

SUPPLEMENTARY FIGURES



SUPPLEMENTARY FIGURE 1. (A) Protective effect of FGF1 at different concentrations against cytotoxicity of 5 nM TLT in U2OSR1 cells. **(B)** Cell viability of control U2OS cells stably transfected with kinase-dead mutant of FGFR1 (U2OSR1-K514R) treated with 5 nM TLT, 20 nM PTX or 10 nM VCR in the absence or presence of 10 ng/mL of FGF1. Cell viability was monitored using the alamarBlue assay 48 h after drug and FGF1 administration. Results represent the mean \pm SD of three independent experiments and are normalized to untreated cells.



SUPPLEMENTARY FIGURE 2. Western blotting analysis of FGF1 and EGF (10 ng/mL) activity in DMS114 and HCC15 cells in the presence of specific FGFR inhibitor (100 nM PD173073) or EGFR inhibitor (10 μ M Gefitinib) using anti-phospho-FGFR and anti-phospho-ERK1/2 antibodies. Anti-tubulin antibody served as an equal loading control.



SUPPLEMENTARY FIGURE 3. Western blotting analysis of α -tubulin acetylation in U2OSR1 cells upon taltobulin-treatment (5 nM TLT) in the presence or absence of 10 ng/mL FGF1. Anti-tubulin antibody served as an equal loading control.



SUPPLEMENTARY FIGURE 4. Anti-apoptotic effect of FGF1 against TLT. (A) TLT-induced apoptosis in U2OSR1 cells measured by Annexin V and propidium iodide assay 24 h after drug administration in the presence or absence of 10 ng/mL FGF1. (B) Relative caspase 3/7 activity induced by 5 nM TLT, 20 nM PTX or 10 nM VCR in DMS114 cells was measured using ApoLive-Glo Multiplex Assay 24 h after drug administration in the presence or absence of 10 ng/mL FGF1 and normalized to TLT-untreated cells. Results represent the mean \pm SD of three independent experiments. Results represent the mean \pm SD of three independent experiments, statistical significance (paired t-test): *p<0.05



SUPPLEMENTARY FIGURE 5. Effect of AKT inhibition on the protective effect of FGF1 against TLT in DMS114 cells. Viability of cells treated with 5 nM TLT and (A) different chemical inhibitors of major FGF-induced signaling pathways (20 μ M LY294002 (PI3K), 20 μ M UO126 (MEK1/2), 5 μ M SB203580 (p38), 100 nM Torin-2 (mTOR)) or (B) FGFR inhibitor (100 nM PD173074), a dual mixture of PI3K (20 μ M LY294002) and mTOR (100 nM Torin-2) inhibitors or an inhibitor of both kinases, PI3K and mTOR (100 nM BEZ235) for 48 h in the presence or absence of 10 ng/mL FGF1, monitored by alamarBlue assay. Results are mean values \pm SD of at least three independent experiments and are normalized to cells untreated with TLT; statistical significance: *p<0.05, **p<0.01, no significant differences are marked as 'ns'.