GA201 (RG7160): a novel, humanised, glycoengineered anti-EGFR antibody with enhanced ADCC and superior in vivo efficacy compared with cetuximab

Christian A Gerdes, Valeria Nicolini, Sylvia Herter, Erwin van Puijenbroek, Sabine Lang, Michaela Roemmele, Ekkehard Moessner, Olivier Freytag, Thomas Friess, Carola H Ries, Birgit Bossenmaier, Hans Joachim Mueller, Pablo Umaña

Supplemental Data

Multiple ADCC experiments were performed using a variety of different effector:target cell ratios (E:T). Figure 3 in the manuscript displays the results of ADCC assays using NK-92 cells as effectors at an E:T ratio of 3:1 and using human peripheral blood mononuclear cells (PBMCs) as effectors at an E:T ratio of 25:1. These E:T ratios represent the optimal experimental conditions that generated robust ADCC signal read outs.

Supplementary Fig. S1 shows additional ADCC results for the MKN45 cell line using human PBMCs as effector cells at an E:T ratios of 1:1, 5:1 and 10:1. The data shows that under all the tested conditions GA201 exhibited superior cell killing compared with cetuximab. The overall ADCC activity with both antibodies using PMBCs at an E:T ratio of 1:1 was substantially lower than at 5:1 or 10:1.
Supplementary Fig. S1A: ADCC activity of GA201 using PMBCs as effector cells at E:T ratios of 1:1, 5:1 (24 hour LDH release measured) and 10:1 (4 hour LDH release measured).