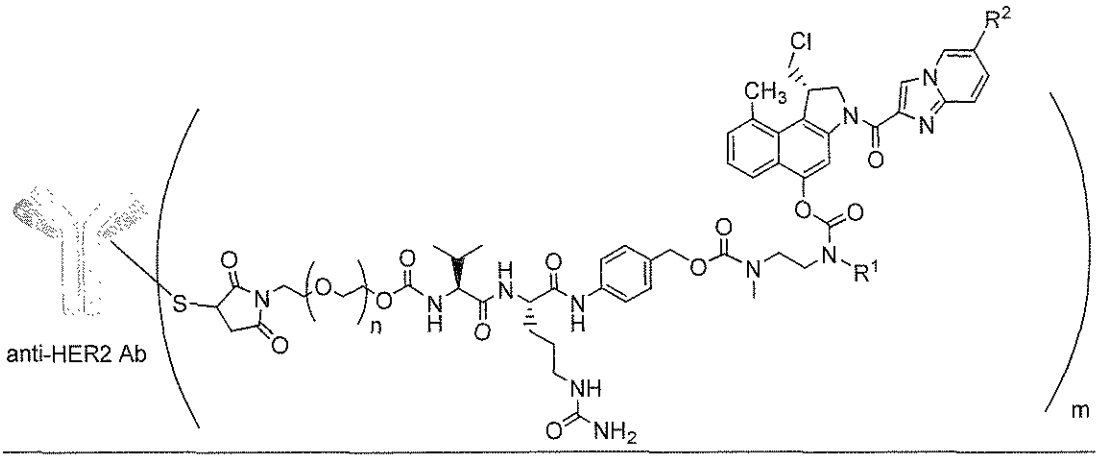
D.P. English et al. report in Cancer Medicine published by John Wiley & Sons Ltd., pp. 1-10, 2014, that T-DM1 is highly effective against primary HER2 over-expressing uterine serous carcinoma (USC) in vitro and in vivo. T-DM1 (Kadcyla™, ado-trastuzumab emtansine, Genentech/Roche) is an antibody-drug conjugate which comprises trastuzumab covalently linked to the anti-microtubule agent DM1. DM1 belongs to the maytansine class of chemotherapeutic agents. On average, 3-4 molecules of DM1 are conjugated to each trastuzumab molecule. T-DM1 is an agent aimed at delivering the highly potent DM1 into HER2 over-expressing cells via receptor-mediated endocytosis. T-DM1 has been approved for the treatment of patients with HER2-positive metastatic breast cancer who received prior treatment with trastuzumab and a taxane. The authors conclude that T-DM1 shows promising antitumor effect in HER2-positive USC cell lines and USC (i.e. HER2 IHC 3+) xenografts in SCID mice (15 mg/kg, i.p. injections once per week) and its activity is significantly higher when compared to trastuzumab, and that T-DM1 may represent a novel treatment option for HER2-positive USC patients with disease refractory to standard chemotherapy. No clinical investigations are currently ongoing with T-DM1 for the treatment of endometrial cancer.

BRIEF DESCRIPTION OF THE PRESENT INVENTION

The present invention relates to duocarmycin-containing ADCs for use in the treatment of human solid tumours expressing HER2, wherein the human solid tumour expressing HER2 is endometrial cancer, particularly wherein the human solid tumour expressing HER2 is USC.

In another aspect, there is provided the use of a compound of formula (I)



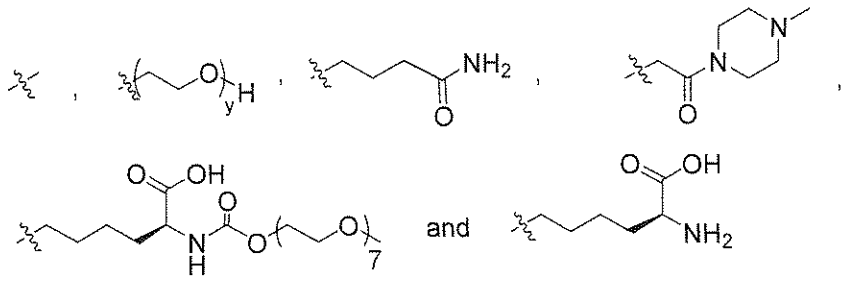
wherein

anti-HER2 Ab is an anti-HER2 antibody or antibody fragment,

n is 0-3,

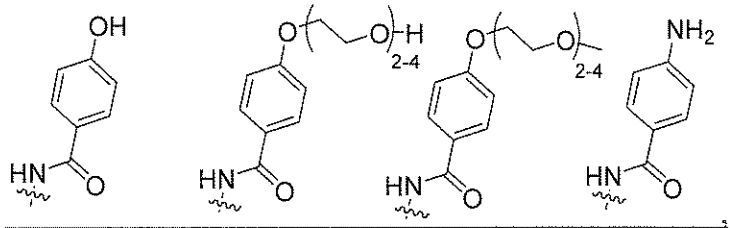
m represents an average DAR of from 1 to 4,

R^1 is selected from



y is 1-16, and

R^2 is selected from



in the manufacture of a medicament for the treatment of human solid tumours expressing HER2, wherein the human solid tumour expressing HER2 is endometrial cancer.

