

Supplementary eTable I. Summary of SNP Genotyping Failure Rates, Genotype Distributions and Tests of HWE in Control Mothers and Infants, California, 1999-2003

SNP rs ID	Type	Alleles ^b	Control Subjects		Genotyping	Genotype 1/1 ^c	Genotype 1/2 ^c	Genotype 2/2 ^c
			(* HWE <0.05)		Failure Rate ^d	N (%)	N (%)	N (%)
<i>DHFR</i> (5) ^a								
rs1650723	DS	A/G	Hispanic	Mother*	26.09	111 (0.82)	21 (0.15)	4 (0.03)
				Child	20.07	221 (0.80)	56 (0.20)	0 (0)
rs1677693	Tag, intron	A/C	White	Mother	9.59	51 (0.77)	12 (0.18)	3 (0.05)
				Child*	18.03	75 (0.75)	20 (0.2)	5 (0.05)
			Hispanic	Mother*	22.70	104 (0.73)	30 (0.21)	9 (0.06)
				Child	14.99	210 (0.71)	78 (0.26)	7 (0.02)
rs11951910	Tag, intron	C/T	White	Mother	13.70	35 (0.56)	23 (0.37)	5 (0.08)
				Child	14.05	64 (0.62)	31 (0.30)	9 (0.09)
			Hispanic	Mother	16.22	1 (0.01)	14 (0.09)	140 (0.90)
				Child	13.79	1 (0)	25 (0.08)	274 (0.91)
rs1076991	Tag, promoter	A/G	White	Mother	8.00	0 (0)	18 (0.26)	51 (0.74)
				Child	12.10	1 (0.01)	13 (0.12)	95 (0.87)
			Hispanic	Mother*	16.85	82 (0.54)	45 (0.29)	26 (0.17)
				Child*	14.41	146 (0.49)	109 (0.37)	42 (0.14)
rs8011839	Tag, intron	C/T	White	Mother	9.59	34 (0.52)	23 (0.35)	9 (0.14)
				Child	13.12	47 (0.44)	46 (0.43)	13 (0.12)
			Hispanic	Mother	12.64	111 (0.70)	40 (0.25)	8 (0.05)
				Child	11.59	201 (0.66)	88 (0.29)	16 (0.05)
rs1076991	Tag, promoter	A/G	White	Mother	4.05	50 (0.70)	18 (0.25)	3 (0.04)
				Child	11.38	74 (0.68)	29 (0.27)	6 (0.06)
			Hispanic	Mother	12.64	33 (0.21)	70 (0.44)	56 (0.35)
				Child	12.17	73 (0.24)	141 (0.47)	89 (0.29)

