

Novel thiosemicarbazone iron chelators induce up-regulation and phosphorylation of the metastasis suppressor, NDRG1: A new strategy for the treatment of pancreatic cancer.

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Molecular Pharmacology

Supplemental Table 1: IC₉₀ values (μ M) of DFO, Dp44mT, DpC and gemcitabine in 4 different pancreatic cancer cell lines after a 72 h incubation. Data is presented as IC₉₀ values \pm SD (3-5 experiments).

	IC ₉₀ (μ M)				
	DFO	Dp44mT	DpC	Gemcitabine	5-fluorouracil
MIAPaCa-2	> 80.0	> 5.0	> 5.0	> 5.0	> 80.0
PANC-1	> 80.0	> 5.0	> 5.0	> 20.0	> 80.0
CAPAN-2	> 80.0	> 5.0	> 5.0	> 80.0	> 80.0
CFPAC-1	> 80.0	10.8 \pm 1.1	15.2 \pm 2.2	> 40.0	> 80.0

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Supplemental Table 2: Histological analysis of the major organs including bone, kidney, liver, lung, myocardium and spleen of the control, gemcitabine (5 mg/kg i.p.; every 3rd day), Dp44mT (0.4 mg/kg/day i.v.; 5 days/week) and DpC (5 mg/kg/day i.v.; 5 days/week)-treated animals (performed by an independent veterinary pathologist). Mice bearing PANC-1 tumor xenografts were treated for 44 days with the agents above and organs and tumors collected.

Treatment Group	#	BONE	KIDNEY	LIVER	LUNG	MYOCARDIUM		SPLEEN
		HP	Fe	HP	HP	HP	Fibrosis	HP
Control	1	N	-	N	N	N	-	N
	2	N	+	N	N	N	-	N
	3	N	++	N	N	N	-	N
	4	N	-	N	N	N	-	N
	5	N	-	N	+/-	N	-	N
	6	N	-	N	+	N	-	N
	7	N	+/-	N	N	N	-	N
	8	N	+	N	N	N	-	N
Gemcitabine	1	N	-	N	N	N	-	N
	2	N	-	N	N	N	-	N
	3	N	-	N	N	N	-	N
	4	N	-	N	N	N	-	N
	5	N	-	N	N	N	-	N
	6	N	-	N	N	N	-	N
	7	N	-	N	N	N	-	N
	8	N	-	N	N	N	-	N
Dp44mT	1	N	++	N	N	++	++	N
	2	N	+	N	N	+	+	N
	3	N	++	N	+/-	+	+	N
	4	N	+	+	N	+	+	N
	5	N	+	++	+	+	+	N
	6	N	+	+/-	+/-	+	+	N
	7	N	+	++	N	+	+	N
	8	N	+/-	+/-	+	+	+	N
DpC	1	N	+	N	N	N	-	N
	2	N	+	N	+/-	+/-	-	N
	3	N	+	+/-	N	+	-	N
	4	N	+	+/-	N	N	-	N
	5	N	+	+/-	N	N	-	N
	6	N	+	N	+	N	-	N
	7	N	+	N	N	N	-	N
	8	N	+	N	N	N	-	N

HP – Histopathological changes; **Fe** – Score for presence of iron stained by Perl's stain; **HPC** – Score for the presence of haematopoietic cells in the splenic red pulp; **N** – No histopathological changes detected.

(-) No pathology; (+/-) Very mild, localized pathology; (+) Less than 10% pathology; (++) Less than 20% pathology.