

Variable					
Sex	42% Male	58% Female			
Wealth index	23% poorest	15% poor	22% middle class	20% rich	19% richest
Marital status	20% never married	79% married	1% divorced, widowed, separated		
Employment	21% manual worker	21% non-manual worker	49% housewife	9% unemployed	
Educational level	36% illiterate	18% primary school	27% secondary school	18% post-secondary	
Smoking status	78% not current smoker	22% current smoker			
	Mean	standard deviation			
Age at follow up (years)	29.5	1.3			
0 minutes glucose (mmol/l)	4.7	0.5			
120 minutes glucose (mmol/l)	5.5	1.7			
Systolic blood pressure (mmHg)	104.3	11.6			
Diastolic blood pressure (mmHg)	62.2	8.6			
Height (cm)	156.3	8.2			
Weight (kg)	48.9	7.9			
Body mass index (kg/m ²)	20.0	2.9			
Waist circumference (cm)	0.8	0.7			
HDL cholesterol (mmol/l)	1.0	0.2			
Triglycerides (mmol/l)	1.0	0.7			
LDL cholesterol (mmol/l)	4.0	0.9			
Total cholesterol (mmol/l)	4.2	1.1			
Total cholesterol:HDL cholesterol ratio	2.6	0.7			

Supplementary table 1: Clinical and socio-demographic characteristics of the participants studied (n=219).

Gene name	Chr	Start	Stop	450k array probes (n)	Annotation	ANOVA			p value	p value significance	Post-hoc pairwise comparison (Bonferroni)		
						Group A	Group B	Group C			AvsB	AvsC	BvsC
						Mean beta value							
VTRNA2-1	5	135,415,762	135,416,613	15	Overlaps TSS	0.369	0.331	0.322	0.0006	***	*	***	ns
PAX8	2	113,992,762	113,993,313	8	Gene body	0.707	0.771	0.730	<0.0001	****	****	ns	**
PRDM9	5	23,507,030	23,507,752	7	Overlaps TSS	0.721	0.656	0.720	<0.0001	****	****	ns	****
HLA-DQB2	6	32,729,442	32,729,847	15	Gene body	0.764	0.750	0.768	0.154	ns			
PLD6	17	17,109,570	17,110,120	8	Overlaps TSS	0.141	0.131	0.138	0.801	ns			
near ZFP57	6	29,648,345	29,649,024	18	Intergenic	0.677	0.618	0.683	<0.0001	****	****	ns	****
AKAP12	6	151,646,312	151,647,133	9	Overlaps TSS	0.171	0.166	0.183	0.684	ns			
ATP5B	12	57,040,045	57,040,204	3	Promoter	0.046	0.041	0.043	0.852	ns			
LRRC14B	5	191,242	192,103	11	Overlaps TSS	0.352	0.351	0.344	0.866	ns			
SPG20	13	36,944,640	36,944,649	2	Promoter	0.905	0.900	0.904	0.671	ns			
near BOLA	2	74357713	74357851	5	Intergenic	0.537	0.603	0.586	0.048	*	ns	ns	ns
RBM46	4	155702411	155702351	11	Overlaps TSS	0.741	0.729	0.737	0.528	ns			
ZFYVE28	4	2366672	2367137	7	Gene body	0.560	0.550	0.548	0.844	ns			
EXD3	9	140311919	140311437	3	5' UTR	0.671	0.623	0.663	0.009	**	*	ns	ns
PARD6G	18	77918588	77918142	4	Gene body	0.547	0.514	0.538	0.599	ns			
near ZNF678	1	227746294	227746111	3	Intergenic	0.576	0.563	0.583	0.769	ns			

Supplementary Table 2. Mean methylation across all probes within (+/- 500bp) of metastable epialleles described by Dominguez-Salasz (Nature Comms, 2014) and Silver (Genome Biol, 2015).

