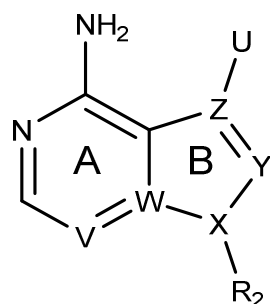
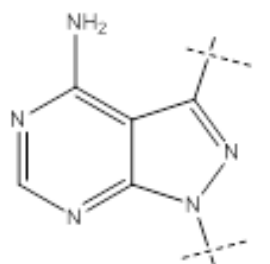


1. Compound having the structure of general formula (I)



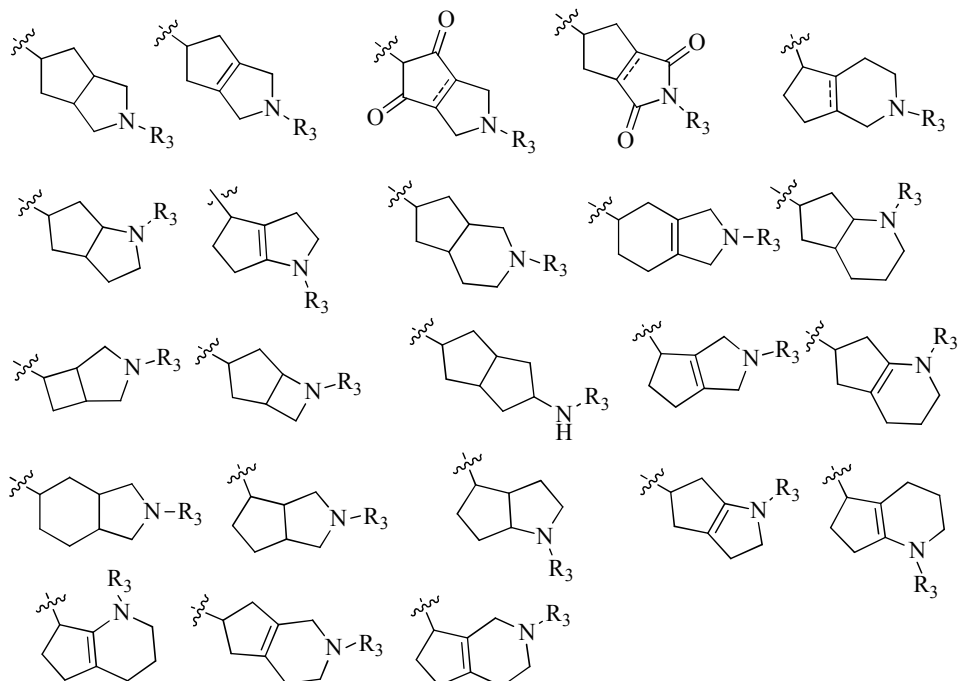
(I)

- 5 and their pharmaceutically acceptable salts, enantiomers and their diastereomers,
Bicyclic ring A-B is selected from the group consisting of:



Wherein

R₂ is selected from the following ring system:



