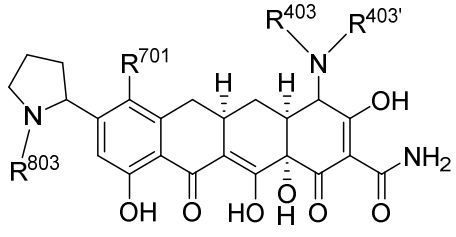
CLAIMS

1. ~~A~~ Use of a compound having Structural Formula (XX) ~~for use in a method of treating acute myeloid leukemia (AML), said method comprising administering to a subject in need of treatment an effective amount of a compound having Structural Formula (XX)~~:



(XX),

or a pharmaceutically acceptable salt thereof, or a pharmaceutically acceptable composition thereof, wherein:

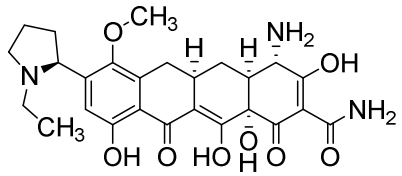
R^{803} is H, a C_{1-6} alkyl, a C_{1-6} haloalkyl, C_{1-6} hydroxyalkyl, a C_{3-12} carbocyclyl-(C_{0-3})alkylenyl, an amino-(C_1-C_4) alkyl, a mono- or di- (C_1-C_4 alkyl)amino-(C_{1-4})alkyl, or a (4-13 member)heterocyclyl-(C_0-C_3)alkylenyl, wherein the heterocyclyl portion is optionally substituted with a C_{1-3} alkyl;

R^{701} is H, a C_{1-4} alkyloxy, -OH, C_{1-4} alkyl, a C_{1-4} haloalkyl, or C_{1-4} hydroxyalkyl, C_{1-4} haloalkoxy; and

R^{403} and $R^{403'}$, each independently, is H; a C_{1-4} alkyl; a C_1-C_4 haloalkyl; a C_1-C_4 hydroxyalkyl; a (C_1-C_4 alkoxy)-(C_{1-4})alkyl; an amino-(C_1-C_4) alkyl; a mono- or di- (C_1-C_4 alkyl)amino-(C_{1-4})alkyl; a C_{3-12} carbocyclyl-(C_0-C_3)alkylenyl-, wherein the carbocyclyl portion is optionally substituted with a hydroxyl group; a (C_{1-4} alkyl)C(O)-, a (C_{1-4} alkyl)$S(O)_{1-2}$-; a (C_{1-4} alkyl)C(O)NH(C_{1-4} alkylenyl)-; a (C_{1-4} alkyl)$S(O)_{1-2}$NH(C_{1-4} alkylenyl)-; a HOC(O)-(C_1-C_3)alkylenyl-; a $H_2NC(O)$-(C_1-C_3)alkylenyl-; or a (C_{1-4} alkyloxy)C(O)-(C_1-C_3)alkylenyl-,

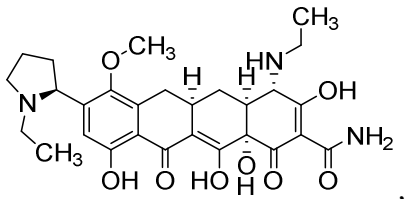
in the manufacture of a medicament for the treatment of acute myeloid leukemia (AML) wherein an effective amount of the compound is to be administered to a subject in need of treatment.

2. The ~~compound for~~ use according to claim 1, wherein the compound is selected from:



compound 3A/K4

, and



,

or a pharmaceutically acceptable salt thereof.

3. The ~~compound for~~ use according to Claim 1, wherein R^{701} is $–OCH_3$, and R^{803} is ethyl.

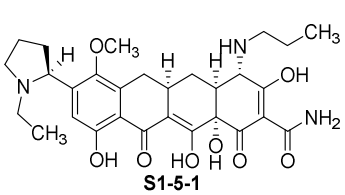
4. The ~~compound for~~ use according to Claim 1, wherein R^{701} is $–OCH_3$, and R^{403} and $R^{403'}$ each is hydrogen.

5. The ~~compound for~~ use according to Claim 1, wherein R^{803} is ethyl and R^{403} and $R^{403'}$ each is hydrogen.

6. The ~~compound for~~ use according to Claim 1, wherein R^{701} is a $–OCF_3$, and R^{803} is methyl.

7. The ~~compound for~~ use according to Claim 1, wherein R^{701} is $–CF_3$, and R^{903} is a C_{1-4} alkyl or a $(C_3\text{-}C_6)$carbocyclyl-$(C_0\text{-}C_3)$alkylenyl.

