by a suitable topcoat of fluorosilicone, polysaccarides, polyethylene glycol, phospholipids or combinations thereof to impart controlled release characteristics in the composition. A variety of compositions and methods related to stent coating and/or local stent drug delivery for preventing restenosis are known in the art (see, for example, U.S. Patent Nos.: 6,517,889; 6,273,913; 6,258,121; 6,251,136; 6,248,127; 6,231,600; 6,203,551; 6,153,252; 6,071,305; 5,891,507; 5,837,313 and published U.S. patent application No.: US2001/0027340, ~~each of which is incorporated herein by reference in its entirety~~). For example, stents may be coated with polymer-drug conjugates by dipping the stent in polymer-drug solution or spraying the stent with such a solution. In certain embodiments, suitable materials for the implantable device include biocompatible and nontoxic materials, and may be chosen from the metals such as nickel-titanium alloys, steel, or biocompatible polymers, hydrogels, polyurethanes, polyethylenes, ethylenevinyl acetate copolymers, etc. In certain embodiments, the inventive compound is coated onto a stent for insertion into an artery or vein following balloon angioplasty.

The compounds of this invention or pharmaceutically acceptable compositions thereof may also be incorporated into compositions for coating implantable medical devices, such as prostheses, artificial valves, vascular grafts, stents and catheters. Accordingly, the present invention, in another aspect, includes a composition for coating an implantable device comprising a compound of the present invention as described generally above, and a carrier suitable for coating said implantable device. In still another aspect, the present invention includes an implantable device coated with a composition comprising a compound of the present invention as described generally above, and a carrier suitable for coating said implantable device.

Within other aspects of the present invention, methods are provided for expanding the lumen of a body passageway, comprising inserting a stent into the passageway, the stent having a generally tubular structure, the surface of the structure being coated with (or otherwise adapted to release) an inventive compound or composition, such that the passageway is expanded. In certain embodiments, the lumen of a body passageway is expanded in order to eliminate a biliary, gastrointestinal,, esophageal, tracheal/bronchial, urethral and/or vascular obstruction.

In certain embodiments, the invention provides a method of treatment of any of the disorders described herein, wherein the subject is a human.

anticancer agent, as discussed in more detail herein. In certain other embodiments, the compositions of the invention are useful for the treatment of protozoal infections. In the treatment of cancer or protein degradation disorders, the inventive compound may be combined with a proteasome inhibitor (e.g., bortezomib, Rl 15777 FTI, MG132, NPI-0052, etc.). In the treatment of cancer or protein degradation disorders, the inventive compound may be combined with protein degradation inhibitor (e.g. another i nventive compound, a tubacin-like compound, bortezomib, Rl 15777 FTI, MGl 32, NPI-0052, SAHA, ^{166}Ho-DOTMP, arsenic trioxide, 17- AAG, MG 132, etc.).

It will also be appreciated that the compounds and pharmaceutical compositions of the present invention can be employed in combination therapies, that is, the compounds and pharmaceutical compositions can be administered concurrently with, prior to, or subsequent to, one or more other desired therapeutics or medical procedures. The particular combination of therapies (therapeutics or procedures) to employ in a combination regimen will take into account compatibility of the desired therapeutics and/or procedures and the desired therapeutic effect to be achieved. It will also be appreciated that the therapies employed may achieve a desired effect for the same disorder (for example, an inventive compound may be administered concurrently with another anticancer agent), or they may achieve different effects (e.g., control of any adverse effects).

The present invention encompasses pharmaceutically acceptable topical formulations of inventive compounds. The term "pharmaceutically acceptable topical formulation," as used herein, means any formulation which is pharmaceutically acceptable for intradermal administration of a compound of the invention by application of the formulation to the epidermis. In certain embodiments of the invention, the topical formulation comprises a carrier system. Pharmaceutically effective carriers include, but are not limited to, solvents {e.g., alcohols, poly alcohols, water), creams, lotions, ointments, oils, plasters, liposomes, powders, emulsions, microemulsions, and buffered solutions (e.g., hypotonic or buffered saline) or any other carrier known in the art for topically administering pharmaceuticals. A more complete listing of art-known carriers is provided by reference texts that are standard in the art, for example, Remington's Pharmaceutical Sciences, 16th Edition, 1980 and 17th Edition, 1985, both published by Mack Publishing Company, Easton, Pa., ~~the disclosures of which are incorporated herein by reference in their entireties.~~ In certain other embodiments, the topical formulations of the invention may comprise excipients. Any pharmaceutically acceptable excipient known in the art may be used to prepare the inventive pharmaceutically

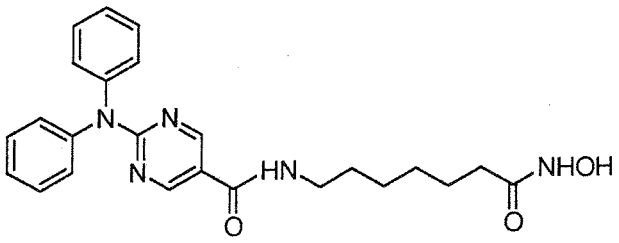
name a few), endocrine therapy, biologic response modifiers (interferons, interleukins, antibodies, aptamers, siRNAs, oligonucletoides, enzyme, ion channel and receptor inhibitors or activators to name a-few), hyperthermia and cryotherapy, agents to attenuate any adverse effects (e.g., antiemetics), and other approved chemotherapeutic drugs, including, but not limited to, alkylating drugs (e.g., mechlorethamine, chlorambucil, Cyclophosphamide, Melphalan, Ifosfamide), antimetabolites (e.g., Methotrexate), purine antagonists and pyrimidine antagonists (e.g. , 6-Mercaptopurine, 5-Fluorouracil, Cytarabile, Gemcitabine), spindle poisons (e.g., Vinblastine, Vincristine, Vinorelbine, Paclitaxel), podophyllotoxins (e.g., Etoposide, Irinotecan, Topotecan), antibiotics (Doxorubicin, Bleomycin, Mitomycin), nitrosoureas (e.g., Carmustine, Lomustine), inorganic ions (e.g., Cisplatin, Carboplatin), enzymes (e.g., Asparaginase), and hormones (e.g., Tamoxifen, Leuprolide, Flutamide, and Megestrol), to name a few. For a more comprehensive discussion of updated cancer therapies see, The Merck Manual, Seventeenth Ed. 1999, ~~the entire contents of which are hereby incorporated by reference~~. See also the National Cancer Institute (CNI) website (www.nci.nih.gov) and the Food and Drug Administration (FDA) website for a list of the FDA approved oncology drugs (www.fda.gov/cder/cancer/dmglistfrarne).

In certain embodiments, the pharmaceutical compositions of the present invention further comprise one or more additional therapeutically active ingredients (e.g., chemotherapeutic and/or palliative). For purposes of the invention, the term "palliative" refers to treatment that is focused on the relief of symptoms of a disease and/or side effects of a therapeutic regimen, but is not curative. For example, palliative treatment encompasses painkillers, antinausea medications, anti-pyretics, and anti-sickness drugs. In addition, chemotherapy, radiotherapy and surgery can all be used palliatively (that is, to reduce symptoms without going for cure; e.g., for shrinking tumors and reducing pressure, bleeding, pain and other symptoms of cancer).

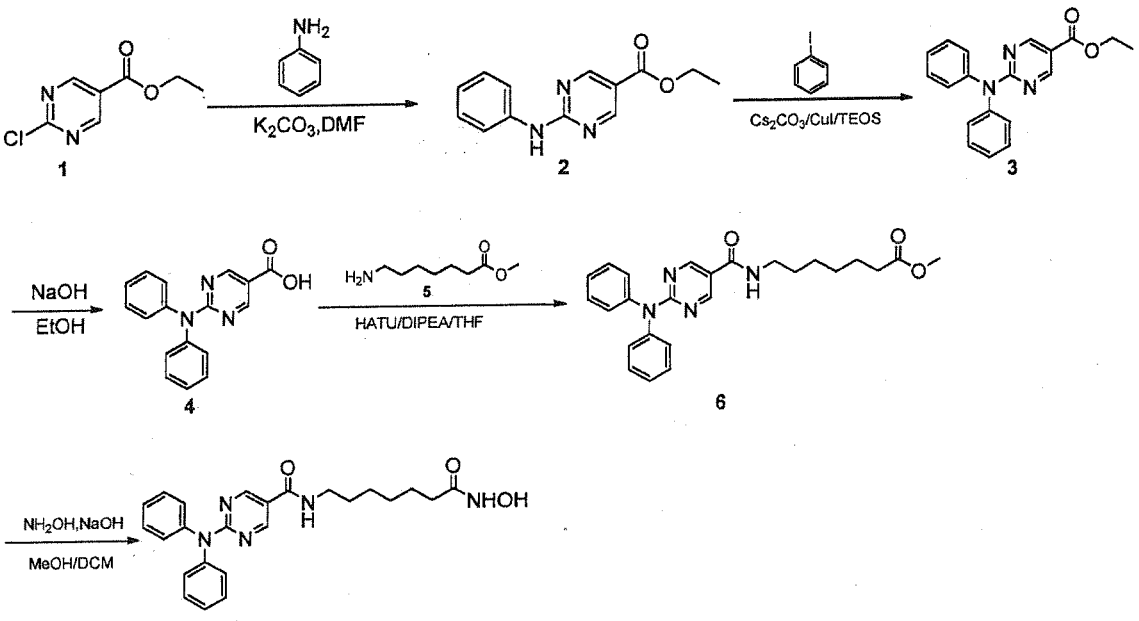
The present compounds and compositions can be administered together with hormonal and steroidal anti-inflammatory agents, such as but not limited to, estradiol, conjugated estrogens (e.g., PREMARIN, PREMPRO, AND PREMPHASE), 17 beta estradiol, calcitonin-salmon, levothyroxine, dexamethasone, medroxyprogesterone, prednisone, cortisone, flunisolide, and hydrocortisone; non-steroidal anti-inflammatory agents, such as but not limited to, tramadol, fentanyl, metamizole, ketoprofen, naproxen, nabumetone, ketoralac, tromethamine, loxoprofen, ibuprofen, aspirin, and acetaminophen;

limit the scope of the invention. ~~Various changes and modifications to the disclosed embodiments will be apparent to those skilled in the art and such changes and modifications including, without limitation, those relating to the chemical structures, substituents, derivatives, formulations and/or methods of the invention may be made without departing from the spirit of the invention and the scope of the appended claims.~~ Definitions of variables in the structures in schemes herein are commensurate with those of corresponding positions in the formulae delineated herein.

Example 1: Synthesis of 2-(diphenylamino)-N-(7-(hydroxyamino)-7-oxoheptyl) pyrimidine-5-carboxamide



Reaction Scheme



Synthesis of Intermediate 2

and 14 μM (HDAC6). Five μl compounds and 20 μl of enzyme were added to wells of a black, opaque 384 well plate in duplicate. Enzyme and compound were incubated together at room temperature for 10 minutes. Five μl of substrate was added to each well, the plate was shaken for 60 seconds and placed into a Victor 2 microtiter plate reader. The development of fluorescence was monitored for 60 min and the linear rate of the reaction was calculated. The IC50 was determined using Graph Pad Prism by a four parameter curve fit.

~~Incorporation by Reference~~

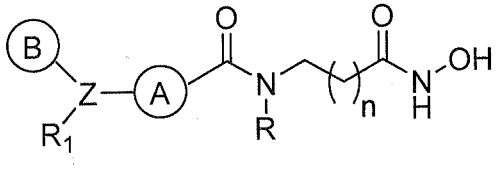
~~The contents of all references (including literature references, issued patents, published patent applications, and co-pending patent applications) cited throughout this application are hereby expressly incorporated herein in their entireties by reference.~~ Unless otherwise defined, all technical and scientific terms used herein are accorded the meaning commonly known to one with ordinary skill in the art.

Equivalents

Those skilled in the art will recognize, or be able to ascertain using no more than routine experimentation, many equivalents of the specific embodiments of the invention described herein. Such equivalents are intended with be encompassed by the following claims.

~~WHAT IS CLAIMED~~CLAIMS:

1. A compound of formula I:



(I);

or a pharmaceutically acceptable salt~~, ester or prodrug~~ thereof,

wherein,

Z is N ~~or CR*, wherein R* is an optionally substituted alkyl, an optionally substituted acyl, an optionally substituted aryl or an optionally substituted heteroaryl~~;

ring A is ~~an optionally substituted~~ aryl or ~~an optionally substituted~~ heteroaryl, each of which may be optionally substituted with halo;

ring B is ~~an optionally substituted~~ aryl or ~~an optionally substituted~~ heteroaryl, each of which may be optionally substituted with alkyl, aryl, heteroaryl, cycloalkyl, heterocycloalkyl, aralkyl, haloalkyl, halo, alkoxy, OH, NH_2, NHR", CN, N_3, or NO_2;

R_1 is ~~(i)~~ H, alkyl, haloalkyl, alkenyl, aryl, aralkyl, heteroaryl, heterocyclic, carbocyclic, C(O)-R_2, or C(O)O-R_2, ~~or $S(O)_p$, each of which~~ wherein alkyl, haloalkyl, alkenyl, aryl, aralkyl, heteroaryl, heterocyclic, carbocyclic, C(O)-R_2, or C(O)O-R_2 may be optionally substituted with OH, halo, alkyl, or alkoxy; ~~or (ii) when Z is CR*, R_1 may be optionally substituted branched alkyl, OR_3, or $N(R_3)(R_3)$ CH_2CH_2OH, OCH_2CH_2OH, SH, or thio alkoxy;~~

~~or ring B and R_1 may together with the atom to which each is attached, form an optionally substituted heterocyclic, or an optionally substituted heteroaryl;~~

~~or R* and R_1 together with the atom to which each is attached, may form an optionally substituted carbocyclic, optionally substituted heterocyclic, optionally substituted aryl or optionally substituted heteroaryl ring;~~

R is H or ~~an optionally substituted~~ alkyl~~; or R and ring A may be joined to form a fused bicyclic ring which may be optionally substituted~~;

R'' is H or alkyl;

each R_2 is independently alkyl, cycloalkyl, heterocycloalkyl, aryl, or heteroaryl~~, each of which is optionally substituted~~; and

~~each R_3 is independently alkyl, cycloalkyl, heterocycloalkyl, aryl, or heteroaryl, each of which is optionally substituted;~~

n is 3, 4, 5, 6, 7 or 8~~; and~~

~~p is 0, 1, or 2~~.