- R_3 at each occurrence is independently selected from, $C(O)NH(C_{1-7})alkyl$, $C(O)-CH=CH_2$, $C(O)-CH\equiv C-R_{11}$, $C(O)-CH=CH-R_4$, $C(O)-C(CN)=CH_2$, $C(O)-C(CN)=CH-R_4$, $SO_2-NH(C_{1-7})alkyl$, $SO_2-CH=CH_2$, $SO_2-CH=CH-R_4$ groups; wherein, R_{11} is independently selected from hydrogen and alkyl group;
- 5 R_4 at each occurrence is selected from $-(CH_2)_n-NR_5R_6$; wherein, $n=0-7$ and each of R_5 and R_6 are independently selected from hydrogen, haloalkyl, $C_{1-7} alkyl$, $C_{2-7} alkenyl$, $C_{2-7} alkynyl$, aryl, cycloalkyl, carbocycle, heterocycloalkyl, cycloalkyl(C_{1-7})alkyl, heterocycloalkyl(C_{1-7})alkyl;
- 10 'U' is selected from unsubstituted or substituted groups selected from heteroaryl, heterocycle, heterocycloalkyl, aryloxyaryl, aryloxyalkyl, aryloxyheteroaryl, heteroaryloxyaryl, heteroaryloxyalkyl, heteroaryloxyheteroaryl, $Ph-CO-N(R_7R_8)$, $Ph-N(R_9)-CO-R_{10}$, wherein, R_7 , R_8 and R_{10} are independently selected from hydrogen, halogen, alkyl, haloalkyl, alkoxy, aryl, cycloalkyl, heteroaryl, heterocycloalkyl and wherein each of the alkyl, haloalkyl, alkoxy, aryl,
- 15 cycloalkyl, heteroaryl, heterocycloalkyl groups are when substituted are further substituted with halogen, alkyl, alkoxy, haloalkoxy groups; R_9 are independently selected from hydrogen, $C_{1-7} alkyl$, $C_{2-7} alkenyl$, $C_{2-7} alkynyl$.
2. A compound as claimed in claim 1 selected from the group comprising of:
- 20 1-(5-(4-amino-3-(4-phenoxyphenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[c]pyrrol-2(1H)-yl)prop-2-en-1-one;
- 1-(5-(4-amino-3-(benzo[d]thiazol-6-yl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[c]pyrrol-2(1H)-yl)prop-2-en-1-one;
- 1-(5-(4-amino-3-(2-methylbenzo[d]thiazol-6-yl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[c]pyrrol-2(1H)-yl)prop-2-en-1-one;
- 25 1-(5-(4-amino-3-(benzo[b]thiophen-5-yl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[c]pyrrol-2(1H)-yl)prop-2-en-1-one;
- 1-(5-(4-amino-3-(2,3-dihydrobenzo[b]thiophen-5-yl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[c]pyrrol-2(1H)-yl)prop-2-en-1-one;
- 1-(5-(4-amino-3-(dibenzo[b,d]furan-3-yl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[c]pyrrol-2(1H)-yl)prop-2-en-1-one;
- 30 N-(6-(1-(2-acryloyloctahydrocyclopenta[c]pyrrol-5-yl)-4-amino-1H-pyrazolo[3,4-d]pyrimidin-3-yl)benzo[d]thiazol-2-yl)acetamide;

- 1-(5-(4-amino-3-(2-methoxybenzo[d]thiazol-6-yl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[c]pyrrol-2(1H)-yl)prop-2-en-1-one;
- 1-(5-(4-amino-3-(4-phenoxyphenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[c]pyrrol-2(1H)-yl)prop-2-yn-1-one;
- 5 1-(5-(4-amino-3-(3-methoxy-4-phenoxyphenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[c]pyrrol-2(1H)-yl)prop-2-en-1-one;
- 4-(1-(2-acryloyloctahydrocyclopenta[c]pyrrol-5-yl)-4-amino-1H-pyrazolo[3,4-d]pyrimidin-3-yl)-N-(pyridin-2-yl)benzamide;
- 1-(5-(4-amino-3-(2-phenylbenzo[d]thiazol-6-yl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[c]pyrrol-2(1H)-yl)prop-2-en-1-one;
- 10 1-(5-(4-amino-3-(benzo[d][1,3]dioxol-5-yl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[c]pyrrol-2(1H)-yl)prop-2-en-1-one;
- 1-(5-(4-amino-3-(4-(5-methyl-1,3,4-oxadiazol-2-yl)phenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[c]pyrrol-2(1H)-yl)prop-2-en-1-one;
- 15 1-(5-(4-amino-3-(benzo[d]oxazol-6-yl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[c]pyrrol-2(1H)-yl)prop-2-en-1-one;
- 3-(4-phenoxyphenyl)-1-(2-(vinylsulfonyl)octahydrocyclopenta[c]pyrrol-5-yl)-1H-pyrazolo[3,4-d]pyrimidin-4-amine;
- 1-(5-(4-amino-3-(2-phenylbenzo[d]oxazol-6-yl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[c]pyrrol-2(1H)-yl)prop-2-en-1-one;
- 20 1-(5-(4-amino-3-(2-phenoxybenzo[d]thiazol-6-yl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[c]pyrrol-2(1H)-yl)prop-2-en-1-one;
- 1-(5-(4-amino-3-(4-(1-methyl-1H-pyrazol-4-yl)phenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[c]pyrrol-2(1H)-yl)prop-2-en-1-one;
- 25 1-(5-(4-amino-3-(benzo[d]oxazol-5-yl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[c]pyrrol-2(1H)-yl)prop-2-en-1-one;
- 1-(5-(4-amino-3-(2-phenylbenzo[d]oxazol-5-yl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[c]pyrrol-2(1H)-yl)prop-2-en-1-one;
- (E)-1-(5-(4-amino-3-(4-phenoxyphenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[c]pyrrol-2(1H)-yl)-4-(dimethylamino)but-2-en-1-one;
- 30 1-(5-(4-amino-3-(4-(5-(pyridin-2-yl)-1,3,4-oxadiazol-2-yl)phenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[c]pyrrol-2(1H)-yl)prop-2-en-1-one;

