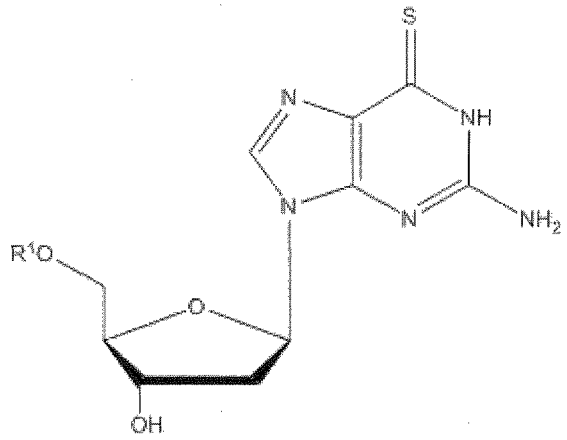
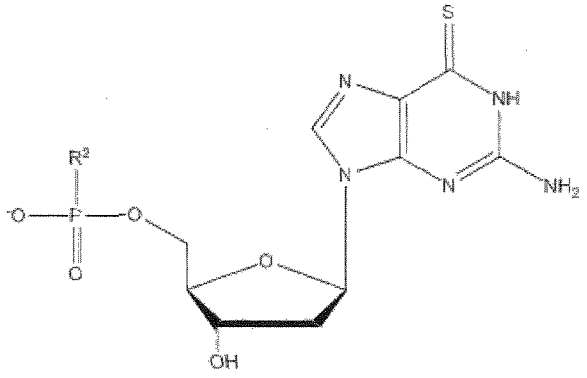
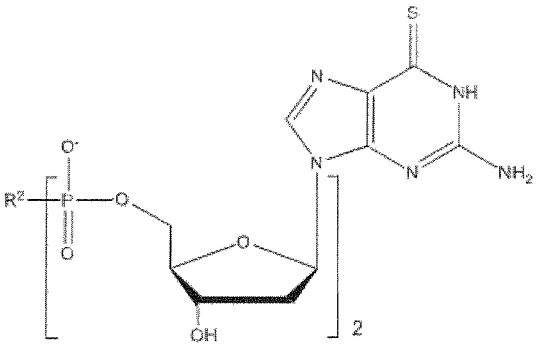
lung cancer, a colon cancer, a cervical cancer or a hyperproliferative disease, wherein the 6-mercaptopurine ribonucleoside analogue is selected from the group consisting of:



,



and

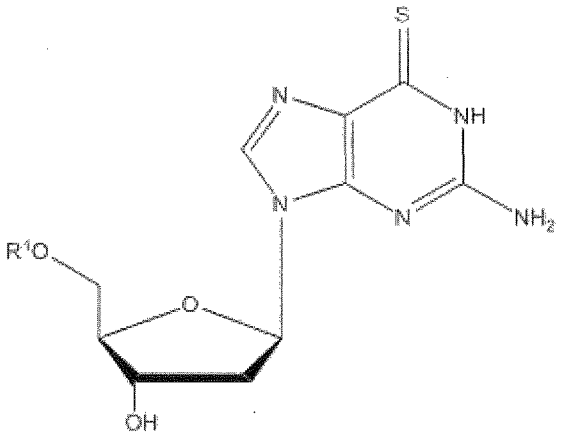


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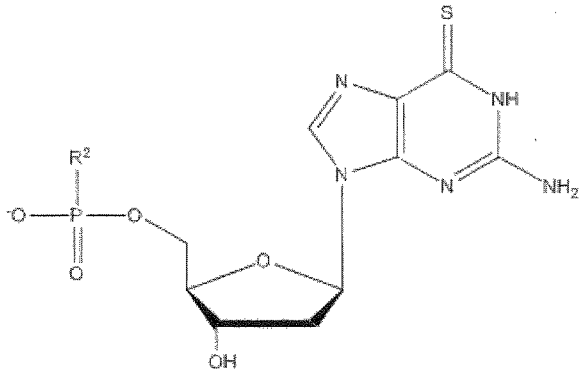
where R^1 is H or -C(O)$(CH_2)_nCH_3$ where n = 6-16, and pharmaceutically acceptable salts or polymorphs thereof; and

CLAIMS

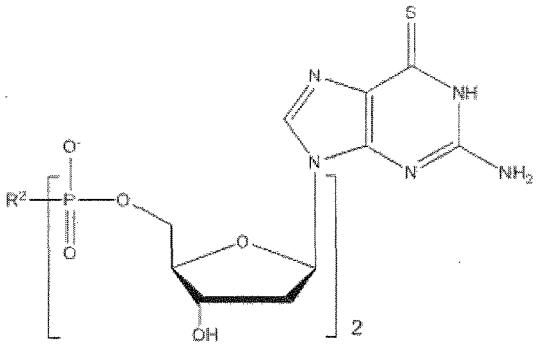
1. Use of a pharmaceutical composition comprising a 6-mercaptopurine ribonucleoside analogue in the manufacture of a medicament for treating a lung cancer, a colon cancer, a cervical cancer or a hyperproliferative disease, wherein the 6-mercaptopurine ribonucleoside analogue is selected from the group consisting of:



,



and



,

where R^1 is H or $-C(O)(CH_2)_nCH_3$ where n = 6-16, and pharmaceutically acceptable salts or polymorphs thereof; and

where R^2 is spermine or spermidine and pharmaceutically acceptable salts or polymorphs thereof; and

wherein the pharmaceutical composition is effective to:

(i) shorten telomere length;

(ii) reduce size of a tumor;

(iii) reduce growth rate of a tumor; or

(iv) a combination thereof.

2. The use of claim 1, wherein the 6-mercaptopurine ribonucleoside analogue is 6-thio-2'-deoxyguanosine.

3. The use of claim 1 or claim 2, wherein the pharmaceutical composition comprises an effective amount of the 6-mercaptopurine ribonucleoside analogue and the effective amount comprises an amount between 0.5 mg of the analogue per 1 kg of subject to 3 mg of the analogue per 1 kg of subject.

4. The use of any one of claim 1 to 3, wherein the medicament further comprises a second pharmaceutical composition comprising a telomerase inhibitor, wherein the telomerase inhibitor is imetelstat sodium (GRN163L), wherein a combination of the pharmaceutical composition and the second pharmaceutical composition produces a synergistic effect on telomere shortening.

5. The use of any one of claim 1 to 4, wherein the medicament further comprises a second pharmaceutical composition comprising a second anti-cancer agent, wherein the telomerase inhibitor is imetelstat sodium (GRN163L), wherein the pharmaceutical composition is to be administered in a first stage of treatment and the second pharmaceutical composition is to be administered in a second stage of treatment, wherein the second pharmaceutical composition is to be administered in a first stage of treatment and the pharmaceutical composition is to be delivered in a second stage of treatment, or wherein the first pharmaceutical composition and the second pharmaceutical composition are to be administered on the same day or simultaneously.

~~6. The use of any one of claims 4 and 5, wherein the telomerase inhibitor is imetelstat sodium (GRN163L).~~

~~76~~. The use of any one of claims 1 to ~~65~~, wherein an effective amount of the pharmaceutical composition is to be administered at least twice per week for at least 2 weeks, at least 4 weeks, at least 6 weeks, at least 8 weeks, or at least 12 weeks.

~~87~~. The use of any one of claims 1 to ~~76~~, wherein the pharmaceutical composition is to be injected or administered orally.

~~98~~. The use of any one of claims 1 to ~~87~~, wherein the medicament is effective to reduce the size of a tumor or reduce the growth rate of a tumor.