CLAIMS

1. Use of an anti-VHZ agent in the preparation of a pharmaceutical composition for the treatment, prophylaxis or alleviation of an invasive or metastatic cancer selected from the group consisting of: colon cancer, lung cancer, squamous cell carcinoma including lip, larynx, vulva, cervix and penis cancer, pancreatic cancer, brain cancer, oesophageal cancer, stomach cancer, bladder cancer, kidney cancer, skin cancer, ovary cancer, prostate cancer and testicular cancer.

2. Use according to claim 1 in which the anti-VHZ agent is capable of down-regulating any combination of the expression and/or amount and/or activity of VHZ.

3. Use according to claim 1 wherein the anti-VHZ agent is a Small interfering RNA (siRNA), Short Hairpin RNA (shRNA) or Chimera RNAi.

4. Use according to claim 3 which is DUSP23 Pre-design Chimera RNAi.

5. Use according to claim 1 wherein the anti-VHZ agent is an anti-VHZ antibody.

6. Use according to claim 5 wherein the anti-VHZ agent is an anti-peptide antibody generated against RRLRPGSIETYEQEK corresponding to amino acid residues (126-140) of human VHZ.

7. Use according to claim 6 wherein the anti-VHZ antibody is a chicken anti-human VHZ antibody or a rabbit anti-human VHZ antibody.

8. A method selected from the group consisting of:

(a) a method of detecting a metastatic cancer cell selected from the group consisting of: a colon cancer cell, a lung cancer cell, a squamous cell carcinoma cell including lip, larynx, vulva, cervix and penis cancer, a pancreatic cancer cell, a brain cancer cell, an oesophageal cancer cell, a stomach cancer cell, a bladder cancer cell, a kidney cancer cell, a skin cancer cell, an ovary cancer cell, a prostate cancer cell and a testicular cancer cell, the method comprising detecting, in a cell or tissue sample obtained from an individual, up-regulation of expression and/or amount and/or activity of VHZ in the cell, preferably in which the expression of VHZ is compared to the expression and/or amount and/or activity of VHZ in a control cell known to be non-cancerous;

(b) a method of determining the proliferative state of a metastatic cancer cell selected from the group consisting of: a colon cancer cell, a lung cancer cell, a squamous cell carcinoma cell including lip, larynx, vulva, cervix and penis cancer, a pancreatic

cancer cell, a brain cancer cell, an oesophageal cancer cell, a stomach cancer cell, a bladder cancer cell, a kidney cancer cell, a skin cancer cell, an ovary cancer cell, a prostate cancer cell and a testicular cancer cell, or determining the likelihood that the cancer cell will become invasive or aggressive, the method comprising detecting, in a cell or tissue sample obtained from an individual, up-regulation of expression, amount or activity of VHZ in the cell;

(c) a method of predicting a survival rate of an individual with a metastatic cancer selected from the group consisting of: colon cancer, lung cancer, squamous cell carcinoma including lip, larynx, vulva, cervix and penis cancer, pancreatic cancer, brain cancer, oesophageal cancer, stomach cancer, bladder cancer, kidney cancer, skin cancer, ovary cancer, prostate cancer and testicular cancer, the method comprising detecting, in a cell or tissue sample obtained from the individual, up-regulation of expression of VHZ in a cell of the individual; and

(d) a method of choosing a therapy for an individual with a metastatic cancer selected from the group consisting of: colon cancer, lung cancer, squamous cell carcinoma including lip, larynx, vulva, cervix and penis cancer, pancreatic cancer, brain cancer, oesophageal cancer, stomach cancer, bladder cancer, kidney cancer, skin cancer, ovary cancer, prostate cancer and testicular cancer, the method comprising detecting, in a cell or tissue sample obtained from the individual, up-regulation of expression of VHZ in a cell of the individual and choosing an appropriate therapy based on the aggressiveness of the metastatic cancer.

9. A method of identifying a molecule suitable for the treatment, prophylaxis or alleviation of a metastatic cancer selected from the group consisting of: colon cancer, lung cancer, squamous cell carcinoma including lip, larynx, vulva, cervix and penis cancer, pancreatic cancer, brain cancer, oesophageal cancer, stomach cancer, bladder cancer, kidney cancer, skin cancer, ovary cancer, prostate cancer and testicular cancer, the method comprising determining if a candidate molecule is an antagonist of VHZ or a sequence having at least 90% sequence identity thereto, the method involving exposing a candidate molecule to a VHZ polypeptide or a cell expressing a VHZ polypeptide in order to determine if the candidate molecule is an antagonist thereof

10. A method of determining whether a tumour of a cancer selected from the group consisting of: colon cancer, lung cancer, squamous cell carcinoma including lip, larynx, vulva, cervix and penis cancer, pancreatic cancer, brain cancer, oesophageal cancer, stomach cancer, bladder cancer, kidney cancer, skin cancer, ovary cancer, prostate cancer and testicular cancer in an individual is, or is likely to be, an invasive or metastatic tumour, the method comprising detecting, in a cell or tissue sample obtained from the individual, up-regulation of expression, amount or activity of VHZ in a tumour cell of the individual.

