

Supplement Table 1. A Summary of the studies included in the meta-analysis

No.	Authors (year)	Country	Methods for <i>BRAF</i> ^{V600E} detection	Follow time	Disease stage	<i>BRAF</i> ^{V600E} mutation rate (%)	NOS score
1	Ahn, et al. (2014)	Korea	PNA Clamp™ <i>BRAF</i> mutation detection kit	2002-2007	I-IV	26/164 (15.85%)	5
2	Ang, et al. (2009)	NA	fluorescent-single strand conformation	NA	I-IV	50/735 (6.80%)	5
3	Bagadi, et al. (2012)	India	amplification refractory mutation system-PCR	2009.1-2010.5	I-IV	17/100 (17.00%)	5
4	Barault, et al. (2008)	French	allele-specific PCR	1998.1-2002.12	I-IV	76/578 (13.15%)	6
5	Birgisson, et al. (2015)	Sweden	pyrosequencing	1987-2006	II-IV	28/121 (23.14%)	6
6	Bozzao, et al. (2012)	Italy	high-resolution melting	2009.7-2011.7	I-IV	13/209 (6.22%)	5
7	Chen, et al. (2016)	Taiwan	direct sequencing	2005-2013	III-IV	25/232 (10.78%)	5
8	Won, et al. (2017)	Korea	Sanger sequencing	2010.7-2013.9	I-IV	44/1096 (4.01%)	7
9	Eklof, et al. (2013)-CRUMS	Sweden	Taqman allelic discrimination assay	1995-2003	I-IV	54/410 (13.17%)	5
10	Eklof, et al. (2013)-NSHDS	Sweden	Taqman allelic discrimination assay	NA-2008.1	I-IV	35/196 (17.86%)	5
11	English, et al. (2008)	Greece	allele-specific PCR	1990-1994	NA	95/582 (16.32%)	6
12	French, et al. (2008)	American	direct sequencing	NA	II-III	77/490 (15.71%)	7
13	Hang, et al. (2015)	Taiwan	direct sequencing	2012-2015	I-IV	23/425 (5.41%)	6
14	Hanna, et al. (2013)	Multiple	OncoMap	NA	I-IV	45/421 (10.69%)	5
15	Hughes, et al. (2012)	Netherlands	RFLP & PCR-based allelic discrimination	1986-2004	NA	207/1279 (16.18%)	7
16	Jia, et al. (2016)	Germany	immunohistochemistry	2003-2010	I-IV	101/1385 (7.29%)	5

17	Jones, et al. (2017)	American	direct sequencing	2013-2016	IV	133/590 (22.54%)	5
18	Kadiyska, et al. (2007)	Bulgaria	single-strand conformation polymorphism (SSCP)	1998-2004	I-IV	8/140 (5.71%)	6
19	Kakar, et al. (2008)	American	allele-specific PCR	1996-2000	I-IV	10/69 (14.49%)	5
20	Kim, et al. (2014)	Korea	direct sequencing	2009.10-2011.12	III-IV	13/136 (9.56%)	5
21	Krol, et al. (2012)	Netherland	direct sequencing	2002-2005	II-IV	23/149 (15.44%)	5
22	Lee, et al. (2014)	Korea	allele-specific RT-PCR	2005.4-2011.12	II-III	16/433 (3.70%)	5
23	Li, et al. (2006)	Australia	direct sequencing	NA	NA	23/275 (8.36%)	6
24	Li, et al. (2011)	China	pyrosequencing	2008-2009	I-IV	14/200 (7.00%)	5
25	Lin, et al. (2014)	Taiwan	MassARRAY-Based BRAF mutation characterization	2000.3-2009.7	I-IV	62/1063 (5.83%)	6
26	Liou, et al. (2011)	Taiwan	direct sequencing	2003.10-2006.4	I-IV	12/314 (3.82%)	5
27	Martinetti, et al. (2014)	Albania	direct sequencing	2012-2013	I-IV	10/159 (6.29%)	5
28	Modest, et al. (2016)	Multiple	pyrosequencing	2000-2013.2	I-IV	74/738 (10.03%)	7
29	Morikawa, et al. (2018)	Japan	direct sequencing	2000.5-2013.2	IV	7/113 (6.19%)	5
30	Naguib, et al. (2010)	United Kingdom	pyrosequencing	1993-1997	I-IV	29/186 (15.59%)	5
31	Nakaji, et al. (2016)	Japan	direct sequencing	1994-2013	I-III	41/472 (8.69%)	5
32	Nakanishi, et al. (2012)	Japan	direct sequencing	1994-2009	I-IV	17/254 (6.69%)	6
33	Nam, et al. (2016)	Korea	RT-PCR	2003-2009	I-IV	6/191 (3.14%)	5
34	Nosho, et al. (2008)	American	pyrosequencing	1976/1986-NA	I-IV	113/861 (13.12%)	5
35	Ogino, et al. (2009)	American	pyrosequencing	1976/1986-NA	I-IV	105/631 (16.64%)	5
36	Ooki, et al. (2014)	Japan	RT-PCR	2001.5-2011.12	III	21/405 (5.19%)	6
37	Phipps, et al. (2012)	American	allele-specific PCR	1998.1-2002.6	NA	247/1980 (12.47%)	5
38	Price, et al. (2016)	Australian	NA	2006.2-2015.3	IV	29/227 (12.78%)	5

