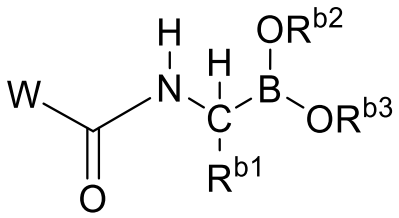
What is claimed is:

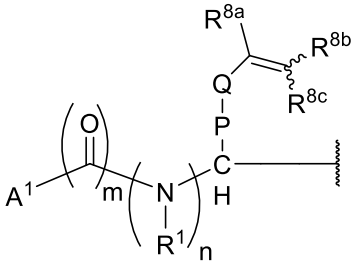
1. A compound of Formula (I):



(I)

and/or a pharmaceutically acceptable salt thereof, wherein:

W is –O-P-Q-C(R^{8a})=C(R^{8b})(R^{8c}), -N(R')-P-Q-C(R^{8a})=C(R^{8b})(R^{8c}), or a group of formula

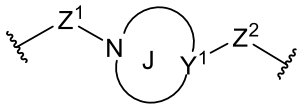


;

A^1 is hydrogen, hydroxy, optionally substituted alkyl, optionally substituted aryl, optionally substituted heteroaryl, optionally substituted heterocyclyl, or -$S(=O)_2$-alkyl, wherein said alkyl of said -$S(=O)_2$-alkyl is optionally substituted;

R' is H or optionally substituted alkyl;

each R^1 is H or optionally substituted alkyl;

P is –alkyl-, -alkyl-O-alkyl-, -alkyl-N(R)-, -alkyl-aryl-N(R)-, -alkyl-N(R)-aryl-N(R)-, -alkyl-O-aryl-N(R)-, -alkyl-aryl-alkyl-N(R)-, -alkyl-heteroaryl-N(R)-, -alkyl-cycloalkyl-N(R)-, -alkyl-O-cycloalkyl-N(R)-, -alkyl-N(R)-cycloalkyl-N(R)-, -alkyl-O-alkyl-N(R)-, -alkyl-N(R)-alkyl-N(R)-,  , or  , wherein each instance of alkyl, aryl, heteroaryl, and cycloalkyl is optionally substituted;

Z and Z^1 are independently a covalent bond, -alkyl-, -alkyl-O-, -alkyl-N(R)-, or -alkyl-O-alkyl-, wherein each instance of alkyl is optionally substituted;

ring A with the ring nitrogen atom shown is an optionally substituted saturated mono- or multicyclic 4 to 10 membered heterocyclyl;

ring J with the ring nitrogen atom and ring Y^1 atom shown is an optionally substituted saturated 4 to 10 membered heterocyclyl;

Y^1 is C or N;

Z^2 is a covalent bond or N(R);

each R is independently hydrogen or optionally substituted alkyl;

Q is –C(=O)- or $–S(=O)_2$-;

each R^{8a} independently is hydrogen, halogen, or cyano;

each R^{8b} independently is hydrogen or optionally substituted alkyl; or

each R^{8a} and R^{8b} independently are taken together to form a bond; and

each R^{8c} independently is hydrogen, optionally substituted alkyl, optionally substituted cycloalkyl, optionally substituted heteroaryl, or optionally substituted heterocyclyl;

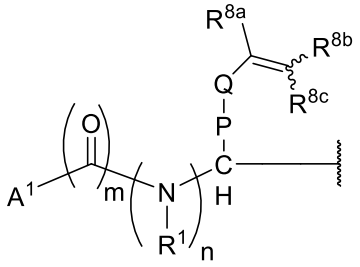
R^{b1} is optionally substituted alkyl, optionally substituted aryl, optionally substituted heteroaryl, optionally substituted cycloalkyl, optionally substituted cycloalkenyl, or optionally substituted heterocyclyl;

R^{b2} and R^{b3} are independently hydrogen or optionally substituted C_{1-6} alkyl; or

R^{b2} and R^{b3} together with the boron atom to which they are shown attached form an optionally substituted cyclic boronic ester having 2 to 20 carbons, and optionally containing one or two additional cyclic heteroatoms chosen from N, O and S; and

m and n are independently 0 or 1;

provided that when W is –O-P-Q-C(R^{8a})=C(R^{8b})(R^{8c}), or a group of formula

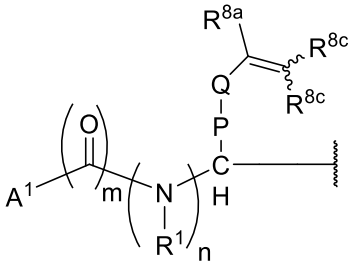


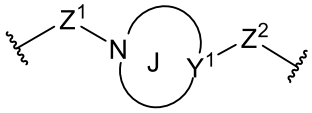
wherein m and n are each 0, then P is not –alkyl-N(R)-, -alkyl-(C_3-C_6) cycloalkyl-N(R)-, alkyl-O-alkyl-N(R)-, or 

, wherein each instance of alkyl, and cycloalkyl is optionally substituted, ring A with the ring nitrogen atom as shown is an optionally substituted saturated monocyclic five- to seven- membered heterocyclyl with only the one nitrogen shown as

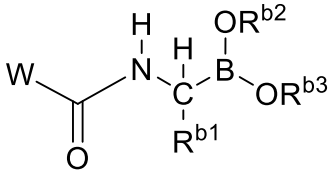
the ring heteroatom, and wherein Z is connected to ring A at a carbon atom adjacent to the ring nitrogen atom; and

provided that when W is –O-P-Q-C(R^{8a})=C(R^{8b})(R^{8c}), or a group of formula



wherein m and n are each 0, and P is  wherein Y^1 in ring J is nitrogen, then Z^2 is a covalent bond.

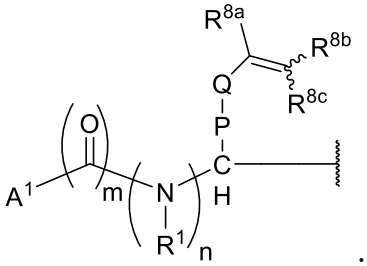
2. A compound of Formula (I'):



(I')

and/or a pharmaceutically acceptable salt thereof, wherein:

W is –O-P-Q-C(R^{8a})=C(R^{8b})(R^{8c}), -N(R')-P-Q-C(R^{8a})=C(R^{8b})(R^{8c}), or a group of formula



;

wherein:

A^1 is hydrogen; hydroxy; alkyl which is optionally substituted with 1-2 substituents chosen from halo, hydroxy, and –N(H)-C(=O)-alkyl; -$S(=O)_2$-alkyl; heterocycylyl; aryl; or heteroaryl; wherein each of said heterocyclyl, aryl and heteroaryl is independently optionally substituted with 1-3 substituents independently chosen from halo, hydroxy, alkyl, alkoxy, cyano, haloalkyl, -NH_2, -NH(alkyl), -$N(alkyl)_2$, heterocyclyl, aryl, and heteroaryl;

R’ is H or alkyl;

R^1 is H or alkyl;

P is -alkyl-N(R)-, -alkyl-aryl-N(R)-, or 

;

Z is a covalent bond, -alkyl-, or -alkyl-O-alkyl-;

ring A with the ring nitrogen atom shown is an optionally substituted saturated mono- or multicyclic 4 to 10 membered heterocyclyl;

each R independently is hydrogen or alkyl;

Q is –C(=O)- or $–S(=O)_2$-;

R^{8a} is hydrogen or cyano;

R^{8b} is hydrogen or alkyl; or

R^{8a} and R^{8b} are taken together to form a bond; and

R^{8c} is hydrogen or alkyl which is optionally substituted with 1-2 substituents chosen from cycloalkyl and heterocyclyl, wherein said heterocyclyl is optionally substituted with 1-2 substituents chosen from halo, alkyl, and heterocyclyl;

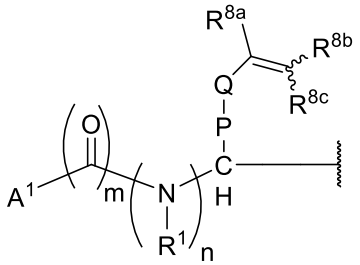
R^{b1} is alkyl which is optionally substituted with 1-2 substituents chosen from cycloalkenyl, aryl and heteroaryl, wherein each of said aryl and heteroaryl is optionally substituted with 1-2 substituents chosen from alkyl, halo, hydroxy, alkoxy, cyano, haloalkyl, $-NH_2$, -NH(alkyl), and $–N(alkyl)_2$;

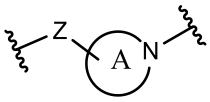
R^{b2} and R^{b3} are independently hydrogen or C_{1-6} alkyl; or

R^{b2} and R^{b3} together with the boron atom to which they are shown attached form an optionally substituted cyclic boronic ester having 2 to 20 carbons, and optionally containing one or two additional cyclic heteroatoms chosen from N, O and S; and

m and n are independently 0 or 1;

provided that when W is $–O\text{-}P\text{-}Q\text{-}C(R^{8a})=C(R^{8b})(R^{8c})$, or a group of formula



wherein m and n are each 0, then P is not –alkyl-N(R)- or , wherein ring A with the ring nitrogen atom as shown is an optionally substituted saturated monocyclic five- to seven- membered heterocyclyl with only the one nitrogen shown as the ring heteroatom, and wherein Z is connected to ring A at a carbon atom adjacent to the ring nitrogen atom.

