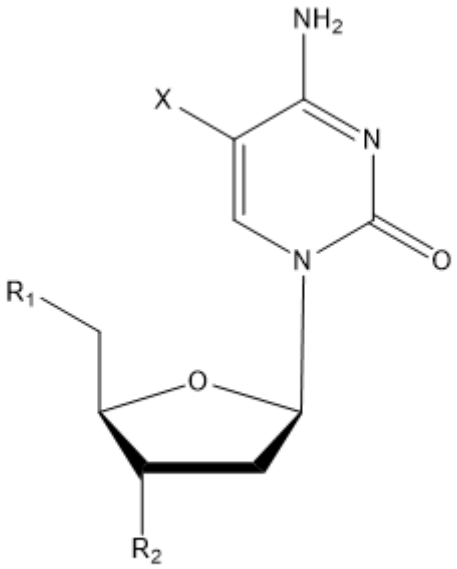
CLAIMS

1. Use of a compound of Formula (IIa):



Formula (IIa)

or a stereoisomer, solvate, tautomer or pharmaceutically acceptable salt thereof for the manufacture of a medicament for the treatment or prevention of a cancer of the central nervous system in a subject;

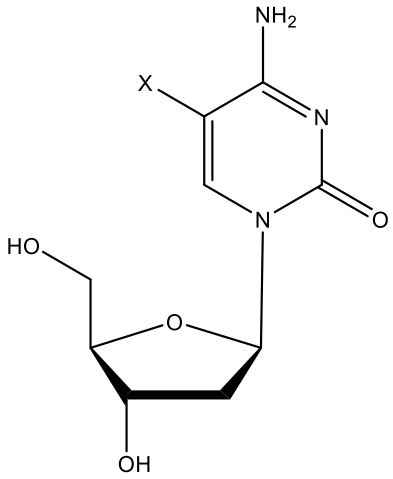
wherein:

X is $-(CH_2)_n-X'$, wherein n is from 0 to 6 and X' is -CHO, -OH, -OR or -OC(=O)R, where R is methyl;

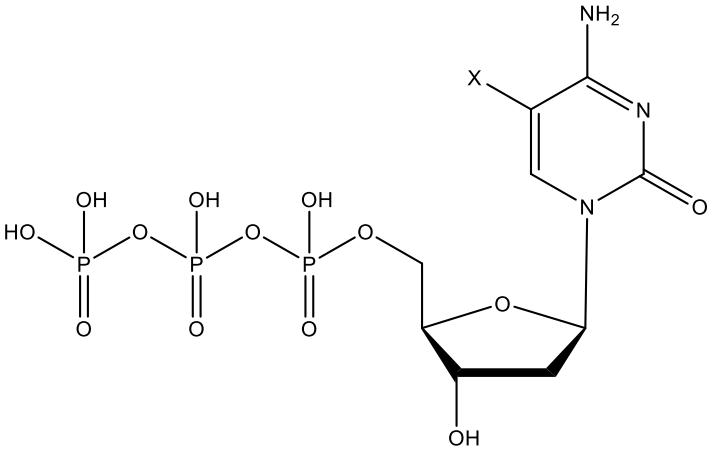
R_1 is -OH or $-O(P(=O)(OH)O)_nH$ where n is from 1 to 3; and

R_2 is -OH.

2. The use of claim 1, wherein the compound is a compound of Formula (IIIa) or (IIIc), or a stereoisomer, solvate, tautomer or pharmaceutically acceptable salt thereof:



Formula (IIIa)



Formula (IIIc)

wherein X is as defined in claim 1.

3. The use of claim 1 or claim 2, wherein X is
-CHO, -CH_2OH, -CH_2OCH_3, or -$CH_2OC(=O)CH_3$.

4. The use of any one of claims 1 to 3, wherein X is -CHO or -CH_2OH.

5. The use of any one of claims 1 to 4, wherein X is CH_2OH.

6. The use of any one of claims 1 to 5, wherein the compound is 5-formyl-2'-deoxycytidine, 5-hydroxymethyl-2'-deoxycytidine, 5-formyl-2'-deoxycytidine-5'-triphosphate or 5-hydroxymethyl-2'-deoxycytidine-5'-triphosphate, or a stereoisomer, solvate, tautomer or pharmaceutically acceptable salt thereof.

7. The use of claim 6, wherein the compound is 5-formyl-2'-deoxycytidine or 5-hydroxymethyl-2'-deoxycytidine, or a stereoisomer, solvate, tautomer or pharmaceutically acceptable salt thereof.

8. The use of claim 7, wherein the compound is 5-hydroxymethyl-2'-deoxycytidine or a stereoisomer, solvate, tautomer or pharmaceutically acceptable salt thereof.

9. The use of any one of claims 1 to 8, wherein the cancer is a brain cancer.

10. The use of any one of claims 1 to 9, wherein the cancer is glioma.

11. The use of claim 10, wherein the cancer is glioblastoma.

12. The use of any one of claims 1 to 11, wherein the cancer is resistant to treatment with gemcitabine, cytarabine, temozolomide or 5-fluorouracil.

13. The use of any one of claims 1 to 12, wherein said treatment comprises administering said compound at a dose between 10 mg/kg and 405 mg/kg.

14. The use of any one of claims 1 to 13, wherein said treatment further comprises the administration of a further anticancer agent.

15. A kit comprising a compound as defined in any one of claims 1 to 8 and a further anticancer agent, wherein said further anticancer agent is Temozolomide, for using in the treatment or prevention of a cancer of the central nervous system.

16. A pharmaceutical composition comprising a compound as defined in any one of claims 1 to 8 and a further anticancer agent, wherein said further anticancer agent is Temozolomide, together with one or more pharmaceutically acceptable excipients.

17. The use of claim 14, wherein the further anticancer agent is selected from the group consisting of gemcitabine, cytarabine, Temozolomide, 5-fluorouracil and gliadel (RTM).