

NR3C1 gene methylation and cortisol levels in preterm and healthy full-term infants in the first three months of life.

Table S6 – Crude means and estimated changes in the percentage of methylation on days 0, 5, 30 and D* (day of discharge for preterm infants or D90 for term infants) in both groups.

CpG sites	Day	Term newborns		Preterm newborns		Preterm compared to term infants			
		Mean (SD)	Change ^a	Mean (SD)	Change ^a	beta	e ^{beta}	95%CI	p-value
CpG8	D0	0.04 (0.31)	-	0.00 (0.00)	-				
	D5	0.00 (0.00)	0.0033	0.00 (0.00)	0	-0.020	0.980	0.9355; 1.027	0.3996
	D30	0.00 (0.00)	0.0255	0.00 (0.00)	0				
	D*	0.17 (0.90)	0.0938	0.00 (0.00)	0				
CpG9	D0	0.00 (0.00)	-	0.05 (0.33)	-				
	D5	0.00 (0.00)	0.0029	0.00 (0.00)	-0.0032	-0.070	0.932	0.904; 0.962	<0.0001
	D30	0.06 (0.34)	0.0354	0.00 (0.00)	-0.0149				
	D*	0.24 (0.91)	0.3135	0.00 (0.00)	-0.0246				
CpG10	D0	0.00 (0.00)	-	0.00 (0.00)	-				
	D5	0.00 (0.00)	0.0020	0.00 (0.00)	0	-0.045	0.956	0.934; 0.978	0.0001
	D30	0.00 (0.00)	0.0231	0.00 (0.00)	0				
	D*	0.23 (0.87)	0.1773	0.00 (0.00)	0				
CpG11	D0	0.05 (0.36)	-	0.03 (0.22)	-				
	D5	0.00 (0.00)	0.0000	0.00 (0.00)	-0.0019	-0.032	0.968	0.929; 1.009	0.128
	D30	0.08 (0.41)	0.0263	0.00 (0.00)	-0.0019				
	D*	0.12 (0.62)	0.0871	0.00 (0.00)	-0.0019				
CpG12	D0	2.71 (6.11)	-	3.87 (6.10)	-				
	D5	2.06 (5.45)	0.0513	3.16 (6.49)	-0.2520	-0.018	0.982	0.963; 1.001	0.067
	D30	2.96 (6.07)	0.3240	2.75 (4.94)	-1.2803				
	D*	3.23 (6.16)	0.8164	0.77 (1.11)	-2.3265				
CpG13	D0	0.33 (0.70)	-	0.37 (0.70)	-				
	D5	0.28 (0.64)	0.0409	0.26 (0.63)	0.0070	-0.016	0.984	0.968; 1.001	0.060
	D30	1.33 (2.70)	0.3221	0.27 (0.68)	0.0446				
	D*	0.99 (2.78)	1.1964	0.46 (0.83)	0.1134				
CpG14	D0	0.42 (1.46)	-	0.56 (1.45)	-				
	D5	0.30 (0.89)	-0.0156	0.00 (0.00)	-0.0099	0.005	1.005	0.940; 1.075	0.885
	D30	0.00 (0.00)	-0.0789	0.00 (0.00)	-0.0532				
	D*	0.09 (0.48)	-0.1424	0.15 (0.50)	-0.1039				
CpG15	D0	0.09 (0.48)	-	0.46 (1.36)	-				
	D5	0.00 (0.00)	-0.0144	0.00 (0.00)	-0.0398	-0.033	0.967	0.915; 1.023	0.242
	D30	0.00 (0.00)	-0.0722	0.00 (0.00)	-0.1425				
	D*	0.09 (0.49)	-0.1292	0.00 (0.00)	-0.1801				
CpG16	D0	0.74 (1.67)	-	1.06 (2.12)	-				
	D5	0.00 (0.00)	-0.0818	0.27 (0.94)	-0.1534	-0.036	0.964	0.933; 0.997	0.033
	D30	0.32 (1.19)	-0.3569	0.00 (0.00)	-0.4775				
	D*	0.08 (0.43)	-0.5398	0.00 (0.00)	-0.5526				
CpG17	D0	1.09 (2.74)	-	0.62 (1.79)	-				
	D5	0.13 (0.50)	-0.0628	0.20 (0.74)	-0.0331	0.003	1.003	0.961; 1.046	0.901
	D30	0.00 (0.00)	-0.2911	0.00 (0.00)	-0.1579				
	D*	0.17 (0.66)	-0.4717	0.12 (0.48)	-0.2651				
CpG18	D0	0.26 (1.40)	-	0.47 (1.53)	-				
	D5	0.00 (0.00)	-0.0281	0.11 (0.51)	-0.0117	0.034	1.034	0.990; 1.080	0.129
	D30	0.00 (0.00)	-0.1050	0.00 (0.00)	-0.0627				
	D*	0.00 (0.00)	-0.1374	0.18 (0.71)	-0.1220				
CpG19	D0	1.31 (3.13)	-	1.19 (2.47)	-				
	D5	1.37 (3.36)	-0.0376	0.58 (2.51)	-0.1495	-0.028	0.972	0.947; 0.998	0.035
	D30	1.32 (2.97)	-0.2102	0.35 (1.43)	-0.6104				
	D*	0.79 (3.11)	-0.4371	0.08 (0.34)	-0.8634				
CpG20	D0	0.06 (0.39)	-	0.00 (0.00)	-				
	D5	0.00 (0.00)	-0.0046	0.00 (0.00)	0				
	D30	0.00 (0.00)	-0.0211	0.00 (0.00)	0				
	Dd*	0.00 (0.00)	-0.0334	0.00 (0.00)	0				

