

Supplementary File 1: Data extracted from publications of confirmatory studies

Drug (generic name)	Company	Indication	Publications	Outcome used in study		Number of patients		Age of patients	Sex distributi on	Randomi zed	Blinded	Observat ional	Primary outcome
				Surrogate	Clinical	Treatment	Control (active)						
Abacavir	GlaxoSmith Kline	HIV/AIDS	Staszewski et al. JAMA 2001;285:1155-1163	1		282	280	median: 36 (treatment), 36 (control)	M = 487, F = 75	1	1	0	Change in plasma HIV-1 RNA level
			Katlama et al. HIV Medicine (2001) 2, 27-34	1		92	93	no mean/median age given	not stated	1	1	0	Change in plasma HIV-1 RNA level
			Rozenbaum et al. Antiviral Therapy 2001;6:135-142	1		35	40	median: 33 (treatment), 33 (control)	M = 48, F = 27	1	0	0	Change in plasma HIV-1 RNA level
Alteplase	Hoffman- LaRoche	stroke	Hill et al. CMAJ 2005;172(10):1307-12		1	1135		no mean/median age given	M = 623, F = 512	0	0	1	Effectiveness of alteplase therapy for ischemic stroke
			Hacke et al. Can J Neurol Sci 2001;28:232-8		1	409	391	median: 68	M = 469, F = 331	1	1	0	Modified Rankin score at 90 days
Anastrozole	AstraZeneca	breast cancer	ATAC Trialist Group. Lancet 2005;365:60-62	1		3092	3094	no mean/median age given	M = 0, F = 6186	1	1	0	Disease-free survival
Bortezomib	Janssen	replaced multiple myeloma	Richardson et al. N Engl J Med 2005;352:2487-98		1	333	336	median: 62 (treatment), 61 (control)	M = 388, F = 281	1	0	0	Time to progression
		progressive multiple myeloma	Richardson et al. N Engl J Med 2005;352:2487-98*		1	333	336	median: 62 (treatment), 61 (control)	M = 388, F = 281	1	0	0	Time to progression
Capecitabine	Hoffman- LaRoche	bowel cancer	Twelves et al. Annals of Oncology 2012;23:1190-1197		1	1004	983	no mean/median age given	M = 1074, F = 912	1	0	0	Overall survival
Crizotinib	Pfizer	lung cancer	Solomon et al. NEJM 2014;371:2167-2177		1	172	171	median: 52 (treatment), 54 (control)	M = 131, F = 212	1	0	0	Progression-free survival
			Shaw et al. NEJM 2013;368:2385-2394		1	173	174	median: 51 (treatment), 49 (control)	M = 153, F = 194	1	0	0	Progression-free survival

Darunavir	Janssen	HIV/AIDS	Arasteh et al. Antiviral Therapy 2009;14:859-864	1	467	124	no mean/median age given	not stated	1	0	0 Sustained virological and immunological responses in treatment-experienced HIV-1 patients
			Madruza et al. Lancet 2007; 370: 49-58	1	286	291	mean: 40.9	M = 470, F = 125	1	0	0 Change in plasma HIV-1 RNA level
Dasatinib	Bristol-Myers Squibb	chronic, accelerated, or blast phase chronic myeloid leukemia	Guilhot et al. Blood 2007 109: 4143-4150	1	107		median: 57	M = 55, F = 52	0	0	1 Hematologic and cytogenetic responses
			Kantarjian H et al. N Engl J Med. 2010;362:2260-70	1	259	260	median: 46 (treatment), 49 (control)	M = 307; F = 212	1	0	0 Complete cytogenetic and major molecular response
			Radich JP et al. Blood 2012;120:3898-905	1	123	123	median: 47 (treatment), 50 (control)	M = 146, F = 100	1	not stated	0 Complete cytogenetic remission rate
Eculizumab	Alexion	paroxysmal nocturnal haemoglobinuria	Greenbaum et al. Eculizumab is a safe and effective treatment in pediatric patients with atypical hemolytic uremic syndrome. Kidney International 2016;89:701-711	1	22		median: 6.5	M = 12, F = 10	0	0	1 Complete thrombotic microangiopathy response
			Fakhouri et al. Terminal complement inhibitor eculizumab in adult patients with atypical hemolytic uremic	1	41		mean: 40	M = 13, F = 28	0	0	1 Complete thrombotic microangiopathy response
Exemestane	Pfizer	breast cancer	Coombes et al. Lancet 2007;369:559-70	1	2352	2372	no mean/median age given	M = 0, F = 4724	1	not stated	0 Disease-free survival

