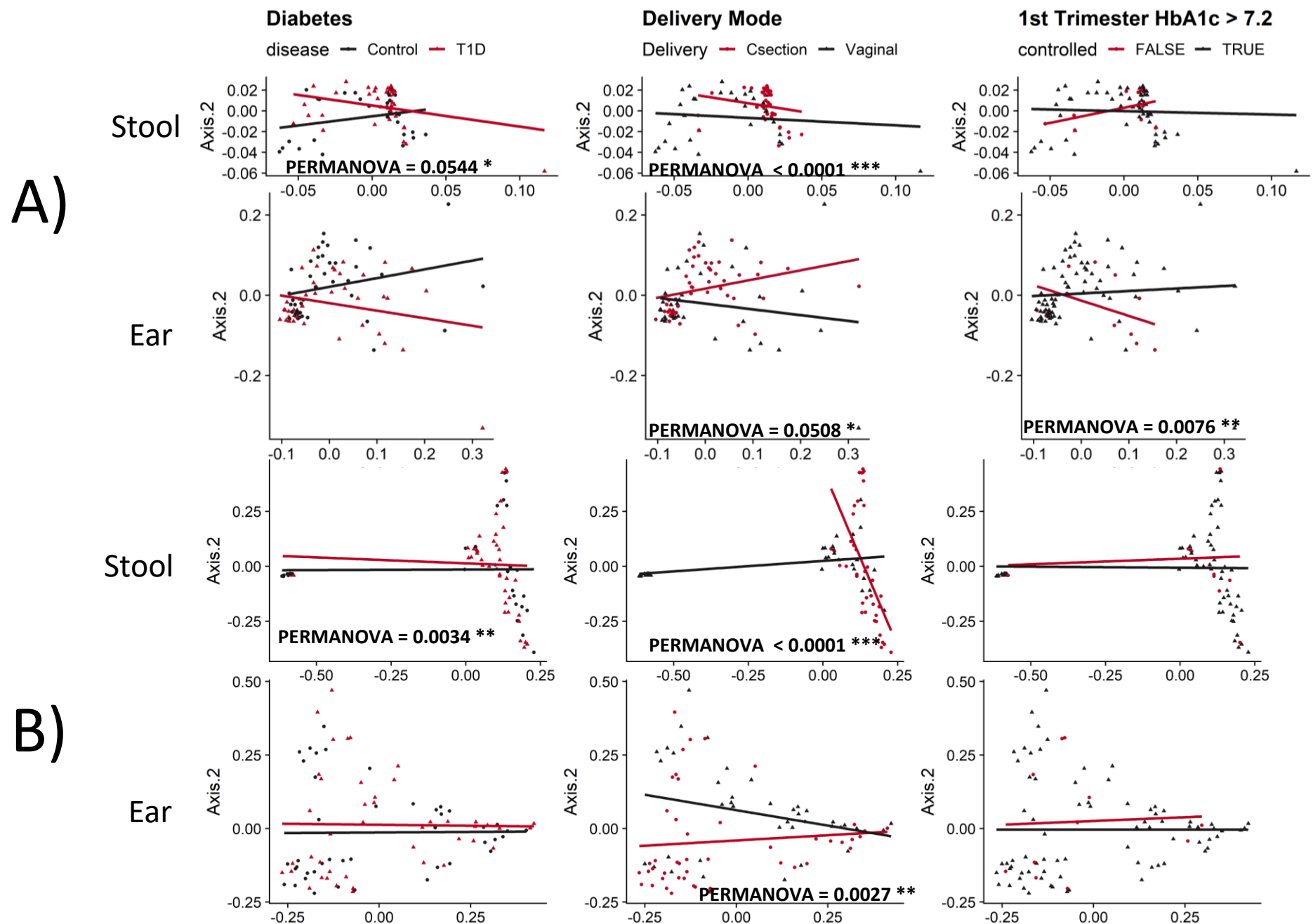


A)





