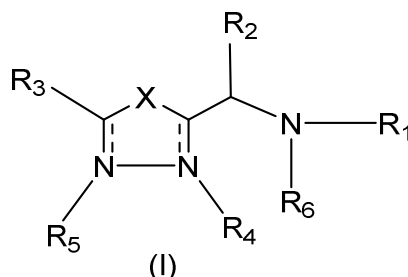


CLAIMS

1. A compound of formula (I):



or a pharmaceutically acceptable salt thereof or a stereoisomer thereof;

wherein,

X is O or S;

each dotted line [----] represents an optional bond;

R₁ is hydrogen or -CO-Aaa;

R₂ is a side chain of an amino acid, hydrogen, (C₁-C₆)alkyl, (C₂-C₆)alkenyl or (C₂-C₆)alkynyl;

wherein (C₁-C₆)alkyl, (C₂-C₆)alkenyl and (C₂-C₆)alkynyl are each optionally substituted with one or more substituents selected from carboxylic acid, carboxylate, carboxylic acid ester, thiocarboxylate, thioacid, amido, amino, hydroxyl, cycloalkyl, aryl, heterocyclyl, heteroaryl, guanidino, amidino, -NH(alkyl), -SH and -S(alkyl); optionally wherein two or three carbon atoms of the alkyl, alkenyl or alkynyl form part of a 3 to 7 membered carbocyclic or heterocyclic ring; wherein the carbocyclic or heterocyclic ring is independently optionally substituted with 1 to 4 moieties selected from alkyl, alkoxy, carboxylic acid, carboxylate and hydroxyl;

R₃ is aryl, heterocyclyl, heteroaryl or cycloalkyl; wherein the aryl, heterocyclyl, cycloalkyl or heteroaryl is optionally substituted by 1 to 4 occurrences of R_d;

each of R₄ and R₅ independently is hydrogen or absent;

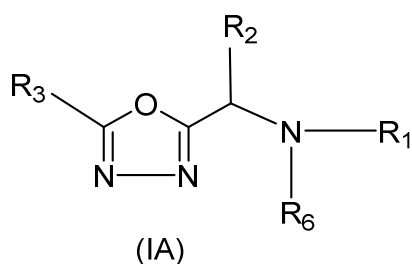
R₆ is hydrogen or alkyl;

or R₆ and R₂, together with the atoms to which they are attached, form pyrrolidine or piperidine which is optionally substituted with one or more moieties independently selected from hydroxyl, halo, amino, cyano and alkyl;

Aaa represents an amino acid residue; and

R_d, independently for each occurrence, is alkyl, alkoxy, halo, hydroxyl, amino, -C(O)OH, arylalkyl, aryl, alkoxy, heterocyclyl, heterocyclalkyl, heteroarylalkyl, heteroaryl, cycloalkyl, (cycloalkyl)alkyl, hydroxyalkyl, alkoxyalkyl or acyl; or any two R_d groups attached to the same carbon atom together represent an oxo (=O) or thioxo (=S).

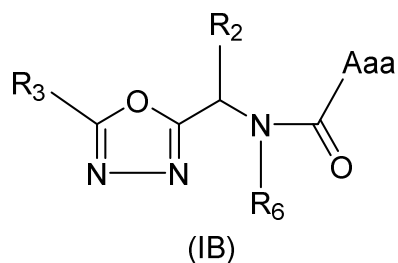
2. The compound of claim 1, wherein the compound is represented by formula (IA):



or a pharmaceutically acceptable salt thereof or a stereoisomer thereof.

3. The compound of claim 1 or 2, wherein R₆ is hydrogen.

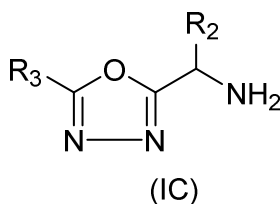
4. The compound of any one of claims 1 to 3, wherein the compound is represented by formula (IB):



or a pharmaceutically acceptable salt thereof or a stereoisomer thereof.