CLAIMS

1. Use of an anti-VHZ antibody in the preparation of a pharmaceutical composition for the treatment, prophylaxis or alleviation of an invasive or metastatic cancer selected from the group consisting of: colon cancer, lung cancer, squamous cell carcinoma including lip, larynx, vulva, cervix and penis cancer, pancreatic cancer, brain cancer, oesophageal cancer, stomach cancer, bladder cancer, kidney cancer, skin cancer, ovary cancer, prostate cancer and testicular cancer.

2. Use according to claim 1 in which the anti-VHZ antibody is capable of down-regulating any combination of the expression and/or amount and/or activity of VHZ.

3. Use according to claim 1 wherein the anti-VHZ antibody is an anti-peptide antibody generated against RRLRPGSIETYEQEK corresponding to amino acid residues (126-140) of human VHZ.

4. Use according to claim 3 wherein the anti-VHZ antibody is a chicken anti-human VHZ antibody or a rabbit anti-human VHZ antibody.

5. A method selected from the group consisting of:

(a) a method of detecting a metastatic cancer cell selected from the group consisting of: a colon cancer cell, a lung cancer cell, a squamous cell carcinoma cell including lip, larynx, vulva, cervix and penis cancer, a pancreatic cancer cell, a brain cancer cell, an oesophageal cancer cell, a stomach cancer cell, a bladder cancer cell, a kidney cancer cell, a skin cancer cell, an ovary cancer cell, a prostate cancer cell and a testicular cancer cell, the method comprising detecting, in a cell or tissue sample obtained from an individual, up-regulation of expression and/or amount and/or activity of VHZ in the cell, preferably in which the expression of VHZ is compared to the expression and/or amount and/or activity of VHZ in a control cell known to be non-cancerous;

(b) a method of determining the proliferative state of a metastatic cancer cell selected from the group consisting of: a colon cancer cell, a lung cancer cell, a squamous cell carcinoma cell including lip, larynx, vulva, cervix and penis cancer, a pancreatic cancer cell, a brain cancer cell, an oesophageal cancer cell, a stomach cancer cell, a

bladder cancer cell, a kidney cancer cell, a skin cancer cell, an ovary cancer cell, a prostate cancer cell and a testicular cancer cell, or determining the likelihood that the cancer cell will become invasive or aggressive, the method comprising detecting, in a cell or tissue sample obtained from an individual, up-regulation of expression, amount or activity of VHZ in the cell;

(c) a method of predicting a survival rate of an individual with a metastatic cancer selected from the group consisting of: colon cancer, lung cancer, squamous cell carcinoma including lip, larynx, vulva, cervix and penis cancer, pancreatic cancer, brain cancer, oesophageal cancer, stomach cancer, bladder cancer, kidney cancer, skin cancer, ovary cancer, prostate cancer and testicular cancer, the method comprising detecting, in a cell or tissue sample obtained from the individual, up-regulation of expression of VHZ in a cell of the individual; and

(d) a method of choosing a therapy for an individual with a metastatic cancer selected from the group consisting of: colon cancer, lung cancer, squamous cell carcinoma including lip, larynx, vulva, cervix and penis cancer, pancreatic cancer, brain cancer, oesophageal cancer, stomach cancer, bladder cancer, kidney cancer, skin cancer, ovary cancer, prostate cancer and testicular cancer, the method comprising detecting, in a cell or tissue sample obtained from the individual, up-regulation of expression of VHZ in a cell of the individual and choosing an appropriate therapy based on the aggressiveness of the metastatic cancer.

6. A method of identifying a molecule suitable for the treatment, prophylaxis or alleviation of a metastatic cancer selected from the group consisting of: colon cancer, lung cancer, squamous cell carcinoma including lip, larynx, vulva, cervix and penis cancer, pancreatic cancer, brain cancer, oesophageal cancer, stomach cancer, bladder cancer, kidney cancer, skin cancer, ovary cancer, prostate cancer and testicular cancer, the method comprising determining if a candidate molecule is an antagonist of VHZ or a sequence having at least 90% sequence identity thereto, the method involving exposing a candidate molecule to a VHZ polypeptide or a cell expressing a VHZ polypeptide in order to determine if the candidate molecule is an antagonist thereof

7. A method of determining whether a tumour of a cancer selected from the group consisting of: colon cancer, lung cancer, squamous cell carcinoma including lip, larynx, vulva,

cervix and penis cancer, pancreatic cancer, brain cancer, oesophageal cancer, stomach cancer, bladder cancer, kidney cancer, skin cancer, ovary cancer, prostate cancer and testicular cancer in an individual is, or is likely to be, an invasive or metastatic tumour, the method comprising detecting, in a cell or tissue sample obtained from the individual, up-regulation of expression, amount or activity of VHZ in a tumour cell of the individual.