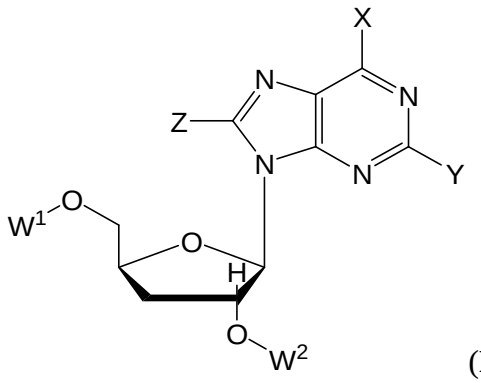
CLAIMS

1. A compound of formula (**Ib**):



(**Ib**)

wherein:

W_1 is -P(=O)(U)(V), wherein U is -OAr and V is -NR_4-CR_1R_2-C(=O)OR_3;

W_2 is H;

X is NH_2;

Z is H;

Y is selected from the group consisting of H, F, Cl, and -OCH_3;

R_1 and R_2 are independently selected from the group consisting of H, -CH_3 and -$CH_2CH(CH_3)_2$;

R_3 is selected from the group consisting of C_{6-30}arylC_{1-6}alkyl and unsubstituted C_{1-20}alkyl;

R_4 is H; and

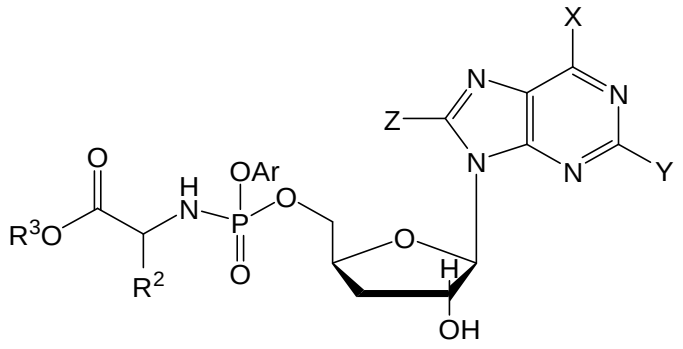
Ar is selected from the group consisting of substituted or unsubstituted phenyl, and substituted or unsubstituted naphthyl,

wherein when Ar is substituted, the substituents are independently selected from the group consisting of hydroxy, C_{1-6}acyl, C_{1-6}acyloxy, nitro, amino, carboxyl, C_{2-6}ester, C_{1-6}aldehyde, cyano, C_{1-6}alkylamino, diC_{1-6}alkylamino, thiol, chloro, bromo, fluoro, iodo, C_{1-6}alkyl, C_{2-6}alkenyl, C_{1-6}alkoxyC_{1-6}alkyl, C_{1-6}alkoxyC_{6-10}aryl, C_{5-7}cycloalkyl, C_{5-11}cycloalkylC_{1-6}alkyl, C_{5-7}cycloalkenyl, C_{8-12}cycloalkynyl, C_{6-11}arylC_{1-6}alkyl, C_{1-6}alkylC_{6-11}aryl, C_{6-11}aryl, C_{1-6}fluoroalkyl, C_{2-6}fluoroalkenyl, SO_3H, SH and SR', wherein R' is independently selected from H, and the group consisting of C_{1-20}alkyl, C_{6-30}arylC_{1-6}alkyl, C_{2-20}alkenyl, C_{1-20}alkoxy, C_{1-20}alkoxyC_{1-20}alkyl, C_{1-20}alkoxyC_{6-30}aryl, C_{2-20}alkynyl, C_{3-20}cycloalkylC_{6-30}aryl, C_{6-30}aryloxy and 5-20 membered heterocyclyl,

wherein any heterocyclyl group comprises at least one heteroatom selected from the group consisting of N, O and S,

or a pharmaceutically acceptable salt, ester, or salt of an ester, of the compound of formula (**Ib**).

2. The compound of claim 1, wherein the compound of formula (**Ib**) is a compound of formula (**II**):



(**II**).

3. A compound according to claim 1 or claim 2, wherein Ar is unsubstituted.

4. A compound according to claim 3, wherein Ar is substituted with one, two, three, four or five substituents selected from: halo, C_1-C_4-alkyl, C_1-C_4-alkoxy, nitro and cyano.

5. A compound according to any one of claims 1 to 4, wherein R^2 is methyl.

6. A compound according to claim 5, wherein the C atom bearing R_1 and R_2 has the same absolute configuration as L-alanine.

7. A compound according to any one of claims 1 to 6, wherein R_3 is selected from the group consisting of benzyl and unsubstituted $C_{1\text{-}20}$alkyl.

8. A compound according to claim 7, wherein R_3 is selected from the group consisting of benzyl, unsubstituted methyl and unsubstituted n-pentyl.