3. The compound and/or pharmaceutically acceptable salt thereof of claim 1 or 2, wherein:

said–alkyl-N(R)- of P is $–(CH_2)_{1-4}N(R)-$;

said–alkyl-aryl-N(R)- of P is $–(CH_2)_{1-4}$-phenyl-N(R)-;

said -alkyl-N(R)-aryl-N(R)- of P is $–(CH_2)_{1-4}$-N(R)-phenyl-N(R)-;

said–alkyl-O-aryl-N(R)- of P is $–(CH_2)_{1-4}$-O-phenyl-N(R)-;

said–alkyl-aryl-alkyl-N(R)- of P is $–(CH_2)_{1-4}$-phenyl-$(CH_2)_{1-4}N(R)-$;

said –alkyl-heteroaryl-N(R)- of P is $–(CH_2)_{1-4}$-heteoaryl-N(R)-;

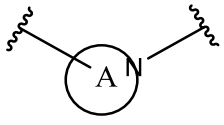
said -alkyl-O-alkyl-N(R)- of P is $–(CH_2)_{1-4}$-O-$(CH_2)_{1-4}N(R)-$;

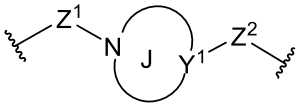
said –alkyl- of Z in  of P is $–(CH_2)_{1-4}-$;

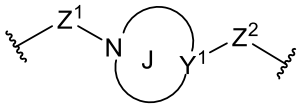
said -alkyl-O- of Z in  of P is $–(CH_2)_{1-4}$-O-;

said -alkyl-N(R)- of Z in  of P is $–(CH_2)_{1-4}$-N(R)-, wherein R is H, unsubstituted alkyl, or alkyl substituted with an alkoxy;

said -alkyl-O-alkyl- of Z in  of P is $–(CH_2)_{1-4}$-O-$(CH_2)_{1-4}-$;

said  in said  of P is a mono- or multicyclic heterocyclyl;

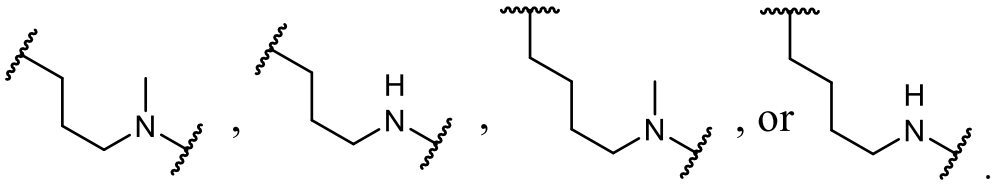
said Z^1 in said  of P is $–(CH_2)_{1-4}–$; and

said ring J in said  of P is heterocyclyl;

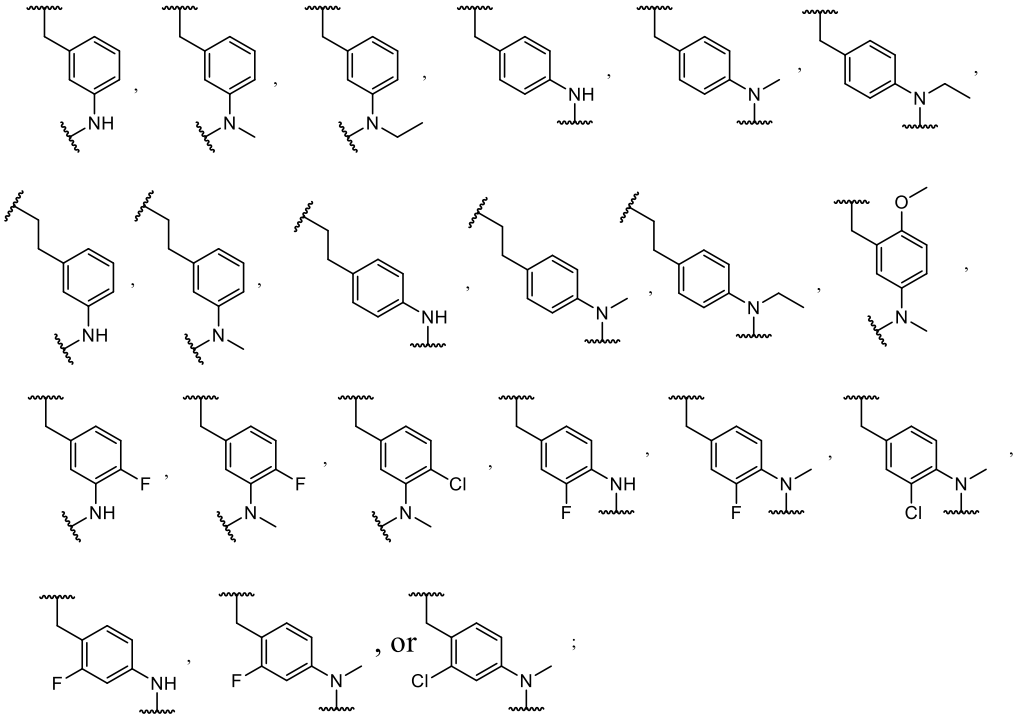
wherein each phenyl and each heterocyclyl is independently optionally substituted with 1-3 substituents independently chosen from halo, hydroxy, alkyl, alkoxy, cyano, haloalkyl, $-NH_2$, -NH(alkyl), $-N(alkyl)_2$, heterocyclyl, aryl, and heteroaryl.