^aChange compared to D0 (day 0).

Table S6 (cont.) – Crude means and estimated changes in the percentage of methylation on days 0, 5, 30 and D* (day of discharge for preterm infants or D90 for term infants) in both groups.

CpG sites	Day	Term newborns		Preterm newborns		Preterm compared to term infants			
		Mean (SD)	Change ^a	Mean (SD)	Change ^a	beta	e ^{beta}	95%CI	p-value
CpG21	D0	0.76 (2.16)	-	0.64 (1.54)	-	-0.030	0.970	0.955; 0.987	0.0003
	D5	1.08 (2.25)	0.1085	0.82 (1.93)	-0,0276				
	D30	2.94 (3.72)	0.8720	0.54 (1.47)	-0,1502				
	D*	2.93 (3.97)	3.3684	0.59 (1.16)	-0,3001				
CpG22	D0	0.10 (0.54)	-	0.50 (1.37)	-	0.025	1.026	0.987; 1.066	0.199
	D5	0.00 (0.00)	-0.0084	0.13 (0.53)	-0,0057				
	D30	0.00 (0.00)	-0.0360	0.11 (0.46)	-0,0326				
	D*	0.00 (0.00)	-0.0535	0.27 (0.70)	-0,0699				
CpG23	D0	0.00 (0.00)	-	0.09 (0.52)	-	0.005	0.024	0.958; 1.053	0.852
	D5	0.00 (0.00)	0	0.00 (0.00)	0,0010				
	D30	0.00 (0.00)	0	0.00 (0.00)	0,0066				
	D*	0.00 (0.00)	0	0.08 (0,41)	0,0168				
CpG24	D0	0.30 (0.96)	-	0.57 (1.47)	-	0.035	1.036	1.001; 1.072	0.044
	D5	0.00 (0.00)	-0.0304	0.28 (1.30)	-0,0125				
	D30	0.00 (0.00)	-0.1142	0.00 (0.00)	-0,0684				
	D*	0.00 (0.00)	-0.1501	0.28 (0.84)	-0,1382				
CpG25	D0	0.00 (0.00)	-	0.00 (0.00)	-	-	-	-	-
	D5	0.00 (0.00)	-	0.00 (0.00)	-				
	D30	0.00 (0.00)	-	0.00 (0.00)	-				
	D*	0.00 (0.00)	-	0.00 (0.00)	-				
CpG26	D0	0.00 (0.00)	-	0.09 (0.53)	-	-0.003	0.997	0.959; 1.037	0.893
	D5	0.09 (0.47)	-0.0063	0.00 (0.00)	-0,0064				
	D30	0.00 (0.00)	-0.0282	0.00 (0.00)	-0,0280				
	D*	0.00 (0.00)	-0.0442	0.00 (0.00)	-0,0425				
CpG27	D0	0.00 (0.00)	-	0.00 (0.00)	-	0.051	1.052	1.023; 1.083	0.0005
	D5	0.58 (3.11)	-0.0724	0.00 (0.00)	0				
	D30	0.00 (0.00)	-0.2517	0.00 (0.00)	0				
	D*	0.00 (0.00)	-0.3118	0.00 (0.00)	0				
CpG28	D0	0.00 (0.00)	-	0.00 (0.00)	-	0.068	1.070	1.062; 1.079	<.0001
	D5	0.00 (0.00)	0	0.00 (0.00)	0,0054				
	D30	0.00 (0.00)	0	0.21 (0.52)	0,0888				
	D*	0.00 (0.00)	0	0.05 (0.26)	1,4775				
CpG29	D0	0.30 (1.74)	-	0.00 (0.00)	-	-0.010	0.990	0.961; 1.019	0.492
	D5	0.27 (1.46)	0.0164	0.00 (0.00)	0				
	D30	0.59 (2.43)	0.1122	0.00 (0.00)	0				
	D*	0.49 (2.31)	0.3238	0.00 (0.00)	0				
CpG30	D0	0.19 (0.75)	-	0.18 (0.79)	-	0.005	1.005	0.975; 1.036	0.736
	D5	0.15 (0.56)	-0.0378	0.05 (0.29)	-0,0195				
	D30	0.00 (0.00)	-0.1389	0.00 (0.00)	-0,0754				
	D*	0.00 (0.00)	-0.1793	0.00 (0.00)	-0,1015				
CpG31	D0	0.31 (1.05)	-	0.29 (0.94)	-	0.007	1.007	0.980; 1.035	0.607
	D5	0.25 (0.67)	-0.0680	0.06 (0.34)	-0,0301				
	D30	0.00 (0.00)	-0.2351	0.00 (0.00)	-0,1110				
	D*	0.00 (0.00)	-0.2901	0.00 (0.00)	-0,1437				
CpG32	D0	0.00 (0.00)	-	0.00 (0.00)	-	0.037	1.038	0.995; 1.083	0.085
	D5	0.00 (0.00)	0.0055	0.00 (0.00)	0,0053				
	D30	0.32 (0.96)	0.0714	0.25 (0.67)	0,1321				
	D*	0.00 (0.00)	0.7305	0.00 (0.00)	5,1636				
CpG33	D0	0.22 (0.90)	-	0.20 (0.91)	-	0.048	1.049	1.005; 1.094	0.028
	D5	0.27 (0.85)	-0.0605	0.00 (0.00)	-0,0018				
	D30	0.00 (0.00)	-0.2097	0.00 (0.00)	-0,0103				
	D*	0.00 (0.00)	-0.2592	0.08 (0.46)	-0,0220				

