HBIGS

Universität Heidelberg

HBIGS Lecture

by

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„ Engineering antibodies to improve their anti-tumoral efficacy: Generation of human bispecific bivalent antibodies and Glycoengineering to enhance effector function "

Date: Wednesday, 30 May 2012
Start of Lecture: 17:00 s.t.
Venue: INF 282 (ZMBH), R001

Abstract:

In the first part of the presentation GA101 (obinutuzumab), a novel type II, glycoengineered anti-CD20 monoclonal antibody will be described. GA101 is characterized by enhanced direct cell death induction with a concomitant reduction of CDC; and enhanced ADCC induction due glycoengineering that results in increased affinity for FcgRIIIa on immune effector cells as compared to rituximab. In NHL animal models GA101 mediates superior efficacy compared to type I CD20 antibodies. GA101 is currently in PhII/III clinical trials in NHL and B-CLL.

In the second part of the presentation the CrossMab technology as a generic method for the production of bivalent bispecific IgG antibodies will be introduced Based on the CrossMab technology we have developed a bispecific Ang-2-VEGF CrossMab targeting VEGF-A and Angiopoietin-2 which demonstrates potent anti-tumoral and anti-angiogenic efficacy.