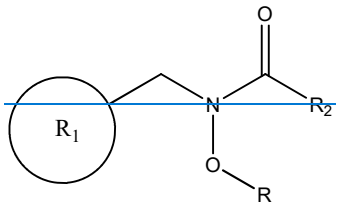
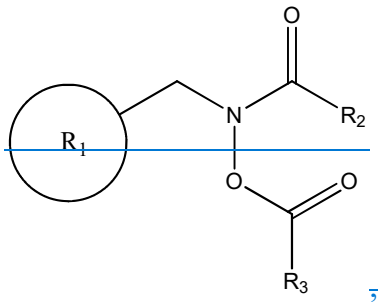
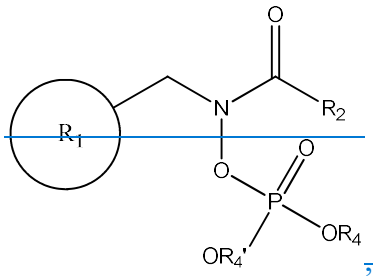
WHAT IS CLAIMED IS:

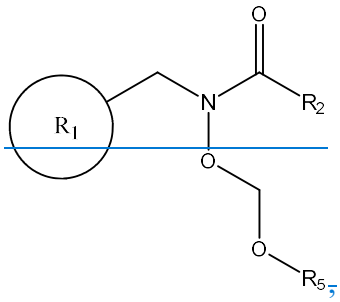
1. A prodrug compound of an inhibitor of necrosis, ferroptosis, human RIP1, or related indications, of compound of structure:



wherein R is $CO(R3)$, $PO(OR4)_2$ or $COR5$:







wherein:

R_1 is C5 or C6 aryl;

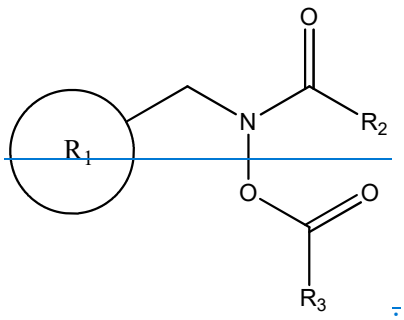
R_2 is is substituted or unsubstituted, 0-3 heteroatom hydrocarbyl or substituted heteroatom;

R_3 is substituted or unsubstituted, 0-3 heteroatom hydrocarbyl or substituted heteroatom;

R_4 and R_4 are independently H or CH_3;

R_5 is substituted or unsubstituted, 0-3 heteroatom hydrocarbyl or substituted heteroatom; or a pharmaceutically acceptable salt, hydrate or stereoisomer of the compound.

2. The compound of claim 1 of structure:



3. The compound of claim 1 or 2, wherein:

R_1 is: (a) substituted or unsubstituted phenyl;

(b) substituted or unsubstituted 2-, 3- or 4-pyridine;

(c) substituted or unsubstituted pyrimidine; or

(d) substituted or unsubstituted thiophene.

~~4. The compound of claim 1, 2 or 3, wherein:~~

~~R_1 is halide-substituted or unsubstituted phenyl.~~

~~5. The compounds of claims 1, 2, 3 or 4, wherein:~~

~~R_1 is 3,5 diflorophenyl.~~

~~6. The compound of claim 1, 2, 3, 4 or 5 wherein:~~

~~R_2 is 1,1-dimethylpropyl, 1,1-dimethylprop-2-enyl, or 1,1-dimethylprop-2-ynyl, each optionally fluorinated with 1-4 F atoms; a pharmaceutically acceptable salt,~~