4. The compound and/or pharmaceutically acceptable salt thereof of any of claims 1-3, wherein:

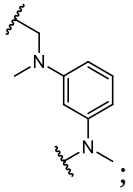
said -alkyl-N(R)- of P is



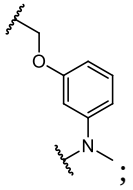
said -alkyl-aryl-N(R)- of P is



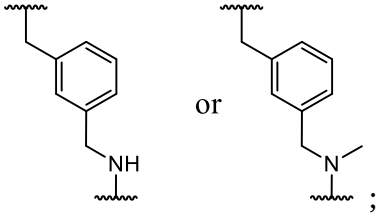
said -alkyl-N(R)-aryl-N(R)- of P is



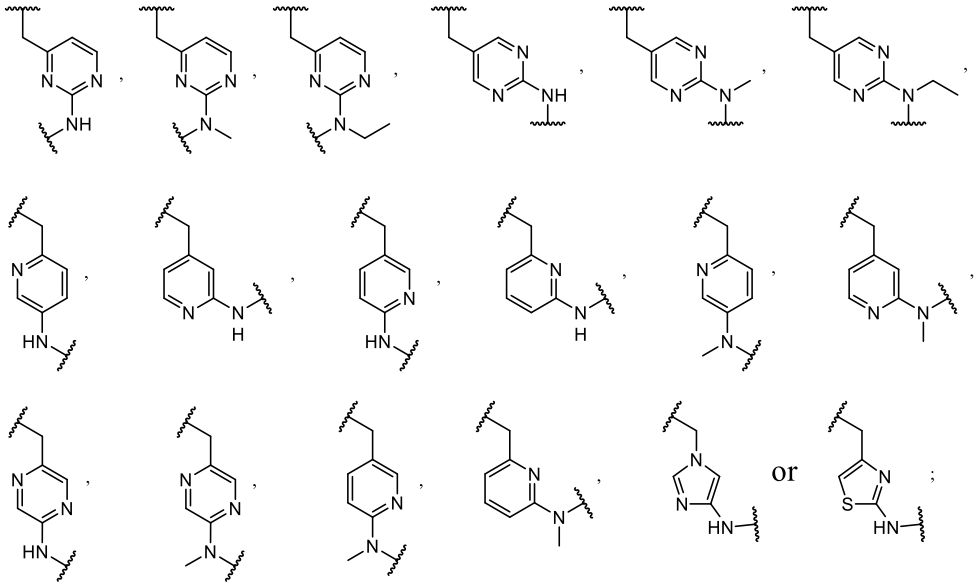
said -alkyl-O-aryl-N(R)-of P is



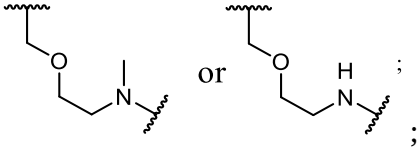
said -alkyl-aryl-alkyl-N(R)- of P is

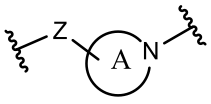


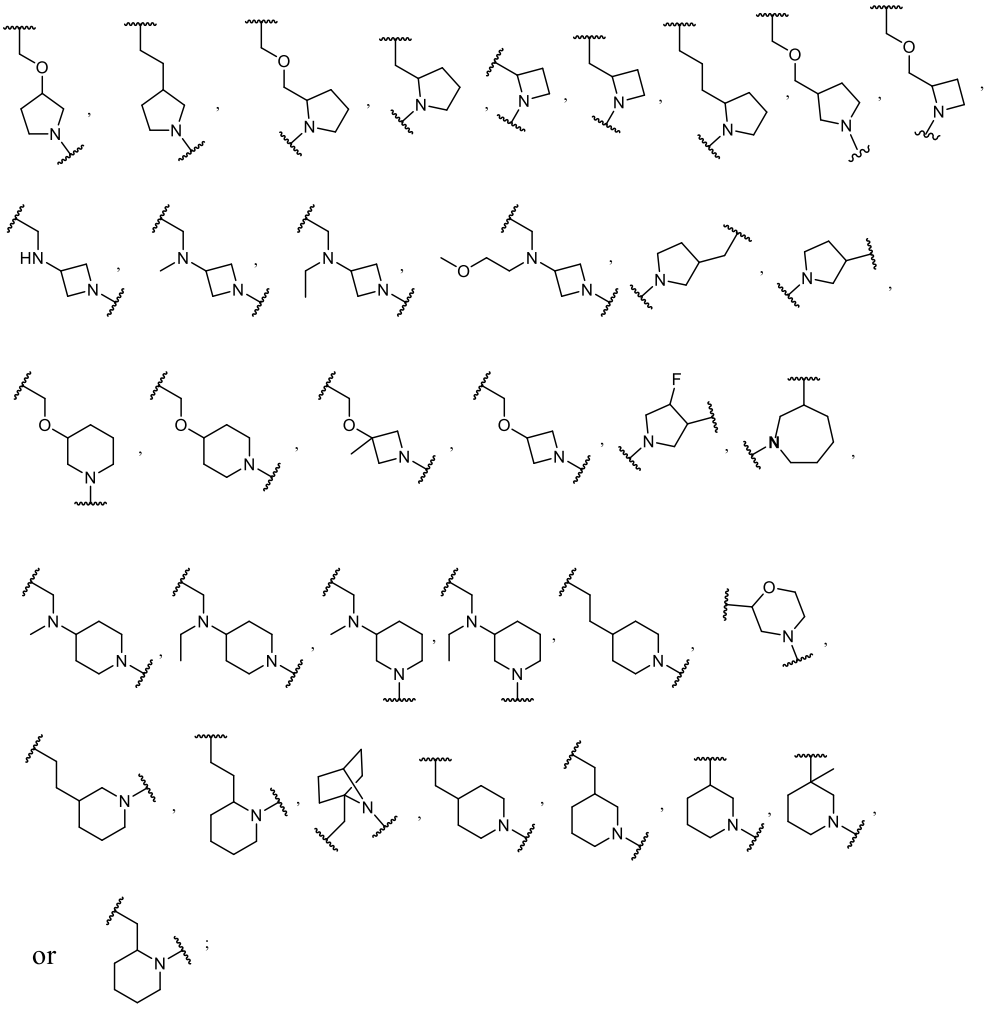
said -alkyl-heteroaryl-N(R)- of P is



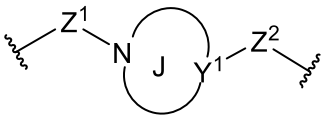
said -alkyl-O-alkyl-N(R)- of P is

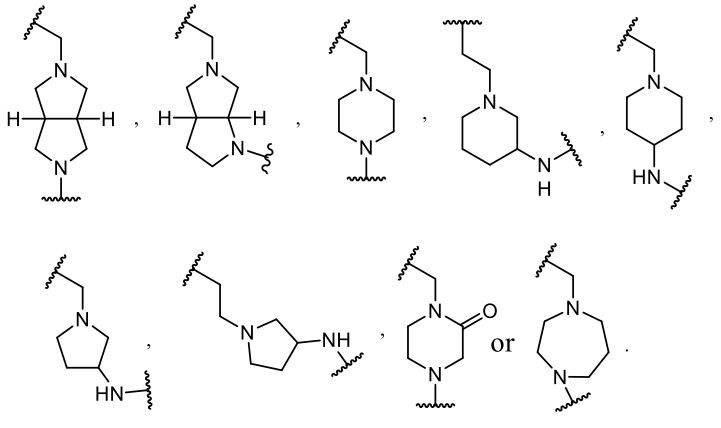


said  of P is



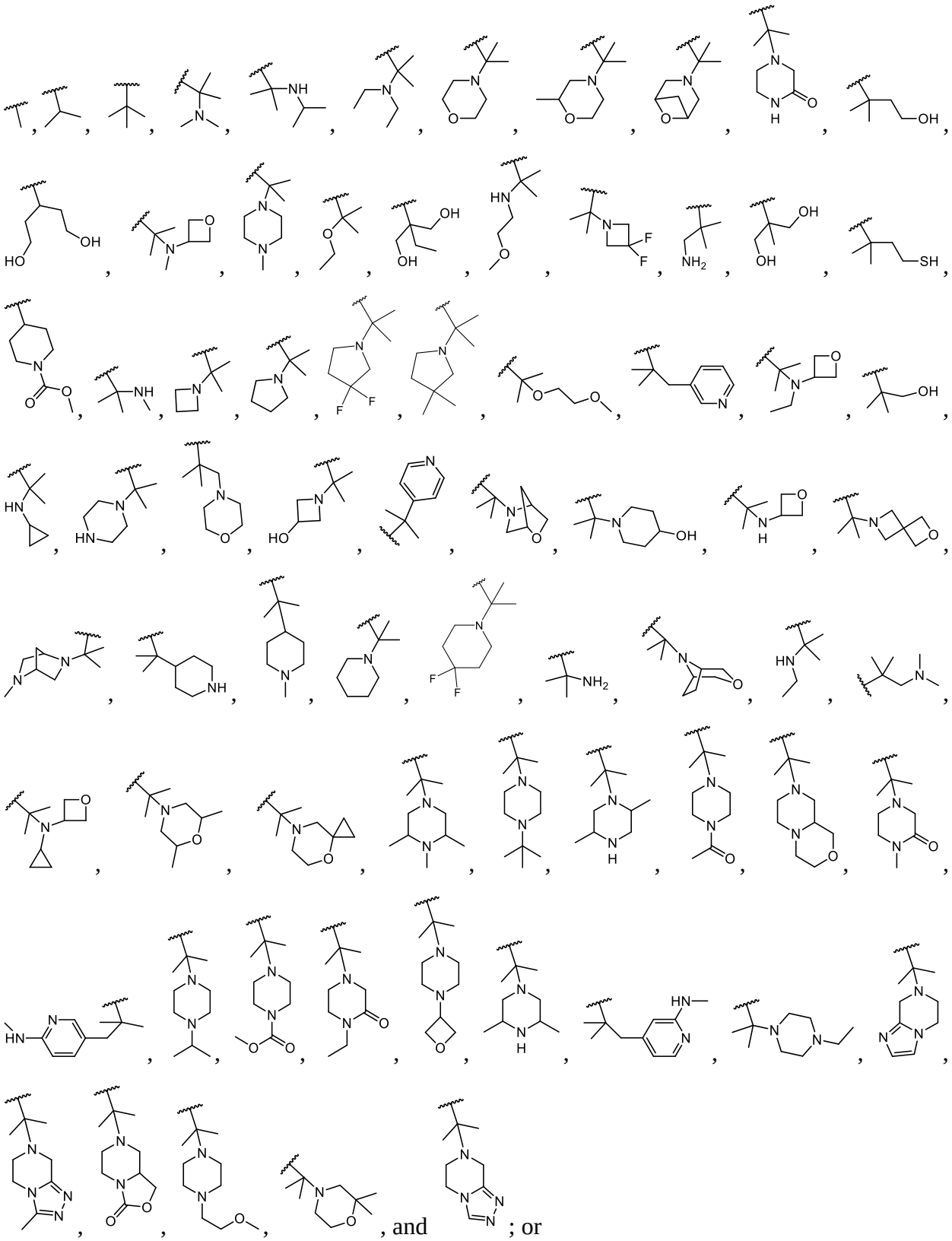
and

said  of P is

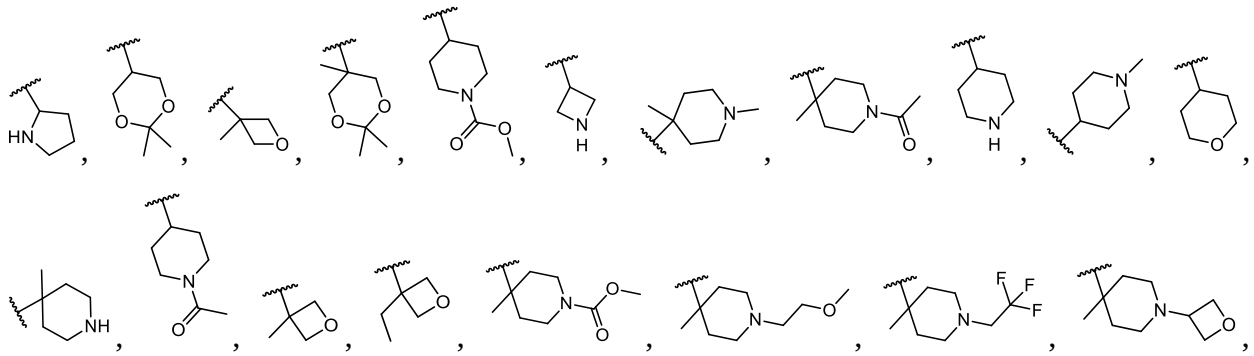


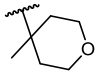
5. The compound and/or pharmaceutically acceptable salt thereof of any of claims 1-4, wherein the optional substituents of said alkyl of R^{8c} are 1-3 substituents independently chosen from halo, hydroxy, alkoxy, cyano, $-NH_2$, -SH, -C(=O)-alkyl, -C(=O)-O-alkyl, -O-alkyl-O-alkyl, -NH(alkyl), -NH(optionally substituted cycloalkyl), -NH(alkyl-O-alkyl), $-N(alkyl)_2$, -NH(optionally substituted heterocyclyl), -N(alkyl)(optionally substituted heterocyclyl), -N(optionally substituted cycloalkyl)(optionally substituted heterocyclyl), optionally substituted cycloalkyl, optionally substituted heterocyclyl, optionally substituted aryl, and optionally substituted heteroaryl; and wherein the optional substituents of each of said cycloalkyl, heteroaryl, and heterocyclyl of R^{8c} are 1-3 substituents independently chosen from halo, hydroxy, alkyl, alkoxy, cyano, haloalkyl, $-NH_2$, -SH, -C(=O)-alkyl, -C(=O)-O-alkyl, -O-alkyl-O-alkyl, -NH(alkyl), -NH(optionally substituted cycloalkyl), -NH(alkyl-O-alkyl), $-N(alkyl)_2$, -NH(optionally substituted heterocyclyl), -N(alkyl)(optionally substituted heterocyclyl), -N(optionally substituted cycloalkyl)(optionally substituted heterocyclyl), optionally substituted cycloalkyl, optionally substituted heterocyclyl, optionally substituted aryl, and optionally substituted heteroaryl; or

wherein R^{8c} is an unsubstituted or substituted alkyl chosen from:

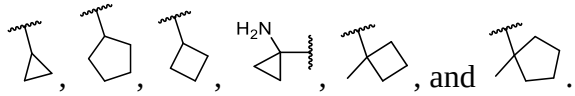


wherein R^{8c} is an optionally substituted heterocyclyl chosen from:

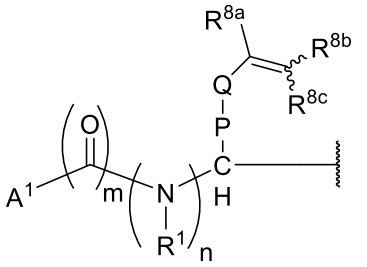


and ; or

wherein R^{8c} is an optionally substituted cycloalkyl chosen from:

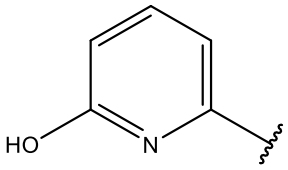
, and .

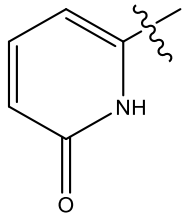
6. The compound and/or pharmaceutically acceptable salt thereof of any of claims 1-5, wherein W is a group of formula

.

7. The compound and/or pharmaceutically acceptable salt thereof of any of claims 1-5, wherein W is –O-P-Q-C(R^{8a})=C(R^{8b})(R^{8c}) or -N(R)-P-Q-C(R^{8a})=C(R^{8b})(R^{8c}).

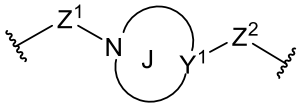
8. The compound and/or pharmaceutically acceptable salt thereof of claim 6, wherein m and n are each 1; and A^1 is optionally substituted alkyl, optionally substituted aryl, or optionally substituted heteroaryl; wherein the optional substituents said aryl or heteroaryl of A^1 are one to three groups independently chosen from halo, hydroxy, alkyl, alkoxy, cyano, haloalkyl, -NH_2, -NH(alkyl), -N(alkyl)$_2$, heterocyclyl, aryl, and heteroaryl, and the optional substituents of said alkyl of A^1 are 1-2 groups independently chosen from –N(H)-C(=O)-alkyl, hydroxy, and halo; or A^1 2,5-dichlorophenyl, 2-pyrazinyl, 4-methyl-3-pyridyl,



, 

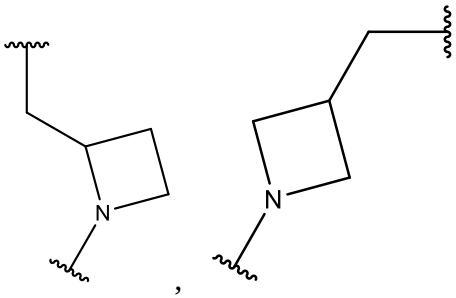
, $-CH_3$, $–CH(CH(OH)CH_3)$-NH-C(=O)$CH(CH_3)_2$, or -$CH(CH_3)$-NH-C(=O)-$CH(CH_3)_2$.

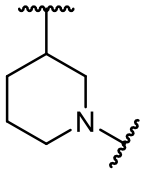
9. The compound and/or pharmaceutically acceptable salt thereof of claim 6, wherein m and n are each 1; and P is –alkyl-N(R)-, -alkyl-aryl-N(R)-, 

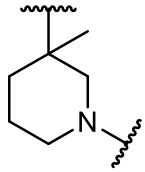
, or 

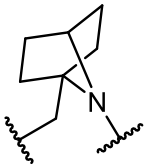
; or wherein m and n are each 1; and P is $–(CH_2)_4$-N(H)-, $–CH_2$-phenyl-$N(CH_3)$- or CH_2-O-CH_2-pyrrolidinyl-.

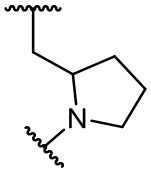
10. The compound and/or pharmaceutically acceptable salt thereof of claim 6, wherein P is 

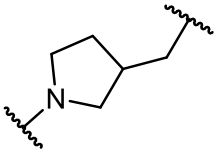
wherein Z is a covalent bond or –alkyl-, wherein said –alkyl- is –$(CH_2)_{1-4}$-; or wherein P is 

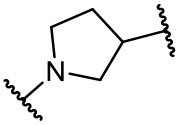
, 

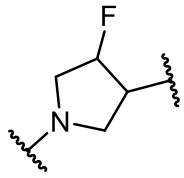
, 

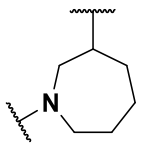
, 

, 

, 

, 

, 

, or 

.

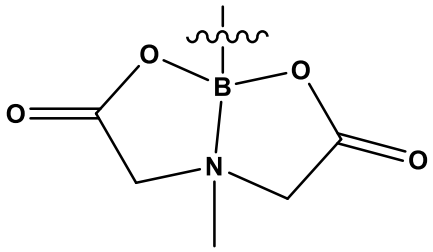
11. The compound and/or pharmaceutically acceptable salt thereof of any of claims 1-10, wherein R^{b1} is optionally substituted alkyl, wherein the optional substituents are 1-2

substituents chosen from –O-aryl, -O-heteroaryl, -N(H)-aryl, -N(alkyl)-aryl, -N(H)-heteroaryl, -N(alkyl)-heteroaryl, cycloalkenyl, aryl, heterocyclyl, heterocyclenyl, or heteroaryl; wherein each instance of said aryl, heteroaryl, heterocyclyl, and heterocyclenyl is optionally substituted with 1-3 substituents independently chosen from halo, alkyl, alkoxy, haloalkyl, cyano, $-NH_2$, -NH(alkyl), $-N(alkyl)_2$, and heterocyclyl; or wherein said R^{b1} is unsubstituted alkyl or a substituted alkyl of the formula $–(CH_2)_{1-2}$-R" wherein R" is –O-aryl, -O-heteroaryl, -N(H)-aryl, -N(alkyl)-aryl, -N(H)-heteroaryl, -N(alkyl)-heteroaryl, cycloalkenyl, aryl, heterocyclyl, heterocyclenyl, or heteroaryl; wherein each instance of said aryl, heteroaryl, heterocyclyl, and heterocyclenyl is optionally substituted with 1-3 substituents independently chosen from the group consisting of halo, alkyl, alkoxy, haloalkyl, cyano, $-NH_2$, -NH(alkyl), $-N(alkyl)_2$, and heterocyclyl; or wherein said R^{b1} is chosen from $–CH_2CH(CH_3)_2$, $–CH_2C(CH_3)_3$, $-CH_2$-cyclopentenyl, $-CH_2$-phenyl, $-CH_2$-phenyl-methyl, $-CH_2$-phenyl-ethyl, $-CH_2CH_2$-phenyl, $-CH_2$-phenyl-trifluoromethyl, $-CH_2$-fluorophenyl, $-CH_2$-thiophenyl, $–CH_2$-CH_2-benzofuranyl, $-CH_2CH_2$-benzimidazolyl, $-CH_2CH_2$-dihydroindolyl, $-CH_2$-benzofuranyl, $-CH_2$-benzimidazolyl, $-CH_2$-dihydroindolyl, $-CH_2$-O-phenyl, and $-CH_2$-N(CH_3)-phenyl; or wherein said R^{b1} is chosen from $–CH_2CH(CH_3)_2$, $-CH_2$-cyclopentenyl, $-CH_2$-phenyl, $-CH_2$-phenyl-trifluoromethyl, $-CH_2$-fluorophenyl, $-CH_2$-phenyl-methyl, $-CH_2$-phenyl-ethyl, and $–CH_2$-benzofuranyl.

12. The compound and/or pharmaceutically acceptable salt thereof of any of claims 1-11, wherein R^{8a} is hydrogen or cyano; R^{8b} is hydrogen or alkyl; or R^{8a} and R^{8b} are taken together to form a covalent bond; or wherein R^{8a}, R^{8b} and R^{8c} are each hydrogen; or R^{8a} is halogen, and R^{8b} and R^{8c} are each hydrogen.

13. The compound and/or pharmaceutically acceptable salt thereof of any of claims 1-11, wherein R^{8a}, R^{8b} and R^{8c} are each hydrogen; or R^{8a} is halogen, and R^{8b} and R^{8c} are each hydrogen.

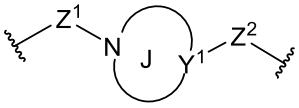
14. The compound and/or pharmaceutically acceptable salt thereof of any of claims 1-13, wherein R^{b2} and R^{b3} are each H; or wherein R^{b2} and R^{b3} together with the boron atom to which they are shown attached form an optionally substituted cyclic boronic ester of the formula



.