8. The ~~compound for~~ use according to any one of Claims 1 and 3 to 7, wherein the compound is represented by any one of the following structural formulas, or a pharmaceutically acceptable salt thereof: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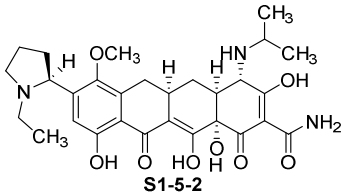
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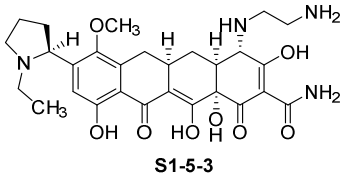
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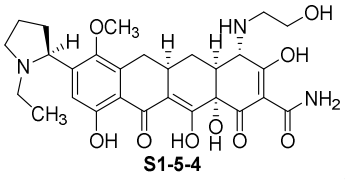
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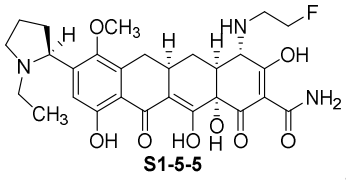
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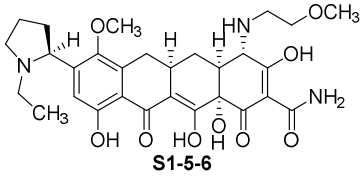
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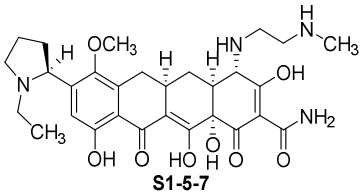
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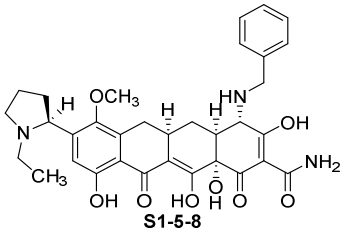
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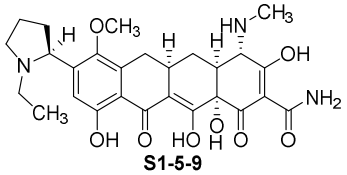
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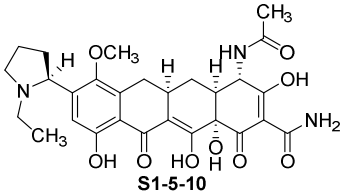
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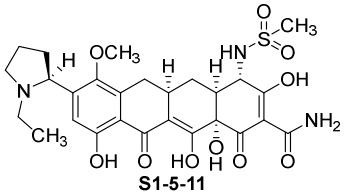
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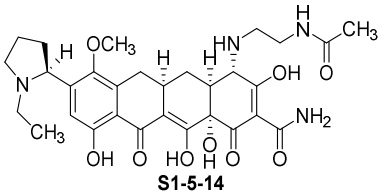
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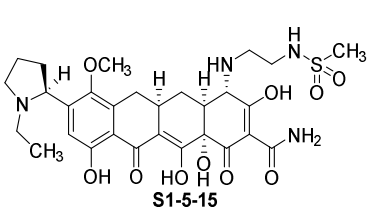
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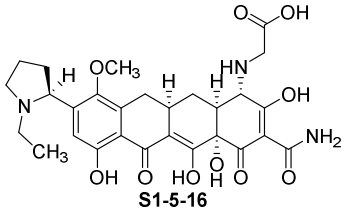
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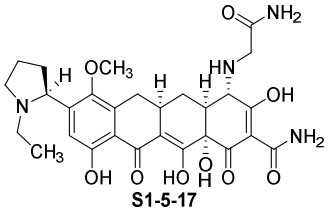
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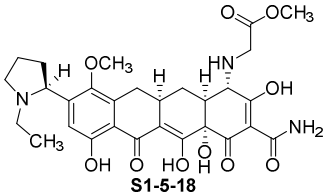
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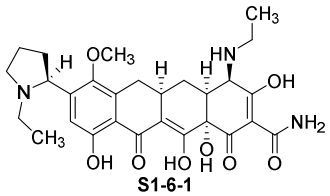
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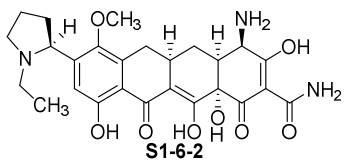
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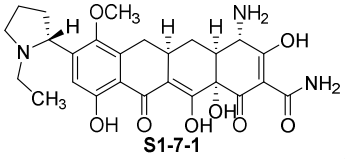
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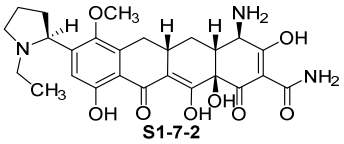
