

**Table S1**

H2286				
BASE DRUG	SECONDARY DRUG	Target	Average Syn	Average Ant
Dasatinib	Crizotinib	MET, AXL, (ALK)	0.89	-0.04
Dasatinib	Cabozantinib	MET, AXL	0.98	-0.16
Dasatinib	BMS-754807	IGF1R, IR	1.49	-0.09
Dasatinib	Linsitinib	IGF1R, IR	0.86	-0.16
Dasatinib	GSK183807A	IGF1R, IR, (ALK)	1.68	-0.10
Dasatinib	Lapatinib	EGFR, HER2	0.51	-0.45
Dasatinib	Erlotinib	EGFR	0.21	-1.04
HCC366				
BASE DRUG	SECONDARY DRUG	Target	Average Syn	Average Ant
Dasatinib	Crizotinib	MET, AXL, (ALK)	0.19	-0.52
Dasatinib	Cabozantinib	MET, AXL	0.23	-0.49
Dasatinib	BMS-754807	IGF1R, IR	1.13	-0.01
Dasatinib	Linsitinib	IGF1R, IR	0.35	-0.62
Dasatinib	GSK183807A	IGF1R, IR, (ALK)	0.65	-0.11
Dasatinib	Lapatinib	EGFR, HER2	0.19	-0.74
Dasatinib	Erlotinib	EGFR	0.00	-1.67