~~7. The compound of claim 1, 2, 3, 4, 5 or 6 wherein:~~

~~R_3 is OEt, pyridine, OEtOMe, or OEtOEtOMe.~~

~~8. The compound of claim 1, 2, 3, 4, 5, 6 or 7 wherein:~~

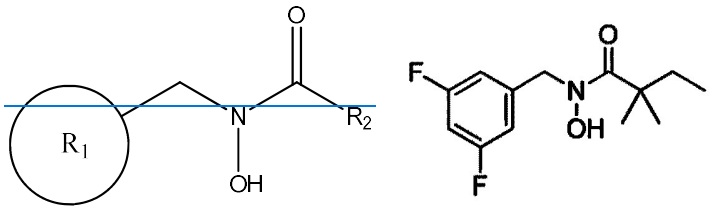
~~R_5 is $COC(CH_3)_3$.~~

~~9. The compound of claim 1, 2, 3, 4, 5, 6, 7 or 8 comprising one or more deuterium isotopes.~~

~~10. The compound of claim 1, 2, 3, 4, 5, 6, 7, 8 or 9 wherein:~~

~~R_2 is 1,1-dimethylpropyl comprising 2 or 4 deuterium isotopes.~~

[Claim ~~1~~1]. An amide compound ~~that is an inhibitor of necrosis, ferroptosis, human RIP1, or related indications, or prodrug, or sulfonamide therof, the compound~~ of structure:



~~wherein:~~

~~R_1 is halide-substituted or unsubstituted phenyl;~~

~~R_2 is 1,1-dimethylpropyl, 1,1-dimethylprop-2-enyl, or 1,1-dimethylprop-2-ynyl, each optionally fluorinated with 1-4 F atoms;~~or a pharmaceutically acceptable salt, hydrate, ~~sulfonamide,~~ or stereoisomer ~~of the compound~~thereof.

~~12. The compound of claim 11, wherein:~~

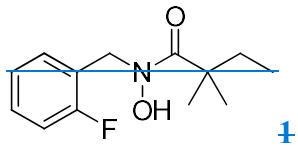
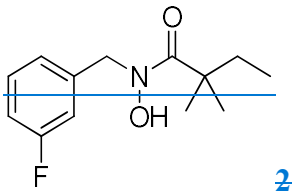
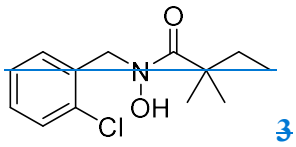
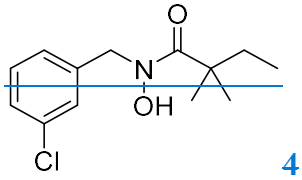
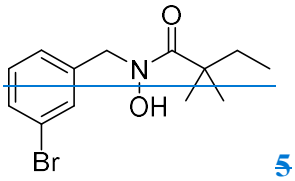
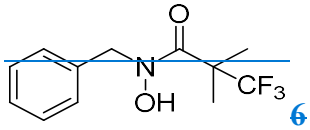
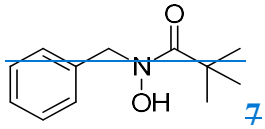
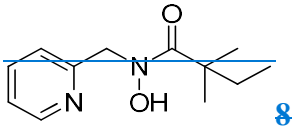
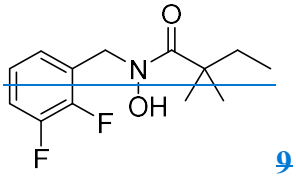
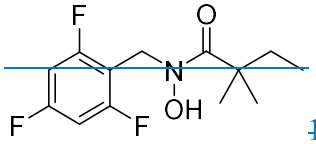
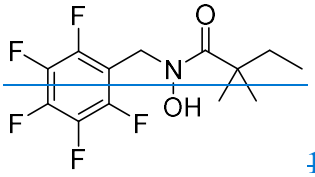
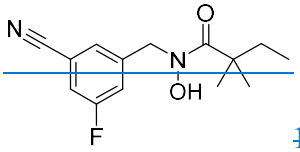
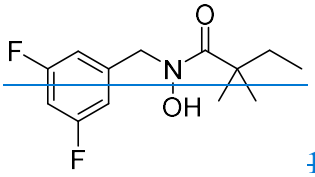
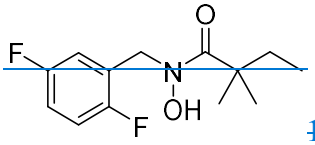
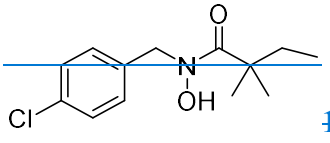
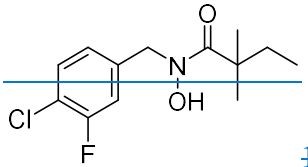
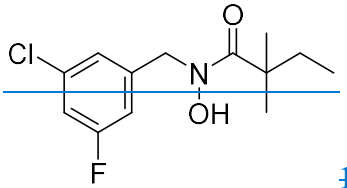
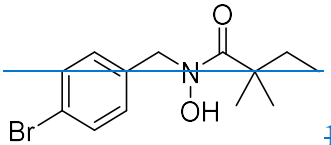
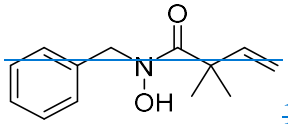
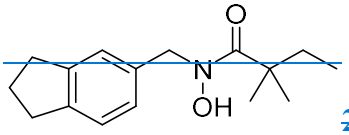
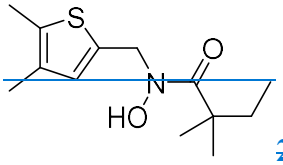
~~R_1 is halide-substituted or unsubstituted phenyl.~~