39	Rako, et al. (2012)	Croatia	fluorescent-single strand conformation	NA	I-III	6/71 (8.45%)	5
40	Rimbert, et al. (2017)	French	pyrosequencing	2011.1-2015.4	NA	269/1735 (15.50%)	5
41	Rozek, et al. (2010)	Northern Israel	direct sequencing	1998.3-2004.4	NA	65/1297 (5.01%)	5
42	Samowitz, et al. (2005)	American	direct sequencing	1991.10-1994.9	I-IV	87/911 (9.55%)	7
43	Sarasqueta, et al. (2010)	Netherland	RT-PCR	1996-2004	II-III	58/296 (19.59%)	5
44	Saridaki, et al. (2013)	Greece	allele-specific RT-PCR	2007.1-2012.12	I-III	41/502 (8.17%)	5
45	Seppä 'la', et al. (2015)	Finland	immunohistochemistry	2000-2010	I-IV	94/738 (12.74%)	5
46	Shaukat, et al. (2010)	American	Mutector II BRAF/Ras mutation detection panel	1991.1-2004.12	I-IV	36/165 (21.82%)	7
47	Shen, et al. (2013)	China	direct sequencing	2010.8-2011.12	I-IV	47/675 (6.96%)	5
48	Sinicrope, et al. (2017)	American	allele-specific PCR+oncocarta and colocarta	2004.12-2015.8	III	112/832 (13.46%)	5
49	Sylvester, et al. (2011)	American	direct sequencing	1992-2002	I-IV	32/418 (7.66%)	7
50	Tanaka, et al. (2010)	American	pyrosequencing	1976/1986-NA	I-IV	113/861 (13.12%)	5
51	Tie, et al. (2010)	Australia	Sanger sequencing	1996.1-2006.8	I-IV	52/525 (9.90%)	5
52	Tol, et al. (2010)	Nederland	fluorescent-single strand conformation	2005.6-2006.4	IV	45/518 (8.69%)	7
53	Toon, et al. (2013)	Australia	immunohistochemistry	2006-2011	I-IV	281/1403 (20.03%)	5
54	Tran, et al. (2011)	American	mutation-specific RT-PCR	NA	I-IV	57/524 (10.88%)	5
55	Umeda, et al. (2012)	Japan	direct sequencing	1997.3-2009.6	IV	3/100 (3.00%)	7
56	Vedeld, et al. (2017)	Norway	direct sequencing	1993-2003/2005-2011	I-IV	166/1044 (15.90%)	5
57	Vilkin A, et al. (2009)	Israel	direct sequencing	2000-2003	I-IV	24/128 (18.75%)	5

58	Yaeger, et al. (2014)	American	Sanger sequencing	2009-2012	I-III	92/515 (17.86%)	5
59	Ye, et al. (2015)	China	Sanger sequencing	2010-2013	I-IV	20/450 (4.44%)	5
60	Yokota, et al. (2011)	Japan	cycleave PCR	2002-2010	IV	15/319 (4.70%)	5
61	Zlobec, et al. (2009)	Switzerland	direct sequencing	1987-1996	I-III	44/371 (11.86%)	5