In another aspect, there is provided the use of a combination of a compound as disclosed herein with a therapeutic antibody and/or a chemotherapeutic agent, in the manufacture of a medicament for the treatment of endometrial cancer.

In another aspect, there is provided a pharmaceutical composition comprising a compound as disclosed herein or a combination as disclosed herein, and one or more pharmaceutically acceptable excipients.

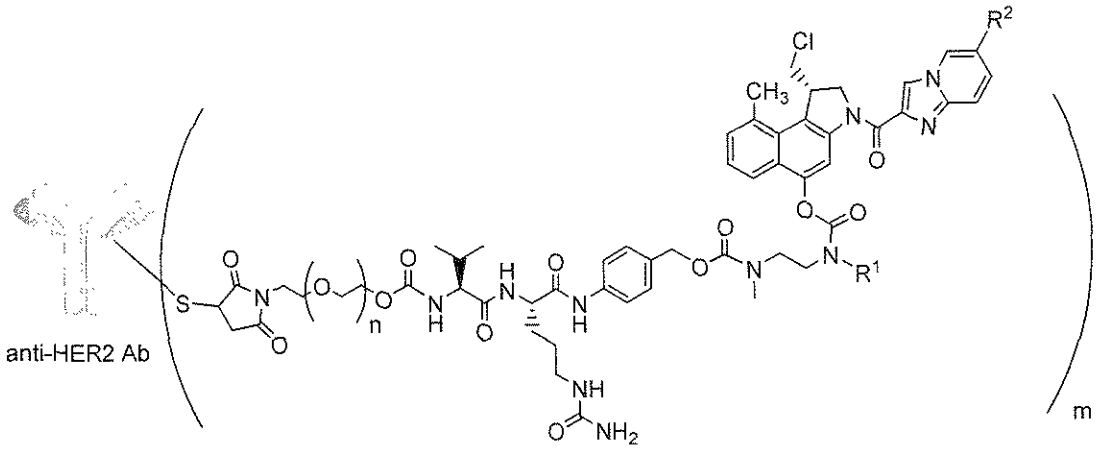
BRIEF DESCRIPTION OF THE DRAWINGS

Figure 1. In vitro USC cell line cytotoxicity: SYD985 versus T-DM1.

Figure 2. In vivo USC cell line xenograft efficacy in mice: SYD985 versus T-DM1 after multiple injections.

CLAIMS

1. Use of a~~A~~ compound of formula (I)



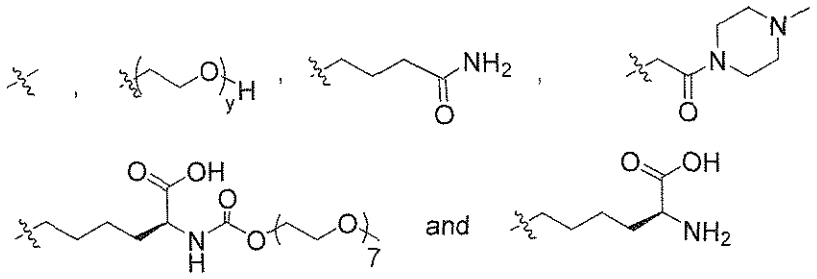
wherein

anti-HER2 Ab is an anti-HER2 antibody or antibody fragment,

n is 0-3,

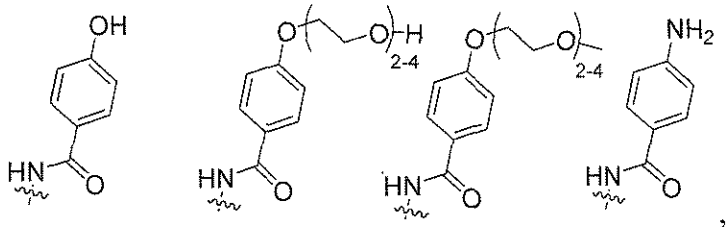
m represents an average DAR of from 1 to 4,