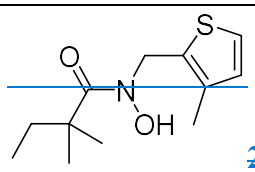
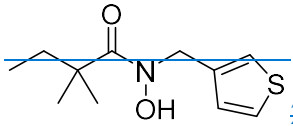
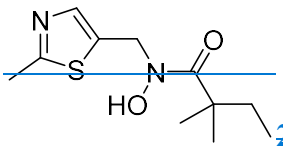
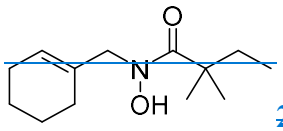
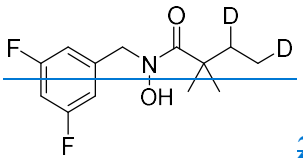
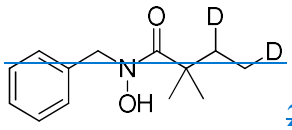
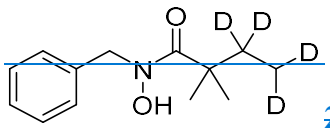
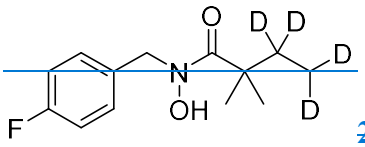
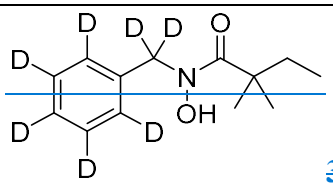
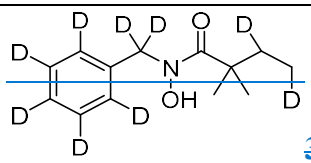
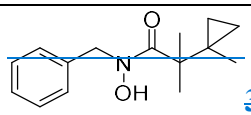
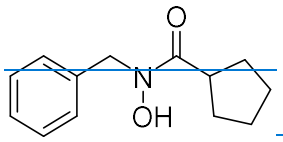
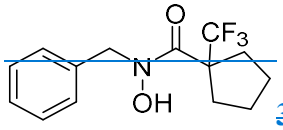
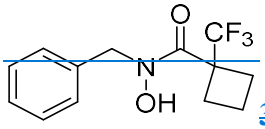
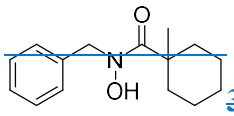
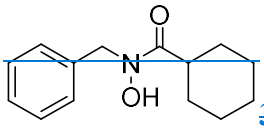
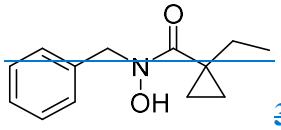
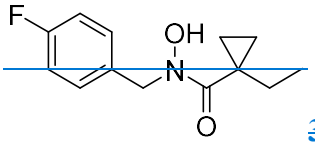
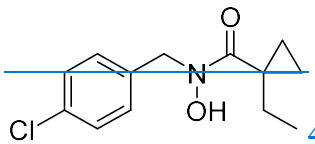
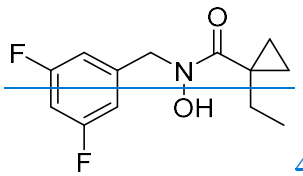
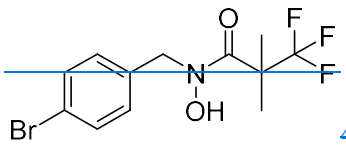
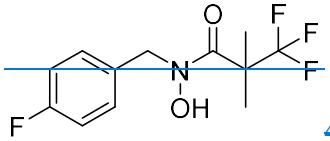
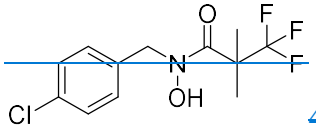
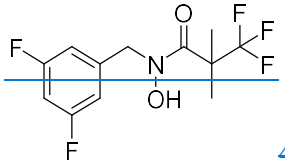
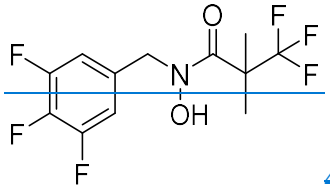
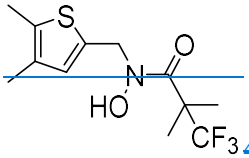
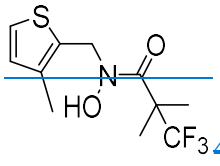
~~13. The compound of claim 11 or 12 comprising one or more deuterium isotopes.~~

