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(54) Title: IMPROVED BISPECIFIC ANTI-TUMOR ANTIGEN/ANTI-HSG ANTIBODIES FOR PRE-TARGETING OF HYPER-PROLIFERATIVE DISORDERS

(57) Abstract: The invention refers to a bispecific anti-tumor antigen/anti-HSG antibody with selected light and heavy chain variable domains which allows improved pre-targeting of tumors for specific delivery of therapeutic or diagnostic agents. Said antibodies have significant affinity for the tumor antigen and sufficient residence time at the desired location. Non-antigen bound antibodies are cleared from the body quickly and exposure of normal tissues is minimized. The humanized anti-HSG antibodies bind with high affinity to both, moieties containing histamine-succinyl-glycyl (HSG) and a tumor antigen, respectively. The bispecific antibody can further be Fc silenced with additional properties such as reduced binding to FcγR and FcRn to modulated effector functions and half-life. The antibodies can be used for diagnosis and treatment of subjects suffering from malignancies.



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