^aChange compared to D0 (day 0).

Table S7 (cont.) – Crude means and estimated changes in the percentage of methylation on days 0, 5, 30 and D* (day of discharge for preterm infants or D90 for term infants) in both groups.

CpG sites	Day	Term newborns		Preterm newborns		Preterm compared to term infants			
		Mean (SD)	Change ^a	Mean (SD)	Change ^a	beta	e ^{beta}	95%CI	p-value
CpG34	D0	0.08 (0.49)	-	0.12 (0.58)	-	-0.044	0.957	0.915; 1.000	0.052
	D5	0.14 (0.53)	0.0062	0.00 (0.00)	-0.0098				
	D30	0.00 (0.00)	0.0433	0.00 (0.00)	-0.0408				
	D*	0.29 (1.07)	0.1287	0.00 (0.00)	-0.0587				
CpG35	D0	0.00 (0.00)	-	0.03 (0.20)	-	-0.016	0.984	0.962; 1.007	0.179
	D5	0.00 (0.00)	0	0.00 (0.00)	-0.0018				
	D30	0.00 (0.00)	0	0.00 (0.00)	-0.0091				
	D*	0.00 (0.00)	0	0.00 (0.00)	-0.0161				
CpG36	D0	0.67 (1.98)	-	0.08 (0.38)	-	-0.029	0.971	0.953; 0.990	0.002
	D5	0.30 (0.81)	0.1004	0.55 (1.77)	0.0005				
	D30	3.78 (6.01)	0.9015	0.24 (0.84)	0.0027				
	D*	1.83 (2.47)	4.3118	0.25 (0.80)	0.0063				
CpG37	D0	0.31 (1.13)	-	0.30 (1.41)	-	-0.035	0.965	0.928; 1.005	0.084
	D5	0.19 (0.74)	0.0506	0.21 (0.81)	-0.0154				
	D30	1.50 (4.05)	0.4069	0.06 (0.39)	-0.0789				
	D*	1.23 (4.05)	1.5711	0.11 (0.49)	-0.1446				
CpG38	D0	2.10 (2.45)	-	2.28 (2.87)	-	-0.009	0.991	0.978; 1.005	0.2121
	D5	2.28 (2.28)	0.1234	1.82 (2.00)	0.0241				
	D30	3.70 (3.96)	0.8517	1.70 (1.72)	0.1491				
	D*	4.02 (3.72)	2.4924	2.83 (4.76)	0.3619				
CpG39	D0	1.40 (2.60)	-	2.06 (3.26)	-	0.001	1.002	0.987; 1.017	0.850
	D5	1.84 (2.31)	-0.0672	1.24 (1.95)	-0.0543				
	D30	1.52 (3.46)	-0.3647	1.12 (1.40)	-0.2996				
	D*	0.76 (1.51)	-0.7261	1.14 (1.31)	-0.6117				
CpG40	D0	0.00 (0.00)	-	0.61 (2.94)	-	0.043	1.044	1.011; 1.078	0.009
	D5	0.98 (2.66)	-0.1160	0.71 (2.65)	-0.0484				
	D30	0.00 (0.00)	-0.3794	0.31 (0.77)	-0.2423				
