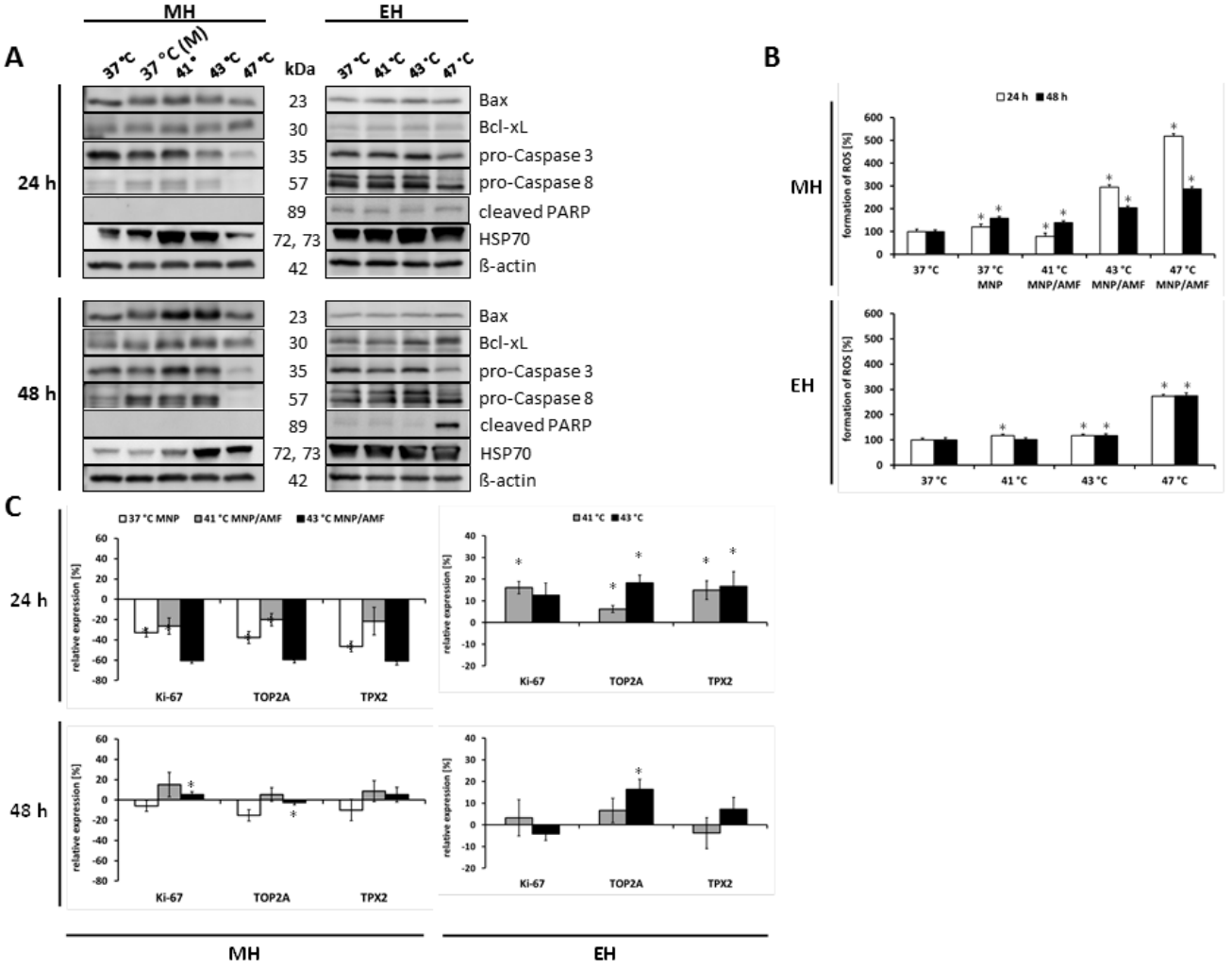

Figure S1: MH exhibits greater impact on apoptosis induction, ROS formation and the expression of proliferation markers compared to EH in BxPC-3 cells. Representative Western blot analysis (n = 2) of Bax, Bcl-xL, pro-caspase 3 and pro-caspase 8 of BxPC-3 cells 24 h and 48 h after treatment with MH or EH (**A**). Equal protein loading was ensured by detection of β-actin. Flow cytometry analysis of BxPC-3 cells stained with DCFH-DA to detect ROS induction 24 h and 48 h after treatment with MH or EH (**B**). Data were normalized to values of cells maintained at 37 °C and the amount of vital cells after each respective treatment. Mean values and standard errors are given (n ≥ 3). Investigated populations: 10000 to 20000 cells.(C) qRT-PCR analysis of proliferation markers Ki-67, TOP2A and TPX2 of BxPC-3 cells 24 h and 48 h after treatment with MH or EH (**C**) in comparison to the untreated control. mRNA expression after treatment was normalized to