

**Supplementary Table S1.** Hsp90 inhibitors in clinical trial since 2005 and referenced in ClinicalTrials.gov on the May 10<sup>th</sup>, 2021.

Design	Class*	Drug name	Phase	Company	Number of trials completed or ongoing
Natural product based inhibitors					
Radicicol derivatives (resorcinol analogues)					75
		STA-9090 (Ganetespib)	I, II & III	Synta Pharmaceuticals and Aldeyra Therapeutics	37
		NVP-AUY922 (Luminespib)	I & II	Cancer Research Technology, The Institute of Cancer Research (UK) and Vernalis	24
		AT13387 (Onalespib)	I & II	Astex Pharmaceuticals	12
		KW-2478	I & II	Kyowa Hakko	2
Geldanamycin derivatives					57
		17-AAG (Tanespimycin KOS-953 CNF-1010)	I, II & III	National Institutes of Health (USA) and Kosan Biosciences	37
		IPI-504 (Retaspimycin)	I, II & III	Infinity Pharmaceuticals	12
		17-DMAG (Alvespimycin)	I & II	National Cancer Institute (USA) and Kosan Biosciences	6
		IPI-493	I	Infinity Pharmaceuticals	2
Rational drug designed synthetic inhibitors					
Purine-scaffold derivatives					17
		CNF2024 (BIIB021)	I & II	Biogen	7
		PU-H71 (Zelavespib)	I	Memorial Sloan-Kettering Cancer Center and Samus Therapeutics	5
		Debio 0932 (CUDC-305)	I	Curis	3
		BIIB028	I	Memorial Sloan-Kettering Cancer Center and Biogen	1
		MPC-3100	I	Myriad Pharmaceuticals	1
Benzamide derivatives					13
		SNX-5422	I & II	Serenex and Esanex	12
		TAS-116 (Pimitespib)	I	Taiho Pharmaceutical	1
Tropane-containing derivatives					4
		XL888	I	Exelixis	4
Pyrimidine derivatives					2
		HSP990	I	Vernalis	2
Monoclonal antibody					1
		Mycograb (Efungumab)	I	NeuTec Pharma Ltd	1
Undisclosed					2
		DS-2248	I	Daiichi Sankyo Inc	1
		TQB3474	I	Chia Tai Tianqing Pharmaceutical Group	1

\*Except Mycograb which bind the MD of yeast and human Hsp90, all the inhibitors in trials target the ATP-NTD of human Hsp90.