Supplementary Figure 1

Effect of chemotherapy on cell viability and cell apoptosis. a NPC cells of cell lines were incubated with different concentrations of the indicated chemotherapeutics. Cell viability was determined by MTT test between 24 h and 72 h after begin of exposure. PdX cells C17 were only tested at one concentration per drug and compared to CNE-2 cells. Data are presented as means ± S.E.M. The one-way repeated measures ANOVA documented significant changes in the percentage of living cells starting after 24 h incubation with chemotherapeutic agents (ANOVA: * = P<0.05; ** = P<0.01; *** = P<0.001). b NPC cells were treated as above and apoptosis was determined by flow cytometric analysis of subdiploid DNA-content between 24 h and 72 h after begin of exposure. Data are presented as means ± S.E.M., each experiment was done three times (Student's t-test: * = P<0.05; ** = P<0.01; *** = P<0.001). c NPC cells labeled with calcein were treated with chemotherapeutics for 24 h. Lysis of target cells was determined by measurement of calcein in collected supernatants by an ELISA reader. Data are presented as means ± S.E.M. Asterisks indicate statistically significant differences between all cell lines in one ratio-group (one-way ANOVA; *P < 0.05; **P < 0.01; ***P < 0.001).
**Supplementary Figure 2**

**Spontaneous lysis of NPC cell lines.** NPC cells were pretreated with chemotherapeutics for 24 h and then labeled with calcein. Spontaneous lysis of NPC cells was determined by measurement of calcein in collected supernatants by an ELISA reader. The lysis was measured 4 h after cells were labeled with calcein. Data are presented as means ± S.E.M. Asterisks indicate statistically significant differences between all cell lines in one ratio-group (one way ANOVA; *P < 0.05; **P < 0.01; ***P < 0.001).
**Supplementary Figure 3**

**Effect of IFNβ on NK cell viability and cell apoptosis.** NK cells were incubated with 1,000 U/ml IFNβ. Apoptosis was determined by flow cytometric analysis of subdiploid DNA-content after 24 h from begin of exposure. Data are presented as single specimen (a) and as means ± S.E.M. (b); each experiment was done three times (Student's t-test: * = P<0.05; ** = P<0.01; *** = P<0.001). c NK cells were treated as above and cell viability was determined by MTT test after 24 h from begin of exposure. Data are presented as means ± S.E.M. The one-way repeated measures ANOVA documented significant changes in the percentage of living cells after 24 h incubation with IFNβ (ANOVA: * = P<0.05; ** = P<0.01; *** = P<0.001).
No influence of PD-1 inhibition on the cytotoxicity of non-activated NK cells against NPC cells treated with chemotherapeutic agents. NK cells were treated or not with the anti-PD-1 antibody nivolumab (10 µg/ml) for 1 h and then co-cultured for 4 h with NPC cells pretreated with chemotherapeutics and labeled with calcein. Lysis of target cells was determined by measurement of calcein in collected supernatants by an ELISA reader. Data are presented as means ± S.E.M. Asterisks indicate statistically significant differences between all cell lines in one ratio-group (two-way ANOVA; *P < 0.05; **P < 0.01; ***P < 0.001).
Transfection of NPC cells with PD-L1 siRNA. a Transfection of NPC cells C666-1, TW01 and C17 with PD-L1 siRNA or non-target siRNA and subsequent exposure to chemotherapeutics before co-culture with IFNβ-stimulated NK cells. Cytotoxicity was measured by calcein release assay. Data are presented as means ± S.E.M. Asterisks indicate statistically significant differences between all cell lines in one ratio-group (two-way ANOVA; *P < 0.05; **P < 0.01; ***P < 0.001). b Cells were treated as above and PD-L1 expression of NPC cells treated with PD-L1 siRNA or non-target siRNA was analyzed by flow cytometry.
Supplementary Figure 6

Relative quantification of the Western Blot from Figure 6. NPC cells \( a \) or NK cells \( c \) were incubated with the NF-κB inhibitor BMS-345541 for 1 h before chemotherapy. NPC cells \( b \) or NK cells \( d \) were transfected with NF-κB siRNA for 16 h and then incubated with chemotherapeutics.
Inhibition of NF-κB and PD-L1 expression in NPC cells treated with chemotherapeutics by NF-κB inhibitor BMS-345541 or NF-κB siRNA. NPC cells were treated with chemotherapeutics and the NF-κB inhibitor BMS-345541 for 24 h a, b or NF-κB siRNA or non-target siRNA c, d. Expression of intracellular NF-κB a, c or surface PD-L1 b, d was analyzed by flow cytometry.
Inhibition of NF-κB and PD-1 expression in NK cells treated with chemotherapeutics by NF-κB inhibitor BMS-345541 or NF-κB siRNA. NK cells were treated with chemotherapeutics and the NF-κB inhibitor BMS-345541 a, b or NF-κB siRNA or non-target siRNA c, d. Expression of intracellular NF-κB a, c or surface PD-L1 b, d was analyzed by flow cytometry.
