diluent, or excipient.

[0019a] In one aspect, the present disclosure refers to a pharmaceutical composition comprising trastuzumab-MCC-DM1, a chemotherapeutic agent selected from GDC-0941 and GNE-390; and one or more pharmaceutically acceptable carrier, glidant, diluent, or excipient.

[0020] Disclosed are methods of treating a hyperproliferative disease or disorder, comprising administering to a mammal in need of such treatment effective amounts of trastuzumab-MCC-DM1 and a chemotherapeutic agent.

Trastuzumab-MCC-DM1 and the chemotherapeutic agent may be co-formulated for administration in a combination as a pharmaceutical formulation or they may be administered separately in alternation (alternating, sequential dosages) as a therapeutic combination. In one example, T-DM1 is delivered by infusion and the chemotherapeutic agent is delivered orally.

[0021] Disclosed are methods to predict effective drug combinations for in vivo efficacy where the combinations include trastuzumab-MCC-DM1 and an anti cancer, standard-of-care, chemotherapeutic agent. Efficacy data from in vitro cell proliferation and in vivo tumor xenograft experiments are analyzed qualitatively and quantitatively. Quantitative analysis methods may be based on the Chou & Talalay median effect and isobolograms generating a combination index (CI) value to denote synergy, antagonism, or additivity, or on the Bliss Independence ribbon graph deflection.

[0022] Disclosed is a method of using a therapeutic combination of the disclosure to treat a disease or condition such as cancer, including one modulated by HER2 or KDR9 (VEGF receptor 1) in a mammal.

[0023] Disclosed is the use of a therapeutic combination of the disclosure in the preparation of a medicament for the treatment of a disease or condition such as cancer, including one modulated by HER2 or KDR9 (VEGF receptor 1) in a mammal.

[0023a] In another aspect, the present disclosure refers to a therapeutic combination for use in the treatment of cancer expressing ErbB2, wherein the treatment comprises administration of a therapeutic combination as a combined formulation or by alternation to a mammal, wherein the therapeutic combination comprises a therapeutically effective amount of trastuzumab-MCC-DM1, and a therapeutically effective amount of a chemotherapeutic agent selected from GDC-0941 and GNE-390.

[0023b] In another aspect, the present disclosure refers to use of the pharmaceutical composition disclosed herein in the manufacture of a medicament for the treatment of cancer expressing ErbB2, wherein the pharmaceutical composition is to be administered as a combined formulation or by alternation to a mammal, wherein the pharmaceutical composition comprises a therapeutically effective amount of trastuzumab-MCC-DM1, and a therapeutically effective amount of a chemotherapeutic agent selected from GDC-0941 and GNE-390.

[0023c] In another aspect, the present disclosure refers to use of a therapeutic combination in the manufacture of a medicament for the treatment of breast cancer expressing ErbB2, wherein the therapeutic combination is to be administered to a mammal as a combined formulation or by alternation, and comprises a therapeutically effective amount of trastuzumab-MCC-DM1, and a therapeutically effective amount of a chemotherapeutic agent selected from GDC-0941 and GNE-390.

[0024] Disclosed are articles of manufacture or kits comprising trastuzumab-MCC-DM1, a chemotherapeutic agent, a container, and optionally a package insert or label indicating a treatment.

[0025] Disclosed is a method for determining compounds to be used in combination for the treatment of cancer comprising: a) administering a therapeutic combination of trastuzumab-MCC-DM1, and a chemotherapeutic agent selected from a HER2 dimerization inhibitor antibody, an anti-VEGF antibody, 5-FU, carboplatin, lapatinib, ABT-869, docetaxel, GDC-0941, and GNE-390 to an in vitro tumor cell line, and b) measuring a synergistic or non-synergistic effect.

[0026] Additional advantages and novel features of this disclosure shall be set forth in part in the description that follows, and in part will become apparent to those skilled in the art upon examination of the following specification or may be learned by the practice of the