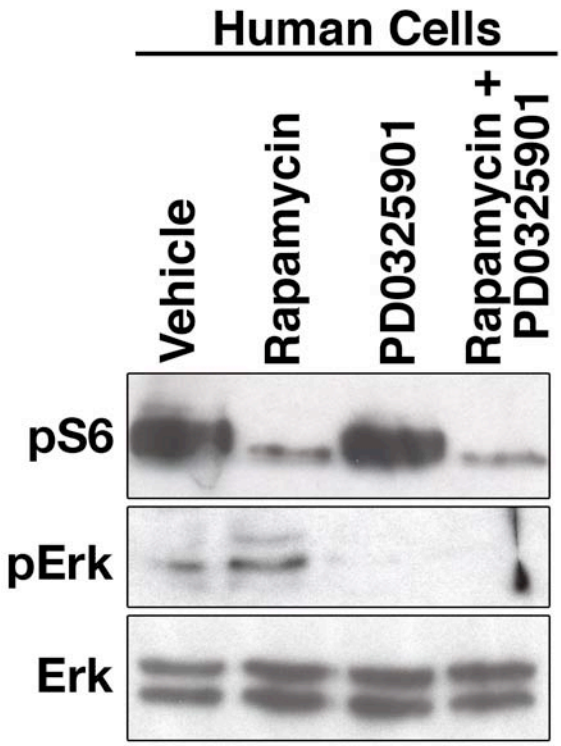
Supplementary Figure 1



Western blot analyses showing efficacy of Rapamycin and PD0325901 in PC3 human prostate cancer cells. Cells were treated with vehicle or the indicated compounds in the media for 48 hours. Western blots were done on whole cell extracts using the indicated antibodies.

Supplementary Table 1 – Summary of pre-clinical data										
			Change	Tissue weights		Proliferation index		Endpoint analyses		
		N	in Body weight	Weight in grams	Stand. Dev.	% prol. cells	Stand. Dev.	Histology	IHC	Western
Paradigm 1 – Treatment of Androgen-Dependent Prostate Cancer										
whole animal, mutant mice	Vehicle	6		0.143	0.095	7.8%	0.040	6	4	3
	Rapamycin	4	+14.5%	0.064	0.023	3.8%	0.025	4	4	3
	PD	3	-3.2%	0.163	0.128	4.7%	0.010	3	3	3
	Rapamycin + PD	5	-6.6%	0.083	0.037	3.2%	0.031	5	3	3
whole animal, wild-type mice	Vehicle	2		0.071	0.003	1.3%	0.008	2	2	2
	Rapamycin	4	-1.3%	0.079	0.025	1.9%	0.008	4	4	2
	PD	4	-3.7%	0.062	0.015	5.4%	0.047	4	4	2
	Rapamycin + PD	3	-2.8%	0.050	0.004	2.8%	0.020	3	3	2
recombinant, mutant mice	Vehicle	4		0.447	0.202	ND	ND	4	2	ND
	Rapamycin	5	-2.9%	0.184	0.060	ND	ND	5	1	ND
	PD	5	+4.6%	0.306	0.284	ND	ND	5	3	ND
	Rapamycin + PD	6	-9.7%	0.172	0.079	ND	ND	6	4	ND
recombinant, wild-type	Vehicle	2		0.577	0.498	ND	ND	2	2	ND
	Rapamycin	1	-2.9%	0.102	NA	ND	ND	1	0	ND
	PD	3	+4.6%	0.350	0.227	ND	ND	3	0	ND
	Rapamycin + PD	4	-9.7%	0.202	0.068	ND	ND	4	2	ND
Paradigm 2 – Treatment of Androgen-independent Prostate Cancer										
whole animal, mutant mice	Vehicle	9		0.111	0.033	18.3%	0.039	8	5	4
	Rapamycin	5	-4.6%	0.080	0.032	8.6%	0.031	4	4	2
	PD0325901	6	-10.6%	0.086	0.019	6.7%	0.012	4	4	2
	Rapamycin + PD	10	-9.8%	0.051	0.022	1.3%	0.001	9	5	2
whole animal, wild-type mice	Vehicle	4		0.088	0.086	4.7%	ND	4	1	ND
	Rapamycin + PD	4	-17.3%	0.061	0.029	1.4%	ND	4	1	ND
Tissue recombinant, mutant mice	Vehicle	6		0.343	0.160	ND	ND	6	6	ND
	Rapamycin + PD	6	-6.3%	0.107	0.05	ND	ND	5	5	ND
Tissue	Vehicle	6		0.091	0.045	ND	ND	6	2	ND

recombinant, wild-type mice	Rapamycin + PD	6	-6.3%	0.082	0.081	ND	ND	6	2	ND
Paradigm 3 – Prevention of Hormone Refractory Prostate Cancer										
whole animal, mutant mice	Vehicle	6		0.271	0.094	8.7%	0.025	6	4	3
	Rapamycin	8	-12.9%	0.124	0.091	3.4%	0.015	8	6	3
	PD	8	-5.2%	0.090	0.089	1.4%	0.004	8	6	3
	Rapamycin + PD	12	-6.9%	0.082	0.043	2.6%	0.003	12	7	3
whole animal, wild-type mice	Vehicle	2		0.150	0.179	1.1%	0.003	2	2	ND
	Rapamycin	4	-3.5%	0.054	0.028	2.5%	0.014	4	4	ND
	PD	4	-8.5%	0.074	0.067	2.7%	0.007	4	4	ND
	Rapamycin + PD	3	-18.9%	0.061	0.046	3.0%	0.009	3	3	ND
Tissue recombinant, mutant mice	Vehicle	5		0.237	0.094	ND	ND	5	5	ND
	Rapamycin	5	-5.7%	0.141	0.037	ND	ND	5	3	ND
	PD	5	+6.5%	0.130	0.068	ND	ND	5	3	ND
	Rapamycin + PD	7	-4.4%	0.110	0.049	ND	ND	7	5	ND
Tissue recombinant, wild-type mice	Vehicle	5		0.119	0.054	ND	ND	5	2	ND
	Rapamycin	3	-5.7%	0.090	0.033	ND	ND	3	ND	ND
	PD	3	+6.5%	0.052	0.009	ND	ND	3	ND	ND
	Rapamycin + PD	5	-4.4%	0.077	0.035	ND	ND	5	2	ND