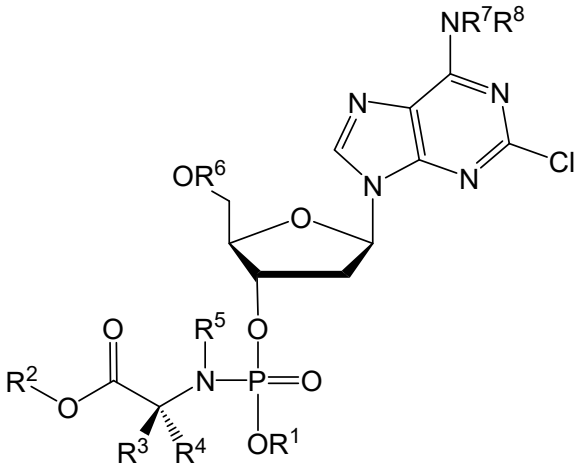
CLAIMS

1. A compound of formula (**I**) or a pharmaceutically acceptable salt thereof:



(**I**)

R^1 is aryl;

R^2 is selected from C_1-C_{24}-alkyl, C_3-C_{24}-alkenyl, C_3-C_{24}-alkynyl, C_0-C_4-alkylene-C_3-C_7-cycloalkyl or C_0-C_4-alkylene-aryl;

R^3 and R^4 are each independently selected from H, C_1-C_6-alkyl and C_1-C_3-alkylene-R^9; or wherein R^3 and R^4 together with the atom to which they are attached form a 3- to 6-membered cycloalkyl or heterocycloalkyl group;

R^5 and R^7 are each independently selected from H and C_1-C_4-alkyl;

R^6 is independently selected from H and $C(O)R^{10}$;

R^8 is independently selected from H, $C(O)OR^{10}$ and $C(O)R^{10}$;

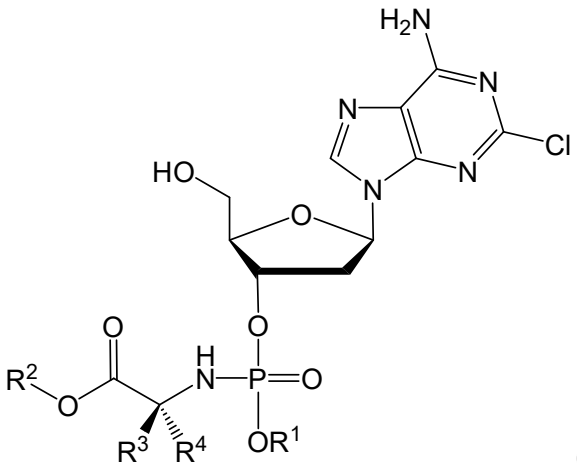
R^9 is independently selected from aryl (e.g. phenyl), imidazole, indole, SR^a, OR^a, CO_2R^a, $CO_2NR^aR^a$, NR^aR^b and $NH(=NH)NH_2$;

R^{10} is independently at each occurrence selected from C_1-C_{24}-alkyl, C_3-C_{24}-alkenyl, C_3-C_{24}-alkynyl, C_0-C_4-alkylene-C_3-C_7-cycloalkyl or C_0-C_4-alkylene-aryl;

wherein any aryl group is phenyl, naphthyl or tetrahydronaphthyl and wherein any phenyl, alkyl, alkyne, alkene, alkylene, cycloalkyl, naphthyl or tetrahydronaphthyl group is optionally substituted with from 1 to 4 substituents selected from: halo, nitro, cyano, NR^aR^a, $NR^aS(O)_2R^a$, $NR^aC(O)R^a$, $NR^aCONR^aR^a$, $NR^aCO_2R^a$, OR^a; SR^a, SOR^a, SO_3R^a, SO_2R^a, $SO_2NR^aR^a$, CO_2R^a $C(O)R^a$, $CONR^aR^a$, $CR^aR^aNR^aR^a$, C_1-C_4-alkyl, C_2-C_4-alkenyl, C_2-C_4-alkynyl and C_1-C_4-haloalkyl;

wherein R^a is independently at each occurrence selected from: H and C_1-C_4-alkyl; and R^b is independently at each occurrence selected from: H, and C_1-C_4-alkyl, C(O)-C_1-C_4-alkyl, $S(O)_2$-C_1-C_4-alkyl.

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



(**II**).

