SUPPLEMENTARY TABLES

Supplementary Table 1. Characteristics of included studies

Author	Institution	Genetic events	Detection Method	Total number of patients	Mean age (years)	Median follow-up (months)
Abubaker 2008 (61)	King Faisal Specialist Hospital	BRAF	Direct sequencing	296	ND	ND
Alzahrani 2013 (23)	John Hopkins University	BRAF	Direct sequencing	281	44[a]	35
Bullock 2015 (62)	Royal North Shore Hospital	TERT	Direct sequencing	80	47.3	106
Costa 2008 (30)	Multicenter (Spain)	BRAF RAS	PCR-SSCP	49	ND	131
Czarniecka 2015* (17)	M. Sklodowska-Curie Memorial Institute	BRAF	Direct sequencing	233	46.2	90
de Biase 2015* (16)	Multicenter (Italy)	BRAF TERT	Direct sequencing NGS	288	48	58
Dettmer 2015 (60)	University of Zurich	BRAF TERT	Pyrosequencing/IHC Direct sequencing	125	ND	82
Fernandez 2013 (27)	Univ. Hospital of Bologna	BRAF	Direct sequencing	297	50.1	49.8
Fraser 2016 (24)	University of Sydney	BRAF	IHC	496	47.5	56.9[b]
Gandolfi 2015* (19)	Arcispedale S. Maria Nuova-IRCCS	BRAF TERT	Direct sequencing	121	48.1	124[b]
George 2015 (63)	MD Anderson Cancer Center	BRAF TERT	NGS NGS	256 242	45.3[a]	112
Guerra 2012 (64)	Ospedale S. Paolo and Fondazione IRCCS Ca' Granda	BRAF	Direct sequencing / pyrosequencing	156	45.9[a]	61.2
Hara 1994 (48)	University of Chicago Medical Center	RAS	Oligonucleotide hybridization	91	ND	169.2[b]
Henke 2015 (7)	Washington Univ. School of Medicine	BRAF	PCR-RFLP	508	45.5	96
Hong 2014* (21)	Seoul National University Hospital	BRAF	PCR-RFLP / Direct sequencing	2624	47.2	31.2
Ito 2014 (6)	Kuma Hospital	BRAF	Direct sequencing	766	50.8	130[b]
Kim 2006 (26)	University of Ulsan	BRAF	Direct sequencing	203	44	87.6
Kim 2015 (29)	Samsung Medical Center	BRAF	Direct sequencing	3019	ND	35[b]
Kim 2016 (32)	Samsung Medical Center	BRAF TERT	Direct sequencing / MEMO PCR Direct sequencing	327	44[a]	156
Lee 2013 (28)	Samsung Medical Center	BRAF	Direct sequencing	605	46.8	23.6[b]
Lee 2016 (59)	Konkuk Univ. School of Medicine	BRAF TERT	Pyrosequencing Direct sequencing	207	47.5	48
Lin 2016 (65)	Taipei Veterans General Hospital	BRAF	Direct sequencing	78	46.6	76.9[b]
Melo 2014 (9)	University of Porto	TERT	Direct sequencing	229	44.8	93.6[b]
Musholt 2010 (66)	Hannover Univ. Medical School	BRAF	Mutation-specific PCR	280	48.4	60

Onder 2016* (20)	Istanbul Univ.	BRAF	Direct sequencing	50	14.74	70[b]
Prescott 2012 (67)	Massachusetts General Hospital	BRAF	SNE	205	ND	60
Renaud 2014 (68)	Lille Univ. Hospital	BRAF	Pyrosequencing	94	42.3	122[b]
Russo 2014* (18)	Garibaldi-Nesima Hospital	BRAF	Direct sequencing	103	44.2	55[b]
Song 2016 (50)	Seoul National Univ. Hospital	TERT	Direct sequencing	432	45.5	57.6
Stanojevic 2011 (69)	Institute of Oncology and Radiology of Serbia, Belgrade	BRAF	Direct sequencing	266	48	62.9[b]
Xing 2009 (25)	John Hopkins Hospital	BRAF	Direct sequencing	129	45[a]	36
Xing 2013 (22)	Multicenter	BRAF	Various methods	1826	46[a]	33
Xing 2014 (8)	John Hopkins Hospital	BRAF	Direct sequencing	507	47.3	26
		TERT	Direct sequencing			
Xing 2015 (5)	Multicenter	BRAF	Various methods	2099	45[a]	36
Yim 2014 (42)	Asan Medical Center	BRAF	Direct sequencing	164	43.9	132

Abbreviation: DFS, disease-free survival; DSS, disease-specific survival; ND, no description; KMC, Kaplan Meier curve; HR, hazard ratio; NGS, next-generation sequencing; SSCP, single strand conformation polymorphism; RFLP, restriction fragment length polymorphism; MEMO, mutant enrichment with 3'-modified oligonucleotides; SNE, single-nucleotide extension

* The authors provided unpublished data of HR via email

[a] Median value of age

[b] Mean value of follow-up