2. The compound of claim 1, wherein ring A is phenyl, naphthyl, anthracenyl, pyridinyl, pyrimidinyl, pyrazinyl, indolyl, imidazolyl, oxazolyl, furyl, thienyl, thiazolyl, triazolyl, isoxazolyl, quinolinyl, pyrrolyl, pyrazolyl, or 5,6,7,8-tetrahydroisoquinoline; each of which may be optionally substituted with halo.

~~3. The compound of claim 1, wherein ring B is phenyl, naphthyl, anthracenyl, pyridinyl, pyrimidinyl, pyrazinyl, indolyl, imidazolyl, oxazolyl, furyl, thienyl, thiazolyl, triazolyl, isoxazolyl, quinolinyl, pyrrolyl, pyrazolyl, or 5,6,7,8-tetrahydroisoquinoline; each of which may be optionally substituted.~~

~~4. The compound of claim 1, wherein R_1 is H, optionally substituted alkyl, optionally substituted aryl, or optionally substituted heteroaryl, or R_1 is OH or alkoxy.~~

~~5~~3. The compound of ~~claim 4~~ claim 1, wherein R_1 is H, methyl, ethyl, propyl, i-propyl, butyl, i-butyl, t-butyl, pentyl, hexyl, phenyl, naphthyl, pyridinyl, OH or OCH_3; each of which may be optionally substituted with OH, halo, alkyl, or alkoxy.

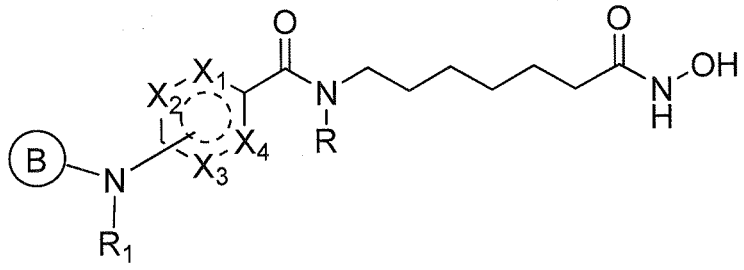
~~6. The compound of claim 1, wherein R_1 is OH, alkoxy, NH_2, NH(alkyl), N(alkyl)(alkyl), NH-aryl, NH-hetroaryl, N(aryl)(aryl), N(aryl)(heteroaryl), or N(heteroaryl)(heteroaryl).~~

~~7~~4. The compound of claim 1, wherein the carbonyl and the Z group attached to ring A are disposed para to each other.

~~8~~5. The compound of claim 1, wherein the carbonyl and Z group attached to ring A are disposed meta to each other.

~~96~~. The compound of claim 1, wherein the carbonyl and the Z group attached to ring A are disposed ortho to each other.

~~107~~. The compound of claim 1, of formula II:



(II);

or a pharmaceutically acceptable salt~~, ester or prodrug~~ thereof,

wherein,

each of X_1, X_2, X_3, or X_4 is independently N, CR', O, or S~~, NCR', CR'CR', OCR', SCR', or absent, or X_1 or X_4 may be joined with R to form a bicyclic ring~~; wherein up to three of X_1, X_2, X_3, or X_4 may be N;

ring B is ~~an optionally substituted~~ aryl or ~~an optionally substituted~~ heteroaryl; each of which may be optionally substituted with alkyl, aryl, heteroaryl, cycloalkyl, heterocycloalkyl, aralkyl, haloalkyl, halo, alkoxy, OH, NH_2, NHR", CN, N_3, or NO_2;

R_1 is H, alkyl, haloalkyl, alkenyl, aryl, aralkyl, heteroaryl, heterocyclic, carbocyclic, C(O)-R_2, or C(O)O-R_2, each of which may be optionally substituted with OH, halo, alkyl, or alkoxy;

R is H or ~~an optionally substituted~~ alkyl~~; or R and X_1 or X_4 may be joined to form a fused bicyclic ring which may be optionally substituted~~;

each R' is independently H, ~~optionally substituted~~ alkyl, halo, OH, NH_2, NHR", haloalkyl, CN, N_3, NO_2;

R" is H or alkyl; and

R_2 is alkyl, cycloalkyl, heterocycloalkyl, aryl, or heteroaryl~~, each of which is optionally substituted~~.

~~118~~. The compound of claim ~~10~~ 7, wherein X_1, X_2, X_3, and X_4 are all CR'.

~~12~~9. The compound of claim ~~10~~ 7, wherein X_2 and X_3, are N and X_1 and X_4 are CR'.

~~13. The compound of claim 10, wherein X_2 and X_3, are CR' and X_1 and X_4 are N.~~

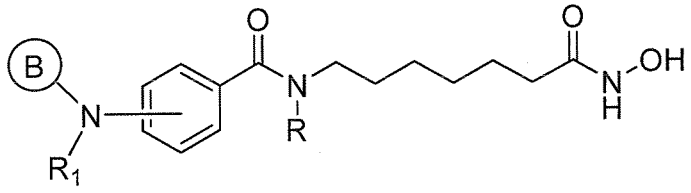
~~14. The compound of claim 10, wherein X_2, is N; X_3 is S, N or O; X_1 is CR' and X_4 is absent.~~

~~15~~10. The compound of claim ~~10~~ 7, wherein ring B is phenyl, pyridinyl, pyrimidinyl, or pyrazinyl; each of which may be optionally substituted with alkyl, aryl, heteroaryl, cycloalkyl, heterocycloalkyl, aralkyl, haloalkyl, halo, alkoxy, OH, NH_2, NHR", CN, N_3, or NO_2.

~~16. The compound of claim 15, wherein ring B is substituted by alkyl, aryl, heteroaryl, cycloalkyl, heterocycloalkyl, aralkyl, haloalkyl, hal, OH, NH_2, NHR", CN, N_3, or NO_2.~~

~~17~~11. The compound of claim ~~10~~ 7, R_1 is H, alkyl, aryl, aralkyl, or heteroaryl, each of which may be optionally substituted with OH, halo, alkyl, or alkoxy.

~~18~~12. The compound of claim 1, of formula III:



(III);

or a pharmaceutically acceptable salt~~, ester or prodrug~~ thereof,

wherein,

ring B is ~~an optionally substituted~~ aryl or ~~an optionally substituted~~ heteroaryl, each of which may be optionally substituted with alkyl, aryl, aralkyl, haloalkyl, halo, alkoxy, OH, NH_2, CN, or NO_2;

R_1 is H, alkyl, haloalkyl, alkenyl, aryl, aralkyl, heteroaryl, heterocyclic, carbocyclic, C(O)-R_2, or C(O)O-R_2, each of which may be optionally substituted with OH, halo, alkyl, or alkoxy;

R_2 is ~~optionally substituted~~ heteroaryl, and

R is H or ~~an optionally substituted~~ alkyl~~; or R and the phenyl ring may be joined to form a fused [6,5] bicyclic ring which may be optionally substituted~~.

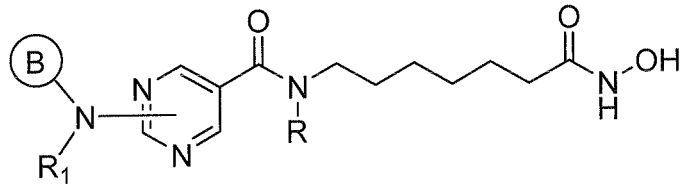
~~19~~13. The compound of claim ~~18~~ 12, wherein ring B is phenyl, pyridinyl, pyrimidinyl, or pyrazinyl; each of which may be optionally substituted with alkyl, aryl, aralkyl, haloalkyl, halo, alkoxy, OH, NH_2, CN, or NO_2.

~~20. The compound of claim 19, wherein ring B is substituted by alkyl, aryl, aralkyl, haloalkyl, hal, OH, NH_2, CN, or NO_2.~~

~~21~~14. The compound of claim ~~18~~ 12, wherein R_1 is H, alkyl, aryl, aralkyl, heteroaryl, C(O)-R_2, or C(O)O-R_2, each of which may be optionally substituted with OH, halo, alkyl, or alkoxy.

~~22~~15. The compound of claim ~~21~~ 14, wherein R_2 is ~~optionally substituted~~ pyridinyl.

~~23~~16. The compound of claim 1, of formula IV:



(IV);

or a pharmaceutically acceptable salt~~, ester or prodrug~~ thereof,

wherein,

ring B is ~~an optionally substituted~~ aryl or ~~an optionally substituted~~ heteroaryl, each of which may be optionally substituted with alkyl, aryl, aralkyl, haloalkyl, halo, OH, NH_2, CN, or NO_2;

R_1 is H, alkyl, haloalkyl, alkenyl, aryl, aralkyl, heteroaryl, heterocyclic, or carbocyclic, each of which may be optionally substituted with OH, halo, or alkyl;

~~or ring B and R_1 may together with the atom to which each is attached, form an optionally substituted heterocyclic, or an optionally substituted heteroaryl, and~~

R is H or ~~an optionally substituted~~ alkyl~~; or R and the 1,3-pyrimidinyl ring may be joined to form a fused bicyclic ring which may be optionally substituted~~.

~~24~~17. The compound of claim ~~23~~ 16, wherein ring B is phenyl, pyridinyl, pyrimidinyl, or pyrazinyl; each of which may be optionally substituted with alkyl, aryl, aralkyl, haloalkyl, halo, OH, NH_2, CN, or NO_2.

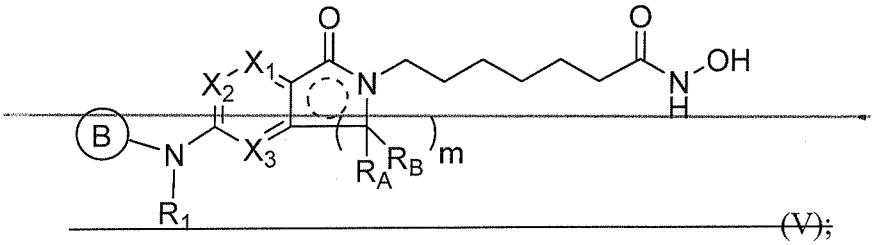
~~25. The compound of claim 24, wherein ring B is substituted by alkyl, aryl, aralkyl, haloalkyl, halo, OH, NH_2, CN, or NO_2.~~

~~26~~18. The compound of claim ~~23~~ 16, wherein R_1 is H, alkyl, aryl, aralkyl, or heteroaryl, each of which may be optionally substituted with OH, halo, or alkyl.

~~27. The compound of claim 26, wherein R_1 is substituted by OH, halo,~~

~~28. The compound of claim 23, wherein the ring formed by ring B and R_1 is piperidine, pyrrolidine, tetrahydroquinoline, morpholine, piperazine, tetrahydro-triazolo pyrazine, diazepane, each of which is optionally substituted.~~

~~29. The compound of claim 1, of formula V:~~



~~(V);~~

~~or a pharmaceutically acceptable salt, ester or prodrug thereof,~~

~~wherein,~~

each of X_1, X_2, or X_3 is independently N or CR';

ring B is an optionally substituted aryl or an optionally substituted heteroaryl;

R_1 is H, alkyl, haloalkyl, alkenyl, aryl, arylalkyl, heteroaryl, heterocyclic, or carbocyclic, each of which may be optionally substituted;

each R_A and R_B is independently H, $NH(R_C)$, $N(R_C)(R_C)$, $N(R_C)CO(R_C)$, CO_2H, $C(O)R_C$, $C(O)OR_C$, $C(O)NH_2$, $C(O)NH(R_C)$, $C(O)N(R_C)(R_C)$, SO_2R_C, SOR_C, SR_C, alkyl, aryl, arylalkyl, alkoxy, heteroaryl, heterocyclic, and carbocyclic, each of which may be further substituted; or R_A and R_B together with the carbon to which they are attached form a carbonyl;

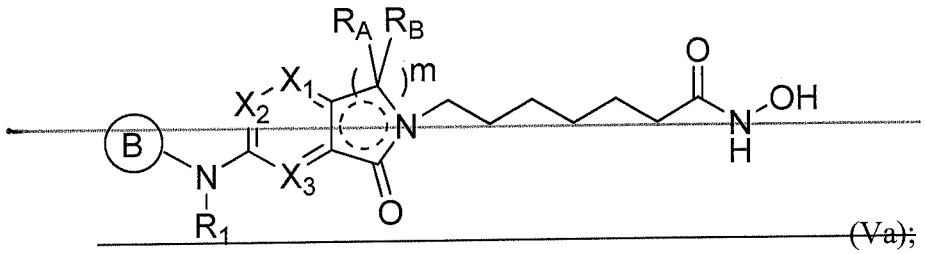
each R_C is independently H, alkyl, alkenyl, aryl, heteroaryl, cycloalkyl, or heterocyclic, each of which may be further substituted;

R' is H, optionally substituted alkyl, halo, OH, NH_2, NHR", haloalkyl, CN, N_3, NO_2;

R" is H or alkyl; and

m is 1 or 2.