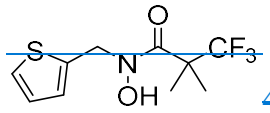
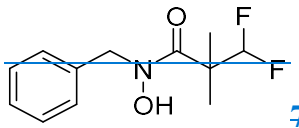
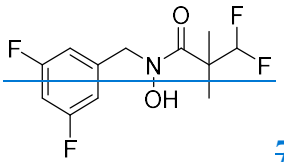
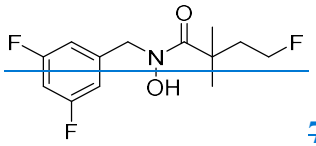
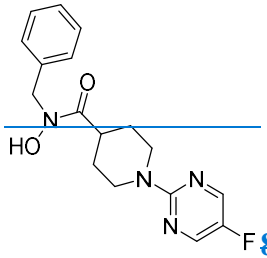
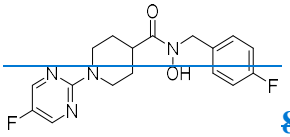
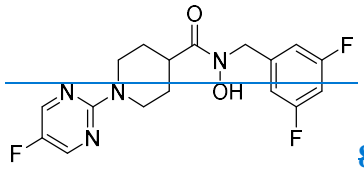
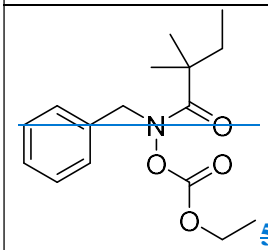
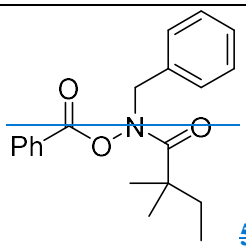
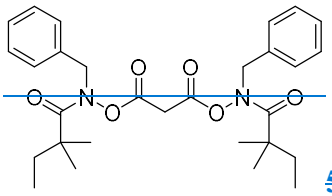
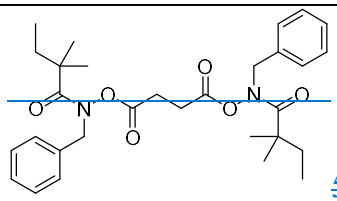
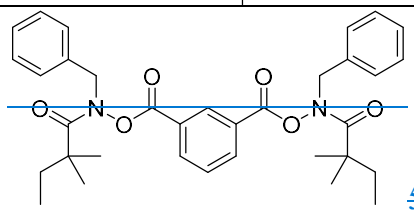
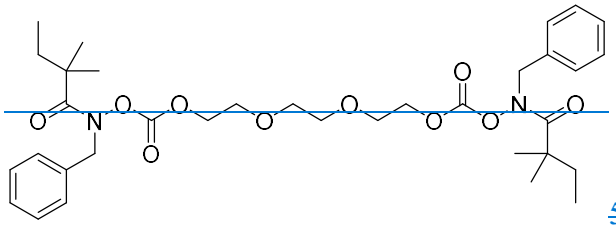
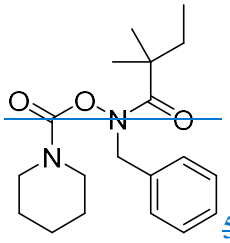
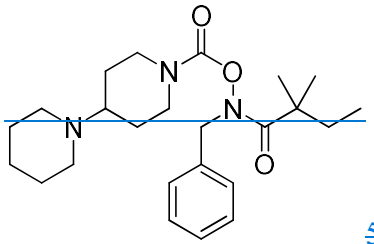
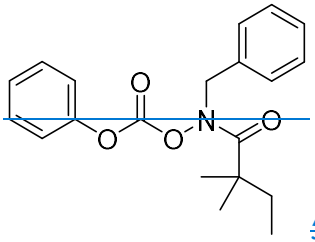
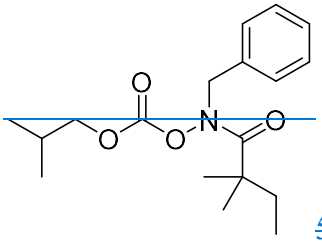
~~14. The compound of claim 11, 12 or 13 wherein:~~