3. A compound of claim 1 or claim 2, wherein R^1 is phenyl; optionally wherein R^1 is unsubstituted phenyl.

4. A compound of claim 1 or claim 2, wherein R^1 is 1-naphthyl; optionally wherein R^1 is unsubstituted 1-naphthyl.

5. A compound of any one of claims 1 to 4, wherein R^2 is C_4-C_8-alkyl; optionally wherein R^2 is selected from iso-butyl, tert-butyl, n-butyl, n-pentyl, $CH_2C(Me)_3$ or n-hexyl.

6. A compound of any one of claims 1 to 4, wherein C_5-C_7-cycloalkyl; optionally wherein R^2 is unsubstituted cyclohexyl.

7. A compound of any one of claims 1 to 4, wherein R^2 is CHR^{11}-phenyl; wherein R_{11} is selected from H and C_1-C_4-alkyl; optionally wherein R^2 is unsubstituted benzyl.

8. A compound of any one of claims 1 to 7, wherein one of R^3 and R^4 is H and the other is selected from: H, Me, isopropyl, isobutyl and benzyl; optionally wherein R^4 is H and R^3 is selected from: H, Me, isopropyl, isobutyl and benzyl; further optionally wherein R^4 is H and R^3 is Me.

9. The compound of formula (**I**) according to claim 1 selected from:

2-Chloro-2'-deoxyadenosine-3'-[phenyl-(ethoxy-L-alaninyl)]-phosphate,

2-Chloro-2'-deoxyadenosine-3'-[phenyl-(tert-butoxy-L-alaninyl)]-phosphate,

2-Chloro-2'-deoxyadenosine-3'-[phenyl-(benzoxy-D-alaninyl)]-phosphate,

2-Chloro-2'-deoxyadenosine-3'-[phenyl-(benzoxy-glycinyl)]-phosphate,

2-Chloro-2'-deoxyadenosine-3'-[phenyl-(benzoxy-L-leucinyl)]-phosphate,

2-Chloro-2'-deoxyadenosine-3'-[1-naphthyl-(2,2-dimethylpropoxy-L-alaninyl)] phosphate,

2-Chloro-2'-deoxyadenosine-3'-[1-naphthyl-(pentoxy-L-leucinyl)]-phosphate,

2-Chloro-2'-deoxyadenosine-3'-[1-naphthyl-(cyclohexoxy-L-alaninyl)]-phosphate,

2-Chloro-2'-deoxyadenosine-3'-[phenyl-(cyclohexoxy-L-alaninyl)]-phosphate,

2-Chloro-2'-deoxyadenosine-3'-[phenyl-(2,2-dimethylpropoxy-L-alaninyl)]-phosphate,

2-Chloro-2'-deoxyadenosine-3'-[phenyl-(ethoxy-2,2-dimethylglycinyl)]-phosphate,

2-Chloro-2'-deoxyadenosine-3'-[phenyl-(benzoxy-L-phenylalaninyl)] phosphate,

2-Chloro-2'-deoxyadenosine-3'-[1-naphthyl-(benzoxy-L-phenylaninyl)] phosphate,

2-Chloro-2'-deoxyadenosine-3'-[phenyl-(benzoxy-L-valinyl)] phosphate,

2-Chloro-2'-deoxyadenosine-3'-[phenyl(iso-propoxy-L-alaninyl)] phosphate,

2-Chloro-2'-deoxyadenosine-3'-[phenyl-(2-butoxy-L-alaninyl)] phosphate,

2-Chloro-2'-deoxyadenosine-3'-[phenyl-((S)-1-phenylethoxy-L-alaninyl)-phosphate,

2-Chloro-2'-deoxyadenosine-3'-[1-naphthyl-(benzoxy-L-alaninyl) phosphate and

2-Chloro-2'-deoxyadenosine-3'-[phenyl-(benzoxy-L-alaninyl)-phosphate.

10. A compound of any one of claims 1 to 9 for medical use.

11. A compound of any one of claims 1 to 9 for use in treating cancer.

12. A compound for use of claim 11, wherein the cancer is selected from the group consisting of leukaemia, multiple myeloma, lung cancer, liver cancer, breast cancer, head and neck cancer, neuroblastoma, thyroid carcinoma, skin cancer, oral squamous cell carcinoma, urinary bladder cancer, Leydig cell tumour, colon cancer, colorectal cancer and gynaecological cancers.

13. A compound for use of claim 11 or claim 12, wherein the patient has mycoplasma infected cells.

14. A compound of any one of claims 1 to 9 for use in treating cancer by targeting cancer stem cells.

15. A pharmaceutical formulation comprising a compound of any one of claims 1 to 9 and a pharmaceutically acceptable excipient.