C L A I M S

1. A peptide derived from WNT5A protein according to SEQ ID NO: 1 for use in 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. A peptide agonist derived from WNT5A protein according to SEQ ID NO: 1 for use in 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 peptide for use according to claims 1 or 2, wherein expression of WNT5A in cancer cells is 35% or less of the expression in surrounding non-cancer cells.

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

5. The peptide for 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 peptide for 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 peptide for 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, administering an effective amount of the peptide, optionally wherein step a) is repeated at least 3 times a week for 2 weeks or more.

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

a) administering an effective amount of a tumour suppressing chemotherapeutic drug;

b) prior to, simultaneously with and/or subsequently after treatment with said at least one tumour suppressing chemotherapeutic drug, administering an effective amount of the peptide, optionally wherein step b) is repeated at least 3 times a week for 2 weeks or more.

9. The peptide for use according to any of the claims 1-6 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 administered either simultaneously or sequentially.

10. The combination for use according to any of the claims 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 combination for use according to claim 9 and 10 wherein the anthracycline is epirubicin or doxorubicin, or the taxane is docetaxel

or paclitaxel.

12. The combination for 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.