UCSC_RefGene_Name	450k probe	CHR	MAPINFO
VTRNA2-1/MIR886	cg00124993	chr5	135416412
	cg06536614	chr5	135416381
	cg11608150	chr5	135415948
	cg25340688	chr5	135416398
	cg26328633	chr5	135416394
	cg26896946	chr5	135416405
	cg04481923	chr5	135416205
	cg04515200	chr5	135415762
	cg06478886	chr5	135416029
	cg08745965	chr5	135416529
	cg11978884	chr5	135415819
	cg13581155	chr5	135415781
	cg16615357	chr5	135416594
	cg18678645	chr5	135416331
	cg18797653	chr5	135416613
PAX8	cg07594247	chr2	113993304
	cg07772999	chr2	113993052
	cg11763394	chr2	113992921
	cg12889195	chr2	113992843
	cg21550016	chr2	113992930
	cg17445212	chr2	113993313
	cg19083407	chr2	113993142
	cg21482265	chr2	113992762
PRDM9	cg02444433	chr5	23507469
	cg19837938	chr5	23507458
	cg22054885	chr5	23507450
	cg25472530	chr5	23507617
	cg01667892	chr5	23507656
	cg10589310	chr5	23507030
	cg22079902	chr5	23507644
HLADQB2	cg02964065	chr6	32729545
	cg04322111	chr6	32729764
	cg09739413	chr6	32729498
	cg10218546	chr6	32729823
	cg10714510	chr6	32729465
	cg13896204	chr6	32729442

	cg14441480	chr6	32729500
	cg15255946	chr6	32729563
	cg18026055	chr6	32729596
	cg21139325	chr6	32729470
	cg23418102	chr6	32729847
	cg24298476	chr6	32729808
	cg25327122	chr6	32729782
	cg03638120	chr6	32729720
	cg17475271	chr6	32729741
PLD6	cg03292213	chr17	17109640
	cg05590257	chr17	17109570
	cg11392858	chr17	17109651
	cg14099398	chr17	17109800
	cg16340422	chr17	17110120
	cg23661344	chr17	17109678
	cg26539818	chr17	17109691
	cg02880176	chr17	17109817
Near ZFP57	cg03198009	chr6	29648604
	cg07134666	chr6	29648400
	cg08022281	chr6	29648345
	cg08041448	chr6	29648901
	cg10648573	chr6	29648348
	cg11383134	chr6	29648590
	cg22494932	chr6	29648379
	cg00588198	chr6	29648452
	cg02157626	chr6	29648736
	cg03449857	chr6	29648623
	cg06032337	chr6	29648468
	cg12644888	chr6	29648360
	cg13835168	chr6	29648756
	cg15570656	chr6	29648628
	cg16885113	chr6	29648507
	cg20228636	chr6	29648525
	cg24100841	chr6	29649024
	cg25699073	chr6	29648381
AKAP12	cg04221606	chr6	151646552
	cg12794224	chr6	151646761
	cg15892964	chr6	151646540
	cg24322333	chr6	151646584

	cg03446012	chr6	151646601
	cg06019170	chr6	151646957
	cg08224159	chr6	151646312
	cg18245460	chr6	151646651
	cg25855249	chr6	151646817
SNORD59A	cg06679265	chr12	57040204
	cg03249590	chr12	57040199
	cg05555643	chr12	57040061
LRR14B	cg01239922	chr5	191242
	cg15351009	chr5	191486
	cg19858576	chr5	191806
	cg00607051	chr5	191500
	cg03553576	chr5	191296
	cg12711961	chr5	191600
	cg13787932	chr5	191793
	cg15730313	chr5	191628
	cg18443893	chr5	192103
	cg24696500	chr5	191492
	cg26866348	chr5	191547
SPG20	cg09410612	chr13	36944649
	cg13486491	chr13	36944640
Near BOLA	cg05890377	2	74357713
	cg01017244	2	74357527
	cg19325132	2	74358223
	cg19729930	2	74357872
	cg20891558	2	74357851
	cg07594247	2	113993304
	cg07772999	2	113993052
	cg11763394	2	113992921
	cg12889195	2	113992843
	cg21550016	2	113992930
	cg17445212	2	113993313
	cg19083407	2	113993142
cg21482265	2	113992762	
RBM46	cg08282428	4	155702411
	cg19340941	4	155702931
	cg22103164	4	155702409
	cg00137234	4	155703138
	cg02992596	4	155702220

	cg04355617	4	155703429
	cg06318837	4	155702341
	cg10920378	4	155702172
	cg22496683	4	155702610
	cg23483495	4	155702533
	cg26413432	4	155702351
ZFYVE28	cg03137131	4	2366672
	cg10622551	4	2366555
	cg00856997	4	2366103
	cg02937671	4	2366485
	cg09884451	4	2366831
	cg10635092	4	2367091
	cg13688770	4	2367137
EXD3	cg21251970	9	140311919
	cg23928763	9	140312446
	cg06433816	9	140311437
PARD6G	cg07500432	18	77918588
	cg13590055	18	77917647
	cg19815565	18	77917615
	cg21237861	18	77918142
Near ZNF678	cg22344745	1	227746294
	cg08111158	1	227746191
	cg21436055	1	227746111

Supplementary table 3. Genomic coordinates of metastable epialleles and related 450k probes (cg...)