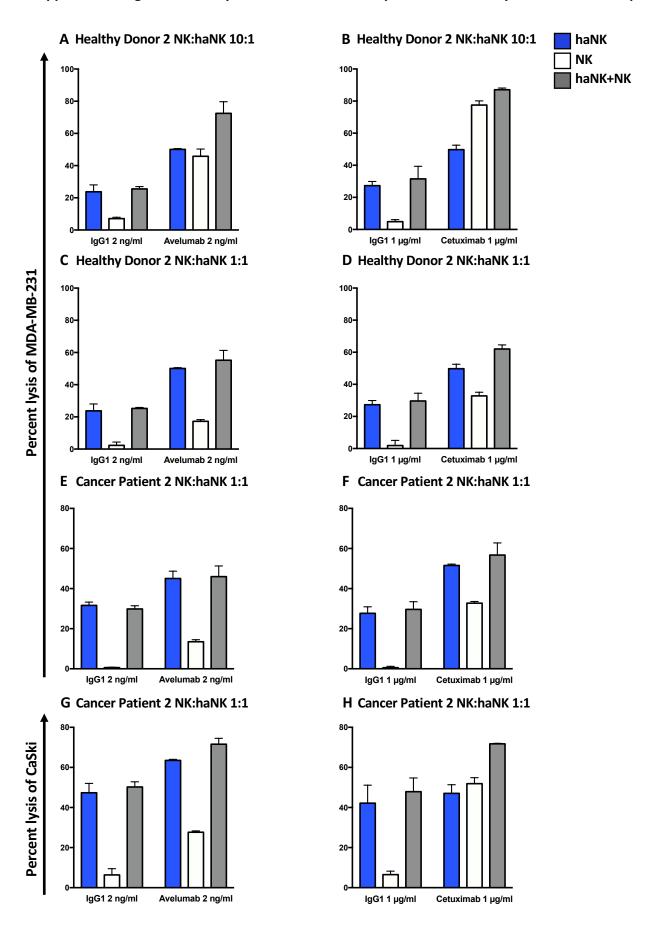


## Supplemental Figure 1. Cytokine secretion by intact and irradiated haNK cells.

Cytokine secretion by intact and irradiated (10 Gy) haNK cells was evaluated by collecting supernatants in 6-hour intervals (0-6h, 6-12h, 18-24h, and 42-48h) after irradiation. haNK cells were plated at  $5x10^5$  cells/ml in a 24-well plate, with triplicate wells for each time point, and medium alone as a negative control. Supernatants were collected after centrifugation of the plate, and cells were washed before each 6-hour interval. The cytokine levels were measured by a multiplex cytokine assay.



## **Supplemental Figure 2.**

## haNK lysis of tumor cells in the presence of healthy donor and cancer patient NK cells.

MDA-MB-231 breast carcinoma cells (a-f), and CaSki cervical carcinoma cells (g-h) were <sup>111</sup>Inlabeled as targets and incubated with haNK cells alone, NK cells alone, or haNK and NK cells together at ratios mimicking those seen in the blood after the infusion of 109 haNK cells (a-b) or 108 haNK cells (C-H). haNK lysis (with IgG1 control antibody) and ADCC induced by avelumab (2 ng/ml) or cetuximab (1 μg/ml) were evaluated in 18h assays. Bars show the mean (SD) lysis of triplicate wells. NK cells from 4 different healthy donors and 3 cancer patients were tested with similar results, and the results from 1 healthy donor and 1 cancer patient are shown. We did not have enough PBMC to do CD16 genotyping for this donor and patient. a-b: Using MDA-MB-231 cells as targets, haNK cells were used at an E:T ratio of 5:1 (blue), NK cells were used at an E:T ratio of 50:1 (white), and NK cells and haNK cells were combined at a 10:1 ratio, resulting in an overall E:T ratio of 55:1 (grey). These ratios were chosen to mimic those seen in the blood after infusion of 108 haNK cells to a 70 kg patient. c-f. Using MDA-MB-231 cells as targets, haNK cells were used at an effector to tumor target ratio (E:T) of 5:1 (blue), NK cells were used at an E:T ratio of 5:1 (white), and NK cells and haNK cells were combined at a 1:1 ratio, resulting in an overall E:T ratio of 10:1 (grey). These ratios were chosen to mimic those seen in the blood after infusion of  $10^9$  haNK cells to a 70 kg patient, showing the results for the healthy donor in c and d, and the results for the cancer patient in e and f. (g-h): An additional tumor cell line, CaSki, was used as a target with NK cells from the cancer patient as effectors. haNK cells were used at an effector to tumor target ratio (E:T) of 5:1 (blue), NK cells were used at an E:T ratio of 5:1 (white), and NK cells and haNK cells were combined at a 1:1 ratio, resulting in an overall E:T ratio of 10:1 (grey). These ratios were chosen to mimic those seen in the blood after infusion of 109 haNK cells to a 70 kg patient.