30. The compound of claim 1, of formula Va:



(Va);

or a pharmaceutically acceptable salt, ester or prodrug thereof,

wherein,

each of X_1, X_2, or X_3 is independently N or CR';

ring B is an optionally substituted aryl or an optionally substituted heteroaryl;

R_1 is H, alkyl, haloalkyl, alkenyl, aryl, arylalkyl, heteroaryl, heterocyclic, or carbocyclic, each of which may be optionally substituted;

each R_A and R_B is independently H, $NH(R_C)$, $N(R_C)(R_C)$, $N(R_C)CO(R_C)$, CO_2H, $C(O)R_C$, $C(O)OR_C$, $C(O)NH_2$, $C(O)NH(R_C)$, $C(O)N(R_C)(R_C)$, SO_2R_C, SOR_C, SR_C, alkyl, aryl, arylalkyl, alkoxy, heteroaryl, heterocyclic, and carbocyclic, each of which may be further substituted; or R_A and R_B together with the carbon to which they are attached form a carbonyl;

each R_C is independently H, alkyl, alkenyl, aryl, heteroaryl, cycloalkyl, or heterocyclic, each of which may be further substituted;

R' is H, optionally substituted alkyl, halo, OH, NH_2, NHR", haloalkyl, CN, N_3, NO_2;

R" is H or alkyl; and

m is 1 or 2.

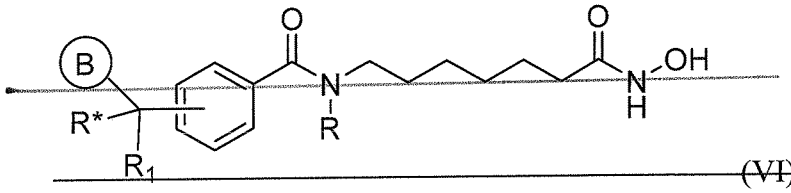
31. The compound of claim 29 or claim 30, wherein X_1, X_2, and X_3, are all independently CR'.

32. The compound of claim 29 or claim 30, wherein ring B is phenyl, pyridinyl, pyrimidinyl, or pyrazinyl; each of which may be optionally substituted.

33. The compound of claim 32, wherein ring B is substituted by alkyl, aryl, heteroaryl, cycloalkyl, heterocycloalkyl, aralkyl, haloalkyl, halo, OH, NH_2, NHR", CN, N_3, or NO_2.

34. The compound of claim 29 or claim 30, wherein R_1 is H, alkyl, aryl, arylalkyl, or heteroaryl, each of which may be optionally substituted.

35. The compound of claim 1, of formula VI:



(VI);

or a pharmaceutically acceptable salt, ester or prodrug thereof,

wherein,

ring B is an optionally substituted aryl or an optionally substituted heteroaryl;

R* is an optionally substituted alkyl, an optionally substituted aryl or an optionally substituted heteroaryl;

R_1 is H, alkyl, aryl, arylalkyl, heteroaryl, heterocyclic, carbocyclic, OH, alkoxy, NH_2, NH(alkyl), or N(alkyl)(alkyl);

~~or R* and R_1 together with the atom to which each is attached, may form an optionally substituted carbocyclic, optionally substituted heterocyclic, optionally substituted aryl or optionally substituted heteroaryl ring; and~~

~~R is H or an optionally substituted alkyl.~~

~~36. The compound of claim 35, wherein ring B is phenyl, pyridinyl, pyrimidinyl, pyrazinyl, or thiazole; each of which may be optionally substituted.~~

~~37. The compound of claim 35, wherein R* is methyl, trifluoromethyl, phenyl, pyridinyl, pyrimidinyl, pyrazinyl, or thiazole; each of which may be optionally substituted.~~

~~38. The compound of claim 35, wherein R_1 is OH, methoxy, or ethoxy.~~

~~39. The compound of claim 35, wherein ring B and R* are each independently substituted with one or more of alkyl, halogen, or $C(O)NR_XR_Y$, wherein R_X is H or alkyl, and R_Y is H or alkyl.~~

~~40. The compound of claim 39, wherein ring B and R* are each independently substituted with one or more of methyl, F, or $C(O)N(Me)_2$.~~

41~~19~~. The compound of claim 1, selected from the following:

~~4-(diphenylamino)-N-(7-(hydroxyamino)-7-oxoheptyl)benzamide;~~

~~4-(dipyrimidin-2-ylamino)-N-(7-(hydroxyamino)-7-oxoheptyl)benzamide;~~

~~4-(bis(4-methoxyphenyl)amino)-N-(7-(hydroxyamino)-7-oxoheptyl)benzamide;~~

~~4-((2,6-dichlorophenyl)(methyl)amino)-N-(7-(hydroxyamino)-7-oxoheptyl)benzamide;~~

~~4-(dipyrimidin-2-ylamino)-N-(8-(hydroxyamino)-8-oxooctyl)benzamide;~~

~~N-(7-(hydroxyamino)-7-oxoheptyl)-4-(methyl(2-(trifluoromethyl)phenyl)amino)benzamide;~~

~~4-((2,6-diisopropylphenyl)(methyl)amino)-N-(7-(hydroxyamino)-7-oxoheptyl)benzamide;~~

~~N-(7-(hydroxyamino)-7-oxoheptyl)-2-(methyl(phenyl)amino)pyrimidine-5-carboxamide;~~

~~4-(2,6-diisopropylphenylamino)-N-(7-(hydroxyamino)-7-oxoheptyl)benzamide;~~

~~N-(7-(hydroxyamino)-7-oxoheptyl)-2-((2-isopropylphenyl)(methyl)amino)pyrimidine-5-carboxamide;~~

~~4-(2,6-dimethylphenylamino)-N-(7-(hydroxyamino)-7-oxoheptyl)benzamide;~~

~~4-(ethyl(2-(trifluoromethyl)phenyl)amino)-N-(7-(hydroxyamino)-7-oxoheptyl) benzamide;~~

~~4-(diphenylamino)-N-(7-(hydroxyamino)-7-oxoheptyl)-N-methylbenzamide;~~

~~4-(dipyrimidin-2-ylamino)-N-(7-(hydroxyamino)-7-oxoheptyl)-N-methylbenzamide;~~

~~4-((2,6-dichlorophenyl)(ethyl)amino)-N-(7-(hydroxyamino)-7-oxoheptyl)benzamide;~~

~~4-(2,6-dichlorophenylamino)-N-(7-(hydroxyamino)-7-oxoheptyl)benzamide;~~

~~N-(7-(hydroxyamino)-7-oxoheptyl)-4-(phenyl(pyrimidin-2-yl)amino)benzamide;~~

~~N-(7-(hydroxyamino)-7-oxoheptyl)-2-((2-isopropylphenyl)(methyl)amino)-N-methylpyrimidine-5-carboxamide;~~

~~4-((2-chloro-6-methylphenyl)(methyl) amino)-N-(7-(hydroxyamino)-7-oxoheptyl) benzamide;~~

~~4-((2,6-difluorophenyl)(methyl)amino)-N-(7-(hydroxyamino)-7-oxoheptyl) benzamide;~~

~~4-(ethyl(2-(trifluoromethyl)phenyl)amino)-N-(7-(hydroxyamino)-7-oxoheptyl)-N-methylbenzamide;~~

~~4-(2,6-difluorophenylamino)-N-(7-(hydroxyamino)-7-oxoheptyl)benzamide;~~

~~4-(bis(3-chlorophenyl)amino)-N-(7-(hydroxyamino)-7-oxoheptyl)benzamide;~~

~~7-(4-((2,6-difluorophenyl)(methyl) amino)benzylamino)-N-hydroxy heptanamide;~~

~~2-(2,6-dimethylphenylamino)-N-(7-(hydroxyamino)-7-oxoheptyl)pyrimidine-5-carboxamide;~~

~~2-(diphenylamino)-N-(7-(hydroxyamino)-7-oxoheptyl)pyrimidine-5-carboxamide;~~

~~N-(7-(hydroxyamino)-7-oxoheptyl)-2-(methyl(pyrazin-2-yl)amino)pyrimidine-5-carboxamide;~~

~~4-(2,6-dimethylphenylamino)-N-(7-(hydroxyamino)-7-oxoheptyl)-N-methylbenzamide~~

~~4-(ethyl(pyrazin-2-yl)amino)-N-(7-(hydroxyamino)-7-oxoheptyl)benzamide;~~

~~N-(7-(hydroxyamino)-7-oxoheptyl)-4-(1-methyl-1H-benzo[d]imidazol-2-ylamino)benzamide;~~

~~N-(7-(hydroxyamino)-7-oxoheptyl)-4-(phenyl(pyrimidin-5-yl)amino)benzamide;~~

~~N-(7-(hydroxyamino)-7-oxoheptyl)-4-(N-phenylacetamido)benzamide;~~

~~4-(benzo[d]oxazol-2-ylamino)-N-(7-(hydroxyamino)-7-oxoheptyl)benzamide;~~

~~N-(7-(hydroxyamino)-7-oxoheptyl)-4-(phenyl(pyrazin-2-yl)amino)benzamide;~~

~~2-(2,6-dimethylphenylamino)-N-(7-(hydroxyamino)-7-oxoheptyl)-N-methylpyrimidine-5-carboxamide;~~

~~N-(7-(hydroxyamino)-7-oxoheptyl)-4-(phenyl(pyridin-2-yl)amino)benzamide;~~

~~N-(7-(hydroxyamino)-7-oxoheptyl)-4-(N-phenylphenylsulfonamido)benzamide;~~

~~N-(7-(hydroxyamino)-7-oxoheptyl)-4-(phenyl(pyridin-3-yl)amino)benzamide;~~

~~N-(7-(hydroxyamino)-7-oxoheptyl)-4-((3-methylpyridin-2-yl)(phenyl)amino) benzamide;~~

~~4-(benzo[d]oxazol-2-yl(methyl)amino)-N-(7-(hydroxyamino)-7-oxoheptyl)-N-methylbenzamide;~~

~~4-(benzo[d]oxazol-2-yl(methyl)amino)-N-(7-(hydroxyamino)-7-oxoheptyl)benzamide;~~

~~4-((2-cyanophenyl)(methyl)amino)-N-(7-(hydroxyamino)-7-oxoheptyl)benzamide;~~

~~4-(benzo[d]thiazol-2-ylamino)-N-(7-(hydroxyamino)-7-oxoheptyl)benzamide;~~

~~4-(N-(2,6-dimethylphenyl)acetamido)-N-(7-(hydroxyamino)-7-oxoheptyl) benzamide;~~

~~N-(7-(hydroxyamino)-7-oxoheptyl)-N-methyl-4-(phenyl(pyridin-3-yl)amino) benzamide;~~

~~4-((2-cyanophenyl)(methyl)amino)-N-(7-(hydroxyamino)-7-oxoheptyl)-N-methylbenzamide;~~

~~N-(7-(hydroxyamino)-7-oxoheptyl)-4-(phenylamino)benzamide;~~

~~4-(2,6-dimethylphenylamino)-2-fluoro-N-(7-(hydroxyamino)-7-oxoheptyl) benzamide;~~

~~4-((2,6-dimethylphenyl)(methyl)amino)-2-fluoro-N-(7-(hydroxyamino)-7-oxoheptyl)benzamide;~~

~~N-(7-(hydroxyamino)-7-oxoheptyl)-N-methyl-4-(phenylamino)benzamide;~~

~~4-((2,6-dimethylphenyl)(methyl)amino)-2-fluoro-N-(7-(hydroxyamino)-7-oxoheptyl)-N-methylbenzamide;~~

~~N-(7-(hydroxyamino)-7-oxoheptyl)-N-methyl-4-(N-phenylacetamido)benzamide;~~

~~4-(N-(2,6-dimethylphenyl)acetamido)-N-(7-(hydroxyamino)-7-oxoheptyl)-N-methylbenzamide;~~

~~N-(7-(hydroxyamino)-7-oxoheptyl)-N-methyl-4-(N-phenylisobutyramido) benzamide;~~

~~N-(7-(hydroxyamino)-7-oxoheptyl)-N-methyl-4-(phenyl(pyridin-2-yl)amino) benzamide;~~

~~4-(N-(2,6-dimethylphenyl)isobutyramido)-N-(7-(hydroxyamino)-7-oxoheptyl)-N-methylbenzamide;~~

~~4-(2,6-dimethylphenylamino)-3-fluoro-N-(7-(hydroxyamino)-7-oxoheptyl)benzamide;~~

~~4-(benzo[d]thiazol-2-ylamino)-N-(7-(hydroxyamino)-7-oxoheptyl)-N-methylbenzamide;~~

~~4-(N-(2,6-dimethylphenyl)-3-methylbutanamido)-N-(7-(hydroxyamino)-7-oxoheptyl)-N-methylbenzamide;~~

4-(2,6-dimethylphenylamino)-3-fluoro-N-(7-(hydroxyamino)-7-oxoheptyl)-N-methylbenzamide;

3-(2,6-dimethylphenylamino)-N-(7-(hydroxyamino)-7-oxoheptyl)benzamide;

3-(2,6-dimethylphenylamino)-N-(7-(hydroxyamino)-7-oxoheptyl)-N-methylbenzamide;

4-(2,6-diisopropylphenylamino)-N-(7-(hydroxyamino)-7-oxoheptyl)-N-methylbenzamide;

