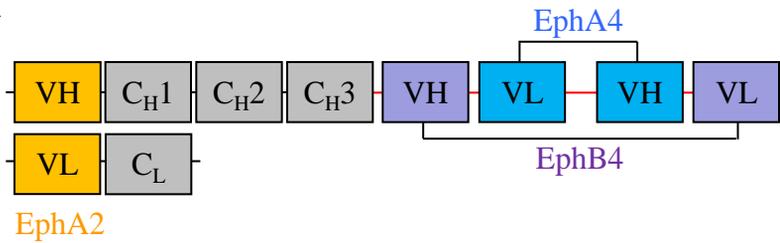


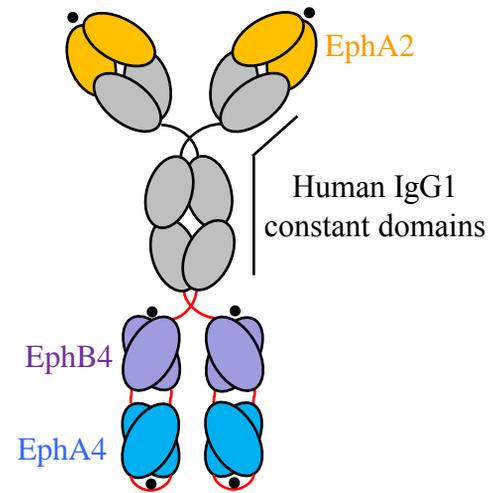
# Development of a trispecific antibody designed to simultaneously and efficiently target three different antigens on tumor cells.

Nazzareno Dimasi, Ryan Fleming, Carl Hay, Rob Woods, Linda Xu, Herren Wu and Changshou Gao  
MedImmune, Gaithersburg, Maryland, United States of America

**A**



**B**



**C**

>Trispecific-Antibody-Light-Chain

DIQMTQSPSSLSASVGDRTITCRASQSI SNNLHWYQQKPKAPKLLIKYAFQSI SGVPSRFSGSGG  
TDFLFTTISLQPEDFATYYCQQANSWPLTFGGGTKVEIKR TVAAPS VFI FPPSDEQLKSGTASV VCLL  
NNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDYSLSSSTLTLSKADYEKHKVYACEVTHQGLSSP  
VTKSFNRGEC

>Trispecific-Antibody-Heavy-Chain

QMQLVQSGPEVKKPGTSVKVSCASGFTFDDYSMNWVRQARGQRLEWIGFIRNKANDYTTEYADSVKG  
RVTITRDMSTSTAYMELSSLRSED TAVYYCARYPRHHAMDSWGQGT SVTVSSASTKGPSVFPLAPSSK  
STSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTVTPSSSLGTQTYICN  
VNHKPSNTKVDKRVPEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDV SHE  
DPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTIS  
KAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFF  
LYSKLTVDKSRWQQGNV FSCSVMEALHNHYTQKSLSLSPGK AAAGGGGSQVQLKQSGAELVKPGASV  
KISCKASGYTFTDYYINWVKQRPGQGLEWIGKIGPRIGTNYNENFKGKATLTADISSNTAYMQLHTL  
TSEDSAVYFCARSEDYSGYVSALDYWGQGT SVTVSS GGGGSNFMLTQPHSMSES PGKTVTISCTRSS  
GSIADHYVQWYQQRPGSSPTTVIYDDNQRPSGVPDRFSGSIDSSNSASLTISGLKTEDEADYYCQSY  
DSSSVIFGGGTKVTVLG GGGGSGGGSGGGSGGGGSQVQLVQSGAEVKKPGSSVKVSCASGYTFTN  
YGISWVRQAPGQGLEWVGWISAYDGNTNYAQKLQGRVTMTTDTPTSTAYMELRSLRSDDTAVYYCARG  
HYYFVSGSYDYWGQGT TVTVSS GGGGSNI VMTQSPKMSMSVGERVTL SCKASENVDYVSWYQQKPD  
QPELLLIYGASNRYTGVPDRFTGSGSATDFTLI ISSVQAEDLADYHCGQTYRYPFTFGGGTKLEIKR

**Supplementary Figure 1. (A)** Schematic representation of the domains and their linear arrangement of the trispecific antibody; **(B)** cartoon representation of the trispecific antibody; **(C)** amino acid sequence of the light and heavy chains of the trispecific antibody. Antigen specificity is schematically labeled and color coded such as the V-domains that bind EphA2 are orange, EphB4 purple and EphA4 blue. The sequences of the linkers are red and underlined. The antigen binding sites are indicated by the black colored circle in the cartoon representation. The trispecific antibody constant domains are from human IgG1.