

Supplementary Table 1. Characteristics of studies included in the meta-analysis

First author	Year	Country	Ethnicity	Source of controls	Genotype distribution						PHWE ^c	
					Cases			Controls				
MTHFRC677T												
Sammer et al.	2011	India	Indian	Healthy person	59	18	9	121	27	12	0.000	
Pardini et al.	2011	Czech	Caucasian	Hospital patients	281	309	76	583	638	156	0.349	
Jokic et al.	2011	Croatia	Caucasian	Healthy person	139	130	31	142	130	28	0.823	
Guimaraes et al.	2010	Brazilian	African-Brazilians	Hospital patients	48	50	15	92	79	17	0.994	
Cui et al.	2010	Korea	Asian	Healthy person	622	923	284	540	863	297	0.133	
Fernandez-Peralta	2009	Spanish	Caucasian	Hospital patients	89	52	2	44	50	9	0.322	
Sharp et al.	2008	Scotland	Caucasian	Healthy person	117	111	23	170	177	47	0.929	
Mohebbi et al.	2008	Iran	Iranian	Hospital patients	117	68	49	94	80	83	0.000	
Theodoratou	2008	Scotland	Caucasian	Hospital patients	447	441	111	439	455	116	0.908	
Zeybek et al.	2007	Turkey	Caucasian	Hospital patients	18	7	27	64	15	65	0.000	
Chang et al.	2007	Taiwan	Asian	Hospital patients	85	86	24	92	87	16	0.467	
Murtaugh et al.	2007	USA	Mixed population	Healthy person	362	305	84	469	398	112	0.052	
Lima et al.	2007	Brazil	Brazilian	Hospital patients	41	46	15	143	127	30	0.817	
Van Guelpen et al.	2006	Sweden	Caucasian	Healthy person	123	85	12	212	161	42	0.168	
Koushik et al.	2006	USA	Caucasian ^b	Healthy person	166	145	38	355	327	112	0.010	

Wang et al.	2006	Indian	Dravidian	Hospital patients	257	43	2	255	36	0	0.261
Le Marchand et al.	2005	USA	Mixed population	Healthy person	384	329	87	987	779	255	0.000
Matsuo et al.	2005	Japan	Asian	Hospital patients	106	114	36	289	348	134	0.100
Jiang et al.	2005	China	Asian	Healthy person	51	59	15	134	143	62	0.032
Otani et al.	2005	Japan	Asian	Hospital patients	32	49	25	51	114	57	0.679
Curtin et al.	2004	USA	Caucasian	Healthy person	729	717	149	886	852	226	0.331
Ulvik et al.	2004	Norway	Caucasian	Healthy person	1103	899	157	1092	886	212	0.101
Yin et al.	2004	Japan	Asian	Hospital patients	270	330	85	278	367	133	0.528
Kim et al.	2004	Korea	Asian	Hospital patients	86	122	35	83	109	33	0.773
Pufulete et al.	2003	UK	Caucasian	Hospital patients	16	6	6	41	29	6	0.784
Plaschke et al.	2003	Germany	Caucasian	Hospital patients	133	120	34	149	159	38	0.648
Heijmans et al.	2003	Netherlands	Caucasian	Healthy person	7	7	4	392	322	61	0.649
Toffoli et al.	2003	Italy	Caucasian	Healthy person	93	145	38	83	140	56	0.827
Shannon et al.	2002	Australia	Caucasian	Healthy person	249	197	55	533	560	114	0.056
Sachse et al.	2002	UK	Caucasian	Hospital patients	238	199	53	271	272	49	0.092
Matsuo et al.	2002	Japan	Asian	Hospital patients	39	81	22	81	124	36	0.304
Le Marchand et al. ^a	2002	USA	Japanese	Healthy person	126	153	43	138	182	77	0.225
Le Marchand et al. ^a	2002	USA	Caucasian	Healthy person	66	64	19	66	81	24	0.915
Le Marchand et al. ^a	2002	USA	Hawaiian	Healthy person	44	27	6	53	32	3	0.488
Keku et al. ^a	2002	USA	African-American	Healthy person	198	43	3	264	59	6	0.214

Keku et al. ^a	2002	USA	Caucasian	Healthy person	144	140	24	265	223	51	0.681
Ryan et al.	2001	Ireland	Caucasian	Hospital patients	49	73	14	439	326	83	0.052
Slattery et al.	1999	USA	mixed population	Hospital patients	673	655	139	827	787	207	0.341
Park et al.	1999	Korea	Asian	Hospital patients	65	107	28	140	246	74	0.048
Ma et al.	1997	USA	Caucasian	Healthy person	92	92	18	145	132	49	0.041
Chen et al.	1996	USA	Caucasian	Healthy person	67	64	13	280	263	84	0.079
<i>MTHFR A1298C</i>											
Pardini et al.	2011	Czech	Caucasian	Hospital patients	317	307	42	613	627	136	0.184
Jokic et al.	2011	Croatia	Caucasian	Healthy person	137	136	27	140	128	32	0.734
Guimaraes et al.	2010	Brazilian	African-Brazilians	Hospital patients	67	38	8	127	49	12	0.022
Fernandez-Peralta	2009	Spanish	Caucasian	Hospital patients	84	53	6	57	44	2	0.048
Theodoratou	2008	Scotland	Caucasian ^b	Hospital patients	465	425	106	462	445	102	0.733
Sharp et al.	2008	Scotland	Caucasian	Healthy person	105	111	29	177	157	60	0.012
Lima et al.	2007	Brazil	Brazilian	Hospital patients	68	28	6	191	93	16	0.297
Chang et al.	2007	Taiwan	Asian	Hospital patients	120	65	10	127	55	13	0.046
Murtaugh et al.	2007	USA	mixed population	Healthy person	364	320	67	438	430	111	0.725
Koushik et al.	2006	USA	Caucasian ^b	Prospective study	154	166	33	389	332	85	0.262
Van Guelpen et al.	2006	Sweeden	Caucasian	Healthy person	85	103	32	189	173	50	0.288
Wang et al.	2006	Indian	Dravidian	Hospital patients	141	130	31	105	135	51	0.505