N-(7-(hydroxyamino)-7-oxoheptyl)-N-methyl-4-((3-methylpyridin-2-yl)(phenyl)amino)benzamide;

2-(2,6-dimethylphenylamino)-N-(7-(hydroxyamino)-7-oxoheptyl)-N-methylbenzamide;

N-(7-(hydroxyamino)-7-oxoheptyl)-4-(mesitylamino)-N-methylbenzamide;

4-(2-chloro-6-methylphenylamino)-N-(7-(hydroxyamino)-7-oxoheptyl)-N-methylbenzamide;

4-((2,6-dimethylphenyl)(pyrimidin-2-yl)amino)-N-(7-(hydroxyamino)-7-oxoheptyl)benzamide;

N-(7-(hydroxyamino)-7-oxoheptyl)-N-methyl-4-(phenyl(pyrimidin-2-yl)amino)benzamide;

4-(2,6-dimethylphenylamino)-N-(6-(hydroxyamino)-6-oxohexyl)-N-methylbenzamide;

N-(7-(hydroxyamino)-7-oxoheptyl)-2-(phenyl(o-tolyl)amino)pyrimidine-5-carboxamide;

N-(7-(hydroxyamino)-7-oxoheptyl)-2-(mesitylamino)-N-methylpyrimidine-5-carboxamide;

4-((2,6-dimethylphenyl)(pyrimidin-2-yl)amino)-N-(7-(hydroxyamino)-7-oxoheptyl)-N-methylbenzamide;

2-(2,6-diisopropylphenylamino)-N-(7-(hydroxyamino)-7-oxoheptyl)-N-methylpyrimidine-5-carboxamide;

4-(2,6-dimethylphenylamino)-N-(5-(hydroxyamino)-5-oxopentyl)-N-methylbenzamide;

N-(7-(hydroxyamino)-7-oxoheptyl)-4-(hydroxydiphenylmethyl)benzamide;

N-(7-(hydroxyamino)-7-oxoheptyl)-4-(methoxydiphenylmethyl)benzamide;

4-(hydroxy(phenyl)(pyridin-4-yl)methyl)-N-(7-(hydroxyamino)-7-oxoheptyl) benzamide;

N-(7-(hydroxyamino)-7-oxoheptyl)-N-methyl-4-(N-phenylbenzamido)benzamide;

N-(4-(7-(hydroxyamino)-7-oxoheptylcarbamoyl)phenyl)-N-phenylbenzamide;

4-(bis(4-fluorophenyl)(hydroxy)methyl)-N-(7-(hydroxyamino)-7-oxoheptyl)benzamide;

4-(bis(4-fluorophenyl)(methoxy)methyl)-N-(7-(hydroxyamino)-7-oxoheptyl) benzamide;

N-(7-(hydroxyamino)-7-oxoheptyl)-4-(methoxy(phenyl)(pyridin-3-yl)methyl)benzamide;

N-(7-(hydroxyamino)-7-oxoheptyl)-4-(methoxy(phenyl)(pyridin-3-yl)methyl)-N-methylbenzamide;

~~N-(7-(hydroxyamino)-7-oxoheptyl)-4-(methoxy(phenyl)(pyridin-2-yl)methyl) benzamide;~~

~~N-(7-(hydroxyamino)-7-oxoheptyl)-4-(hydroxydipyridin-2-ylmethyl)benzamide;~~

~~N-(7-(hydroxyamino)-7-oxoheptyl)-4-(hydroxydipyridin-2-ylmethyl)-N-methyl benzamide;~~

~~2-(di-o-tolylamino)-N-(7-(hydroxyamino)-7-oxoheptyl)pyrimidine-5-carboxamide;~~

~~2-((2-chlorophenyl)(phenyl)amino)-N-(7-(hydroxyamino)-7-oxoheptyl)pyrimidine-5-carboxamide;~~

~~2-((2,6-dimethylphenyl)(phenyl)amino)-N-(7-(hydroxyamino)-7-oxoheptyl)pyrimidine-5-carboxamide;~~

~~7-(5-(2,6-dimethylphenylamino)-1-oxoisoindolin-2-yl)-N-hydroxyheptanamide;~~

~~7-(5-(2,6-dimethylphenylamino)-1,3-dioxoisoindolin-2-yl)-N-hydroxyheptanamide;~~

~~N-(7-(hydroxyamino)-7-oxoheptyl)-4-(methoxydipyridin-2-ylmethyl)benzamide;~~

~~N-(7-(hydroxyamino)-7-oxoheptyl)-4-(methoxydipyridin-2-ylmethyl)-N-methylbenzamide;~~

~~N-(7-(hydroxyamino)-7-oxoheptyl)-2-(pyridin-2-yl(o-tolyl)amino)pyrimidine-5-carboxamide;~~

~~N-(7-(hydroxyamino)-7-oxoheptyl)-2-(pyridin-4-yl(o-tolyl)amino)pyrimidine-5-carboxamide;~~

~~N-(7-(hydroxyamino)-7-oxoheptyl)-4-(methoxy(phenyl)(pyridin-4-yl)methyl)benzamide;~~

~~4-(hydroxy(phenyl)(pyridin-4-yl)methyl)-N-(7-(hydroxyamino)-7-oxoheptyl)-N-methylbenzamide;~~

~~4-benzhydryl-N-(7-(hydroxyamino)-7-oxoheptyl)benzamide;~~

~~4-benzhydryl-N-(7-(hydroxyamino)-7-oxoheptyl)-N-methylbenzamide;~~

~~N-(4-(7-(hydroxyamino)-7-oxoheptyl carbamoyl)phenyl)-N-phenylpicolinamide;~~

~~4-(ethoxydiphenylmethyl)-N-(7-(hydroxyamino)-7-oxoheptyl)benzamide;~~

~~4-(bis(3-fluorophenyl)(hydroxy)methyl)-N-(7-(hydroxyamino)-7-oxoheptyl)benzamide;~~

~~4-(bis(3-fluorophenyl)(hydroxy)methyl)-N-(7-(hydroxyamino)-7-oxoheptyl)-N-methylbenzamide;~~

~~4-(bis(3-fluorophenyl)(methoxy)methyl)-N-(7-(hydroxyamino)-7-oxoheptyl)benzamide;~~

~~4-(1-(4-fluorophenyl)-1-hydroxyethyl)-N-(7-(hydroxyamino)-7-oxoheptyl)benzamide;~~

~~N-(4-(7-(hydroxyamino)-7-oxoheptyl carbamoyl)phenyl)-N-phenylpicolinamide;~~

~~4-(ethoxydiphenylmethyl)-N-(7-(hydroxyamino)-7-oxoheptyl)benzamide;~~

~~4-(ethoxydiphenylmethyl)-N-(7-(hydroxy amino)-7-oxoheptyl)-N-methylbenzamide;~~

~~4-(ethoxydipyridin-2-ylmethyl)-N-(7-(hydroxyamino)-7-oxoheptyl)benzamide;~~

~~4-(ethoxydipyridin-2-ylmethyl)-N-(7-(hydroxy amino)-7-oxoheptyl)-N-methylbenzamide;~~

4-(bis(3-fluorophenyl)(hydroxy)methyl)-N-(7-(hydroxyamino)-7-oxoheptyl)benzamide;
4-(bis(3-fluorophenyl)(hydroxy)methyl)-N-(7-(hydroxyamino)-7-oxoheptyl)-N-methyl benzamide;
4-(bis(3-fluorophenyl)(methoxy)methyl)-N-(7-(hydroxyamino)-7-oxoheptyl)benzamide;
4-(bis(3-fluorophenyl)(methoxy)methyl)-N-(7-(hydroxyamino)-7-oxoheptyl)-N-methyl benzamide;
4-(1-(4-fluorophenyl)-1-hydroxyethyl)-N-(7-(hydroxyamino)-7-oxoheptyl)benzamide;
4-(1-(4-fluorophenyl)-1-hydroxyethyl)-N-(7-(hydroxyamino)-7-oxoheptyl)benzamide;
4-(1-(4-fluorophenyl)-1-hydroxyethyl)-N-(7-(hydroxyamino)-7-oxoheptyl)benzamide;
4-(1-(4-fluorophenyl)-1-hydroxyethyl)-N-(7-(hydroxyamino)-7-oxoheptyl)-N-methyl benzamide;
4-(1-(4-fluorophenyl)-1-methoxyethyl)-N-(7-(hydroxyamino)-7-oxoheptyl)benzamide;
4-(1-(4-fluorophenyl)-1-methoxyethyl)-N-(7-(hydroxyamino)-7-oxoheptyl)-N-methyl benzamide;
4-(1-hydroxy-1-(pyridin-2-yl)ethyl)-N-(7-(hydroxyamino)-7-oxoheptyl)benzamide;
4-(1-hydroxy-1-(pyridin-2-yl)ethyl)-N-(7-(hydroxyamino)-7-oxoheptyl)-N-methyl benzamide;
N-(7-(hydroxyamino)-7-oxoheptyl)-4-(1-methoxy-1-(pyridin-2-yl)ethyl)benzamide;
N-(7-(hydroxyamino)-7-oxoheptyl)-4-(1-methoxy-1-(pyridin-2-yl)ethyl)-N-methylbenzamide;
4-(bis(2-fluorophenyl)(hydroxy)methyl)-N-(7-(hydroxyamino)-7-oxoheptyl)benzamide;
4-(bis(2-fluorophenyl)(hydroxy)methyl)-N-(7-(hydroxyamino)-7-oxoheptyl)-N-methyl benzamide;
4-(bis(2-fluorophenyl)(methoxy)methyl)-N-(7-(hydroxyamino)-7-oxoheptyl)benzamide;
4-(bis(2-fluorophenyl)(methoxy)methyl)-N-(7-(hydroxyamino)-7-oxoheptyl)-N-methyl benzamide;
4-(bis(2,4-difluorophenyl)(hydroxy)methyl)-N-(7-(hydroxyamino)-7-oxoheptyl)benzamide;
4-(bis(2,4-difluorophenyl)(hydroxy)methyl)-N-(7-(hydroxyamino)-7-oxoheptyl)-N-methylbenzamide;
4-(bis(2,4-difluorophenyl)(methoxy)methyl)-N-(7-(hydroxyamino)-7-oxoheptyl)benzamide;
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4-(bis(3,5-difluorophenyl)(hydroxy)methyl)-N-(7-(hydroxyamino)-7-oxoheptyl)benzamide;
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4-(bis(3,5-difluorophenyl)(methoxy)methyl)-N-(7-(hydroxyamino)-7-oxoheptyl)-N-methylbenzamide;
4-(bis(4-fluoro-2-methylphenyl)(hydroxy)methyl)-N-(7-(hydroxyamino)-7-oxoheptyl)benzamide;
4-(bis(4-fluoro-2-methylphenyl)(methoxy)methyl)-N-(7-(hydroxyamino)-7-oxoheptyl)benzamide;
4-((4-fluorophenyl)(hydroxy)(pyridin-2-yl)methyl)-N-(7-(hydroxyamino)-7-oxoheptyl)benzamide;
4-((4-fluorophenyl)(hydroxy)(pyridin-2-yl)methyl)-N-(7-(hydroxyamino)-7-oxoheptyl)-N-methylbenzamide;
4-((4-fluorophenyl)(methoxy)(pyridin-2-yl)methyl)-N-(7-(hydroxyamino)-7-oxoheptyl)benzamide;
4-((4-fluorophenyl)(methoxy)(pyridin-2-yl)methyl)-N-(7-(hydroxyamino)-7-oxoheptyl)-N-methylbenzamide;
N-(7-(hydroxyamino)-7-oxoheptyl)-4-(hydroxydithiazol-2-ylmethyl)benzamide;
3-(bis(4-fluorophenyl)(hydroxy)methyl)-N-(7-(hydroxyamino)-7-oxoheptyl)benzamide;
3-(bis(4-fluorophenyl)(hydroxy)methyl)-N-(7-(hydroxyamino)-7-oxoheptyl)-N-methylbenzamide;
N-(7-(hydroxyamino)-7-oxoheptyl)-4-(2,2,2-trifluoro-1-(4-fluorophenyl)-1-hydroxyethyl)benzamide;
N-(7-(hydroxyamino)-7-oxoheptyl)-4-(2,2,2-trifluoro-1-(4-fluorophenyl)-1-methoxyethyl)benzamide;
4-(2-(4-fluorophenyl)tetrahydrofuran-2-yl)-N-(7-(hydroxyamino)-7-oxoheptyl)benzamide;
N-(7-(hydroxyamino)-7-oxoheptyl)-2-((2-hydroxyethyl)(phenyl)amino)pyrimidine-5-carboxamide;
N-(7-(hydroxyamino)-7-oxoheptyl)-3-(hydroxydipyridin-2-ylmethyl)benzamide;
N-(7-(hydroxyamino)-7-oxoheptyl)-3-(methoxydipyridin-2-ylmethyl)benzamide;

4-(hydroxy(4-(7-(hydroxyamino)-7-oxoheptylcarbamoyl)phenyl)(phenyl)methyl)-N,N-dimethylbenzamide;

3-(hydroxy(4-(7-(hydroxyamino)-7-oxoheptylcarbamoyl)phenyl)(phenyl)methyl)-N,N-dimethylbenzamide;

2-(bis(4-fluorophenyl)amino)-N-(7-(hydroxyamino)-7-oxoheptyl)pyrimidine-5-carboxamide;

N-(7-amino-7-oxoheptyl)-2-(diphenylamino)pyrimidine-5-carboxamide;

4-((4-(7-(hydroxyamino)-7-oxoheptylcarbamoyl)phenyl)(methoxy)(phenyl)methyl)-N,N-dimethylbenzamide;

