

CLAIMS

[Claim 1]. Use of an antibody against calnexin (Cnx) in the manufacture of a medicament for the treatment or prevention of cancer.

[Claim 2]. The use according to claim 1, wherein the antibody against Cnx is capable
5 of inhibiting:

- (a) an ECM degradation activity of Cnx/ERp57; or
- (b) an oxireductase activity of Cnx/ERp57; or
- (c) a disulphide bond reductase activity of Cnx/ERp57.

[Claim 3]. The use according to Claim 1 or 2, in which the cancer comprises invasive
10 or metastatic cancer.

[Claim 4]. The use according to claim 3, wherein the medicament is for the treatment or prevention of tumour growth or metastasis.

[Claim 5]. The use according to any one of claims 1 to 4, in which the cancer is characterised by elevated levels of O-glycosylation.

15 [Claim 6]. The use according to claim 5, wherein the cancer is characterised by elevated levels of ER O-glycosylation, or elevated levels of O-glycosylation of Cnx.

[Claim 7]. The use according to claim 5 or 6, wherein the cancer is selected from the group consisting of: liver, breast, sarcoma, lung, prostate, bladder, kidney, melanoma, pancreatic, endometrial, colorectal and thyroid cancer.

20 [Claim 8]. The use according to any previous claim, wherein the cancer is characterised by increased Cnx expression.

[Claim 9]. The use according to any preceding claim, in which the antibody against Cnx is capable of down-regulating the activity of Cnx.

[Claim 10]. The use according to any previous claim, wherein the antibody is
25 monoclonal.

[Claim 11]. The use according to any previous claim, wherein the antibody is humanised.

[Claim 12]. The use according to any preceding claim, in which the antibody against Cnx is an Fv, F(ab') and F(ab')₂, or scFv antibody.

[Claim 13]. The use according to any preceding claim, in which the antibody against Cnx is capable of preventing GALA mediated O-glycosylation of Cnx.

5 [Claim 14]. Use of an antibody against calnexin (Cnx) in the manufacture of a medicament for manipulating a cancer cell, such as an invasive or metastatic cancer cell, comprising down-regulating the expression, amount or activity of Cnx in the cell, such that the cancer cell becomes non-cancerous or the invasive or metastatic cancer cell becomes non-invasive or non-metastatic as a result of the manipulation.

10 [Claim 15]. A method of identifying:

(a) a molecule capable of binding to Cnx/ERp57, the method comprising contacting Cnx/ERp57 with a candidate molecule and determining whether the candidate molecule binds to the Cnx/ERp57;

(b) a modulator of Cnx/ERp57, the method comprising contacting a cell with a
15 candidate molecule and detecting elevated or reduced expression, amount or activity of Cnx/ERp57 in or of the cell;

(c) a molecule suitable for the treatment, prophylaxis or alleviation of cancer, the method comprising determining if a candidate molecule is an agonist or antagonist of Cnx/ERp57, preferably by exposing a candidate molecule to Cnx/ERp57 or a cell expressing
20 Cnx/ERp57 in order to determine if the candidate molecule is an agonist or antagonist thereof; or

(d) an agonist or antagonist of a Cnx/ERp57, the method comprising administering a candidate molecule to an animal and determining whether the animal exhibits increased or decreased expression, amount or activity of Cnx/ERp57;

optionally isolating or synthesising the molecule, modulator, agonist or antagonist;

25 in which the molecule, modulator, agonist or antagonist so identified comprises an antibody against Cnx according to any of Claims 1 to 13.