

Claims

1. Use of an ErbB-2/ErbB-3 bispecific antibody and a therapeutically effective amount of an endocrine therapy drug in the manufacture of a medicament for treating a subject that has hormone receptor positive breast cancer or is at risk of having said cancer, wherein the bispecific antibody comprises two heavy chain variable regions (VH), each of which is paired with a huVκ1-39 light chain variable region (VL), wherein one VH has an antigen-binding site that can bind domain I of ErbB-2 comprising at least the CDR1, CDR2 and CDR3 sequences selected from the group consisting of MF2973, MF3004, MF3958, MF2971, MF3025, MF2916, MF3991, MF3031 and MF3003; and the other VH has an antigen-binding site that can bind domain III of ErbB-3 comprising at least the CDR1, CDR2 and CDR3 sequences selected from the group consisting of MF3178; MF3176; MF3163; MF6055; MF6056; MF6057; MF6058; MF6059; MF6060; MF6061; MF6062; MF6063; MF6064; MF6065; MF6066; MF6067; MF6068; MF6069; MF6070; MF6071; MF6072; MF6073 and MF6074.

2. The use of claim 1, wherein the affinity of the antigen-binding site for ErbB-3 is equal to or higher than the affinity of the antigen-binding site for ErbB-2.

3. The use according to claim 1 or 2, wherein the huVκ1-39 light chain comprises the sequence
DIQMTQSPSSLSASVGDRVITTCRASQSISSYLNWYQQKPGKAPKLLIYAASSLQSGVP
SRFSGSGSGTDFTLTISSLQPEDFATYYCQQSYSTPPTFGQGTKVEIKRTVAAPSVFIFP
PSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSSTYSLS
STLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC, or with 1-5 amino acid
insertions, deletions, substitutions or a combination thereof.

4. The use according to any one of claims 1-3, wherein one VH comprises CDR1, CDR2 and CDR3 sequences AYYIN, RIYPGSGYTSYAQKFQG and PPVYYDSAWFAY, respectively, of an ErbB-2 specific heavy chain variable region, or CDR sequences that differ in at most 3 amino acids from these CDR1, CDR2 and CDR3 sequences.

5. The use according to any one of claims 1-4, wherein one VH comprises CDR1, CDR2 and CDR3 sequences GYYMH, WINPNSGGTNYAQKFQG and DHGSRHFWSYWGFYD, respectively, of an ErbB-3 specific heavy chain variable

region, or CDR sequences that differ in at most 3 amino acids from these CDR1, CDR2 and CDR3 sequences.