SNP rs ID	Type	Alleles ^b	Control Subjects		Genotyping	Genotype 1/1 ^c	Genotype 1/2 ^c	Genotype 2/2 ^c
			(* HWE <0.05)		Failure Rate ^d	N (%)	N (%)	N (%)
rs1885031	Tag, intron	A/G	White	Mother	4.05	19 (0.27)	31 (0.44)	21 (0.30)
				Child	9.76	23 (0.21)	54 (0.49)	34 (0.31)
			Hispanic	Mother	15.68	4 (0.03)	39 (0.25)	113 (0.72)
				Child	22.70	11 (0.04)	74 (0.28)	184 (0.68)
			White	Mother	5.41	0 (0)	9 (0.13)	61 (0.87)
				Child	24.39	0 (0)	14 (0.15)	79 (0.85)
rs1950902	Tag, exon NS K134R	C/T	Hispanic	Mother	16.76	3 (0.02)	22 (0.14)	129 (0.84)
				Child	14.37	5 (0.02)	45 (0.15)	248 (0.83)
			White	Mother	6.67	3 (0.04)	15 (0.21)	52 (0.74)
				Child	14.52	5 (0.05)	28 (0.26)	73 (0.69)
			Hispanic	Mother*	13.26	54 (0.34)	47 (0.30)	56 (0.36)
				Child	13.37	83 (0.28)	146 (0.49)	69 (0.23)
rs2236224	Tag, intron	C/T	White	Mother	10.81	11 (0.17)	28 (0.42)	27 (0.41)
				Child	11.38	22 (0.20)	50 (0.46)	37 (0.34)
			Hispanic	Mother*	19.89	53 (0.37)	46 (0.32)	46 (0.32)
				Child	15.12	96 (0.33)	140 (0.48)	56 (0.19)
			White	Mother*	8.22	17 (0.25)	25 (0.37)	25 (0.37)
				Child	18.85	26 (0.26)	46 (0.46)	27 (0.27)
rs2236225	Tag, exon NS R653Q	C/T	Hispanic	Mother*	12.90	154 (0.95)	7 (0.04)	1 (0.01)
				Child	11.46	282 (0.91)	26 (0.08)	1 (0)
			White	Mother	9.33	55 (0.81)	13 (0.19)	0 (0)
				Child	11.29	95 (0.86)	15 (0.14)	0 (0)
			Hispanic	Mother*	19.34	24 (0.16)	43 (0.29)	79 (0.54)
				Child*	13.08	37 (0.12)	104 (0.35)	158 (0.53)
rs3783728	Tag, intron	C/T	White	Mother	12.50	8 (0.13)	22 (0.35)	33 (0.52)
				Child	11.57	10 (0.09)	47 (0.44)	50 (0.47)
			Hispanic	Mother*	13.59	10 (0.06)	40 (0.25)	109 (0.69)
				Child	10.66	10 (0.03)	90 (0.29)	210 (0.68)
			White	Mother	9.33	55 (0.81)	13 (0.19)	0 (0)
				Child	11.29	95 (0.86)	15 (0.14)	0 (0)
rs11158542	Tag, upstream	C/T	Hispanic	Mother*	19.34	24 (0.16)	43 (0.29)	79 (0.54)
				Child*	13.08	37 (0.12)	104 (0.35)	158 (0.53)
			White	Mother	12.50	8 (0.13)	22 (0.35)	33 (0.52)
				Child	11.57	10 (0.09)	47 (0.44)	50 (0.47)
			Hispanic	Mother*	13.59	10 (0.06)	40 (0.25)	109 (0.69)
				Child	10.66	10 (0.03)	90 (0.29)	210 (0.68)
rs11627387	Tag, intron	A/G	Hispanic	Mother*	13.59	10 (0.06)	40 (0.25)	109 (0.69)
				Child	10.66	10 (0.03)	90 (0.29)	210 (0.68)
			White	Mother	9.33	55 (0.81)	13 (0.19)	0 (0)
				Child	11.29	95 (0.86)	15 (0.14)	0 (0)
			Hispanic	Mother*	19.34	24 (0.16)	43 (0.29)	79 (0.54)
				Child*	13.08	37 (0.12)	104 (0.35)	158 (0.53)