			Bliss et al. Journal of Clinical Oncology 2012;30:709- 717	1	2352	2372	mean: 64.2	M = 0, F = 4724	1 not stated	0 Overall survival
			Fallowfield et al. Br J Cancer 2012;106:106	1	289	293	no mean/me dian age	M = 0, F = 582	1 not stated	0 Quality of life
Gefitinib	AstraZeneca	lung cancer	Thatcher et al. Lancet 2005;366:152 7-37	1	1129	563	median: 62 (treatmen t), 61 (control)	M = 1139, F = 553	1 1	0 Overall survival
			Kim et al. Lancet 2008;372:180 9-1818	1	733	733	not stated if median or mean: 61 (treatmen t), 60 (control)	M = 954, F = 512	1 0	0 Overall survival
			Natale et al. Journal of Clinical Oncology 2009;27:2523-	1	85	83	median: 61 (treatmen t), 63 (control)	M = 100, F = 68	1 1	0 Progression- free survival
Lenalidomide	Celgene	myelodysplastic syndromes	Fenaux et al. Blood 2011 118: 3765- 3776	1	138	67	median: 66 (treatmen t, 5 mg), 68 (treatmen t, 10 mg), 70 (control)	M = 32, F = 106	1 1	0 Red blood cell transfusion independence
Levodopa /carbidopa	AbbVie	Parkinson's disease	Olanow et al. Lancet Neurol 2014; 13: 141- 149	1	37	34	not stated if median or mean: 63.7 (treatmen t), 65.1 (control)	M = 46, F = 25	1 1	0 Mean off- time (return of Parkinson's symptoms)
			Slevin et al. Journal of Parkinson's Disease 2015;5:165- 74	1	33	29	mean: 64.1	M = 44, F = 18	0 0	1 Long-term safety, efficacy, and quality of life in those advanced Parkinson's patients
Pregabalin	Pfizer	central neuropathic pain	Kim et al. Pain 2011;152:101 8-1023	1	110	109	mean: 57.1 (treatmen t), 59.4 (control)	M = 137, F = 73	1 1	0 Long-term efficacy in central post- stroke pain

Recombinant factor VIIa	Novo Nordisk	clotting disorders	Pruthi et al. Thromb Haemost 2007;98:726-732	1	12	12	12	median: 37.4 (treatment), 26.7 (control-active), 31 (control - placebo)	M = 36, F = 0	1	0	0	Hemostatic efficacy and safety
Simeprevir	Janssen	hepatitis C	Kwo et al. Hepatology 2016;64:370-80	1		310		median: 56	M = 169, F = 141	1	0	0	Sustained virological response
			Lawitz et al. Hepatology 2016;64:360-369	1		103		median: 58	M = 83, F = 20	0	0	1	Sustained virological response
Sorafenib	Bayer	kidney cancer	Escudier et al. Journal of Clinical Oncology 2009;27:3312-3318	1		451	452	median: 59 (treatment), 59 (control); mean: 58.5 (treatment), 58.3 (control)	M = 677-686, F = 226-217 (percent male 75-76)	1	1	0	Overall survival
			Pena et al. Clinical Cancer Research 2010;16:4853-4863	1		451	452	no mean/median age given	M = 650-668, F = 253-235 (percent male 72-74)	1	not stated	0	Prognostic biomarkers or indicators of response
Sunitinib	Pfizer	second line treatment of kidney cancer	Motzer et al. Journal of Clinical Oncology 2009;27:3584-3590	1		375	375	no mean/median age given	not stated	1	0	0	Overall survival
			Motzer et al. N Engl J Med 2007;356:115-24	1		375	375	median: 62 (treatment), 59 (control)	M = 536, F = 214	1	0	0	Progression-free survival
		first-line treatment of kidney cancer	Motzer et al. JAMA 2006;295:2516-2524	1		106		median: 56	M = 67, F = 39	0	0	1	Overall objective response rate
			Motzer et al. Journal of Clinical Oncology 2009;27:3584-	1		375	375	no mean/median age given	not stated	1	0	0	Overall survival
Zanamivir	GlaxoSmithKline	influenza	Hedrick et al. Pediatric Infectious Diseases Journal 2000;19:410-	1		224	247	only median given for influenza positive patients	M = 258, F = 213	1	1	0	Median time to alleviation of symptoms

*duplicate study