9. A compound according to claim 8, wherein R_3 is benzyl.

10. A compound according to any one of claims 1 to 9, wherein Y is H.

11. A compound according to any one of claims 1 to 9, wherein Y is F.

12. A compound according to any one of claims 1 to 9, wherein Y is Cl.

13. A compound according to any one of claims 1 to 9, wherein Y is $-OCH_3$.

14. A compound of claim 1, wherein the compound of formula (**Ib**) is selected from:
(2*S*)-Benzyl 2-(((((2*S*,4*R*,5*R*)-5-(6-amino-9*H*-purin-9-yl)-4-hydroxytetrahydrofuran-2-yl)methoxy)(naphthalen-1-yloxy)phosphoryl)amino)propanoate;
Benzyl 2-(((((2*S*,4*R*,5*R*)-5-(6-amino-9*H*-purin-9-yl)-4-hydroxytetrahydrofuran-2-yl)methoxy)(phenoxy)phosphoryl)amino)acetate;
(2*S*)-Pentyl 2-(((((2*S*,4*R*,5*R*)-5-(6-amino-9*H*-purin-9-yl)-4-hydroxytetrahydrofuran-2-yl)methoxy)(naphthalen-1-yloxy)phosphoryl)amino)-4-methylpentanoate;
Methyl 2-(((((2*S*,4*R*,5*R*)-5-(6-amino-9*H*-purin-9-yl)-4-hydroxytetrahydrofuran-2-yl)methoxy)(naphthalen-1-yloxy)phosphoryl)amino)-2-methylpropanoate;
(2*S*)-Benzyl 2-(((((2*S*,4*R*,5*R*)-5-(6-amino-9*H*-purin-9-yl)-4-hydroxytetrahydrofuran-2-yl)methoxy)(2-(3-ethoxy-3-oxopropyl)phenoxy)phosphoryl)amino)propanoate;
(2*S*)-Benzyl 2-((((2*S*,4*R*,5*R*)-5-(6-amino-2-methoxy-9*H*-purin-9-yl)-4-hydroxytetrahydrofuran-2-yl)methoxy)(naphthalen-1-yloxy)phosphorylamino)propanoate;
(2*S*)-Benzyl 2-((((2*S*,4*R*,5*R*)-5-(6-amino-2-methoxy-9*H*-purin-9-yl)-4-hydroxytetrahydrofuran-2-yl)methoxy)(phenoxy)phosphorylamino)propanoate;

(2*S*)-Benzyl 2-(((((2*S*,4*R*,5*R*)-5-(6-amino-2-fluoro-9*H*-purin-9-yl)-4-hydroxytetrahydrofuran-2-yl)methoxy)(phenoxy)phosphoryl)amino)propanoate;
(2*S*)-Hexyl 2-(((((2*S*,4*R*,5*R*)-5-(6-amino-2-fluoro-9*H*-purin-9-yl)-4-hydroxytetrahydrofuran-2-yl)methoxy)(phenoxy)phosphoryl)amino)propanoate;
(2*R*)-Benzyl 2-((((2*S*,4*R*,5*R*)-5-(6-amino-2-chloro-9*H*-purin-9-yl)-4-hydroxytetrahydrofuran-2-yl)methoxy)(naphthalen-1-yloxy)phosphorylamino)propanoate;

2-*O*-Methyl-3'-deoxyadenosine-5'-*O*-[1-naphthyl(1-pentyloxy-L-leucinyl)] phosphate;

2-*O*-Methyl-3'-deoxyadenosine-5'-*O*-[phenyl(1-hexyloxy-L-alaninyl)] phosphate;

2-Fluoro-3'-deoxyadenosine-5'-*O*-[1-naphthyl(benzyloxy-L-alaninyl)] phosphate;

2-Fluoro-3'-deoxyadenosine-5'-*O*-[1-naphthyl(1-pentyloxy-L-leucinyl)] phosphate;

2-Chloro-3'deoxyadenosine 5'-O-[1-phenyl (2,2-dimethylpropoxy-L-alanine)] phosphate;

2-Chloro-3'deoxyadenosine 5'-O-[1-naphtyl (2,2-dimethylpropoxy-L-alanine)] phosphate;

2-Chloro-3'deoxyadenosine 5'-O-[1-phenyl (ethoxy-L-alanine)] phosphate; and

(2*S*)-Isopropyl-2-(((((2*S*,4*R*,5*R*)-5-(6-amino-9*H*-purin-9-yl)-4-hydroxytetrahydrofuran-2-yl)methoxy)(phenoxy)phosphoryl)amino)propanoate.

15. A compound of claim 1, wherein the compound of (**Ib**) is (S_p)-3'-deoxyadenosine-5'-O-[phenyl(benzyloxy-L-alaninyl)] phosphate.

16. A compound of claim 1, wherein the compound of (**Ib**) is (R_p)-3'-deoxyadenosine-5'-O-[phenyl(benzyloxy-L-alaninyl)] phosphate.

17. A compound according to any one of the preceding claims for use as a medicament.

18. Use of a compound according to claim 17, in the manufacture of a medicament for the prophylaxis or treatment of cancer.

19. The use according to claim 18, wherein the cancer is selected from the group consisting of: leukaemia, lymphoma, multiple myeloma, lung cancer, liver cancer, breast cancer, bladder cancer, prostate cancer, head and neck cancer, neuroblastoma, sarcoma, thyroid carcinoma,

skin cancer, oral squamous cell carcinoma, urinary bladder cancer, Leydig cell tumour, biliary cancer, such as cholangiocarcinoma or bile duct cancer, pancreatic cancer, colon cancer, colorectal cancer and gynaecological cancers, including ovarian cancer, endometrial cancer.

20. The use according to claim 19, wherein the cancer is leukaemia or lymphoma.

21. The use according to claim 19, wherein the lung cancer includes non small cell lung cancer and small cell lung cancer.

22. The use according to claim 19, wherein the sarcoma includes Ewing's sarcoma.

23. The use according to claim 19, wherein the skin cancer includes melanoma.

24. The use according to claim 20, wherein the leukaemia is selected from the group comprising acute lymphoblastic leukaemia, acute myelogenous leukaemia, acute promyelocytic leukaemia, acute lymphocytic leukaemia, chronic myelogenous leukaemia, chronic lymphocytic leukaemia, monoblastic leukaemia, hairy cell leukaemia, Hodgkin lymphoma and non-Hodgkin lymphoma.

25. The use according to claim 24, wherein the leukaemia is acute lymphoblastic leukaemia.

26. A pharmaceutical composition comprising a compound according to any one of claims 1 to 16, in combination with a pharmaceutically acceptable carrier, diluent or excipient.