

Supplemental Table 2. Combination treatments with IAP antagonists

Compound	Stimulus	Cancer type	Results	Reference
Death receptor ligands				
Smac mimetic BV6	TRAIL-R2 Ab, FasL	solid cancers	increased apoptosis <i>in vitro</i> & <i>in vivo</i>	1
Smac mimetic compound 3	TRAIL, TNF α	glioblastoma	increased apoptosis <i>in vitro</i>	2
Smac mimetic compound 3	TRAIL, VP16	breast cancer	increased apoptosis <i>in vitro</i>	3
Smac mimetic compound 3	TRAIL	HNSCC	increased apoptosis <i>in vitro</i>	4
Smac mimetic compound 3	TRAIL, Lexatumumab	ovarian cancer	synergistic apoptosis <i>in vitro</i>	5
Smac mimetic compound A	TRAIL, chemotherapy (CDDP, GZ)	bladder cancer	increased apoptosis <i>in vitro</i>	6
Smac mimetic compound A	TRAIL	CLL	increased apoptosis <i>in vitro</i>	7
IAP inh. IDN	TRAIL	pancreatic cancer	increased apoptosis <i>in vitro</i> , suppression of tumor growth <i>in vivo</i>	8
IAP inh. IDN	TRAIL	pancreatic cancer	increased apoptosis <i>in vitro</i>	9
IAP inh. IDN	Mapatumumab, Lexatumumab	pancreatic cancer	increased apoptosis <i>in vitro</i>	10
IAP inh. IDN	TRAIL	CLL	increased apoptosis <i>in vitro</i>	11
IAP inh. IDN	TRAIL	ALL	increased apoptosis <i>in vitro</i>	12
LBW242	TRAIL, proteasome inhibitors, melphalan	multiple myeloma	additive/synergistic apoptosis <i>in vitro</i> , suppression of tumor growth <i>in vivo</i>	13
Smac mimetic SMC-AEG40730	TRAIL	solid cancers	increased apoptosis <i>in vitro</i>	14
Smac mimetic SM-164	TRAIL	breast, prostate, colon cancer	increased apoptosis <i>in vitro</i> , suppression of tumor growth <i>in vivo</i>	15
Smac mimetic SH122	TRAIL	prostate cancer	increased apoptosis <i>in vitro</i>	16
Smac mimetic JP1584	TRAIL	cholangiocarcinoma	<i>in vitro</i> , <i>in vivo</i> inhibition of invasion & metastasis	17
Smac mimetic Smac001, 005, 007, 012, 019, 025, 027, 032, 040	TRAIL, chemotherapy (AraC, VP16)	leukemia	<i>in vitro</i>	18
Smac mimetic compounds 67, 74, 75, 76	TRAIL, Bortezomib	melanoma	synergistic cell death induction <i>in vitro</i>	19
Smac peptide	TRAIL, α CD95 Ab, chemotherapy (Doxo, VP16, CDDP)	glioblastoma, neuroblastoma, pancreatic cancer, melanoma	increased apoptosis <i>in vitro</i> , suppression of tumor growth <i>in vivo</i>	20
Smac peptide	TRAIL, epothilone B	leukemia	increased apoptosis <i>in vitro</i>	21
Smac peptide	TRAIL, radiation, chemotherapy (taxol, Doxo, VP16)	breast cancer	increased apoptosis <i>in vitro</i>	22
Embelin, Smac peptide	TRAIL	pancreatic cancer	increased apoptosis <i>in vitro</i>	23
Embelin	TRAIL	glioblastoma	increased apoptosis	24

