

CLAIMS

[Claim 1]. Use of an antibody against calnexin (Cnx) in the manufacture of a medicament for the treatment ~~or prevention~~ of cancer, wherein the antibody inhibits Cnx and antibody-mediated inhibition of Cnx reduces or inhibits tumor growth.

5 [Claim 2]. An antibody against Cnx for use according to Claim 1, wherein the method of treatment or prevention of cancer reduces or inhibits extracellular matrix (ECM) degradation.

 [Claim 3]. An antibody against Cnx for use according to Claim 1, wherein the treatment or prevention of cancer involves the prevention of ECM degradation by cancer cells.

10 [Claim 24]. The use according to claim 1, wherein the antibody against Cnx is capable of inhibiting:

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

15 [Claim 35]. The use according to any one of Claims 1 to 24, in which the cancer comprises invasive or metastatic cancer.

 [Claim 46]. The use according to claim 35, wherein the medicament is for the treatment or prevention of ~~tumour growth or~~ metastasis.

 [Claim 57]. The use according to any one of claims 1 to 46, in which the cancer is characterised by elevated levels of O-glycosylation.

20 [Claim 68]. The use according to claim 57, wherein the cancer is characterised by elevated levels of endoplasmic reticulum (ER) O-glycosylation, or elevated levels of O-glycosylation of Cnx.

25 [Claim 79]. The use according to claim 57 or 68, wherein the cancer is selected from the group consisting of: liver, breast, sarcoma, lung, prostate, bladder, kidney, melanoma, pancreatic, endometrial, colorectal and thyroid cancer.

 [Claim 810]. The use according to any previous claim, wherein the cancer is characterised by increased Cnx expression.

[Claim 911]. ~~The use according to any preceding claim, in which the~~An antibody against Cnx for use according to any one of th previous claims, wherein the cancer is characterised by cell surface exposure is capable of down-regulating the activity of the Cnx/ERp57 complex.

5 [Claim 4012]. The use according to any previous claim, wherein the antibody is monoclonal.

[Claim 4413]. 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 15]. An antibody against Cnx for use according to any one of claims 2 to 14, wherein inhibition of ECM degradation is determined through an ECM degradation assay.

5 ~~[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.~~

~~[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.~~

~~[Claim 15].—A method of identifying:~~

15 ~~(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 candidate molecule and detecting elevated or reduced expression, amount or activity of Cnx/ERp57 in or of the cell;~~

20 ~~(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 Cnx/ERp57 in order to determine if the candidate molecule is an agonist or antagonist thereof; or~~

25 ~~(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;~~

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