3-((4-(7-(hydroxyamino)-7-oxoheptylcarbamoyl)phenyl)(methoxy)(phenyl)methyl)-N,N-dimethylbenzamide;

7-(2-(diphenylamino)pyrimidine-5-carboxamido)heptanoic acid;

N-(7-(hydroxyamino)-7-oxoheptyl)-4-(3-oxo-1-phenyl-1,3-dihydroisobenzofuran-1-yl)benzamide;

2-(bis(4-fluorophenyl)methylamino)-N-(7-(hydroxyamino)-7-oxoheptyl)pyrimidine-5-carboxamide;

2-(3,4-dihydroquinolin-1(2H)-yl)-N-(7-(hydroxyamino)-7-oxoheptyl)pyrimidine-5-carboxamide;

2-(3,4-dihydroisoquinolin-2(1H)-yl)-N-(7-(hydroxyamino)-7-oxoheptyl)pyrimidine-5-carboxamide;

2-((2,2-bis(4-fluorophenyl)ethyl)(2-hydroxyethyl)amino)-N-(7-(hydroxyamino)-7-oxoheptyl)pyrimidine-5-carboxamide;

2-((2-(1H-indol-3-yl)ethyl)(2-hydroxyethyl)amino)-N-(7-(hydroxyamino)-7-oxoheptyl)pyrimidine-5-carboxamide;

N-(7-(hydroxyamino)-7-oxoheptyl)-2-morpholinopyrimidine-5-carboxamide;

2-((2S,6R)-2,6-dimethylmorpholino)-N-(7-(hydroxyamino)-7-oxoheptyl)pyrimidine-5-carboxamide;

N-(7-(hydroxyamino)-7-oxoheptyl)-2-(piperazin-1-yl)pyrimidine-5-carboxamide;

2-(4-benzylpiperazin-1-yl)-N-(7-(hydroxyamino)-7-oxoheptyl)pyrimidine-5-carboxamide;

N-(7-(hydroxyamino)-7-oxoheptyl)-2-(4-(2-hydroxyethyl)piperazin-1-yl)pyrimidine-5-carboxamide;

~~2-(6,7-dimethoxy-3,4-dihydroisoquinolin-2(1H)-yl)-N-(7-(hydroxyamino)-7-oxoheptyl)pyrimidine-5-carboxamide;~~

~~N-(7-(hydroxyamino)-7-oxoheptyl)-2-(3-(trifluoromethyl)-5,6-dihydro-[1,2,4]triazolo[4,3-a]pyrazin-7(8H)-yl)pyrimidine-5-carboxamide;~~

~~N-(7-(hydroxyamino)-7-oxoheptyl)-2-(4-phenylpiperazin-1-yl)pyrimidine-5-carboxamide;~~

~~N-(7-(hydroxyamino)-7-oxoheptyl)-2-(4-(4-methoxyphenyl)piperazin-1-yl)pyrimidine-5-carboxamide;~~

~~N-(7-(hydroxyamino)-7-oxoheptyl)-2-(4-(2-methoxyethyl)piperazin-1-yl)pyrimidine-5-carboxamide;~~

~~N-(7-(hydroxyamino)-7-oxoheptyl)-2-(4-(4-(trifluoromethyl)pyrimidin-2-yl)piperazin-1-yl)pyrimidine-5-carboxamide;~~

~~N-(7-(hydroxyamino)-7-oxoheptyl)-2-(2-(hydroxymethyl)morpholino)pyrimidine-5-carboxamide;~~

~~(R)-N-(7-(hydroxyamino)-7-oxoheptyl)-2-(3-hydroxypiperidin-1-yl)pyrimidine-5-carboxamide;~~

~~2-(4-carbamoylpiperidin-1-yl)-N-(7-(hydroxyamino)-7-oxoheptyl)pyrimidine-5-carboxamide;~~

~~2-(4-hydroxy-4-phenylpiperidin-1-yl)-N-(7-(hydroxyamino)-7-oxoheptyl)pyrimidine-5-carboxamide;~~

~~2-(4-(4-chlorophenyl)-4-hydroxypiperidin-1-yl)-N-(7-(hydroxyamino)-7-oxoheptyl)pyrimidine-5-carboxamide;~~

~~(R)-2-(3-(dimethylamino)pyrrolidin-1-yl)-N-(7-(hydroxyamino)-7-oxoheptyl)pyrimidine-5-carboxamide;~~

~~(S)-N-(7-(hydroxyamino)-7-oxoheptyl)-2-(2-(hydroxymethyl)pyrrolidin-1-yl)pyrimidine-5-carboxamide;~~

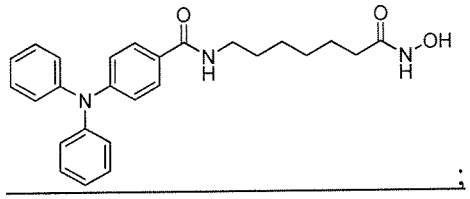
~~N-(7-(hydroxyamino)-7-oxoheptyl)-2-(4-methyl-2-phenylpiperazin-1-yl)pyrimidine-5-carboxamide;~~

~~2-(4-(4-fluorophenyl)piperazin-1-yl)-N-(7-(hydroxyamino)-7-oxoheptyl)pyrimidine-5-carboxamide;~~

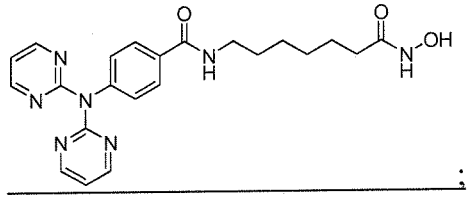
~~2-(1,4-diazepan-1-yl)-N-(7-(hydroxyamino)-7-oxoheptyl)pyrimidine-5-carboxamide;~~

~~N-(7-(hydroxyamino)-7-oxoheptyl)-2-(piperidin-1-yl)pyrimidine-5-carboxamide; and~~

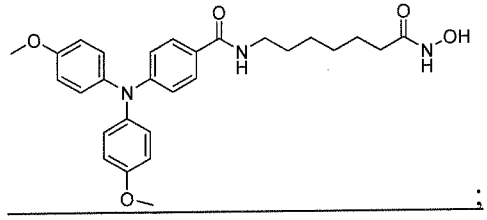
~~N-(7-(hydroxyamino)-7-oxoheptyl)-2-(4-methylpiperazin-1-yl)pyrimidine-5-carboxamide.~~



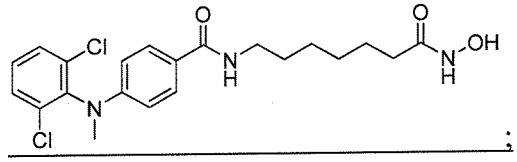
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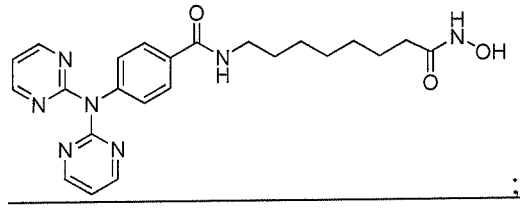
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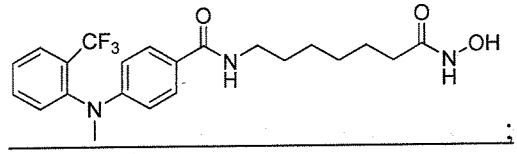
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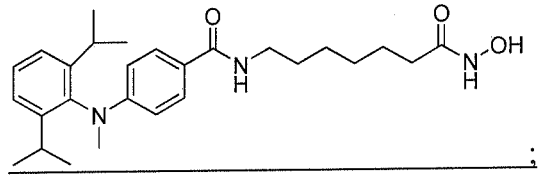
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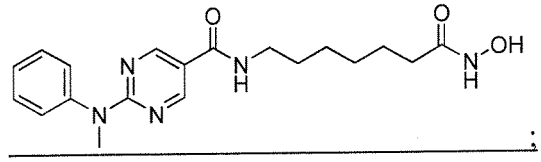
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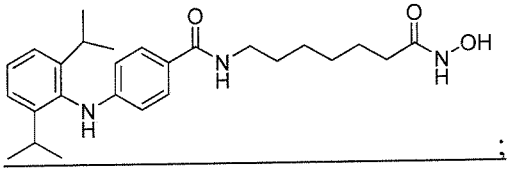
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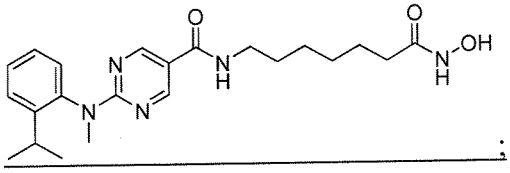
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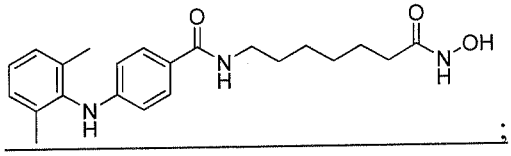
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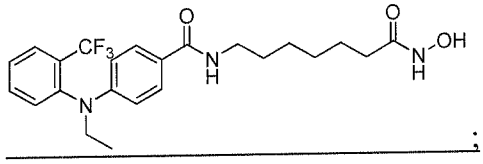
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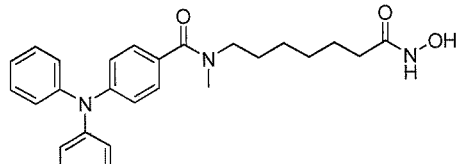
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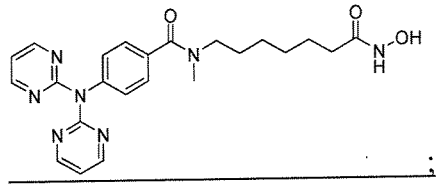
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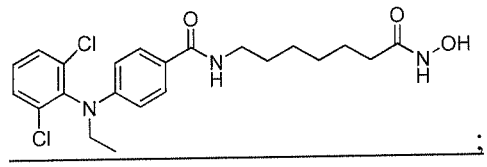
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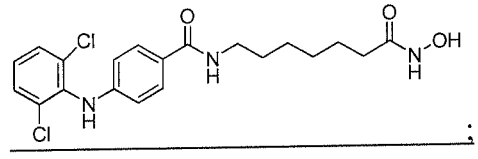
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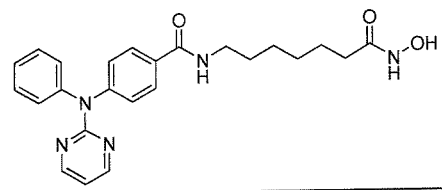
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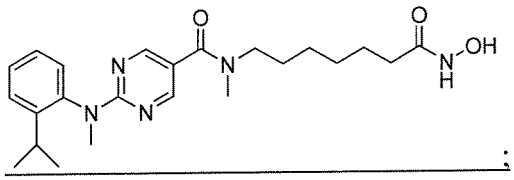
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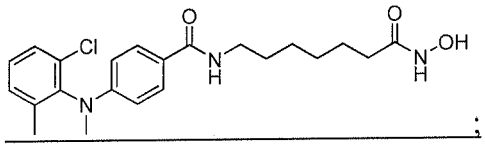


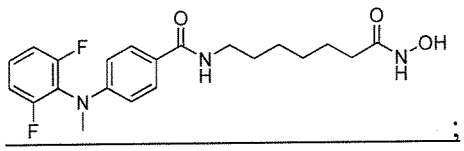
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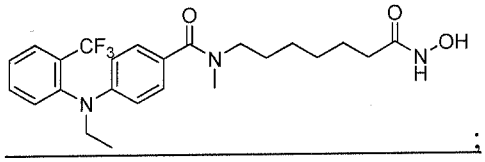


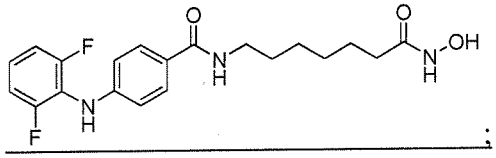
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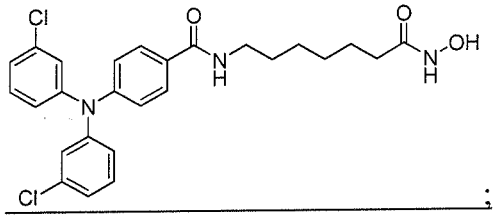

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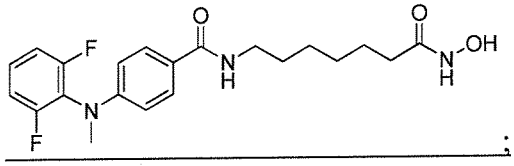

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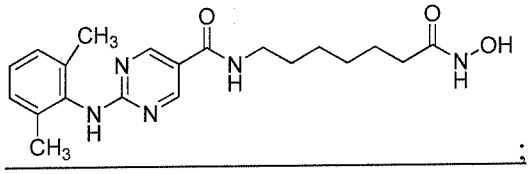

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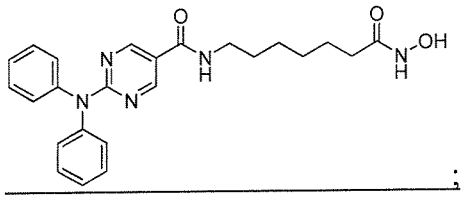

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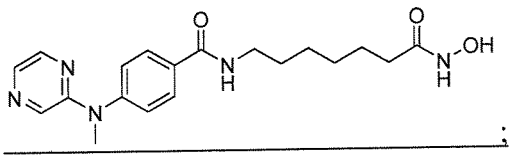