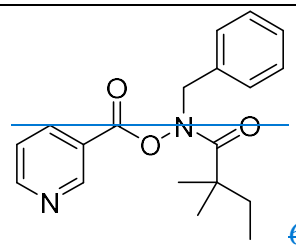
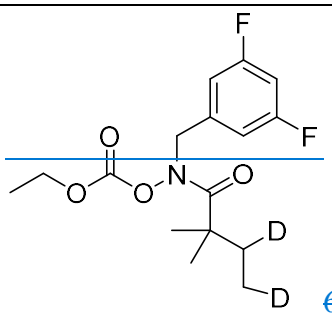
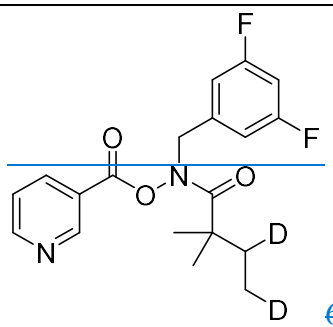
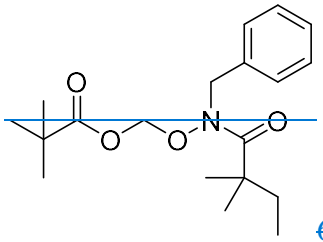
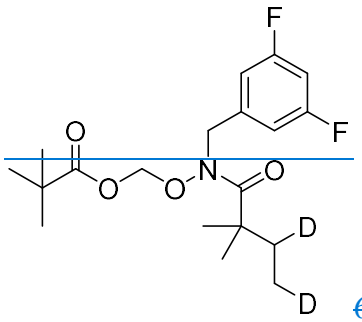
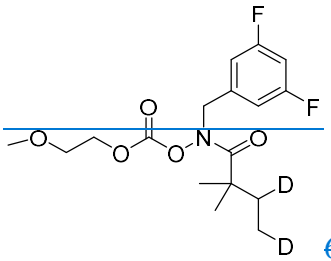
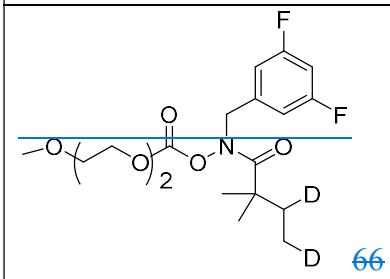
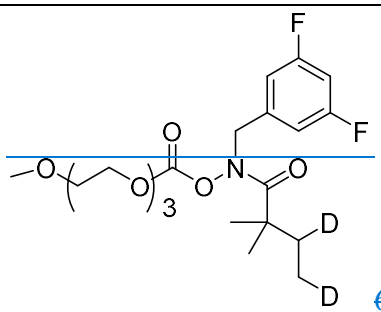
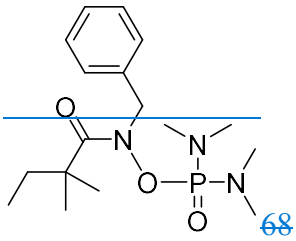
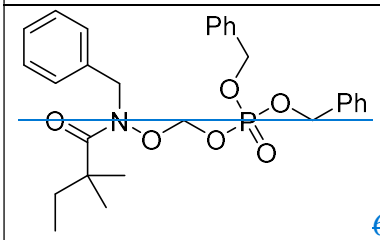
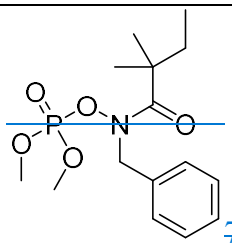
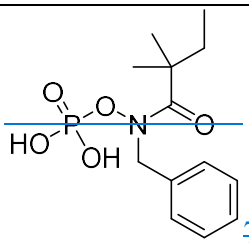
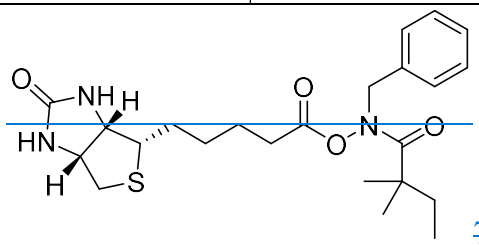
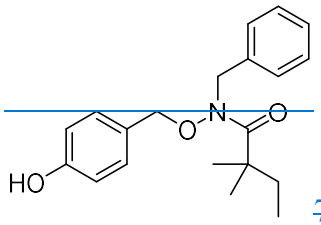
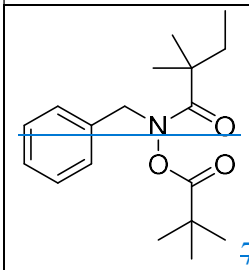
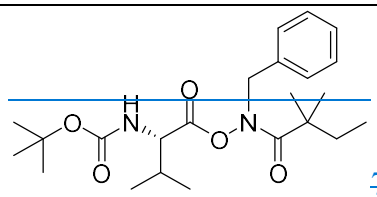
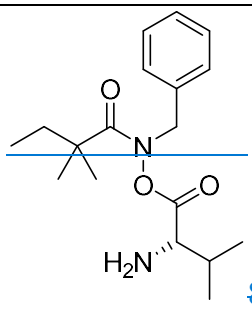
~~R_2 is 1,1-dimethylpropyl comprising 2 or 4 deuterium isotopes.~~