15. The compound and/or pharmaceutically acceptable salt thereof of claim 6, wherein m is 0 and n is 1; and A^1 is optionally substituted alkyl or -S(=O)$_2$-alkyl, wherein said optional substituents of alkyl of A^1 are 1-2 substituents chosen from halo, hydroxy, alkoxy, cyano, haloalkyl, -NH_2, -NH(alkyl), -N(alkyl)$_2$, heterocyclyl, aryl, and heteroaryl.

16. The compound and/or pharmaceutically acceptable salt thereof of claim 6, wherein m is 0 and n is 1; and P is –alkyl-N(R)-, -alkyl-aryl-N(R)-, 

wherein Z is –alkyl-O-alkyl- and ring A with the ring nitrogen atom shown is a monocyclic five- to six-membered heterocyclyl, or 

.

17. The compound and/or pharmaceutically acceptable salt thereof of claim 6, m and n are each 0; wherein A^1 is hydrogen; and P is 

; wherein Z is covalent bond or –alkyl-; and ring A with the ring nitrogen atom shown is piperidinyl or morpholinyl.

18. The compound and/or pharmaceutically acceptable salt thereof of claim 1, wherein the compound is:

((R)-1-((S)-6-(2-cyano-4-methylpent-2-enamido)-2-((S)-2-isobutyramidopropanamido)hexanamido)-3-methylbutyl)boronic acid;

((R)-1-((S)-6-(2-cyano-4-methylpent-2-enamido)-2-(pyrazine-2-carboxamido)hexanamido)-3-methylbutyl)boronic acid;

((R)-1-((S)-6-(2-cyano-4-methylpent-2-enamido)-2-(2,5-dichlorobenzamido)hexanamido)-3-methylbutyl)boronic acid;

((R)-1-((S)-6-(2-cyano-4-methylpent-2-enamido)-2-((S)-2-isobutyramidopropanamido)hexanamido)-2-phenylethyl)boronic acid;

((R)-1-((S)-6-(2-cyano-4-methylpent-2-enamido)-2-(pyrazine-2-carboxamido)hexanamido)-2-phenylethyl)boronic acid;

((R)-1-((S)-6-(2-cyano-4-methylpent-2-enamido)-2-(6-hydroxypicolinamido)hexanamido)-2-phenylethyl)boronic acid;

((R)-1-((S)-6-(2-cyano-4-methylpent-2-enamido)-2-(6-hydroxypicolinamido)hexanamido)-3-methylbutyl)boronic acid;

((R)-1-((S)-6-(2-cyano-4-methylpent-2-enamido)-2-(6-oxo-1,6-dihydropyridine-2-carboxamido)hexanamido)-2-phenylethyl)boronic acid;

((R)-1-((S)-6-(2-cyano-4-methylpent-2-enamido)-2-(6-oxo-1,6-dihydropyridine-2-carboxamido)hexanamido)-3-methylbutyl)boronic acid;

((R)-1-((S)-6-(2-cyano-4-methylpent-2-enamido)-2-(2,5-dichlorobenzamido)hexanamido)-2-phenylethyl)boronic acid;

((R)-1-((S)-6-(2-cyano-4-methylpent-2-enamido)-2-((2S,3R)-3-hydroxy-2-isobutyramidobutanamido)hexanamido)-3-methylbutyl)boronic acid;

((R)-1-((S)-6-(2-cyano-4-methylpent-2-enamido)-2-((2S,3R)-3-hydroxy-2-isobutyramidobutanamido)hexanamido)-2-phenylethyl)boronic acid;

((R)-1-((S)-2-acetamido-6-(2-cyano-4-methylpent-2-enamido)hexanamido)-2-phenylethyl)boronic acid;

((R)-1-((S)-3-(((R)-1-(2-cyano-4-methylpent-2-enoyl)pyrrolidin-2-yl)methoxy)-2-(2,5-dichlorobenzamido)propanamido)-2-phenylethyl)boronic acid;

((R)-1-((S)-2-(2,5-dichlorobenzamido)-3-(3-(N-methylacrylamido)phenyl)propanamido)-2-phenylethyl)boronic acid;

((R)-1-((S)-2-(2,5-dichlorobenzamido)-3-(3-(N-methylvinylsulfonamido)phenyl)propanamido)-2-phenylethyl)boronic acid;

((R)-1-((S)-6-(2-cyano-4-methylpent-2-enamido)-2-(4-methylnicotinamido)hexanamido)-2-phenylethyl)boronic acid;

((R)-1-((S)-2-(2,5-dichlorobenzamido)-3-(3-(N-methylbut-2-ynamido)phenyl)propanamido)-2-phenylethyl)boronic acid;

8-((R)-1-((S)-3-(((R)-1-(2-cyano-4-methylpent-2-enoyl)pyrrolidin-2-yl)methoxy)-2-(2,5-dichlorobenzamido)propanamido)-2-phenylethyl)-4-methyl-2,6-dioxohexahydro-[1,3,2]oxazaborolo[2,3-b][1,3,2]oxazaborol-4-ium-8-uide;

((R)-1-((S)-3-(3-(2-cyano-N,4-dimethylpent-2-enamido)phenyl)-2-(2,5-dichlorobenzamido)propanamido)-2-phenylethyl)boronic acid;

((R)-1-((S)-3-(3-(2-cyano-N,4-dimethylpent-2-enamido)phenyl)-2-(pyrazine-2-carboxamido)propanamido)-2-phenylethyl)boronic acid;

((R)-1-((S)-6-(2-cyano-4-methylpent-2-enamido)-2-(methylsulfonamido)hexanamido)-2-phenylethyl)boronic acid;

((R)-1-((S)-6-(2-cyano-4-methylpent-2-enamido)-2-((2,2,2-trifluoroethyl)amino)hexanamido)-2-phenylethyl)boronic acid;

((R)-1-((S)-3-(((R)-1-(2-cyano-3-cyclopropylacryloyl)pyrrolidin-2-yl)methoxy)-2-((2,2,2-trifluoroethyl)amino)propanamido)-2-phenylethyl)boronic acid;

((R)-1-((S)-3-(((R)-1-(2-cyano-4-methylpent-2-enoyl)pyrrolidin-2-yl)methoxy)-2-((2,2,2-trifluoroethyl)amino)propanamido)-2-phenylethyl)boronic acid;

((R)-1-((S)-3-(((R)-1-(2-cyano-4,4-dimethylpent-2-enoyl)pyrrolidin-2-yl)methoxy)-2-((2,2,2-trifluoroethyl)amino)propanamido)-2-phenylethyl)boronic acid;

((R)-1-((S)-3-(((R)-1-(2-cyano-4-methylpent-2-enoyl)piperidin-2-yl)methoxy)-2-((2,2,2-trifluoroethyl)amino)propanamido)-2-phenylethyl)boronic acid;

((R)-1-((S)-3-(3-(2-cyano-N,4-dimethylpent-2-enamido)phenyl)-2-((2,2,2-trifluoroethyl)amino)propanamido)-2-phenylethyl)boronic acid;

((R)-1-((S)-3-(3-(2-cyano-N,4-dimethylpent-2-enamido)phenyl)-2-((2,2,2-trifluoroethyl)amino)propanamido)-3-methylbutyl)boronic acid;

((R)-1-((S)-3-(((R)-1-(2-cyano-4-methylpent-2-enoyl)pyrrolidin-2-yl)methoxy)-2-((2,2,2-trifluoroethyl)amino)propanamido)-3-methylbutyl)boronic acid;

((R)-1-((S)-3-(((R)-1-(2-cyano-4-methylpent-2-enoyl)pyrrolidin-2-yl)methoxy)-2-((2,2,2-trifluoroethyl)amino)propanamido)-2-(3-ethylphenyl)ethyl)boronic acid;

((R)-2-(benzofuran-3-yl)-1-((S)-3-(((R)-1-(2-cyano-4-methylpent-2-enoyl)pyrrolidin-2-yl)methoxy)-2-((2,2,2-trifluoroethyl)amino)propanamido)ethyl)boronic acid;

(R)-1-((S)-3-(((R)-1-(2-cyano-3-cyclopropylacryloyl)pyrrolidin-2-yl)methoxy)-2-(2,2,2-trifluoroethylamino)propanamido)-2-phenylethylboronic acid;

(R)-1-((S)-3-(((R)-1-(2-cyano-4-methylpent-2-enoyl)pyrrolidin-2-yl)methoxy)-2-(2,2,2-trifluoroethylamino)propanamido)-2-phenylethylboronic acid; and

(R)-1-((S)-3-(((R)-1-(2-cyano-4,4-dimethylpent-2-enoyl)pyrrolidin-2-yl)methoxy)-2-(2,2,2-trifluoroethylamino)propanamido)-2-phenylethylboronic acid;

(R)-(1-(4-(1-(2-cyano-4-methylpent-2-enoyl)piperidin-4-yl)butanamido)-2-phenylethyl)boronic acid;

((R)-1-(2-((R)-1-(2-cyano-4-(3,3-difluoropyrrolidin-1-yl)-4-methylpent-2-enoyl)piperidin-3-yl)acetamido)-2-phenylethyl)boronic acid;

((R)-1-(2-((R)-4-(2-cyano-4-(3,3-difluoropyrrolidin-1-yl)-4-methylpent-2-enoyl)morpholin-2-yl)acetamido)-2-phenylethyl)boronic acid;