**Figure X.** PCoA plot comparisons of maternal microbiome community composition by disease state(left), delivery mode (center), and maternal 1<sup>st</sup> trimester hemoglobin A1c values across rectum, cervix, midvaginal, and vaginal introitus sample types (top to bottom). PCoA plots coordinates are based on **A)** Weighted and **B)** Unweighted UniFrac dissimilarity indices obtained from VST transformed ASV counts. Trendlines are derived from fitting generalized linear models for each factor and statistical significance annotations are based on adonis2 permutational analysis of variance scores (permutations = 9999)



**Figure X.** PCoA plot comparisons of neonatal microbiome community composition by disease state(left), delivery mode (center), and maternal 1<sup>st</sup> trimester hemoglobin A1c values across stool and ear sample types (top to bottom). PCoA plots coordinates are based on **A)** Weighted and **B)** Unweighted UniFrac dissimilarity indices obtained from VST transformed ASV counts. Trendlines are derived from fitting generalized linear models for each factor and statistical significance annotations are based on adonis2 permutational analysis of variance scores (permutations = 9999)

**Table X.** adonis2 permutational analysis of variance scores (permutations = 9999) comparisons of maternal and neonatal microbiome community beta diversity by disease state, delivery mode, and maternal 1<sup>st</sup> trimester hemoglobin A1c values across rectum, cervix, midvaginal, vaginal introitus, stool and ear sample types. Missing 1<sup>st</sup> trimester hemoglobin A1c values were either imputed using a KNN based model from the remaining metadata values for T1D patients or generated based on a norm distribution derived from average 1st Trimester HbA1C values for nondiabetic mothers ( $4.96 \pm 0.53$ ).

Host	Sample Type	Variable	Weighted UniFrac					Unweighted UniFrac				
			SumOfSqs	R2	statistic	p.value		SumOfSqs	R2	statistic	p.value	
Maternal	Anus	Type 1 Diabetes	0.01	0.03	2.57	0.0406	*	0.72	0.02	1.84	0.0034	**
		Delivery Mode	0.00	0.01	0.51	0.7685		0.46	0.01	1.15	0.1833	
		1st Tri HbA1C	0.00	0.01	0.97	0.3855		0.59	0.02	1.49	0.0216	*
	Cervix	Type 1 Diabetes	0.00	0.01	0.78	0.5825		0.52	0.01	1.17	0.2411	
		Delivery Mode	0.00	0.01	1.03	0.3906		0.38	0.01	0.85	0.6525	
		1st Tri HbA1C	0.00	0.01	0.79	0.556		0.38	0.01	0.87	0.6371	
	Introitus	Type 1 Diabetes	0.00	0.02	1.44	0.1824		0.60	0.01	1.32	0.0746	
		Delivery Mode	0.00	0.02	1.67	0.112		0.61	0.02	1.36	0.0611	
		1st Tri HbA1C	0.00	0.02	1.75	0.0946		0.54	0.01	1.19	0.1703	
	Vagina	Type 1 Diabetes	0.00	0.01	1.14	0.3226		0.58	0.01	1.31	0.1028	
		Delivery Mode	0.00	0.02	1.73	0.1034		0.47	0.01	1.06	0.3484	
		1st Tri HbA1C	0.00	0.00	0.45	0.8508		0.57	0.01	1.27	0.1299	
Neonatal	Ear	Type 1 Diabetes	0.01	0.02	1.76	0.0831		0.53	0.01	1.23	0.0954	
		Delivery Mode	0.01	0.02	2.00	0.0508	*	0.74	0.02	1.72	0.0027	**
		1st Tri HbA1C	0.01	0.04	3.20	0.0076	**	0.57	0.02	1.31	0.0567	
	Stool	Type 1 Diabetes	0.00	0.03	2.27	0.0544	*	0.99	0.03	2.30	0.0034	**
		Delivery Mode	0.00	0.10	8.16	0.0001	****	2.15	0.07	5.16	0.0001	****
		1st Tri HbA1C	0.00	0.01	0.63	0.6338		0.36	0.01	0.81	0.7286	