R^1 is selected from



y is 1-16, and

R^2 is selected from



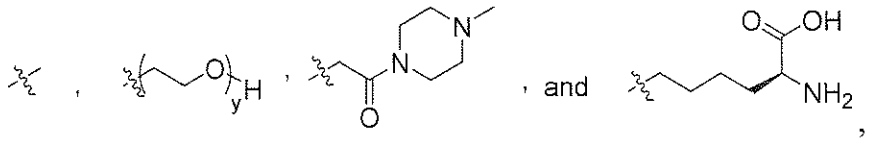
~~for use~~ in the manufacture of a medicament ~~in~~ for the treatment of human solid tumours expressing HER2, wherein the human solid tumour expressing HER2 is endometrial cancer.

2. ~~A compound for~~ The use according to claim 1, wherein in the compound of formula (I) anti-HER2 Ab is an anti-HER2 antibody or antibody fragment,

n is 0-1,

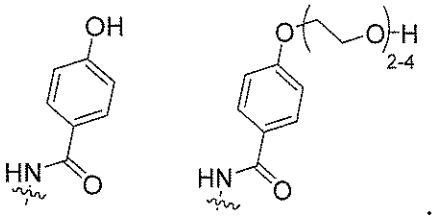
m represents an average DAR of from 1 to 4,

R^1 is selected from

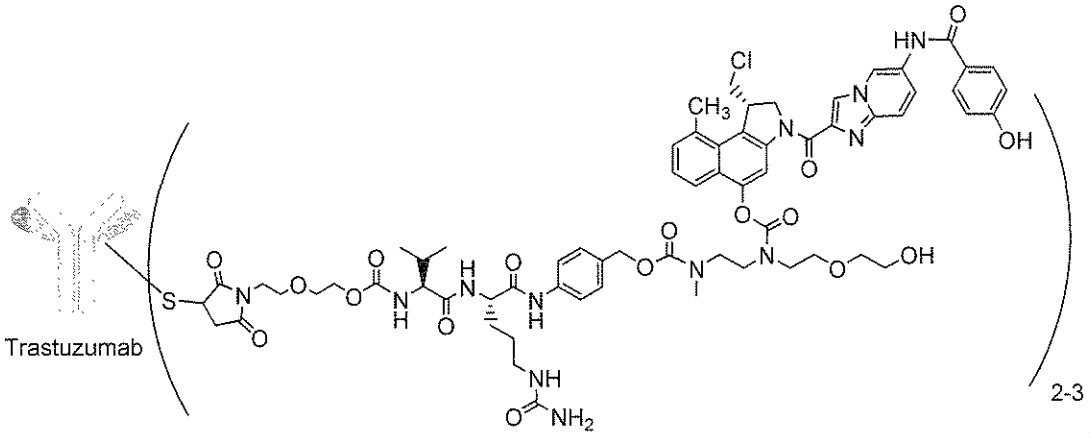


y is 1-16, and

R^2 is selected from



3. ~~A compound for~~ The use according to claim 1 or 2, wherein the compound of formula (I) is a compound of formula (II)



4. ~~A compound for~~ The use according to claim 3, wherein the compound of formula (II) ~~having~~ has an average DAR of from 2.6 to 2.9.

5. ~~A compound for~~ The use according to any one of claims 1 to 4, wherein the endometrial cancer is~~for use in the treatment of~~ uterine serous carcinoma.

6. ~~A compound for~~The use according to any one of claims 1 to 5, wherein the endometrial cancer is HER2 IHC 2+ or 1+.

7. ~~A compound for~~The use according to any one of claims 1 to 6, wherein the endometrial cancer is HER2 FISH negative.

8. Use of ~~A~~a combination of a compound ~~for use~~ according to any one of claims 1 to 7 with a therapeutic antibody and/or a chemotherapeutic agent, ~~for~~ in the manufacture of a medicament for ~~use in~~ the treatment of endometrial cancer.

9. ~~A combination for~~The use according to claim 8, ~~for use in the treatment of~~wherein the endometrial cancer is uterine serous carcinoma.

10. ~~A combination for~~The use according to claim 8 or 9, wherein the therapeutic antibody is pertuzumab and the chemotherapeutic agent is a taxane, an anthracycline or a tyrosine kinase inhibitor.

11. A pharmaceutical composition comprising a compound ~~for use~~ according to any one of claims 1 to 7 or a combination ~~for use~~ according to any one of claims 8 to 10, and one or more pharmaceutically acceptable excipients.

12. A pharmaceutical composition according to claim 11 in the form of a lyophilized powder or a frozen solution.