((R)-1-(2-((S)-1-(2-cyano-4-(3,3-difluoropyrrolidin-1-yl)-4-methylpent-2-enoyl)piperidin-3-yl)acetamido)-2-phenylethyl)boronic acid;

((R)-1-(2-((S)-4-(2-cyano-4-(3,3-difluoropyrrolidin-1-yl)-4-methylpent-2-enoyl)morpholin-2-yl)acetamido)-2-phenylethyl)boronic acid;

((R)-1-(3-(((R)-1-(2-cyano-4-methylpent-2-enoyl)pyrrolidin-2-yl)methyl)ureido)-2-phenylethyl)boronic acid;

((R)-1-(3-(((R)-1-(2-cyano-4-methylpent-2-enoyl)piperidin-2-yl)methyl)ureido)-2-phenylethyl)boronic acid;

((R)-1-(3-(((S)-1-(2-cyano-4-methylpent-2-enoyl)pyrrolidin-2-yl)methyl)ureido)-2-phenylethyl)boronic acid;

((R)-1-(3-(((S)-1-(2-cyano-4-methylpent-2-enoyl)piperidin-2-yl)methyl)ureido)-2-phenylethyl)boronic acid;

((R)-1-(3-(((R)-1-acryloylpyrrolidin-2-yl)methyl)ureido)-2-phenylethyl)boronic acid;

((R)-1-(3-(((S)-1-acryloylpyrrolidin-2-yl)methyl)ureido)-2-phenylethyl)boronic acid;

((R)-1-(3-(((S)-1-acryloylpiperidin-2-yl)methyl)ureido)-2-phenylethyl)boronic acid;

((R)-1-(3-(((S)-1-(2-cyano-4,4-dimethylpent-2-enoyl)pyrrolidin-2-yl)methyl)ureido)-2-phenylethyl)boronic acid;

((R)-1-(3-(((S)-1-(2-cyano-4,4-dimethylpent-2-enoyl)piperidin-2-yl)methyl)ureido)-2-phenylethyl)boronic acid;

((R)-1-(3-(((R)-1-acryloylpyrrolidin-2-yl)methyl)ureido)-2-(benzofuran-3-yl)ethyl)boronic acid;

((R)-1-(3-(((S)-1-(2-cyano-4,4-dimethylpent-2-enoyl)pyrrolidin-2-yl)methyl)ureido)-2-(p-tolyl)ethyl)boronic acid;

((R)-1-(3-(((R)-1-(2-cyano-4,4-dimethylpent-2-enoyl)pyrrolidin-2-yl)methyl)ureido)-2-(p-tolyl)ethyl)boronic acid;

((R)-2-(benzofuran-3-yl)-1-(3-(((R)-1-(2-cyano-4,4-dimethylpent-2-enoyl)pyrrolidin-2-yl)methyl)ureido)ethyl)boronic acid;

((R)-2-(benzofuran-3-yl)-1-(3-(((R)-1-(2-cyano-4-methyl-4-morpholinopent-2-enoyl)pyrrolidin-2-yl)methyl)ureido)ethyl)boronic acid;

((R)-2-(benzofuran-3-yl)-1-(3-(((R)-1-(2-cyano-4-methyl-4-(4-(oxetan-3-yl)piperazin-1-yl)pent-2-enoyl)pyrrolidin-2-yl)methyl)ureido)ethyl)boronic acid;

((R)-2-(benzofuran-3-yl)-1-(3-(((R)-1-(2-cyano-4-(4,4-difluoropiperidin-1-yl)-4-methylpent-2-enoyl)pyrrolidin-2-yl)methyl)ureido)ethyl)boronic acid;

((R)-2-(benzofuran-3-yl)-1-(3-(((R)-1-(2-cyano-4-(3,3-difluoropyrrolidin-1-yl)-4-methylpent-2-enoyl)pyrrolidin-2-yl)methyl)ureido)ethyl)boronic acid;

((R)-1-(3-(((R)-1-(2-cyano-4-(3,3-difluoropyrrolidin-1-yl)-4-methylpent-2-enoyl)piperidin-2-yl)methyl)-3-methylureido)-2-phenylethyl)boronic acid;

((R)-1-(3-((S)-1-(2-cyano-4-(3,3-difluoropyrrolidin-1-yl)-4-methylpent-2-enoyl)pyrrolidin-3-yl)ureido)-2-phenylethyl)boronic acid;

((R)-1-(3-((R)-1-(2-cyano-4-(3,3-difluoropyrrolidin-1-yl)-4-methylpent-2-enoyl)piperidin-3-yl)ureido)-2-phenylethyl)boronic acid; and

((R)-1-(3-((S)-1-(2-cyano-4-(3,3-difluoropyrrolidin-1-yl)-4-methylpent-2-enoyl)piperidin-3-yl)ureido)-2-phenylethyl)boronic acid;

((R)-1-(((((S)-1-(2-cyano-4,4-dimethylpent-2-enoyl)piperidin-3-yl)methoxy)carbonyl)amino)-2-(p-tolyl)ethyl)boronic acid;

((R)-1-(((((S)-1-(2-cyano-4,4-dimethylpent-2-enoyl)pyrrolidin-3-yl)methoxy)carbonyl)amino)-2-(p-tolyl)ethyl)boronic acid;

((R)-1-(((((S)-1-acryloylazetidin-2-yl)methoxy)carbonyl)amino)-2-phenylethyl)boronic acid;

((R)-1-(((((S)-1-(2-cyano-4-(3,3-difluoropyrrolidin-1-yl)-4-methylpent-2-enoyl)piperidin-3-yl)methoxy)carbonyl)amino)-2-(p-tolyl)ethyl)boronic acid;

((R)-1-(((((S)-1-(2-cyano-4-(3,3-difluoropyrrolidin-1-yl)-4-methylpent-2-enoyl)piperidin-3-yl)methoxy)carbonyl)amino)-2-phenylethyl)boronic acid;

((R)-1-(((((R)-1-(2-cyano-4-(3,3-difluoropyrrolidin-1-yl)-4-methylpent-2-enoyl)azetidin-2-yl)methoxy)carbonyl)amino)-2-phenylethyl)boronic acid;

((R)-1-(((((R)-1-(2-cyano-4-(3,3-difluoropyrrolidin-1-yl)-4-methylpent-2-enoyl)piperidin-3-yl)oxy)carbonyl)amino)-2-phenylethyl)boronic acid;

(R)-(1-((((7-(2-cyano-4-(3,3-difluoropyrrolidin-1-yl)-4-methylpent-2-enoyl)-7-azabicyclo[2.2.1]heptan-1-yl)methoxy)carbonyl)amino)-2-phenylethyl)boronic acid;

((R)-1-(((((S)-1-(2-cyano-4-(3,3-difluoropyrrolidin-1-yl)-4-methylpent-2-enoyl)piperidin-3-yl)oxy)carbonyl)amino)-2-phenylethyl)boronic acid;

((R)-1-(((((R)-1-acryloylazetidin-2-yl)methoxy)carbonyl)amino)-2-(benzofuran-3-yl)ethyl)boronic acid;

(R)-(1-((((7-acryloyl-7-azabicyclo[2.2.1]heptan-1-yl)methoxy)carbonyl)amino)-2-(benzofuran-3-yl)ethyl)boronic acid;

((R)-1-(((((S)-1-acryloylpiperidin-3-yl)oxy)carbonyl)amino)-2-(benzofuran-3-yl)ethyl)boronic acid;

((R)-1-(((((S)-1-acryloylpiperidin-3-yl)oxy)carbonyl)amino)-2-(4-(trifluoromethyl)phenyl)ethyl)boronic acid;

((R)-1-(((((S)-1-acryloylpiperidin-3-yl)oxy)carbonyl)amino)-2-phenylethyl)boronic acid;

((R)-2-(benzofuran-3-yl)-1-(((((S)-1-(2-cyano-4-(3,3-dimethylpyrrolidin-1-yl)-4-methylpent-2-enoyl)piperidin-3-yl)oxy)carbonyl)amino)ethyl)boronic acid;

((R)-1-(((((S)-1-(2-cyano-4-(3,3-dimethylpyrrolidin-1-yl)-4-methylpent-2-enoyl)piperidin-3-yl)oxy)carbonyl)amino)-2-(4-(trifluoromethyl)phenyl)ethyl)boronic acid;

((R)-1-(((((S)-1-acryloylpiperidin-3-yl)oxy)carbonyl)amino)-2-(4-fluorophenyl)ethyl)boronic acid;

(R)-(1-((((7-acryloyl-7-azabicyclo[2.2.1]heptan-1-yl)methoxy)carbonyl)amino)-3-phenylpropyl)boronic acid;

((R)-1-(((((S)-1-(2-cyano-4-(3,3-dimethylpyrrolidin-1-yl)-4-methylpent-2-enoyl)piperidin-3-yl)oxy)carbonyl)amino)-2-(4-fluorophenyl)ethyl)boronic acid;

((R)-2-(benzofuran-3-yl)-1-(((((S)-1-(2-cyano-4-(3,3-difluoropyrrolidin-1-yl)-4-methylpent-2-enoyl)piperidin-3-yl)oxy)carbonyl)amino)ethyl)boronic acid;

((R)-1-(((((S)-1-(2-fluoroacryloyl)piperidin-3-yl)oxy)carbonyl)amino)-2-(4-fluorophenyl)ethyl)boronic acid;

(R)-(1-((((7-(2-fluoroacryloyl)-7-azabicyclo[2.2.1]heptan-1-yl)methoxy)carbonyl)amino)-2-(4-fluorophenyl)ethyl)boronic acid;