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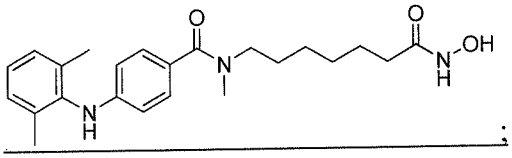

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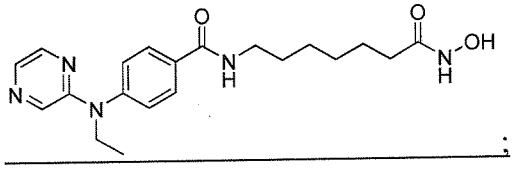

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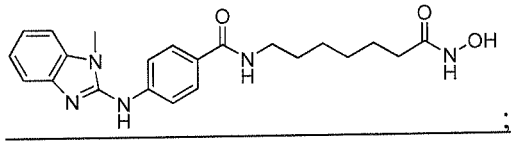

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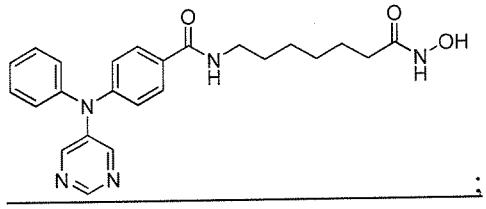

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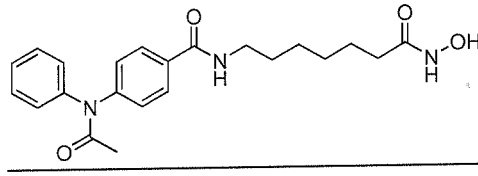

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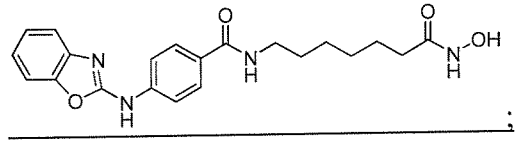

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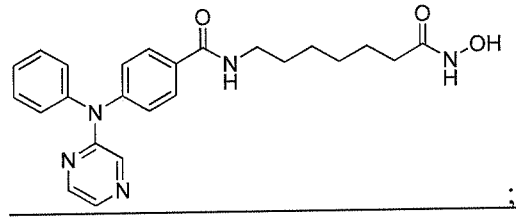

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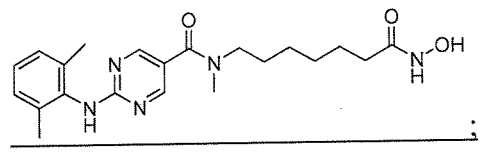

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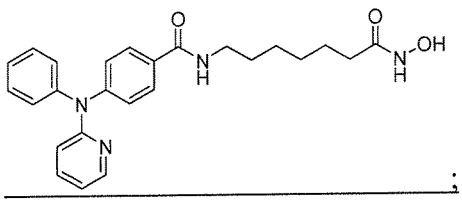

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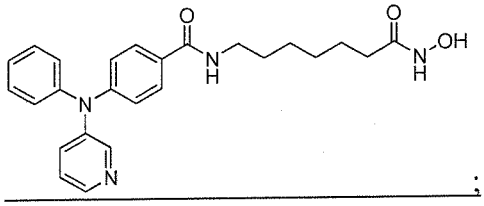

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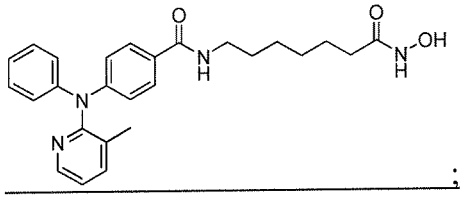

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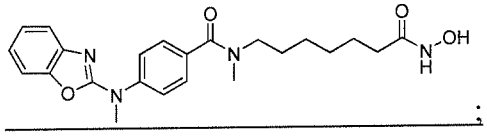
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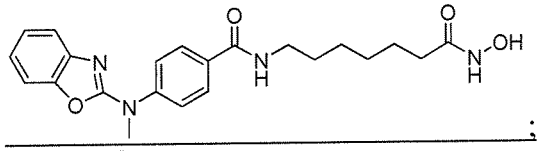
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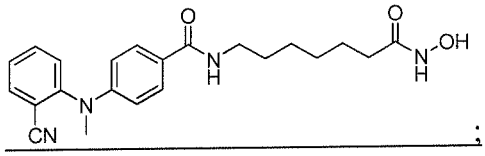
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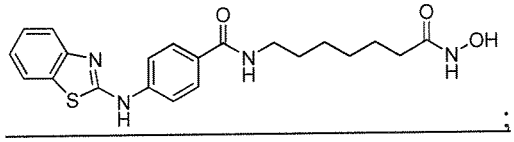
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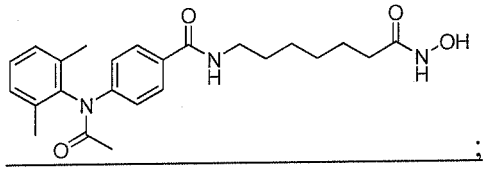
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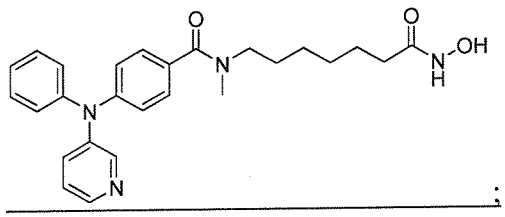
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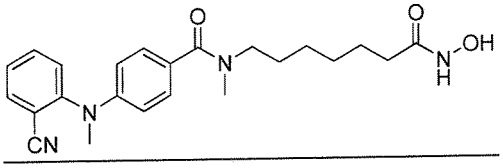
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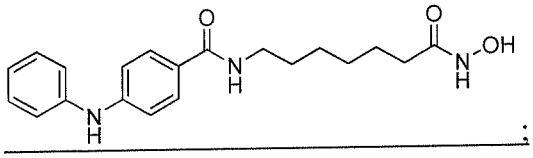


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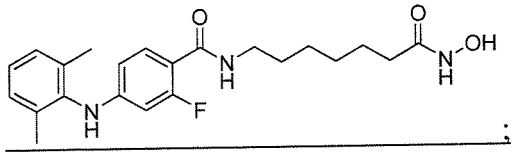


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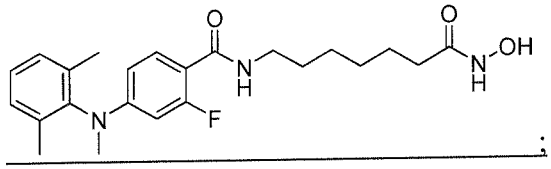




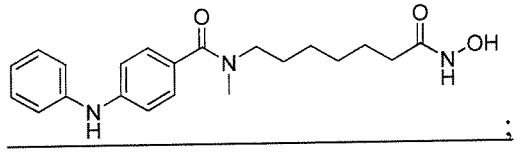
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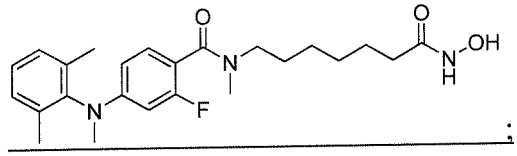
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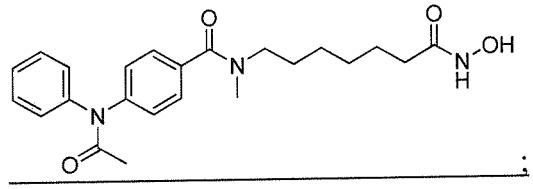
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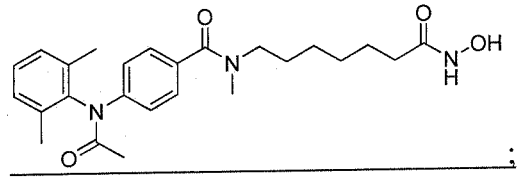
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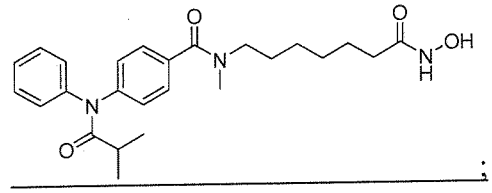
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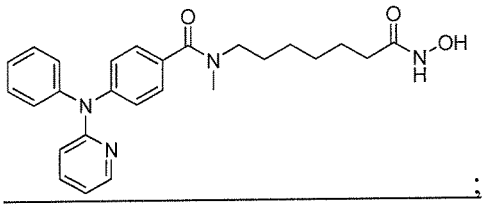
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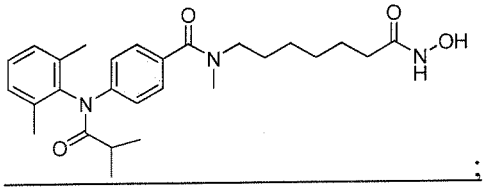


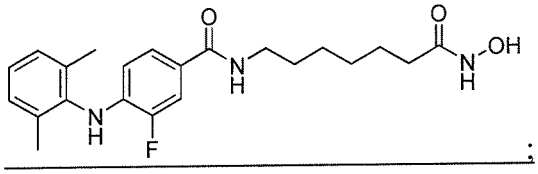
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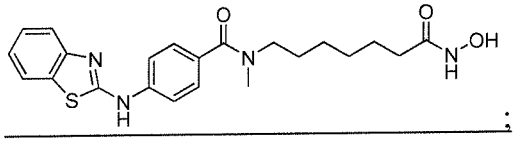


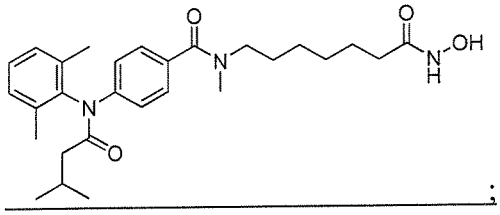
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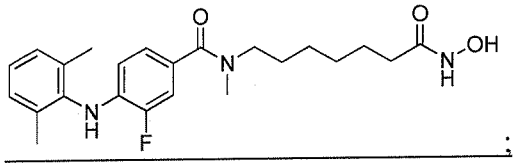

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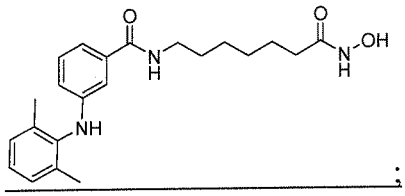

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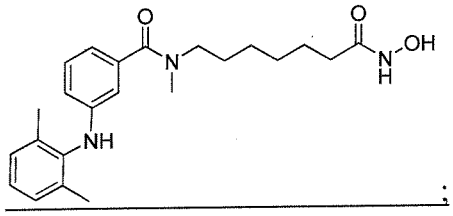

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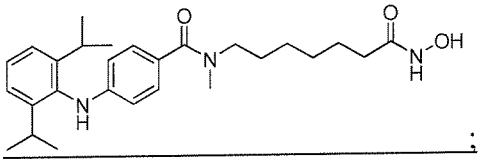

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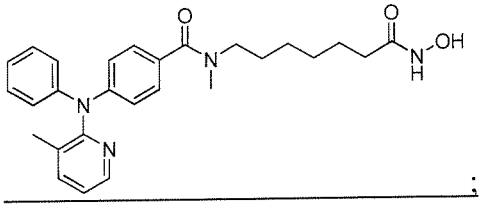

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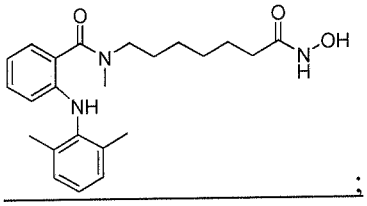

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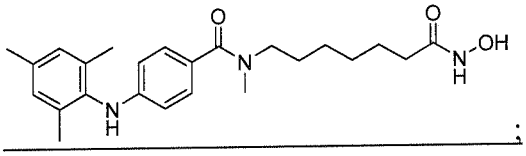

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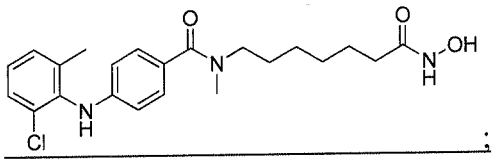

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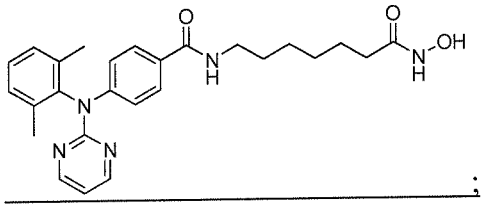

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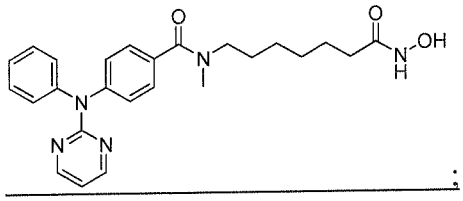

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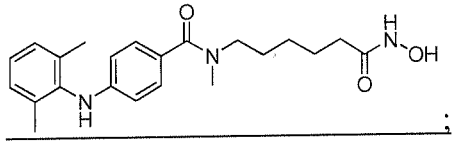

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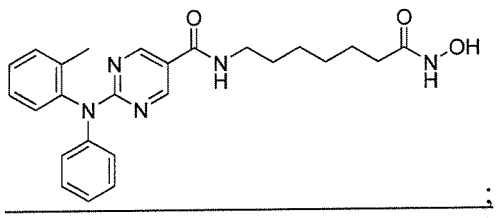