the mRNA expression of the reference gene B2M to calculate relative values. Relative mRNA expression of cells maintained at 37 °C (untreated control) was subtracted from the relative mRNA expression of treated cells. Mean values and standard errors are given (n ≥ 6). MNP concentration: 100 µg/ml. (* p ≤ 0.05 (Mann-Whitney-U-Test: treated vs. 37 °C)).

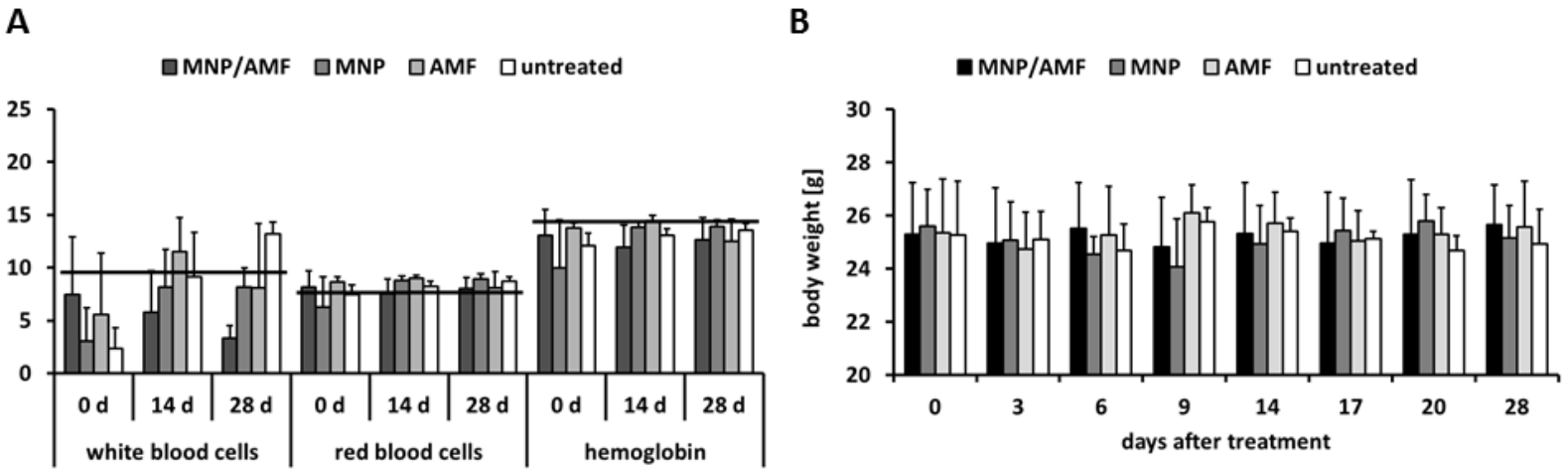

Figure S2: Treatment of PANC-1 xenografts with MH, MNP or AMF alone shows no distinct effects on blood count and bodyweight.
The blood count (**A**) and bodyweight (**B**) of PANC-1 tumor bearing mice treated or not (untreated controls) with MH (MNP/AMF), MNP or AMF are depicted. The amount of white blood cells ($*10^3$/µl), red blood cells ($*10^6$/µl) and of hemoglobin (g/dl) before treatment, 14 d and 28 d after treatment are shown. Black lines refer to reference values reported by the supplier of the animal models. Number of animals: MNP/AMF: n = 5; MNP: n = 5; AMF: n = 3; untreated: n = 3.