			<i>in vitro</i>	
IAP antagonist, compound A	α CD95 Ab	squamous cell carcinoma	increased apoptosis <i>in vitro</i>	25
IAP inh. 1540-14	α CD95 Ab	CLL	increased apoptosis <i>in vitro</i>	26
IAP inh. IDN	MegaFasL	ALL	increased apoptosis <i>in vitro</i>	27
Smac mimetic BV6	TNF α	solid cancers	increased apoptosis <i>in vitro</i>	28
Smac mimetic BV6	TNF α	fibrosarcoma, leukemia	increased necroptosis <i>in vitro</i>	29
Smac mimetic BV6	TNF α , TRAIL, α CD95 Ab	leukemia	increased necroptosis <i>in vitro</i>	30
Smac mimetic compound 3	TNF α	solid cancers	increased apoptosis <i>in vitro</i>	31
Smac mimetic compound 3	TNF α	solid cancers, leukemia	increased apoptosis <i>in vitro</i>	32
Smac mimetic compound 3	TNF α	solid cancers, leukemia	increased necroptosis <i>in vitro</i>	33
Smac mimetic compound A	TNF α	solid cancers	increased apoptosis <i>in vitro</i>	34
Chemotherapy				
Smac mimetic JP1201	GZ	pancreatic cancer	inhibition of viability & tumor growth <i>in vitro</i> & <i>in vivo</i>	35
Smac mimetic JP1201	Doxo, GZ, taxol, VRL	lung cancer	inhibition of viability & tumor growth <i>in vitro</i> & <i>in vivo</i>	36
Smac mimetic BV6	GZ, Doxo, 5-FU, CDDP,	pancreatic cancer	increased apoptosis <i>in vitro</i>	37
XIAP inh. 1396-11	VRL, CDDP	NSCLC	increased apoptosis <i>in vitro</i>	38
Embelin	CDDP	NSCLC	increased apoptosis in cisplatin-resistant cells <i>in vitro</i>	39
IAP inh. IDN	AraC	ALL	increased apoptosis <i>in vitro</i>	40
XIAP inh. 1396-12	AraC	AML	increased apoptosis <i>in vitro</i>	41
Smac mimetic compound 3 (JP1010), JP1400	GZ, VP16, taxol, SN38, CDDP, 5-FU	lung, colon, prostate, breast, pancreas, skin cancer	<i>in vitro</i> , <i>in vivo</i> , increased apoptosis & suppression of tumor growth	42
Compound 8	Doxo	breast cancer	increased apoptosis <i>in vitro</i>	43
Smac peptide	Doxo	breast cancer	increased apoptosis <i>in vitro</i>	44
Radiation				
IAP inh. IDN	radiation	pancreatic cancer	increased apoptosis <i>in vitro</i>	45
IAP inh. IDN	radiation	glioblastoma	increased apoptosis <i>in vitro</i>	46
Smac mimetic BV6	radiation	glioblastoma	increased apoptosis <i>in vitro</i>	47
Embelin	radiation	prostate cancer	increased apoptosis <i>in vitro</i> , tumor growth delay <i>in vivo</i>	48
Smac mimetic LBW242	radiation, TMZ	glioblastoma	increased apoptosis <i>in vitro</i> , suppression of tumor growth <i>in vivo</i>	49
Smac mimetic SH-130	radiation	prostate cancer	increased apoptosis <i>in vitro</i> , suppression of tumor growth <i>in vivo</i>	50
Kinase inhibitors & others				

Smac mimetic compound 3	trastuzumab, lapatinib, gefitinib	breast cancer	increased apoptosis <i>in vitro</i>	51
Smac mimetic LBW242	PKC412, chemotherapy (Doxo, AraC)	AML	increased apoptosis <i>in vitro</i> , suppression of tumor growth <i>in vivo</i>	52
Smac mimetic LCL161	PKC412, nilotinib	AML	increased apoptosis <i>in vitro</i> , suppression of tumor growth <i>in vivo</i>	53
Embelin	ErbB1/2 inhibitor GW583340	breast cancer	<i>in vitro</i> , overcome acquired resistance to GW583340	54
Smac mimetic LBW242	imatinib, nilotinib, NVP-AEW541, PKI 166	glioblastoma	increased apoptosis <i>in vitro</i> , suppression of tumor growth <i>in vivo</i>	55
Smac mimetic compounds 67, 74, 75, 76	bortezomib, TRAIL	melanoma	synergistic cell death induction <i>in vitro</i>	19

Abbreviations: 5-FU, 5-fluoruracil; Ab, antibody; ALL, acute lymphoblastic leukemia; AML, acute myelogenous leukemia; AraC, cytarabine; α CD95, anti-CD95; CDDP, cisplatin; CLL, Chronic lymphocytic leukemia; Doxo, doxorubicin; FasL, Fas ligand; GZ, gemcitabine; HNSCC, head and neck small cell carcinoma; IDN, IDUN; MegaFasL, MegaFas ligand; NSCLC, non-small cell lung cancer; PKC412, midostaurin; SMC, Smac mimetic; SN38, active metabolite of irinotecan; TMZ, temozolomide; TNF α , tumor necrosis factor α ; TRAIL, TNF-related apoptosis-inducing ligand; TRAIL-R2 Ab, TRAIL receptor 2 antibody; VP16, etoposide; VRL, vinorelbine.

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