(R)-(1-((((7-acryloyl-7-azabicyclo[2.2.1]heptan-1-yl)methoxy)carbonyl)amino)-2-(4-fluorophenyl)ethyl)boronic acid;

(R)-(1-((((7-(2-cyano-4-(3,3-difluoropyrrolidin-1-yl)-4-methylpent-2-enoyl)-7-azabicyclo[2.2.1]heptan-1-yl)methoxy)carbonyl)amino)-3-phenylpropyl)boronic acid;

((R)-1-(((((S)-1-(2-cyano-4-(3,3-difluoropyrrolidin-1-yl)-4-methylpent-2-enoyl)piperidin-3-yl)oxy)carbonyl)amino)-2-(4-fluorophenyl)ethyl)boronic acid;

((R)-1-(((((S)-1-(2-cyano-4-methyl-4-(4-(oxetan-3-yl)piperazin-1-yl)pent-2-enoyl)piperidin-3-yl)oxy)carbonyl)amino)-2-phenylethyl)boronic acid;

((R)-1-(((((S)-1-(2-cyano-4-methyl-4-(4-methylpiperazin-1-yl)pent-2-enoyl)piperidin-3-yl)oxy)carbonyl)amino)-2-phenylethyl)boronic acid;

(R)-(1-((((7-(2-cyano-4-methyl-4-morpholinopent-2-enoyl)-7-azabicyclo[2.2.1]heptan-1-yl)methoxy)carbonyl)amino)-2-phenylethyl)boronic acid;

(R)-(1-((((7-(2-cyano-4-methyl-4-morpholinopent-2-enoyl)-7-azabicyclo[2.2.1]heptan-1-yl)methoxy)carbonyl)amino)-2-(4-fluorophenyl)ethyl)boronic acid;

((R)-1-(((((S)-1-(2-cyano-4-(4-(methoxycarbonyl)piperazin-1-yl)-4-methylpent-2-enoyl)piperidin-3-yl)oxy)carbonyl)amino)-2-phenylethyl)boronic acid;

(R)-(1-((((7-(2-cyano-4-(3,3-difluoropyrrolidin-1-yl)-4-methylpent-2-enoyl)-7-azabicyclo[2.2.1]heptan-1-yl)methoxy)carbonyl)amino)-2-(4-fluorophenyl)ethyl)boronic acid;

((1R)-1-((((1-acryloyl-3-methylpiperidin-3-yl)oxy)carbonyl)amino)-2-phenylethyl)boronic acid;

(R)-(1-((((1-acryloylazetidin-3-yl)methoxy)carbonyl)amino)-2-phenylethyl)boronic acid;

((R)-1-(((((S)-1-((E)-2-cyano-4,4-dimethylpent-2-enoyl)pyrrolidin-3-yl)oxy)carbonyl)amino)-2-phenylethyl)boronic acid;

((R)-1-(((((S)-1-acryloylpyrrolidin-3-yl)oxy)carbonyl)amino)-2-phenylethyl)boronic acid;

((R)-1-(((((S)-1-(2-cyano-4-(3,3-difluoropyrrolidin-1-yl)-4-methylpent-2-enoyl)pyrrolidin-3-yl)oxy)carbonyl)amino)-2-phenylethyl)boronic acid;

((R)-1-(((((R)-1-(2-cyano-4-(3,3-difluoropyrrolidin-1-yl)-4-methylpent-2-enoyl)pyrrolidin-3-yl)oxy)carbonyl)amino)-2-phenylethyl)boronic acid;

((1R)-1-((((1-acryloyl-3-methylpiperidin-3-yl)oxy)carbonyl)amino)-2-(4-fluorophenyl)ethyl)boronic acid;

((R)-1-(((((R)-1-(2-cyano-4-(3,3-difluoropyrrolidin-1-yl)-4-methylpent-2-enoyl)-3-methylpiperidin-3-yl)oxy)carbonyl)amino)-2-phenylethyl)boronic acid;

((R)-1-(((((S)-1-(2-cyano-4-(3,3-difluoropyrrolidin-1-yl)-4-methylpent-2-enoyl)-3-methylpiperidin-3-yl)oxy)carbonyl)amino)-2-phenylethyl)boronic acid;

((1R)-1-((((1-(2-cyano-4-(3,3-difluoropyrrolidin-1-yl)-4-methylpent-2-enoyl)-3-methylpiperidin-3-yl)oxy)carbonyl)amino)-2-(4-fluorophenyl)ethyl)boronic acid;

((R)-1-(((((S)-1-(2-cyano-4-(3,3-difluoropyrrolidin-1-yl)-4-methylpent-2-enoyl)pyrrolidin-3-yl)methoxy)carbonyl)amino)-2-phenylethyl)boronic acid;

((R)-1-(((((S)-1-(2-cyano-4-(4-(methoxycarbonyl)piperazin-1-yl)-4-methylpent-2-enoyl)pyrrolidin-3-yl)methoxy)carbonyl)amino)-2-phenylethyl)boronic acid;

((R)-1-(((((S)-1-(2-cyano-4-methyl-4-((S)-3-oxotetrahydro-3H-oxazolo[3,4-a]pyrazin-7(1H)-yl)pent-2-enoyl)piperidin-3-yl)oxy)carbonyl)amino)-2-phenylethyl)boronic acid;

((R)-1-(((((S)-1-(2-cyano-4-methyl-4-((R)-3-oxotetrahydro-3H-oxazolo[3,4-a]pyrazin-7(1H)-yl)pent-2-enoyl)piperidin-3-yl)oxy)carbonyl)amino)-2-phenylethyl)boronic acid;

((R)-1-(((((S)-1-(2-cyano-4-methyl-4-morpholinopent-2-enoyl)pyrrolidin-3-yl)methoxy)carbonyl)amino)-2-phenylethyl)boronic acid;

((R)-1-(((((3R,4R)-1-acryloyl-4-fluoropyrrolidin-3-yl)oxy)carbonyl)amino)-2-phenylethyl)boronic acid;

((R)-1-(((((R)-1-(2-cyano-4-methyl-4-morpholinopent-2-enoyl)azepan-3-yl)oxy)carbonyl)amino)-2-phenylethyl)boronic acid;

((R)-1-(((((S)-1-(2-cyano-4-methyl-4-morpholinopent-2-enoyl)azepan-3-yl)oxy)carbonyl)amino)-2-phenylethyl)boronic acid;

((R)-1-(((((R)-1-(2-cyano-4-(3,3-difluoropyrrolidin-1-yl)-4-methylpent-2-enoyl)azepan-3-yl)oxy)carbonyl)amino)-2-phenylethyl)boronic acid;

((R)-1-(((((S)-1-(2-cyano-4-(3,3-difluoropyrrolidin-1-yl)-4-methylpent-2-enoyl)azepan-3-yl)oxy)carbonyl)amino)-2-phenylethyl)boronic acid;

((R)-1-(((((R)-1-(2-cyano-4-(4-(methoxycarbonyl)piperazin-1-yl)-4-methylpent-2-enoyl)azepan-3-yl)oxy)carbonyl)amino)-2-phenylethyl)boronic acid;

((R)-1-(((((S)-1-(2-cyano-4-(4-(methoxycarbonyl)piperazin-1-yl)-4-methylpent-2-enoyl)azepan-3-yl)oxy)carbonyl)amino)-2-phenylethyl)boronic acid;

((R)-1-(((((3S,4S)-1-(2-cyano-4-(3,3-difluoropyrrolidin-1-yl)-4-methylpent-2-enoyl)-4-fluoropyrrolidin-3-yl)oxy)carbonyl)amino)-2-phenylethyl)boronic acid;

((R)-1-(((((3S,4S)-1-acryloyl-4-fluoropyrrolidin-3-yl)oxy)carbonyl)amino)-2-phenylethyl)boronic acid;

((R)-1-(((((3R,4S)-1-(2-cyano-4-(3,3-difluoropyrrolidin-1-yl)-4-methylpent-2-enoyl)-4-fluoropyrrolidin-3-yl)oxy)carbonyl)amino)-2-phenylethyl)boronic acid;

((R)-1-(((((3R,4R)-1-(2-cyano-4-(3,3-difluoropyrrolidin-1-yl)-4-methylpent-2-enoyl)-4-fluoropyrrolidin-3-yl)oxy)carbonyl)amino)-2-phenylethyl)boronic acid;

((R)-1-((((7-(2-cyano-4-((2S,6R)-2,6-dimethylmorpholino)-4-methylpent-2-enoyl)-7-azabicyclo[2.2.1]heptan-1-yl)methoxy)carbonyl)amino)-2-phenylethyl)boronic acid;

((R)-1-(((((3R,4S)-1-acryloyl-4-fluoropyrrolidin-3-yl)oxy)carbonyl)amino)-2-phenylethyl)boronic acid;

(R)-(1-((((7-(2-cyano-4-methyl-4-(4-oxa-7-azaspiro[2.5]octan-7-yl)pent-2-enoyl)-7-azabicyclo[2.2.1]heptan-1-yl)methoxy)carbonyl)amino)-2-phenylethyl)boronic acid;

((R)-1-(((((S)-1-(2-cyano-4-(3,3-difluoropyrrolidin-1-yl)-4-methylpent-2-enoyl)piperidin-3-yl)oxy)carbonyl)amino)-2-(cyclopent-1-en-1-yl)ethyl)boronic acid;