SNP rs ID	Type	Alleles ^b	Control Subjects		Genotyping	Genotype 1/1 ^c	Genotype 1/2 ^c	Genotype 2/2 ^c
			(* HWE <0.05)		Failure Rate ^d	N (%)	N (%)	N (%)
rs11849530	Tag, intron	A/G	White	Mother	5.48	10 (0.14)	24 (0.35)	35 (0.51)
				Child	9.84	12 (0.11)	47 (0.43)	51 (0.46)
			Hispanic	Mother*	17.84	89 (0.59)	45 (0.30)	18 (0.12)
				Child*	13.79	176 (0.59)	96 (0.32)	28 (0.09)
rs34616731	Promoter	A/T	White	Mother	9.46	40 (0.60)	22 (0.33)	5 (0.07)
				Child	15.45	61 (0.59)	38 (0.37)	5 (0.05)
			Hispanic	Mother*	14.52	12 (0.08)	43 (0.27)	104 (0.65)
				Child	21.55	9 (0.03)	78 (0.29)	186 (0.68)
<i>MTHFR</i> (1) ^a rs1476413	Intron	A/G	Hispanic	Mother	10.33	119 (0.72)	42 (0.25)	4 (0.02)
				Child	18.79	99 (0.74)	33 (0.25)	2 (0.01)
			White	Mother	2.70	45 (0.63)	22 (0.31)	5 (0.07)
				Child	13.43	36 (0.62)	17 (0.29)	5 (0.09)
rs1801131	Exon, NS E429A (A1298C)	A/C	Hispanic	Mother	16.22	7 (0.05)	40 (0.26)	108 (0.7)
				Child	21.33	12 (0.04)	87 (0.32)	174 (0.64)
			White	Mother	13.33	5 (0.08)	22 (0.34)	38 (0.58)
				Child*	17.74	12 (0.12)	30 (0.29)	60 (0.59)
rs1801133	Exon, NS A222V (C677T)	C/T	Hispanic	Mother	11.41	40 (0.25)	78 (0.48)	45 (0.28)
				Child	24.85	27 (0.22)	52 (0.42)	45 (0.36)
			White	Mother	2.70	14 (0.19)	34 (0.47)	24 (0.33)
				Child	17.91	10 (0.18)	23 (0.42)	22 (0.40)
<i>SHMT1</i> (17) ^a rs669340	Tag, intron	C/G	Hispanic	Mother	17.03	61 (0.40)	64 (0.42)	26 (0.17)

SNP rs ID	Type	Alleles ^b	Control Subjects		Genotyping	Genotype 1/1 ^c	Genotype 1/2 ^c	Genotype 2/2 ^c	
			(* HWE <0.05)		Failure Rate ^d	N (%)	N (%)	N (%)	
rs1979277	DS, NS L474F	A/G	Hispanic	Child	12.79	152 (0.51)	116 (0.39)	32 (0.11)	
				White	Mother	5.33	31 (0.44)	27 (0.38)	13 (0.18)
				Child	8.07	53 (0.46)	50 (0.44)	11 (0.10)	
				Mother*	31.52	9 (0.07)	33 (0.26)	84 (0.67)	
				Child	19.60	22 (0.08)	109 (0.39)	148 (0.53)	
				White	Mother*	13.70	10 (0.16)	15 (0.24)	38 (0.60)
rs2168781	Tag, intron	C/G	Hispanic	Child	18.85	8 (0.08)	45 (0.45)	46 (0.46)	
				Mother	16.76	54 (0.36)	66 (0.44)	29 (0.19)	
				Child	12.90	81 (0.27)	140 (0.47)	76 (0.26)	
				White	Mother	14.87	24 (0.38)	27 (0.43)	12 (0.19)
				Child	13.82	33 (0.31)	51 (0.48)	22 (0.21)	
				Mother	12.97	118 (0.73)	36 (0.22)	7 (0.04)	
rs2273026	Tag, intron	A/G	Hispanic	Child*	14.08	206 (0.69)	76 (0.25)	17 (0.06)	
				White	Mother	6.76	57 (0.83)	11 (0.16)	1 (0.01)
				Child*	12.20	91 (0.84)	14 (0.13)	3 (0.03)	
				Mother*	22.28	15 (0.10)	37 (0.26)	91 (0.64)	
				Child	17.00	19 (0.07)	105 (0.36)	164 (0.57)	
				White	Mother	10.96	4 (0.06)	21 (0.32)	40 (0.62)
rs9909104	Tag, intron	C/T	Hispanic	Child	16.39	9 (0.09)	41 (0.4)	52 (0.51)	
				Mother*	13.26	103 (0.66)	42 (0.27)	12 (0.08)	
				Child	10.76	176 (0.57)	109 (0.36)	22 (0.07)	
				White	Mother	8.22	40 (0.60)	21 (0.31)	6 (0.09)
				Child	6.56	52 (0.46)	52 (0.46)	10 (0.09)	
				Mother*	15.76	11 (0.07)	43 (0.28)	101 (0.65)	
rs12939757	Tag, DS	A/G	Hispanic	Child	12.97	21 (0.07)	118 (0.39)	163 (0.54)	
				White	Mother*	9.46	11 (0.16)	18 (0.27)	38 (0.57)
				Child	17.07	8 (0.08)	47 (0.46)	47 (0.46)	