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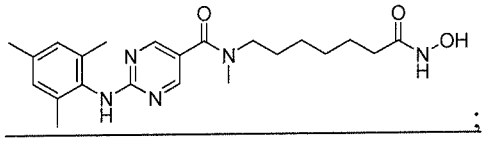

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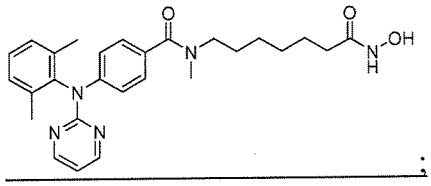

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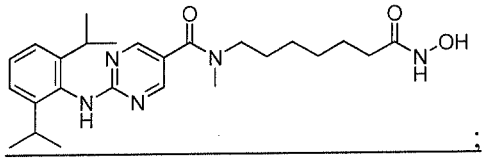

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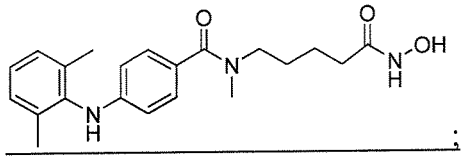

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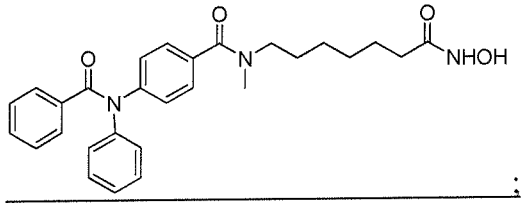


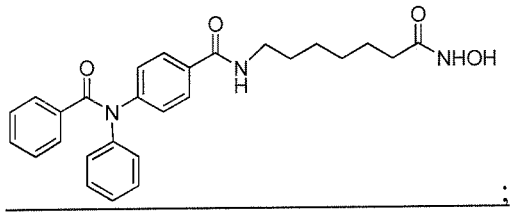


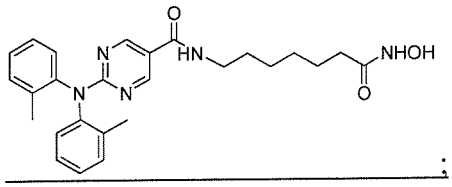




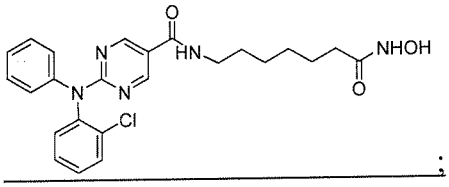




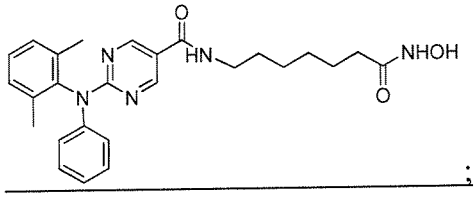




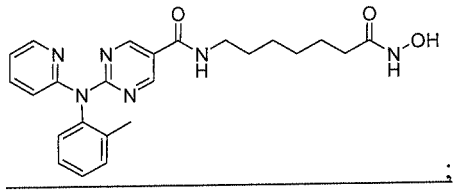
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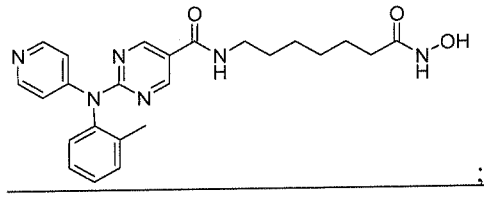
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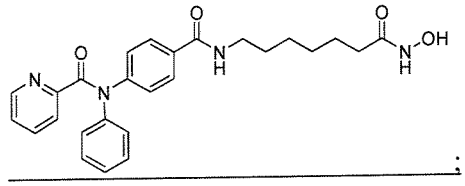
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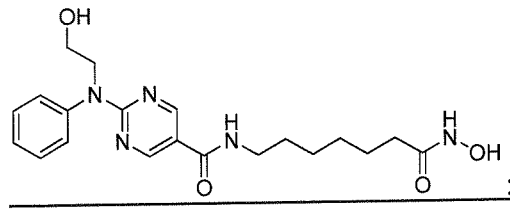
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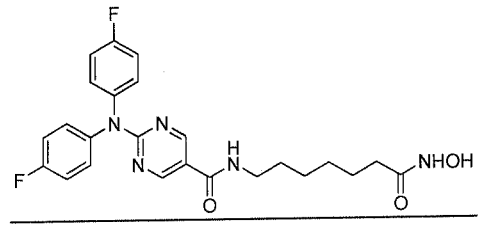
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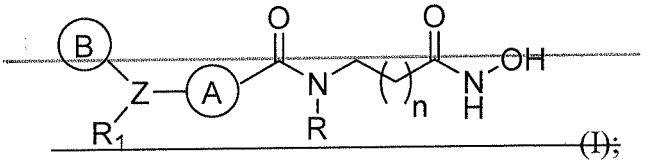
; and



or pharmaceutically acceptable salts thereof.

~~42~~20. A pharmaceutical composition comprising a compound of any one of claims 1 to 19, or a pharmaceutically acceptable ~~ester,~~ salt~~, or prodrug~~ thereof, together with a pharmaceutically acceptable carrier.

~~43~~21. A compound of ~~formula I:~~ any one of claims 1 to 19,



~~(I);~~

or a pharmaceutically acceptable salt~~, ester or prodrug~~ thereof,

~~wherein,~~

~~Z is N or CR*, wherein R* is an optionally substituted alkyl, an optionally substituted acyl, an optionally substituted aryl or an optionally substituted heteroaryl;~~

~~ring A is an optionally substituted aryl or an optionally substituted heteroaryl;~~

~~ring B is an optionally substituted aryl or an optionally substituted heteroaryl;~~

~~R_1 is (i) H, alkyl, haloalkyl, alkenyl, aryl, arylalkyl, heteroaryl, heterocyclic, carbocyclic, C(O) R_2, C(O)O R_2, or $S(O)_p$, each of which may be optionally substituted; or (ii) when Z is CR*, R_1 may be optionally substituted branched alkyl, OR_3, or $N(R_3)(R_3)$, CH_2CH_2OH, OCH_2CH_2OH, SH, or thio alkoxy;~~

~~or ring B and R_1 may together with the atom to which each is attached, form an optionally substituted heterocyclic, or an optionally substituted heteroaryl;~~

~~or R* and R_1 together with the atom to which each is attached, may form an optionally substituted carbocyclic, optionally substituted heterocyclic, optionally substituted aryl or optionally substituted heteroaryl ring;~~

~~R is H or an optionally substituted alkyl; or R and ring A may be joined to form a fused bicyclic ring which may be optionally substituted;~~

~~each R_2 is independently alkyl, cycloalkyl, heterocycloalkyl, aryl, or heteroaryl, each of which is optionally substituted;~~

~~each R_3 is independently alkyl, cycloalkyl, heterocycloalkyl, aryl, or heteroaryl, each of which is optionally substituted;~~

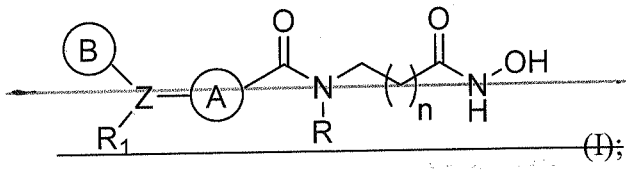
~~n is 4, 5, 6, 7 or 8; and~~

~~p is 0, 1, or 2;~~ for use in a method of selectively inhibiting HDAC6 over other HDACs in a subject, wherein the compound is for administering to the subject.

~~44~~22. Compound for the~~The method~~ use of claim ~~43~~ 21, wherein the compound ~~of formula I~~ has a selectivity for HDAC6 of 5 to 1000 fold.

~~45~~23. Compound for the ~~The method~~use of claim ~~43~~ 21, wherein the compound ~~of formula I~~ has a selectivity for HDAC6 when tested in a HDAC enzyme assay of about 5 to 1000 fold.

~~46~~24. A compound of any one of claims 1 to 19, ~~formula I:~~



~~(I);~~

or a pharmaceutically acceptable salt~~, ester or prodrug~~ thereof,

~~wherein,~~

~~Z is N or CR*, wherein R* is an optionally substituted alkyl, an optionally substituted acyl, an optionally substituted aryl or an optionally substituted heteroaryl;~~

~~ring A is an optionally substituted aryl or an optionally substituted heteroaryl;~~

~~ring B is an optionally substituted aryl or an optionally substituted heteroaryl;~~

~~R_1 is (i) H, alkyl, haloalkyl, alkenyl, aryl, arylalkyl, heteroaryl, heterocyclic, carbocyclic, C(O)-R_2, C(O)O-R_2, or S(O)$_p$, each of which may be optionally substituted; or (ii) when Z is CR*, R_1 may be optionally substituted branched alkyl, OR_3, or N(R_3)(R_3), CH_2CH_2OH, OCH_2CH_2OH, SH, or thio alkoxy;~~

~~or ring B and R_1 may together with the atom to which each is attached, form an optionally substituted heterocyclic, or an optionally substituted heteroaryl;~~

~~or R* and R_1 together with the atom to which each is attached, may form an optionally substituted carbocyclic, optionally substituted heterocyclic, optionally substituted aryl or optionally substituted heteroaryl ring;~~

~~R is H or an optionally substituted alkyl; or R and ring A may be joined to form a fused bicyclic ring which may be optionally substituted;~~

~~each R_2 is independently alkyl, cycloalkyl, heterocycloalkyl, aryl, or heteroaryl, each of which is optionally substituted;~~

~~each R_3 is independently alkyl, cycloalkyl, heterocycloalkyl, aryl, or heteroaryl, each of which is optionally substituted;~~

~~n is 4, 5, 6, 7 or 8; and~~

~~p is 0, 1, or 2;~~ for use in a method of treating a disease mediated by HDAC-6 in a subject, wherein the compound is for administering to the subject.

~~47~~25. Compound for t~~T~~he ~~method~~use of claim ~~46~~ 24, wherein the disease is cancer or a proliferation disease.

~~48~~26. Compound for t~~T~~he ~~method~~use of claim ~~47~~ 25, wherein the disease is lung cancer, colon cancer, breast cancer, prostate cancer, liver cancer, pancreas cancer, brain cancer, kidney cancer, ovarian cancer, stomach cancer, skin cancer, bone cancer, gastric cancer, breast cancer, pancreatic cancer, glioma, gliobastoma, hepatocellular carcinoma, papillary renal carcinoma, head and neck squamous cell carcinoma, leukemias, lymphomas, myelomas, and solid tumors.

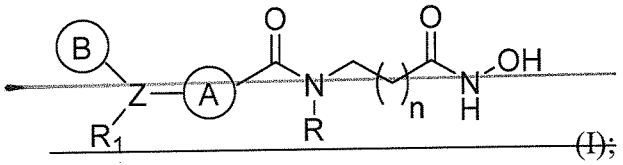
~~49~~27. Compound for t~~T~~he ~~method~~use of claim ~~47~~ 25, wherein the cancer is multiple myeloma.

~~50~~28. Compound for t~~T~~he ~~method~~use of claim ~~46~~ 24, wherein the disease is Wilson's disease, spinocerebellar ataxia, prion disease, Parkinson's disease, Huntington's disease, amytrophic lateral sclerosis, amyloidosis, Alzheimer's disease, Alexander's disease, alcoholic liver disease, cystic fibrosis, Pick's Disease, spinal muscular dystrophy or Lewy body dementia.

~~51~~29. Compound for t~~T~~he ~~method~~use of claim ~~46~~24, wherein the disease is rheumatoid arthritis, osteoarthritis; rheumatoid spondylitis; psoriasis; post ischemic perfusion injury; inflammatory bowel disease; chronic inflammatory pulmonary disease, eczema, asthma, psoriasis, ischemia/reperfusion injury, ulcerative colitis, acute respiratory distress

syndrome, psoriatic arthritis, infectious arthritis, progressive chronic arthritis, deforming arthritis, osteoarthritis, traumatic arthritis, gouty arthritis, Reiter's syndrome, polychondritis, acute synovitis and spondylitis, glomerulonephritis, hemolytic anemia, aplasic anemia, idiopathic thrombocytopenia, neutropenia, ulcerative colitis, Crohn's disease, host versus graft disease, allograft rejection, chronic thyroiditis, Graves' disease, schleroderma, diabetes, active hepatitis, primary binary cirrhosis, myasthenia gravis, multiple sclerosis (MS), systemic lupus erythematosus, atopic dermatitis, contact dermatitis, skin sunburns, chronic renal insufficiency, Stevens-Johnson syndrome, idiopathic sprue, sarcoidosis, Guillain-Barre syndrome, uveitis, conjunctivitis, keratoconjunctivitis, otitis media, periodontal disease, pulmonary interstitial fibrosis, asthma, bronchitis, rhinitis, sinusitis, pneumoconiosis, pulmonary insufficiency syndrome, pulmonary emphysema, pulmonary fibrosis, silicosis, or chronic inflammatory pulmonary disease.

