## CLAIMS

1. Use of a WNT5A peptide or derivatives thereof in the manufacture of a medicament for the treatment of acute myelogenous leukemia in a subject in need thereof, wherein the WNT5A peptide derives from WNT5A protein according to SEQ ID NO: 1 and comprises amino acid sequence $X_A$DG$X_B$EL (SEQ. ID. NO. 2), or a formylated derivative thereof, wherein $X_A$ is methionine (M) or norleucine, $X_B$ is cysteine (C) or alanine (A).

2. The use according to claim 1, wherein a blood sample and/or bone marrow sample obtained from said subject has an upregulated MAPK and/or PI3K pathway compared to a healthy subject.

3. The use according to any one of the preceding claims, wherein a blood sample and/or bone marrow sample obtained from said subject has a higher level of p-ERK and/or p-AKT compared to a healthy subject.

4. Use of WNT5A peptide or derivatives thereof in the manufacture of a medicament for the treatment of acute myelogenous leukemia in a subject in need thereof according to any one of the preceding claims, wherein the total length of the peptide is equal to or less than 50 amino acids.

5. The use according to any one of the preceding claims, wherein the WNT5A 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 the preceding claims, wherein the WNT5A peptide is MDGCEL (SEQ. ID. NO. 3), or a formylated derivative thereof.

7. The use according to any of the preceding claims, wherein said WNT5A peptide or derivative thereof is administered to said subject comprising the following steps:

a) immediately after diagnosis of acute myelogenous leukemia, administering an effective amount of the WNT5A peptide or derivatives thereof, 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 the preceding claims, wherein said WNT5A peptide or derivative thereof is administered to said subject comprising the following steps:

a) immediately after diagnosis of acute myelogenous leukemia, administering an effective amount of the WNT5A peptide or derivatives thereof, wherein step a) is repeated daily for 2 weeks or more.

9. Use of a WNT5A peptide or derivatives thereof in the manufacture of a medicament for the treatment of acute myelogenous leukemia in a subject in need thereof, wherein the WNT5A peptide derives from WNT5A protein according to SEQ ID NO: 1 and comprises amino acid sequence $X_A$DG$X_B$EL (SEQ. ID. NO. 2), or a formylated derivative thereof, wherein $X_A$ is methionine (M) or norleucine, $X_B$ is cysteine (C) or alanine (A), wherein said peptide and

said tumour suppressing chemotherapeutic drug are either combined or separate and/or are administered either simultaneously or sequentially.

10. The use according to claim 9, wherein a blood sample and/or bone marrow sample obtained from said subject has an upregulated MAPK and/or PI3K pathway compared to a healthy subject.

11. The use according to claim 9 or claim 10, wherein a blood sample and/or bone marrow sample obtained from said subject has a higher level of p-ERK and/or p-AKT compared to a healthy subject.

12. The use according to any one of the preceding claims, wherein said at least one chemotherapeutic drug is selected from cytarabine, daunorubicin, idarubicin, midostaurin, gemtuzumab ozogamicin, Gilteritinib and combinations thereof.

13. The use according to any one of the preceding claims, wherein the total length of the peptide is equal to or less than 50 amino acids.

14. The use according to any one of the preceding claims, wherein said WNT5A peptide is MDGCEL (SEQ. ID. NO. 3), or a formylated derivative thereof.