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Suppl. Fig. 1 NK cell-specific cytotoxicity of PBMCs of 2nd line STS patients is independent of the time interval since last chemotherapy, but decreases with disease progression. (A) NK-specific cytotoxicity of PBMCs of 2nd line STS patients with a time interval of ≤ 5 months (n=6) and > 5 months (n=5) since last chemotherapeutic treatment. The red triangle marks the NK cell-specific lysis of a patient with very late relapse of clear cell sarcoma almost 18 years after initial treatment (see discussion). (B) NK-specific cytotoxicity of PBMCs of 2nd line STS patients with metastatic (n=7) and non-metastatic (n=4) disease at time of blood withdrawal. (C) NK-specific cytotoxicity of PBMCs of non-metastatic 1st line STS patients (n=13) and non-metastatic 2nd line STS patients (n=4). (A-C) Cytotoxicity was assessed against radiolabeled K562 target cells using the 4h 51Cr release assay. PBMC/K562 ratio was 20:1 for all experiments. Box plots represent the median, .75 and .25 percentiles, with whiskers showing minimum and maximum values. Each symbol corresponds to one sample. For statistical analysis, Mann-Whitney-U test was used.



**Suppl. Fig. 2** **(A)** NK cell identification by gating CD3-CD56+ cells among live single PBMCs. **(B)** NK cell subset identification exemplified by representative dot plots of HD, 1st, 2nd line STS and RCC patients.



**Suppl. Fig. 3** **NK-specific cytotoxicity, normalized to the percentage of NK cells among PBMCs, differs significantly between HD and STS patients. (A)** NK-specific cytotoxicity of PBMCs of healthy donors (HD, n=8), 1st line STS patients (n=6), 2nd line STS patients (n=5) and RCC patients (n=4) against radiolabeled K562 target cells was assessed by 4h 51Cr release assay and normalized to the percentage of CD3-CD56+ NK cells among PBMCs (as assessed by polychromatic flow cytometry). **(B)** NK-specific cytotoxicity of PBMCs of healthy donors (HD, n=8), 1st line STS patients (n=6), 2nd line STS patients (n=5) and RCC patients (n=4) against radiolabeled K562 target cells was assessed by 4h 51Cr release assay and normalized to the percentage of CD3-CD56dim NK cells among PBMCs (as assessed by polychromatic flow cytometry). **(A, B)** PBMC/K562 ratio was 20:1 for all experiments. Box plots represent the median, .75 and .25 percentiles, with whiskers showing minimum and maximum values. Each symbol corresponds to one sample. For statistical analysis, Kruskal-Wallis with Dunn’s post hoc test was used. The uppermost p value represents the result of the Kruskal-Wallis test, whereas the p values below (with bracketed lines) represent results of the post hoc tests.