SNP rs ID	Type	Alleles ^b	Control Subjects		Genotyping	Genotype 1/1 ^c	Genotype 1/2 ^c	Genotype 2/2 ^c
			(* HWE <0.05)		Failure Rate ^d	N (%)	N (%)	N (%)
<i>TYMS</i> (18) ^a								
rs502396	Tag, promoter	C/T	Hispanic	Mother	18.23	29 (0.20)	60 (0.41)	59 (0.40)
				Child*	15.12	61 (0.21)	123 (0.42)	108 (0.37)
			White	Mother	10.81	22 (0.33)	30 (0.45)	14 (0.21)
				Child*	15.45	38 (0.37)	41 (0.39)	25 (0.24)
rs699517	Tag, DS	C/T	Hispanic	Mother	15.68	83 (0.53)	55 (0.35)	18 (0.12)
				Child	11.49	140 (0.45)	130 (0.42)	38 (0.12)
			White	Mother	10.81	29 (0.44)	31 (0.47)	6 (0.09)
				Child	7.32	53 (0.46)	43 (0.38)	18 (0.16)
rs1001761	Tag, intron	C/T	Hispanic	Mother*	18.13	28 (0.19)	59 (0.40)	62 (0.42)
				Child*	14.78	56 (0.19)	125 (0.43)	113 (0.38)
			White	Mother	13.51	17 (0.27)	29 (0.45)	18 (0.28)
				Child*	13.82	34 (0.32)	41 (0.39)	31 (0.29)
rs2847153	Tag, intron	A/G	Hispanic	Mother	14.13	3 (0.02)	51 (0.32)	104 (0.66)
				Child	13.55	12 (0.04)	93 (0.31)	195 (0.65)
			White	Mother	6.85	2 (0.03)	23 (0.34)	43 (0.63)
				Child	9.84	7 (0.06)	36 (0.33)	67 (0.61)
rs2847149	Tag, intron	A/G	Hispanic	Mother*	16.94	31 (0.20)	54 (0.36)	67 (0.44)
				Child*	15.90	56 (0.19)	123 (0.42)	112 (0.38)
			White	Mother	12.50	18 (0.29)	30 (0.48)	15 (0.24)
				Child*	11.57	33 (0.31)	42 (0.39)	32 (0.30)
rs2847326	Tag, DS	A/T	Hispanic	Mother	17.84	20 (0.13)	57 (0.38)	75 (0.49)
				Child	14.12	20 (0.07)	118 (0.40)	160 (0.54)
			White	Mother	9.46	3 (0.04)	20 (0.30)	44 (0.66)
				Child*	10.57	12 (0.11)	31 (0.28)	67 (0.61)

Abbreviations: *DHFR*, dihydrofolate reductase; DS, downstream; HWE, Hardy-Weinberg equilibrium; *MTHFD1*, methylenetetrahydrofolate dehydrogenase; *MTHFR*, methylenetetrahydrofolate reductase; NS, non-synonymous; *SHMT1*, cytoplasmic serine hydroxymethyltransferase; *TYMS*, thymidylate synthase.

**HWE P* values < 0.05 were excluded from further analyses.

^a Chromosome.

^b SNP alleles, minor allele shown in bold.

^c Shown as n with (frequencies).

^d % of subgroup with undiscriminated or discordant (with duplicate) genotypes.