	D*	0.00 (0.00)	-0.4516	0.24 (0.74)	-0.4314				
CpG41	D0	0.00 (0.00)	-	0.13 (0.68)	-	-0.036	0.965	0.942; 0.989	0.0049
	D5	0.00 (0.00)	0	0.05 (0.30)	-0.0150				
	D30	0.00 (0.00)	0	0.00 (0.00)	-0.0606				
	D*	0.00 (0.00)	0	0.00 (0.00)	-0.0846				
CpG42	D0	0.32 (0.94)	-	2.15 (3.04)	-	0.011	1.012	0.984; 1.040	0.417
	D5	1.97 (6.36)	-0.0695	1.50 (1.49)	-0.0379				
	D30	0.11 (0.56)	-0.3456	1.13 (1.32)	-0.2153				
	D*	0.31 (0.75)	-0.6103	1.44 (1.42)	-0.4589				
CpG43	D0	0.00 (0.00)	-	0.19 (0.76)	-	0.013	1.013	0.973; 1.054	0.532
	D5	0.14 (0.65)	-0.0093	0.07 (0.40)	-0.0125				
	D30	0.00 (0.00)	-0.0395	0.09 (0.32)	-0.0607				
	D*	0.00 (0.00)	-0.0581	0.03 (0.18)	-0.1045				
CpG44	D0	0.00 (0.00)	-	0.11 (0.66)	-	0.026	1.027	0.984; 1.072	0.228
	D5	0.22 (0.72)	-0.0163	0.00 (0.00)	-0.0030				
	D30	0.00 (0.00)	-0.0653	0.03 (0.17)	-0.0162				
	D*	0.00 (0.00)	-0.0908	0.03 (0.15)	-0.0315				
CpG45	D0	0.12 (0.46)	-	0.29 (1.01)	-	0.005	1.005	0.965; 1.047	0.804
	D5	0.24 (0.82)	-0.0104	0.53 (1.17)	-0.0183				
	D30	0.00 (0.00)	-0.0525	0.25 (0.64)	-0.0982				
	D*	0.08 (0.35)	-0.0950	0.17 (0.48)	-0.1932				
CpG46	D0	0.00 (0.00)	-	0.16 (0.91)	-	0.025	1.025	0.981; 1.072	0.269
	D5	0.29 (1.01)	-0.0245	0.12 (0.60)	-0.0100				
	D30	0.00 (0.00)	-0.0936	0.00 (0.00)	-0.0495				
	D*	0.00 (0.00)	-0.1246	0.04 (0.25)	-0.0869				
CpG47	D0	0.04 (0.23)	-	0.93 (2.79)	-	-0.030	0.970	0.946; 0.996	0.022
	D5	0.41 (1.11)	0.0199	0.33 (0.68)	-0.0234				
	D30	0.46 (1.95)	0.1614	0.42 (0.70)	-0.1279				
	D*	0.94 (2.17)	0.6343	0.45 (0.67)	-0.2578				
Total Meth.	D0	0.40 (1.76)	-	0.54 (1.94)	-	-0.013	0.987	-0.025; -0.001	0.034
	D5	0.44 (1.90)	0.0151	0.36 (1.64)	-0.0162				
	D30	0.59 (2.33)	0.0981	0.27 (1.21)	-0.0896				
	D*	0.51 (2.09)	0.2592	0.28 (1.12)	-0.1828				

^aChange compared to D0 (day 0); Total Meth – total methylation