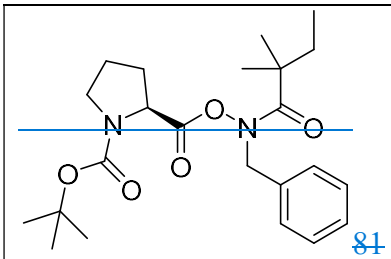
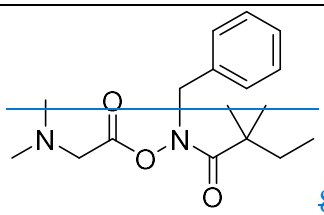
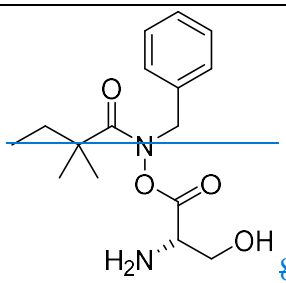
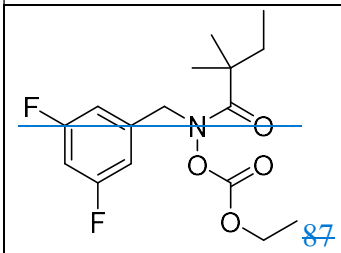
~~15. A compound that is an inhibitor of necrosis, ferroptosis, human RIP1, or related indications, or sulfonamide or prodrug thereof, the compound of structure:~~