Otani et al.	2005	Japan	Asian	Hospital patients	73	32	1	156	63	5	0.643
Matsuo et al.	2005	Japan	Asian	Hospital patients	163	85	9	479	257	31	0.635
Jiang et al.	2005	Chian	Asian	Healthy person	93	30	1	226	103	6	0.137
Curtin et al.	2004	USA	mixed population	Healthy person	751	691	153	926	822	216	0.100
Plaschke et al.	2003	Germany	Caucasian	Healthy person	134	124	29	154	151	41	0.669
Toffoli et al.	2003	Italy	Caucasian	Healthy person	122	129	25	133	121	25	0.735
Matsuo et al.	2002	Japan	Caucasian	Hospital patients	94	44	3	157	75	9	0.991
Le Marchand et al. ^a	2002	USA	Japanese	Healthy person	205	100	10	244	136	15	0.459
Le Marchand et al. ^a	2002	USA	Caucasian	Healthy person	78	56	14	86	65	20	0.163
Le Marchand et al. ^a	2002	USA	Hawaiian	Healthy person	41	33	2	50	34	3	0.333
Keku et al. ^a	2002	USA	African-American	Healthy person	157	78	8	217	99	13	0.686
Keku et al. ^a	2002	USA	Caucasian	Healthy person	156	132	21	237	236	68	0.440
<i>MTRRA66G</i>											
Pardini et al.	2011	Czech	Caucasian	Hospital patients	113	330	218	291	671	410	0.592
Jokic et al.	2011	Croatia	Caucasian	Healthy person	53	159	88	74	143	83	0.428
Guimaraes et al.	2010	Brazilian	African-Brazilians	Hospital patients	26	55	32	53	102	33	0.181
Theodoratou	2008	Scotland	Caucasian ^b	Healthy person	200	456	339	198	482	329	0.370
Steck et al ^a	2008	USA	African-Americans	Healthy person	116	99	24	169	127	26	0.755
Steck et al ^a	2008	USA	Caucasian	Healthy person	53	155	99	109	256	168	0.526

Koushik et al.	2006	USA	Caucasian ^b	Prospective study	82	159	116	163	399	245	0.981
Otani et al.	2005	Japan	Asian	Hospital patients	58	44	5	128	82	14	0.858
Matsuo et al.	2002	Japan	Asian	Hospital patients	64	55	23	112	114	15	0.045
Le Marchand et al. ^a	2002	USA	Japanese	Healthy person	148	140	26	193	170	30	0.374
Le Marchand et al. ^a	2002	USA	Caucasian	Healthy person	26	81	40	45	86	39	0.865
Le Marchand et al. ^a	2002	USA	Hawaiian	Healthy person	30	34	12	40	38	9	0.995
<i>MTR A2756G</i>											
Guimaraes et al.	2010	Brazilian	African-Brazilians	Hospital patients	82	26	5	144	37	7	0.028
Theodoratou	2008	Scotland	Caucasian ^b	Healthy person	630	332	37	662	318	30	0.267
Steck et al ^a	2008	USA	African-Americans	Healthy person	129	94	16	182	125	15	0.265
Steck et al ^a	2008	USA	Caucasian	Healthy person	205	91	11	347	171	15	0.263
Koushik et al.	2006	USA	Caucasian ^b	Prospective study	222	121	20	529	239	36	0.180
Matsuo et al.	2005	Japan	Asian	Hospital patients	165	78	14	499	247	25	0.404
Ulvik et al.	2004	Norway	Caucasian	Prospective study	1457	647	64	1402	693	97	0.336
Pufulete et al.	2003	UK	Caucasian	Hospital patients	19	8	1	45	23	8	0.072
Matsuo et al.	2002	Japan	Asian	Hospital patients	90	47	5	156	79	6	0.276
Le Marchand et al. ^a	2002	USA	Asian	Healthy person	212	91	12	259	119	16	0.618
Le Marchand et al. ^a	2002	USA	Caucasian	Healthy person	103	43	2	116	50	5	0.889
Le Marchand et al. ^a	2002	USA	Hawaiian	Prospective study	57	17	2	72	14	1	0.734

Ma et al.	1998	USA	Caucasian-American	Prospective study	248	98	10	317	137	22	0.154
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Note: ^aThey were different case-control studies in one publications;

^b most of the subjects were Caucasians;

^c p for Hardy-Weinberg equilibrium test in controls;

MTHFR, Methylenetetrahydrofolate Reductase; *MTRR*, methionine synthase reductase; *MTR*, Methionine synthase.