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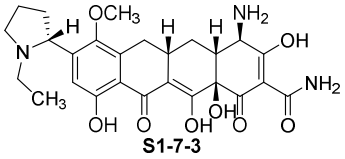
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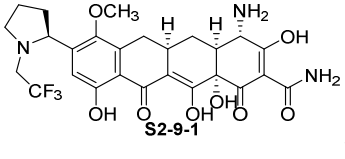
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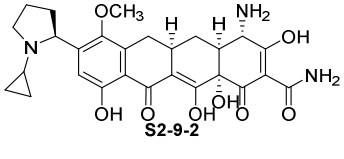
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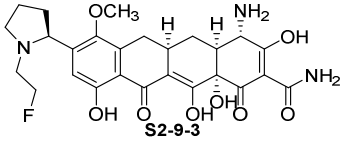
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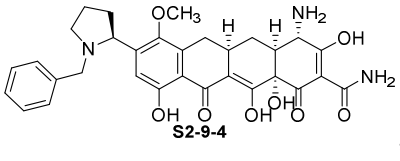
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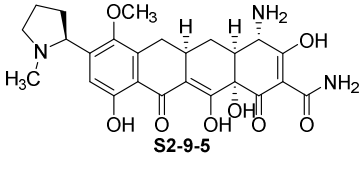
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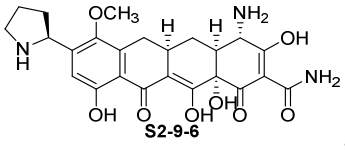
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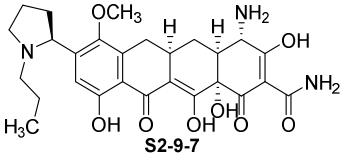
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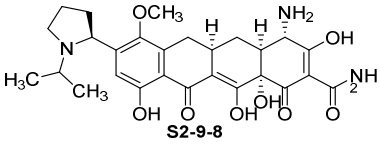
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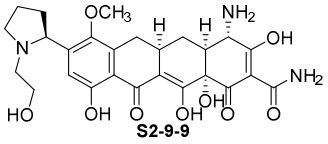
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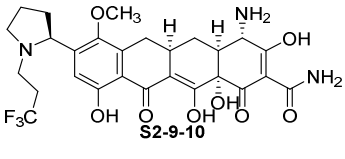
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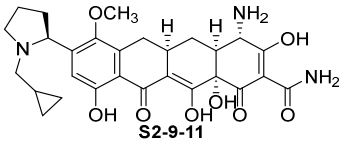
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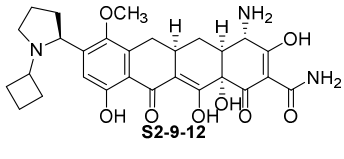
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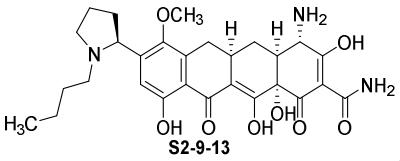
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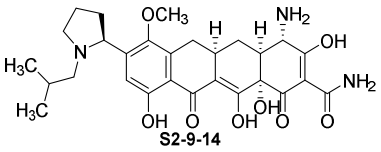
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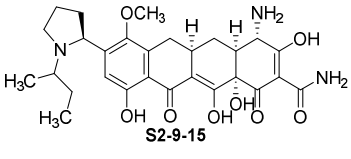
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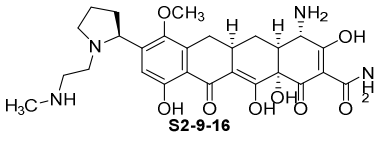
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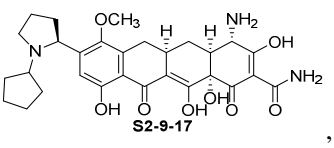
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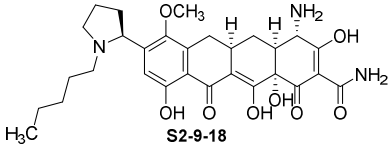
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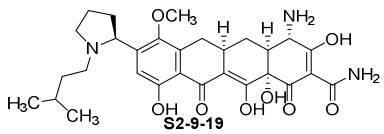
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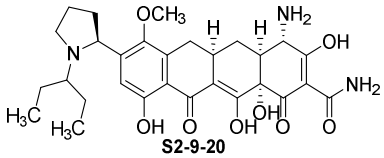
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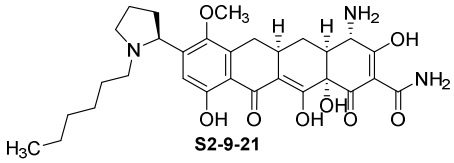
