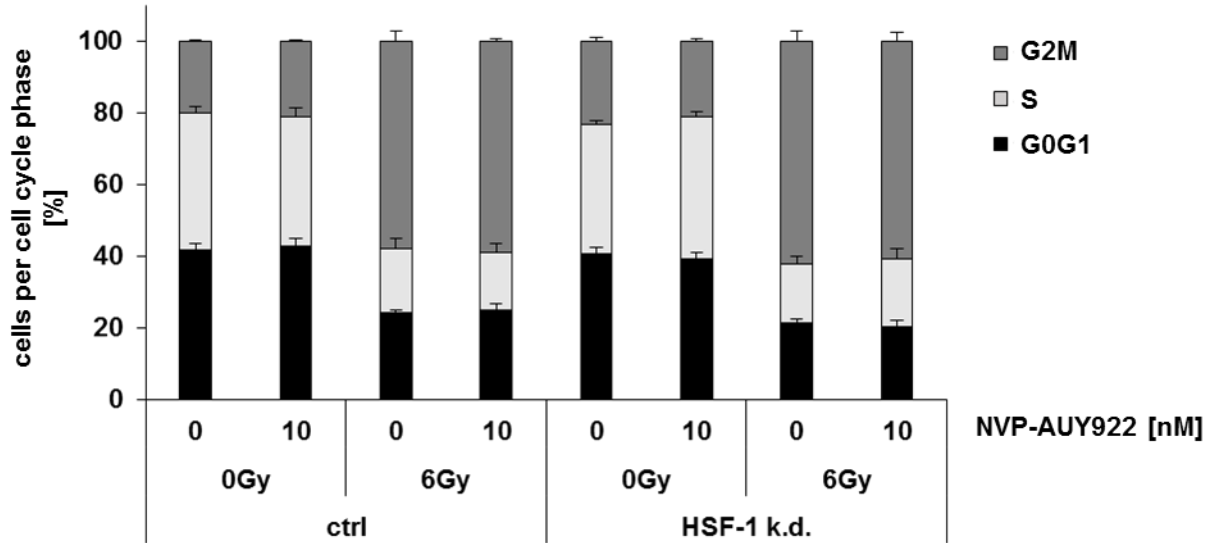


Supplementary Material

Suppl. Fig. 1

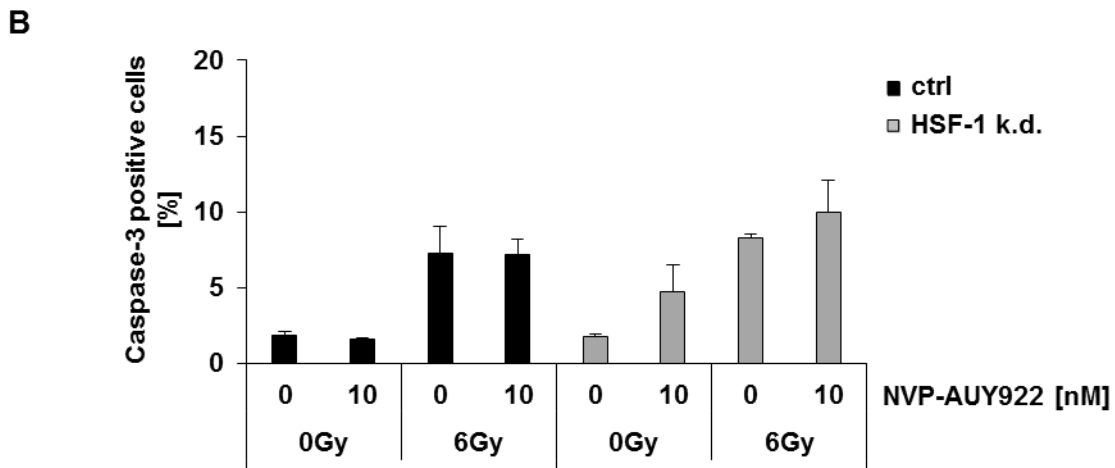
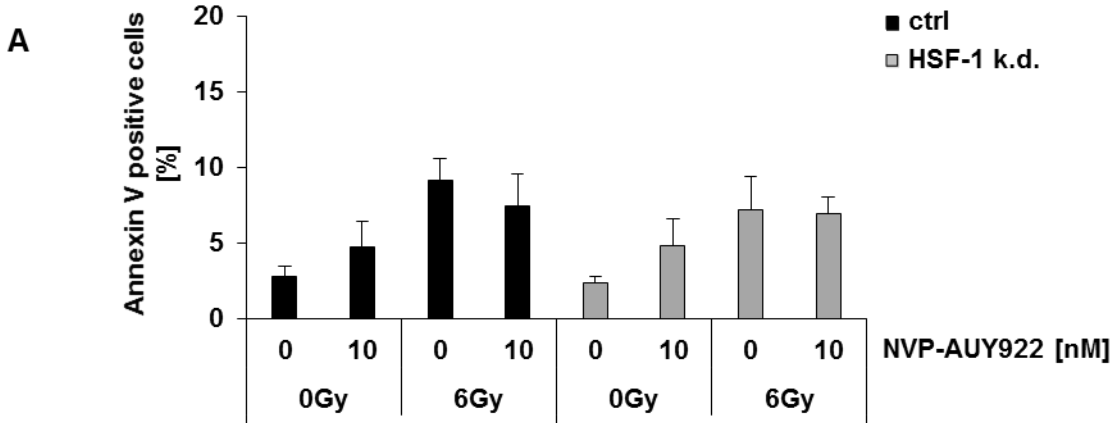


Suppl. Fig. 1 HSF-1 knockdown cells show no difference in cell cycle distribution after combined Hsp90 inhibition and irradiation

H1339 ctrl and HSF-1 k.d. cells were treated with 10nM NVP-AUY922 for 24h and irradiated with 6Gy. Cells were stained with PI to analyse cell cycle distribution 24h after irradiation.

Supplementary Material

Suppl. Fig. 2



Suppl. Fig. 2 HSF-1 knockdown and control cells show no difference in apoptosis induction after combined Hsp90 inhibition and irradiation

A. Measurement of apoptosis induction 24h after irradiation by Annexin V and **B.** Caspase-3 staining of H1339 ctrl and HSF-1 k.d. cells treated with 10nM NVP-AUY922 for 24h following irradiation with 6Gy.

Supplementary Material

Supplementary Table 1: Summary of radiobiological parameters

A. Loss of HSF-1 per se has no influence on radiosensitivity. D_{50} , dose to reduce survival fraction to 50%. Sensitizing enhancement ratio (SER) = $D_{50}(\text{irradiation ctrl})/D_{50}(\text{irradiation HSF-1 k.d.})$.

B. Radiosensitizing effect of Hsp90 inhibition is much more pronounced in H1339 HSF-1 k.d. cells compared to control cells. SER ($D_{50}(\text{irradiation})/D_{50}(\text{irradiation} + \text{drug})$) greater than 1.20 is indicative for radiosensitization (indicated in bold).

Tab.1

A

D_{50} dosis [Gy]		SER (50%)	
ctrl	HSF-1 k.d.	ctrl	HSF-1 k.d.
2.01	2.21	1	0.91

B

	SER (50%)	
NVP-AUY922 [nM]	ctrl	HSF-1 k.d.
0	1	1
1	1.09	1.92
2	0.94	1.53
5	1.89	2.38