C L A I M S

1. Use of a peptide derived from WNT5A protein according to SEQ ID NO: 1 in the manufacture of a medicament for the reduction or elimination of cancer stem cells in a patient diagnosed with colon cancer, which peptide has a length of 20 amino acids or less and comprises the amino acids sequence XDGXEL (SEQ ID NO: 2), or a formylated derivative thereof, wherein X is any amino acid.

2. Use of a peptide agonist derived from WNT5A protein according to SEQ ID NO: 1 in the manufacture of a medicament for the reduction or elimination of cancer stem cells in a patient diagnosed with colon cancer, which peptide agonist has a length of 20 amino acids or less and comprises the amino acids sequence XDGXEL (SEQ ID NO: 2), or a formylated derivative thereof, wherein X is any amino acid.

3. The use according to claim 1 or 2, wherein expression of WNT5A in cancer cells is 35% or less of the expression in surrounding non-cancer cells.

4. The use according to any one of claims 1 to 3, wherein X in position 1 is M or norleucine and X in position 4 is C or A.

5. The use according to any one of claims 1 to 4, wherein said peptide is selected from the group consisting of:

MDGCEL (SEQ. ID. NO. 3),
GMDGCEL (SEQ. ID. NO. 4),
EGMDGCEL (SEQ. ID. NO. 5),
SEGMDGCEL (SEQ. ID. NO. 6),
TSEGMDGCEL (SEQ. ID. NO. 7),
KTSEGMDGCEL (SEQ. ID. NO. 8),
NKTSEGMDGCEL (SEQ. ID. NO. 9),
CNKTSEGMDGCEL (SEQ. ID. NO. 10),
LCNKTSEGMDGCEL (SEQ. ID. NO. 11),
RLCNKTSEGMDGCEL (SEQ. ID. NO. 12),
GRLCNKTSEGMDGCEL (SEQ. ID. NO. 13),
QGRLCNKTSEGMDGCEL (SEQ. ID. NO. 14),
TQGRLCNKTSEGMDGCEL (SEQ. ID. NO. 15),

GTQGRLCNKTSEGMDGCEL (SEQ. ID. NO. 16), and
LGTQGRLCNKTSEGMDGCEL (SEQ. ID. NO. 17),
or a formylated derivative thereof.

6. The use according to any one of claims 1 to 5, wherein said peptide is MDGCEL (SEQ ID NO: 3), or a formylated derivative thereof.

7. The use according to any one of claims 1 to 6, wherein reduction or elimination comprises the following step:

a) immediately after diagnosis of cancer and/or during surgery and/or after removing the tumour by surgery, an effective amount of the peptide is to be administered, optionally wherein step a) is repeated at least 3 times a week for 2 weeks or more.

8. The use according to any one of claims 1 to 7 in combination with at least one tumour suppressing chemotherapeutic drug, wherein reduction or elimination comprises the following steps:

a) an effective amount of a tumour suppressing chemotherapeutic drug is to be administered;

b) prior to, simultaneously with and/or subsequently after treatment with said at least one tumour suppressing chemotherapeutic drug, an effective amount of the peptide is to be administered, optionally wherein

step b) is repeated at least 3 times a week for 2 weeks or more.

9. The use according to any one of claims 1 to 6 in combination with at least one tumour suppressing chemotherapeutic drug, wherein said peptide and said tumour suppressing chemotherapeutic drug are either combined or separate and/or are to be administered either simultaneously or sequentially.

10. The use according to claim 8 or 9 wherein said at least one tumour suppressing chemotherapeutic drug is a combination of 5-fluorouracil (5-FU), leucovorin and oxaliplatin (FOLFOX) or anthracycline or taxane.

11. The use according to claim 10 wherein the anthracycline is epirubicin or doxorubicin, or the taxane is docetaxel or paclitaxel.

12. The use according to claim 10 wherein said tumour suppressing chemotherapeutic drug is a combination of 5-fluorouracil (5-FU), leucovorin and oxaliplatin (FOLFOX) for use in treatment of a patient diagnosed with colon cancer.