5. The compound of any one of claims 1 to 4, wherein Aaa is Ser, Ala, Lys, Thr or Met.

6. The compound of claim 1, wherein the compound is represented by formula (IC):



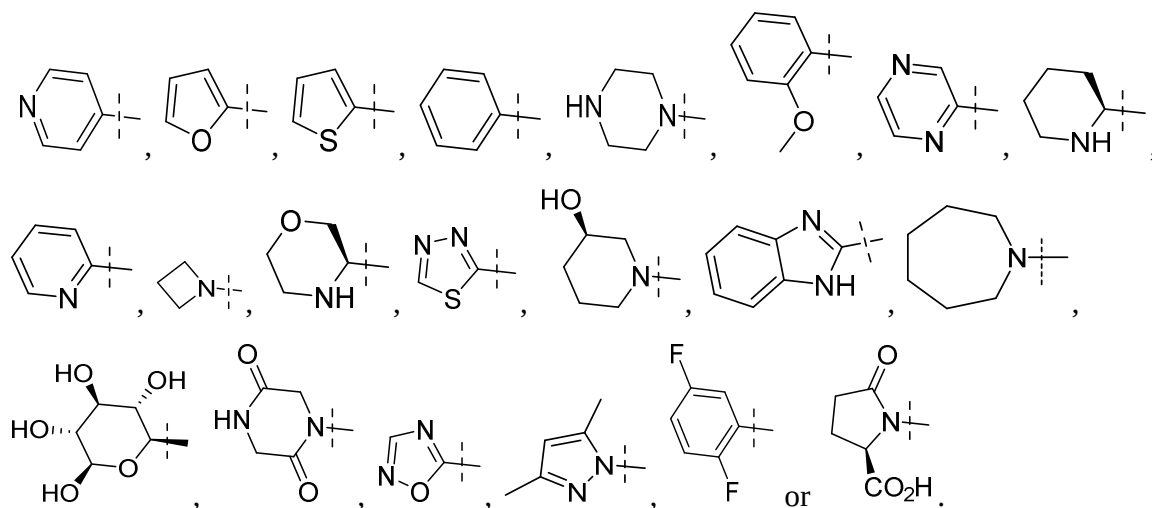
or a pharmaceutically acceptable salt thereof or a stereoisomer thereof.

7. The compound of any one of claims 1 to 6, wherein R₂ is hydrogen, (C₁-C₆)alkyl, (C₂-C₆)alkenyl or (C₂-C₆)alkynyl; wherein each (C₁-C₆)alkyl, (C₂-C₆)alkenyl or (C₂-C₆)alkynyl is optionally substituted by one or more substituents selected from carboxylic acid, carboxylate, and amido.
8. The compound of any one of claims 1 to 7, wherein R₂ is (C₁-C₆)alkyl, which is optionally substituted with carboxylic acid, amido, guanidino, amidino, -NH(alkyl), -SH, or -S(alkyl).
9. The compound of any one of claims 1 to 8, wherein R₂ is -CH(CH₃)₂, -(CH₂)COOH, -(CH₂)₂COOH, -(CH₂)CONH₂, or -(CH₂)₂CONH₂.
10. The compound of any one of claims 1 to 9, wherein R₂ is -(CH₂)COOH or -(CH₂)CONH₂.
11. The compound of any one of claims 1 to 6, wherein R₂ is the side chain of an amino acid.
12. The compound of claim 11, wherein R₂ is the side chain of an amino acid comprising (C₁-C₆)alkyl which is optionally substituted with carboxylic acid, carboxylate, thiocarboxylate, thioacid, amido, amino, hydroxyl, cycloalkyl, aryl, heterocyclyl, heteroaryl, guanidino, amidino, -NH(alkyl), -SH or -S(alkyl).
13. The compound of any one of claims 1 to 12, wherein R₃ is aryl, heterocyclyl or heteroaryl, optionally substituted by 1 to 4 occurrences of R_d.

14. The compound of any one of claims 1 to 13, wherein R_d is alkyl, alkoxy, halo, hydroxyl, amino, -C(O)OH, aralkyl, aryl, alkoxy, heteroaralkyl, heteroaryl, cycloalkyl, (cycloalkyl)alkyl, hydroxyalkyl, alkoxyalkyl or acyl.

15. The compound of any one of claims 1 to 13, wherein any two R_d groups attached to the same carbon atom together represent an oxo (=O) or thioxo (=S).

16. The compound of any one of claims 1 to 15, wherein R₃ is



17. A compound selected from:

Compound No.	Structure
1	
2	
3	

Compound No.	Structure
4	
5	
6	
7	
8	
9	
10	
11	
12	

Compound No.	Structure
13	
14	
15	
16	
17	
18	
19	
20	

Compound No.	Structure
21	
22	
23	
24	
25	
26	
27	
28	

Compound No.	Structure
29	 and
30	

or a pharmaceutically acceptable salt thereof or a stereoisomer thereof.

18. A pharmaceutical composition comprising a compound of any one of claims 1 to 17 and a pharmaceutically acceptable carrier.
19. Use of a compound of any one of claims 1 to 17 in the manufacture of a medicament for the treatment of cancer.
20. The use of claim 19, wherein the cancer is selected from lung cancer, breast cancer, colon cancer, renal cancer, bladder cancer, thyroid cancer, prostate cancer, osteosarcoma and Hodgkin's lymphoma.
21. Use of a compound of any one of claims 1 to 17 in the manufacture of a medicament for the treatment of a bacterial infection, a viral infection, a fungal infection, or an immunological condition.