((R)-1-((((7-(2-cyano-4-methyl-4-((R)-2-methylmorpholino)pent-2-enoyl)-7-azabicyclo[2.2.1]heptan-1-yl)methoxy)carbonyl)amino)-2-phenylethyl)boronic acid;

(R)-(1-((((7-(2-cyano-4-(2,2-dimethylmorpholino)-4-methylpent-2-enoyl)-7-azabicyclo[2.2.1]heptan-1-yl)methoxy)carbonyl)amino)-2-phenylethyl)boronic acid;

((R)-1-(((((S)-1-(2-cyano-4-(4-(methoxycarbonyl)piperazin-1-yl)-4-methylpent-2-enoyl)piperidin-3-yl)oxy)carbonyl)amino)-2-(cyclopent-1-en-1-yl)ethyl)boronic acid;

((R)-1-(((((S)-1-(2-cyano-4-methyl-4-morpholinopent-2-enoyl)piperidin-3-yl)oxy)carbonyl)amino)-2-(cyclopent-1-en-1-yl)ethyl)boronic acid;

((R)-1-((((7-(2-cyano-4-methyl-4-((S)-2-methylmorpholino)pent-2-enoyl)-7-azabicyclo[2.2.1]heptan-1-yl)methoxy)carbonyl)amino)-2-phenylethyl)boronic acid;

((R)-1-((((7-(2-cyano-4-((2S,6S)-2,6-dimethylmorpholino)-4-methylpent-2-enoyl)-7-azabicyclo[2.2.1]heptan-1-yl)methoxy)carbonyl)amino)-2-phenylethyl)boronic acid;

((R)-1-(((((3S,4R)-1-acryloyl-4-fluoropyrrolidin-3-yl)oxy)carbonyl)amino)-2-phenylethyl)boronic acid;

((R)-1-(((((3S,4R)-1-(2-cyano-4-(3,3-difluoropyrrolidin-1-yl)-4-methylpent-2-enoyl)-4-fluoropyrrolidin-3-yl)oxy)carbonyl)amino)-2-phenylethyl)boronic acid;

((R)-1-((((7-(2-cyano-4-((2R,6R)-2,6-dimethylmorpholino)-4-methylpent-2-enoyl)-7-azabicyclo[2.2.1]heptan-1-yl)methoxy)carbonyl)amino)-2-phenylethyl)boronic acid;

((R)-1-(((((R)-1-(2-cyano-4-((2S,6R)-2,6-dimethylmorpholino)-4-methylpent-2-enoyl)azepan-3-yl)oxy)carbonyl)amino)-2-phenylethyl)boronic acid;

((R)-1-(((((R)-1-(2-cyano-4-((2R,6R)-2,6-dimethylmorpholino)-4-methylpent-2-enoyl)azepan-3-yl)oxy)carbonyl)amino)-2-phenylethyl)boronic acid;

((R)-1-(((((R)-1-(2-cyano-4-methyl-4-((S)-2-methylmorpholino)pent-2-enoyl)azepan-3-yl)oxy)carbonyl)amino)-2-phenylethyl)boronic acid;

((R)-1-(((((R)-1-(2-cyano-4-methyl-4-((R)-2-methylmorpholino)pent-2-enoyl)azepan-3-yl)oxy)carbonyl)amino)-2-phenylethyl)boronic acid;

((1R)-1-((((7-(4-(6-oxa-3-azabicyclo[3.1.1]heptan-3-yl)-2-cyano-4-methylpent-2-enoyl)-7-azabicyclo[2.2.1]heptan-1-yl)methoxy)carbonyl)amino)-2-phenylethyl)boronic acid;

((R)-1-(((((R)-1-(2-cyano-4-methyl-4-(4-oxa-7-azaspiro[2.5]octan-7-yl)pent-2-enoyl)azepan-3-yl)oxy)carbonyl)amino)-2-phenylethyl)boronic acid;

((1R)-1-(((((3R)-1-(4-(6-oxa-3-azabicyclo[3.1.1]heptan-3-yl)-2-cyano-4-methylpent-2-enoyl)azepan-3-yl)oxy)carbonyl)amino)-2-phenylethyl)boronic acid;

((R)-1-(((((3R,4R)-1-acryloyl-4-fluoropyrrolidin-3-yl)oxy)carbonyl)amino)-2-(4-fluorophenyl)ethyl)boronic acid;

((R)-1-(((((R)-1-(2-cyano-4-(2,2-dimethylmorpholino)-4-methylpent-2-enoyl)azepan-3-yl)oxy)carbonyl)amino)-2-phenylethyl)boronic acid;

((R)-1-(((((R)-1-(2-cyano-4-methyl-4-morpholinopent-2-enoyl)azepan-3-yl)oxy)carbonyl)amino)-2-(4-fluorophenyl)ethyl)boronic acid;

((R)-1-(((((R)-1-(2-cyano-4-methyl-4-morpholinopent-2-enoyl)azepan-3-yl)oxy)carbonyl)amino)-2-(cyclopent-1-en-1-yl)ethyl)boronic acid;

(R)-(1-((((7-acryloyl-7-azabicyclo[2.2.1]heptan-1-yl)methoxy)carbonyl)amino)-2-(benzofuran-3-yl)ethyl)boronic acid;

((R)-1-(((((S)-1-acryloylpiperidin-3-yl)oxy)carbonyl)amino)-2-(benzofuran-3-yl)ethyl)boronic acid;

((R)-1-(((((S)-1-acryloylpiperidin-3-yl)oxy)carbonyl)amino)-2-(4-(trifluoromethyl)phenyl)ethyl)boronic acid;

((R)-1-(((((S)-1-acryloylpiperidin-3-yl)oxy)carbonyl)amino)-2-phenylethyl)boronic acid;

((R)-1-(((((S)-1-acryloylpiperidin-3-yl)oxy)carbonyl)amino)-2-(4-fluorophenyl)ethyl)boronic acid;

(R)-(1-((((7-acryloyl-7-azabicyclo[2.2.1]heptan-1-yl)methoxy)carbonyl)amino)-3-phenylpropyl)boronic acid;

(R)-(1-((((7-(2-fluoroacryloyl)-7-azabicyclo[2.2.1]heptan-1-yl)methoxy)carbonyl)amino)-2-(4-fluorophenyl)ethyl)boronic acid;

(R)-(1-((((7-acryloyl-7-azabicyclo[2.2.1]heptan-1-yl)methoxy)carbonyl)amino)-2-(4-fluorophenyl)ethyl)boronic acid;

((1R)-1-((((1-acryloyl-3-methylpiperidin-3-yl)oxy)carbonyl)amino)-2-phenylethyl)boronic acid;

(R)-(1-((((1-acryloylazetidin-3-yl)methoxy)carbonyl)amino)-2-phenylethyl)boronic acid;

((R)-1-(((((S)-1-acryloylpyrrolidin-3-yl)oxy)carbonyl)amino)-2-phenylethyl)boronic acid;

((1R)-1-((((1-acryloyl-3-methylpiperidin-3-yl)oxy)carbonyl)amino)-2-(4-fluorophenyl)ethyl)boronic acid;

((R)-1-(((((3R,4R)-1-acryloyl-4-fluoropyrrolidin-3-yl)oxy)carbonyl)amino)-2-phenylethyl)boronic acid;

((R)-1-(((((3R,4S)-1-acryloyl-4-fluoropyrrolidin-3-yl)oxy)carbonyl)amino)-2-phenylethyl)boronic acid;

((R)-1-(((((3S,4R)-1-acryloyl-4-fluoropyrrolidin-3-yl)oxy)carbonyl)amino)-2-phenylethyl)boronic acid; and

((R)-1-(((((3R,4R)-1-acryloyl-4-fluoropyrrolidin-3-yl)oxy)carbonyl)amino)-2-(4-fluorophenyl)ethyl)boronic acid;

an individual E or Z isomer thereof; and/or

a pharmaceutically acceptable salt of any of the foregoing compounds.

19. A pharmaceutical composition comprising at least one compound of any of claims 1-18, and/or a pharmaceutical acceptable salt thereof, and a pharmaceutically acceptable excipient.

20. Use of a compound of any one of claims 1-18, and/or a pharmaceutically acceptable salt thereof, in the preparation of a medicament for inhibiting Large Multifunctional Protease 2 (LMP2) and/or Large Multifunctional Protease 7 (LMP7).

21. Use of a compound of any one of claims 1-18, and/or a pharmaceutically acceptable salt thereof, in the preparation of a medicament for treating a disease chosen from an autoimmune disorder, an inflammatory disorder, and a hematological disorder.

22. The use of claim 21, wherein the disease is chosen from lupus, rheumatoid arthritis, scleroderma, ankylosing spondylitis, Duchene muscular dystrophy (DMD), Becker muscular dystrophy (BMD), idiopathic inflammatory myopathies (IIMs), polymyositis, sporadic inclusion body myositis, dermatomyositis, immune-mediated necrotizing myopathies (IMNM), psoriasis, multiple sclerosis, inflammatory bowel disease, Behçet's disease, ulcerative colitis, Crohn's disease, Sjogren's Syndrome, bronchitis, conjunctivitis, pancreatitis, cholecystitis, bronchiectasis, aortic valve stenosis, restenosis, psoriasis, arthritis, fibrosis, infection, ischemia, cardiovascular disease, hepatitis, cirrhosis, steatohepatitis, liver inflammation, Alzheimer's Disease (AD), amyotrophic lateral sclerosis (ALS), Huntington's disease, body myositis, myofibrilar myopathy, GVHD, and multiple myeloma.