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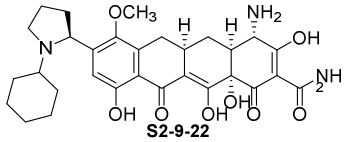
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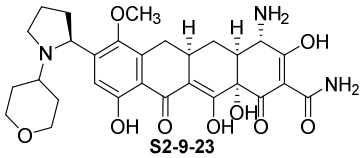
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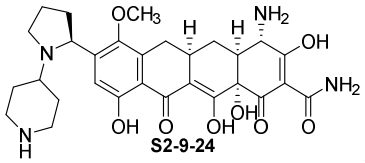
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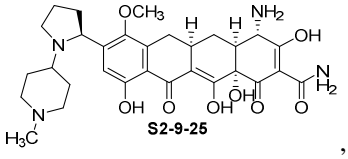
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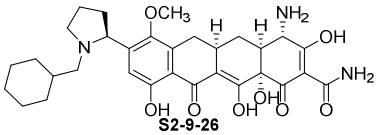
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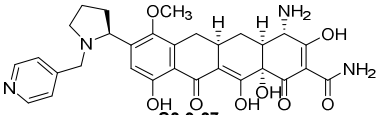
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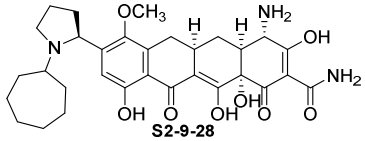
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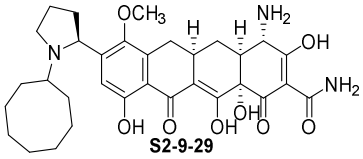
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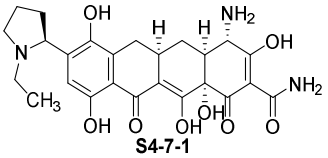
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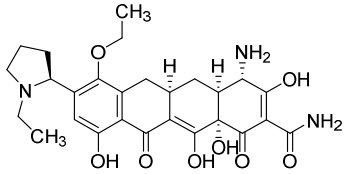
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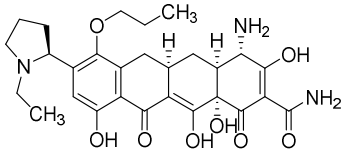
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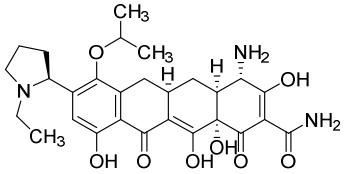
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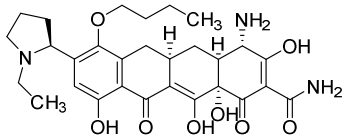
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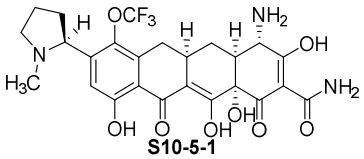
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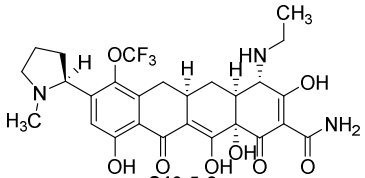
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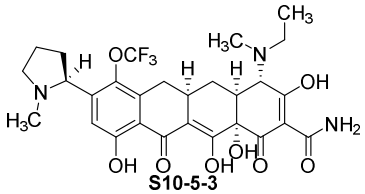
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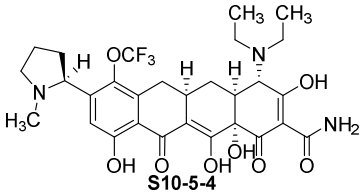
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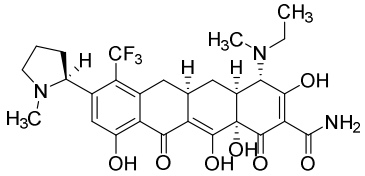
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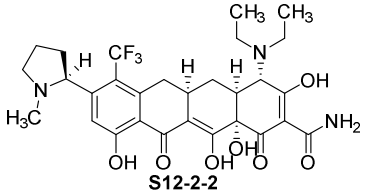
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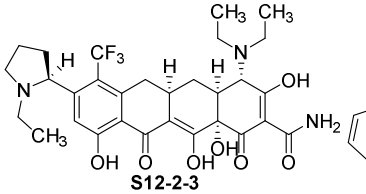
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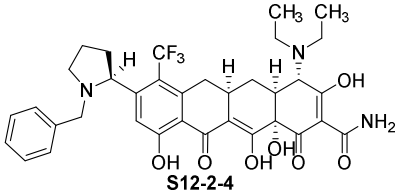