 ~~1~~	 ~~2~~	 ~~3~~
 ~~4~~	 ~~5~~	 ~~6~~
 ~~7~~	 ~~8~~	 ~~9~~
 ~~10~~	 ~~11~~	 ~~12~~
 ~~13~~	 ~~14~~	 ~~15~~
 ~~16~~	 ~~17~~	 ~~18~~
 ~~19~~	 ~~20~~	 ~~21~~

 22	 23	 24
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 86		
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 72		 73
 77	 79	 80

 81	 82	 83
 87		

[Claim 216]. A pharmaceutical composition comprising a compound or mixture of ~~a prodrug of~~ claim 1, ~~11, or 15 and a corresponding inhibitor of necrosis, ferroptosis, human RIP1, or related indications, or a mixture of a compound of claim 11 or 15 that is an inhibitor of necrosis, ferroptosis, human RIP1, or related indications, and a prodrug thereof.~~

~~17. A pharmaceutical composition comprising a therapeutically effective amount of a compound or mixture of claim 1, 11, 15 or 16 in unit dosage form~~ and one or more pharmaceutically acceptable excipients.

[Claim 3]. A pharmaceutical composition comprising a compound or mixture of claim 1, in a unit dosage form, and one or more pharmaceutically acceptable excipients.

[Claim 418]. Use of a compound of claim 1, ~~11 or 15 or mixture of claim 16~~ or composition of claim ~~17~~ 2 or 3 for inhibiting necrosis, ferroptosis or human receptor interacting protein I kinase (RIP1).

[Claim 5]. Use of a compound of claim 1, or composition of claim 2 in the manufacture of a medicament for inhibiting necrosis, ferroptosis, or human receptor interacting protein I kinase (RIP1~~), or related indications, in a person in need thereof~~.

~~19. A compound of claim 1, 11 or 15 or mixture of claim 16 or composition of claim 17 for use in inhibiting necrosis, ferroptosis, human RIP1, or related indications in a person in need thereof, or in the manufacture of a medicament thereof in a person in need thereof.~~

~~20. A method of inhibiting necrosis, ferroptosis, human RIP1, or related indications, comprising administering to a person in need thereof a compound of claim 1, 11 or 15 or mixture of claim 16 or composition of claim 17.~~