~~52~~30. A compound of ~~formula I:~~ any one of claims 1 to 19, or a pharmaceutically acceptable salt thereof



~~(I);~~

~~or a pharmaceutically acceptable salt, ester or prodrug thereof,~~

~~wherein,~~

~~Z is N or CR*, wherein R* is an optionally substituted alkyl, an optionally substituted acyl, an optionally substituted aryl or an optionally substituted heteroaryl;~~

~~ring A is an optionally substituted aryl or an optionally substituted heteroaryl;~~

~~ring B is an optionally substituted aryl or an optionally substituted heteroaryl;~~

~~R_1 is (i) H, alkyl, haloalkyl, alkenyl, aryl, arylalkyl, heteroaryl, heterocyclic, carbocyclic, C(O)-R_2, C(O)O-R_2, or S(O)$_p$, each of which may be optionally substituted; or (ii) when Z is CR*, R_1 may be optionally substituted branched alkyl, OR_3, or N(R_3)(R_3), CH_2CH_2OH, OCH_2CH_2OH, SH, or thio alkoxy;~~

~~or ring B and R_1 may together with the atom to which each is attached, form an optionally substituted heterocyclic, or an optionally substituted heteroaryl;~~

~~or R* and R_1 together with the atom to which each is attached, may form an optionally substituted carbocyclic, optionally substituted heterocyclic, optionally substituted aryl or optionally substituted heteroaryl ring;~~

~~R is H or an optionally substituted alkyl; or R and ring A may be joined to form a fused bicyclic ring which may be optionally substituted;~~

~~each R_2 is independently alkyl, cycloalkyl, heterocycloalkyl, aryl, or heteroaryl, each of which is optionally substituted;~~

~~each R_3 is independently alkyl, cycloalkyl, heterocycloalkyl, aryl, or heteroaryl, each of which is optionally substituted;~~

~~n is 4, 5, 6, 7 or 8; and~~

~~p is 0, 1, or 2;~~

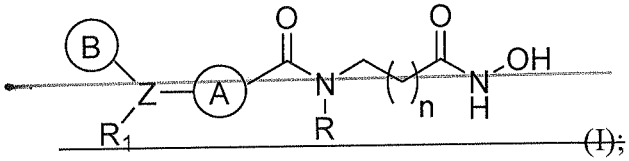
for use in a method of treating a subject suffering from or susceptible to multiple myeloma, wherein the compound is for administration in a therapeutically effective amount to thereby treat the subject in need thereof.

~~53. The method of claim 46, wherein the compound is for co-administering with one or more of a chemotherapeutic agent, radiation agent, hormonal agent, biological agent or an anti-inflammatory agent to the subject.~~

~~54. The method of claim 53, wherein the chemotherapeutic agent is tamoxifen, trastuzamab, raloxifene, doxorubicin, fluorouracil/5-fu, pamidronate disodium, anastrozole, exemestane, cyclophosphamide, epirubicin, letrozole, toremifene, fulvestrant, fluoxymesterone, trastuzumab, methotrexate, megastrol acetate, docetaxel, paclitaxel, testolactone, aziridine, vinblastine, capecitabine, goselerin acetate, zoledronic acid, taxol, vinblastine, or vincristine.~~

~~55~~31. Compound for t~~The method~~ use of any one of claims ~~46-54~~24 to 30, wherein the subject is human.

~~56. A kit comprising a compound capable of inhibiting HDAC activity selected from one or more compounds of formula I:~~



(I);

or a pharmaceutically acceptable salt, ester or prodrug thereof,

wherein,

Z is N or CR*, wherein R* is an optionally substituted alkyl, an optionally substituted acyl, an optionally substituted aryl or an optionally substituted heteroaryl;

ring A is an optionally substituted aryl or an optionally substituted heteroaryl;

ring B is an optionally substituted aryl or an optionally substituted heteroaryl;

R_1 is (i) H, alkyl, haloalkyl, alkenyl, aryl, arylalkyl, heteroaryl, heterocyclic, carbocyclic, C(O) R_2, C(O)O R_2, or $S(O)_p$, each of which may be optionally substituted; or (ii) when Z is CR*, R_1 may be optionally substituted branched alkyl, OR_3, or $N(R_3)(R_3)$, CH_2CH_2OH, OCH_2CH_2OH, SH, or thio alkoxy;

or ring B and R_1 may together with the atom to which each is attached, form an optionally substituted heterocyclic, or an optionally substituted heteroaryl;

or R* and R_1 together with the atom to which each is attached, may form an optionally substituted carbocyclic, optionally substituted heterocyclic, optionally substituted aryl or optionally substituted heteroaryl ring;

R is H or an optionally substituted alkyl; or R and ring A may be joined to form a fused bicyclic ring which may be optionally substituted;

each R_2 is independently alkyl, cycloalkyl, heterocycloalkyl, aryl, or heteroaryl, each of which is optionally substituted;

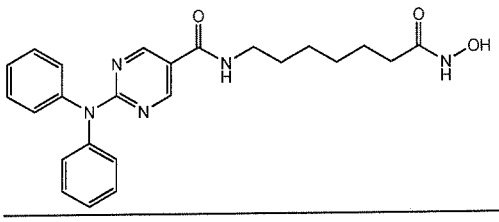
each R_3 is independently alkyl, cycloalkyl, heterocycloalkyl, aryl, or heteroaryl, each of which is optionally substituted;

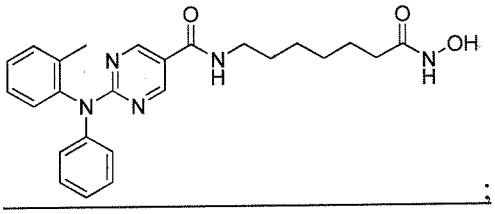
n is 4, 5, 6, 7 or 8; and

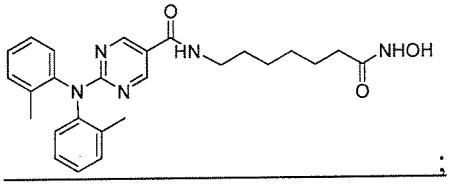
p is 0, 1, or 2;

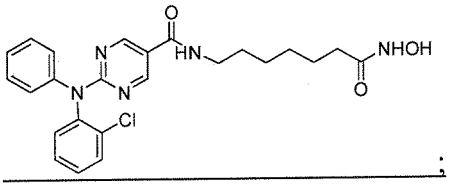
and instructions for use in treating multiple myeloma.

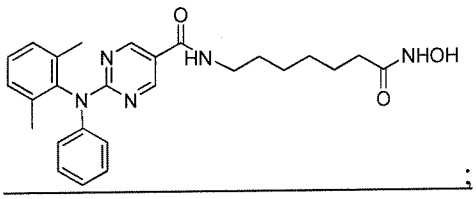
32. A compound of claim 19, wherein the compound is selected from:

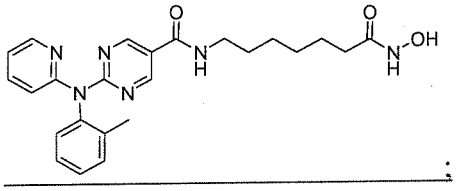

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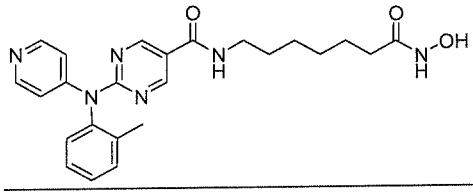

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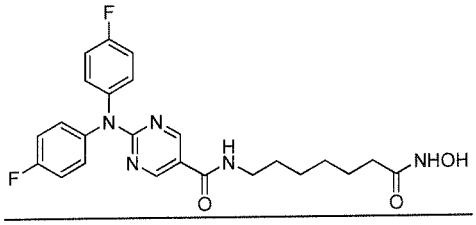

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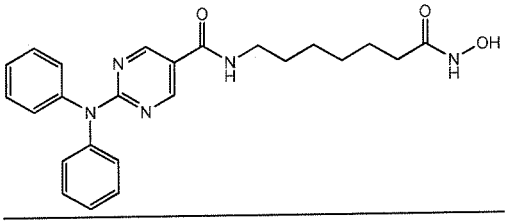

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; and



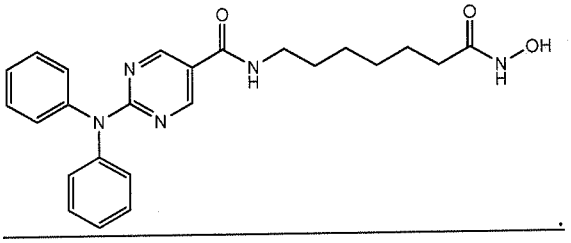
or a pharmaceutically acceptable salt thereof.

33. The compound:



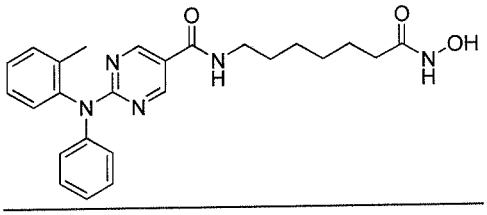
or a pharmaceutically acceptable salt thereof.

34. The compound:



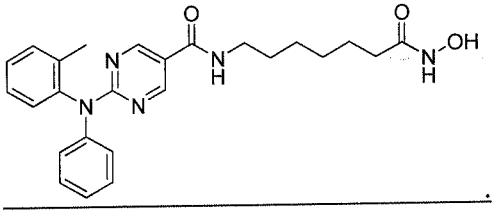
.

35. The compound:



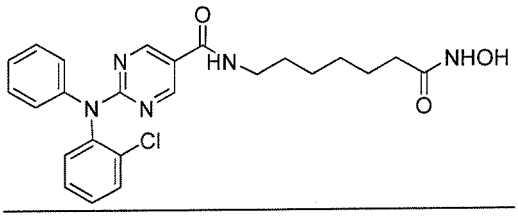
or a pharmaceutically acceptable salt thereof.

36. The compound:



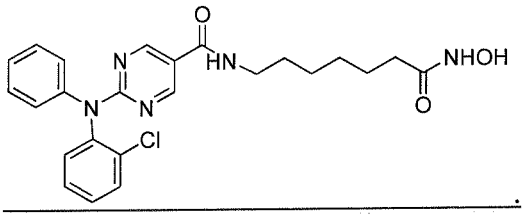
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37. The compound:



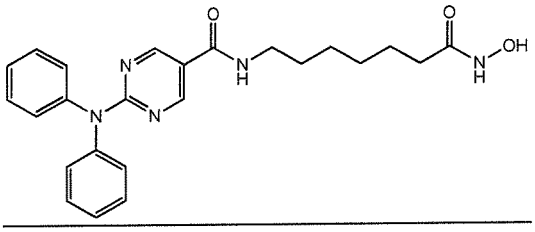
or a pharmaceutically acceptable salt thereof.

38. The compound:



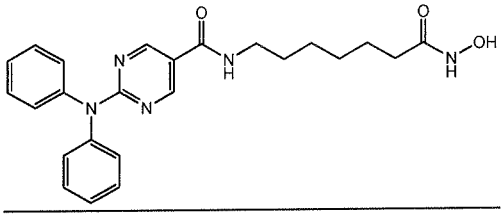
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39. A pharmaceutical composition comprising the compound



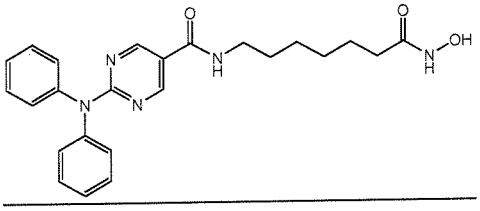
or a pharmaceutically acceptable salt thereof, together with a pharmaceutically acceptable carrier.

40. A pharmaceutical composition comprising the compound



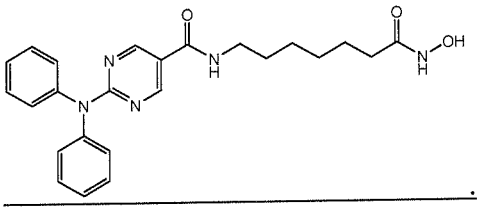
together with a pharmaceutically acceptable carrier.

41. The compound:



or a pharmaceutically acceptable salt thereof, for use in a method of treating multiple myeloma in a subject, wherein the compound is for administering to the subject.

42. The compound:

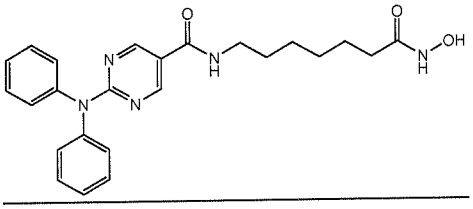


or a pharmaceutically acceptable salt thereof, for use in a method of treating multiple myeloma in a subject, wherein the compound is for administering to the subject

43. Use of a compound according to any one of claims 1 to 19 or a pharmaceutically acceptable salt thereof for the preparation of a composition for selectively inhibiting HDAC6 over other HDACs in a subject, wherein the composition is for administering to the subject.

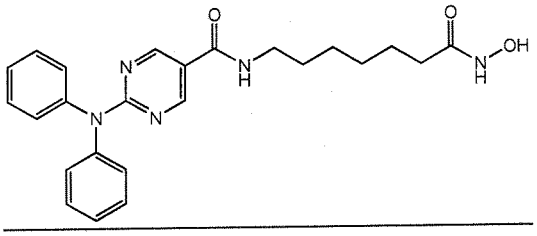
44. Use of a compound according to any one of claims 1 to 19 or a pharmaceutically acceptable salt thereof, for the preparation of a pharmaceutical composition for treating a subject suffering from or susceptible to multiple myeloma.

45. Use of the compound:



or a pharmaceutically acceptable salt thereof, for the preparation of a pharmaceutical composition for treating a subject suffering from or susceptible to multiple myeloma.

46. Use of the compound:



or a pharmaceutically acceptable salt thereof, for the preparation of a pharmaceutical composition for treating a subject suffering from or susceptible to multiple myeloma.