S12-2-4.

9. The ~~compound for~~ use according to any one of claims 1 to 8, wherein the ~~method comprises administration of~~ compound is to be conjointly administered with one or more additional therapeutic agents.

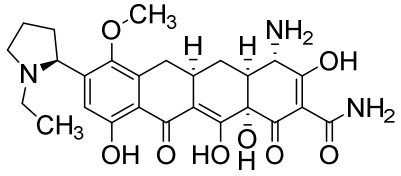
10. The ~~compound for~~ use according to claim 9, wherein the additional therapeutic agents are cytarabine and an anthracycline drug.

11. The ~~compound for~~ use according to claim 10, wherein the anthracycline drug is selected from daunorubicin or idarubicin.

12. The ~~compound for~~ use according to claim 9 or claim 11, wherein the ~~method further includes administration of~~ compound is to be further conjointly administered with cladribine.

13. The ~~compound for~~ use according to any one of claims 1 to 8, wherein the subject is a human.

14. The ~~compound for~~ use according to any one of claims 1 to 5 and 8 to 13, wherein the compound is represented by the following structural formula

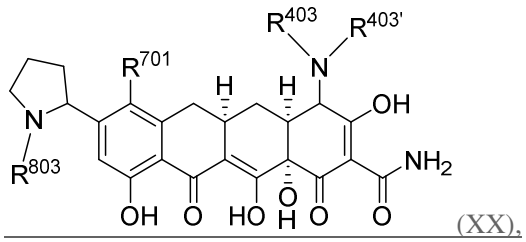


compound 3A/K4

,

or a pharmaceutically acceptable salt thereof.

15. A compound having Structural Formula (XX):



(XX),

or a pharmaceutically acceptable salt thereof, or a pharmaceutically acceptable composition thereof, wherein:

R^{803} is H, a C_{1-6} alkyl, a C_{1-6} haloalkyl, C_{1-6} hydroxyalkyl, a C_{3-12} carbocyclyl-(C_{0-3})alkylenyl, an amino-(C_1-C_4) alkyl, a mono- or di- (C_1-C_4 alkyl)amino-(C_{1-4})alkyl, or a (4-13 member)heterocyclyl-(C_0-C_3)alkylenyl, wherein the heterocyclyl portion is optionally substituted with a C_{1-3} alkyl;

R^{701} is H, a C_{1-4} alkyloxy, -OH, C_{1-4} alkyl, a C_{1-4} haloalkyl, or C_{1-4} hydroxyalkyl, C_{1-4} haloalkoxy; and

R^{403} and $R^{403'}$, each independently, is H; a C_{1-4} alkyl; a C_1-C_4 haloalkyl; a C_1-C_4 hydroxyalkyl; a (C_1-C_4 alkoxy)-(C_{1-4})alkyl; an amino-(C_1-C_4) alkyl; a mono- or di- (C_1-C_4 alkyl)amino-(C_{1-4})alkyl; a C_{3-12} carbocyclyl-(C_0-C_3)alkylenyl-, wherein the carbocyclyl portion is optionally substituted with a hydroxyl group; a (C_{1-4} alkyl)C(O)-, a (C_{1-4} alkyl)$S(O)_{1-2}$-; a (C_{1-4} alkyl)C(O)NH(C_{1-4} alkylenyl)-; a (C_{1-4} alkyl)$S(O)_{1-2}$NH(C_{1-4} alkylenyl)-; a HOC(O)-(C_1-C_3)alkylenyl-; a H_2NC(O)-(C_1-C_3)alkylenyl-; or a (C_{1-4} alkyloxy)C(O)-(C_1-C_3)alkylenyl-,

for use in therapy.