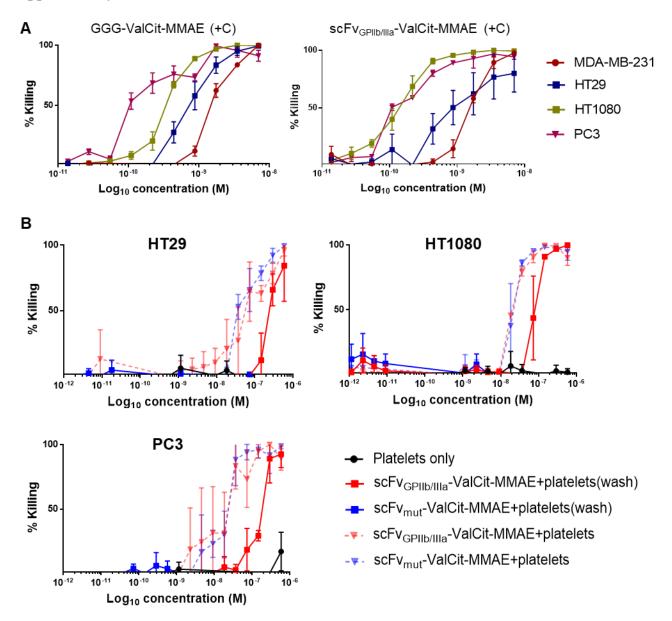
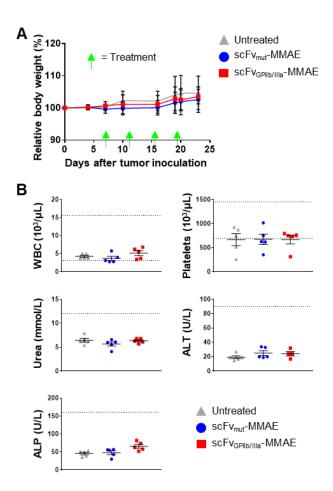
Supplementary Data



Supplementary Figure 1. scFvGPIIb/IIIa-MMAE binds to activated platelets and induces cancer cell killing. (A) Cytotoxicity assay of MDA-MB-231, HT29, HT1080 and PC3 tumor cells, cultured in GGG-Val-Cit PAB-MMAE and scFv_{GPIIb/IIIa}-MMAE, in the presence of cathepsin B (+C). Data expressed as mean \pm SEM. (B) Cytotoxicity assay of HT29, HT1080 and PC3 tumor cells, cultured in activated platelets which have been pre-incubated with scFv_{GPIIb/IIIa}-MMAE (\blacksquare) or scFv_{mut}-MMAE (\blacksquare) and washed to remove unbound scFv (wash) in the absence of exogenous cathepsin B. As a control, HT29, HT1080 and PC3 tumor cells were

cultured in activated platelets that had been pre-incubated with $scFv_{GPIIb/IIIa}$ -MMAE (\bigtriangledown) or $scFv_{mut}$ -MMAE (\checkmark), which did not undergo a washing step (all n=3). Data expressed as mean \pm SEM.



Supplementary Figure 2. Body weight, blood counts, liver and renal function assessments. (A) Body weight of MDA-MB-231 tumor-bearing mice treated with 6 mg/kg of scFv_{GPIIb/IIIa}-MMAE (\bullet) (n=7), scFv_{mut}-MMAE (\bullet) (n=6) or untreated (\blacktriangle) (n=6). Data expressed as mean \pm SEM. (B) Blood cell counts of tumor-bearing mice after four treatment rounds of 6 mg/kg of scFv_{GPIIb/IIIa}-MMAE (\bullet) (n=5), scFv_{mut}-MMAE (\bullet) (n=5) or untreated (\bigstar) (n=5). (B) Liver and renal function tests of tumor-bearing mice after four treatment rounds of 6 mg/kg of scFv_{GPIIb/IIIa}-MMAE (\bullet) (n=4/5), scFv_{mut}-MMAE (\bullet) (n=5) or untreated (\bigstar) (n=5). Black dotted lines represent guideline for normal range within the 95% interval published by Charles River for female BALB/C athymic nude mice. Data expressed as mean \pm SEM. WBC - white blood cells, ALT - alanine aminotransferase and ALP - alkaline phosphatase.