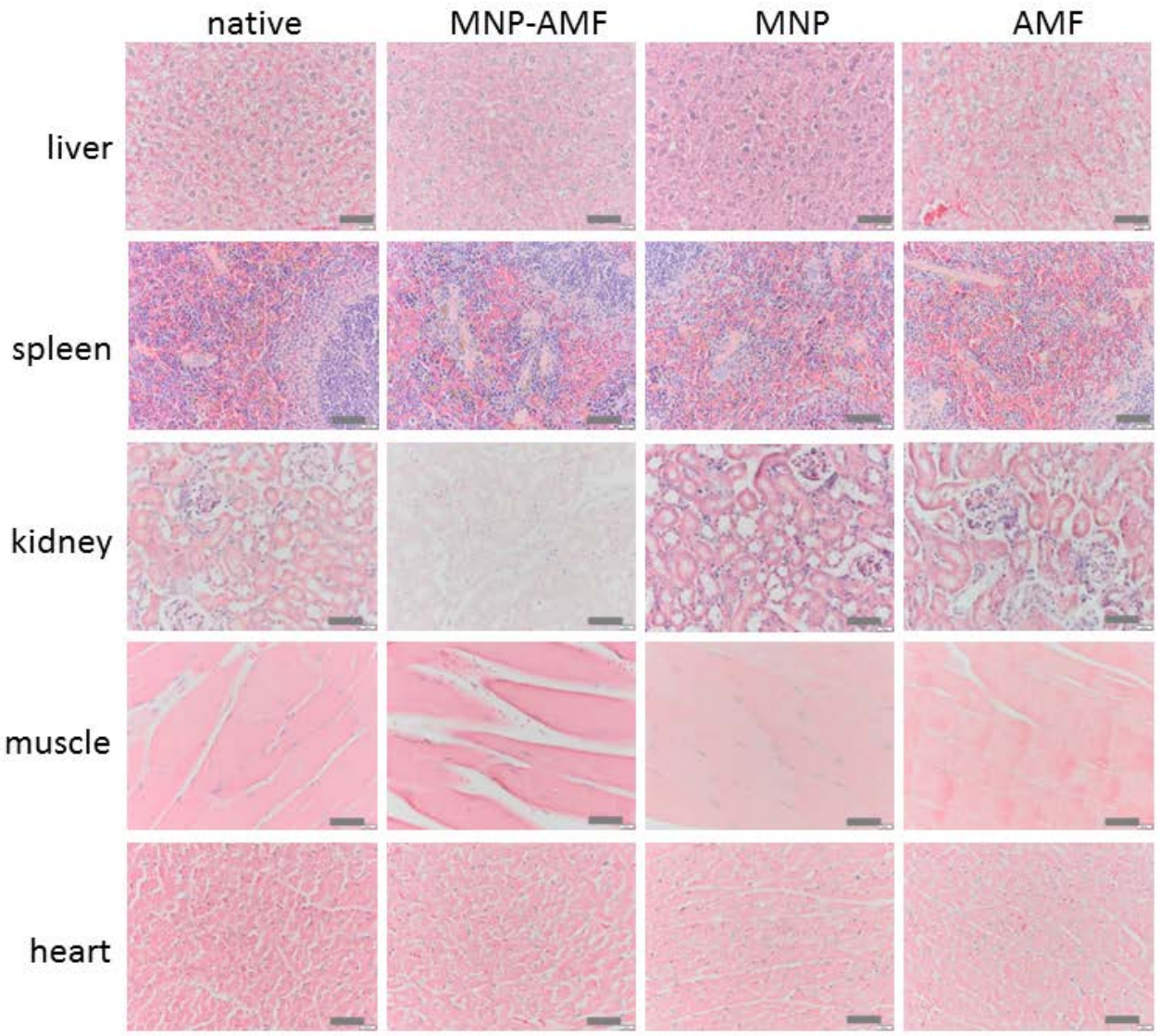

Figure S3: Treatment of tumors with magnetic hyperthermia does not influence other organs. Hematoxylin and eosin staining of tissue slices. Bars: 40 µm.