- (E)-2-(5-(4-amino-3-(4-phenoxyphenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)octahydrocyclopenta[c]pyrrole-2-carbonyl)-3-cyclopropylacrylonitrile;
 4-(1-(2-acryloyloctahydrocyclopenta[c]pyrrol-5-yl)-4-amino-1H-pyrazolo[3,4-d]pyrimidin-3-yl)-2-methoxy-N-(4-methylpyridin-2-yl)benzamide;
 5 4-(1-(2-acryloyloctahydrocyclopenta[c]pyrrol-5-yl)-4-amino-1H-pyrazolo[3,4-d]pyrimidin-3-yl)-N-(4-methylpyridin-2-yl)benzamide;
 N-(4-(1-(2-acryloyloctahydrocyclopenta[c]pyrrol-5-yl)-4-amino-1H-pyrazolo[3,4-d]pyrimidin-3-yl)phenyl)picolinamide;
 4-(1-(2-acryloyloctahydrocyclopenta[c]pyrrol-5-yl)-4-amino-1H-pyrazolo[3,4-d]pyrimidin-3-yl)-N-(benzo[d]thiazol-2-yl)benzamide;
 10 N-(4-(1-(2-acryloyloctahydrocyclopenta[c]pyrrol-5-yl)-4-amino-1H-pyrazolo[3,4-d]pyrimidin-3-yl)phenyl)pyrazine-2-carboxamide;
 1-(5-(4-amino-3-(2,2-difluorobenzo[d][1,3]dioxol-5-yl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[c]pyrrol-2(1H)-yl)prop-2-en-1-one;
 15 4-(1-(2-acryloyloctahydrocyclopenta[c]pyrrol-5-yl)-4-amino-1H-pyrazolo[3,4-d]pyrimidin-3-yl)-N-(pyrazin-2-yl)benzamide;
 N-(4-(1-(2-acryloyloctahydrocyclopenta[c]pyrrol-5-yl)-4-amino-1H-pyrazolo[3,4-d]pyrimidin-3-yl)phenyl)benzamide;
 1-(5-(4-amino-3-(4-(5-(pyridin-2-yl)-1,3,4-thiadiazol-2-yl)phenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[c]pyrrol-2(1H)-yl)prop-2-en-1-one;
 20 4-(1-(2-acryloyloctahydrocyclopenta[c]pyrrol-5-yl)-4-amino-1H-pyrazolo[3,4-d]pyrimidin-3-yl)-N-(4-(trifluoromethyl)pyridin-2-yl)benzamide;
 Z)-methyl 4-(1-(2-acryloyloctahydrocyclopenta[c]pyrrol-5-yl)-4-amino-1H-pyrazolo[3,4-d]pyrimidin-3-yl)-N-(4-methylpyridin-2-yl)benzimidate;
 25 6-(1-(2-acryloyloctahydrocyclopenta[c]pyrrol-5-yl)-4-amino-1H-pyrazolo[3,4-d]pyrimidin-3-yl)-N-(4-methylpyridin-2-yl)nicotinamide;
 1-(5-(4-amino-3-(4-(pyridin-2-yloxy)phenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[c]pyrrol-2(1H)-yl)prop-2-en-1-one;
 30 (E)-4-(4-amino-1-(2-(4-(dimethylamino)but-2-enoyl)octahydrocyclopenta[c]pyrrol-5-yl)-1H-pyrazolo[3,4-d]pyrimidin-3-yl)-N-(pyridin-2-yl)benzamide;

- (E)-4-(4-amino-1-(2-(4-(dimethylamino)but-2-en-1-yl)octahydrocyclopenta[c]pyrrol-5-yl)-1H-pyrazolo[3,4-d]pyrimidin-3-yl)-N-(4-methylpyridin-2-yl)benzamide;
- 5 1-(5-(4-amino-3-(4-(5-(pyrazin-2-yl)-1,3,4-thiadiazol-2-yl)phenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[c]pyrrol-2(1H)-yl)prop-2-en-1-one;
- (E)-1-(5-(4-amino-3-(4-(pyridin-2-yloxy)phenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[c]pyrrol-2(1H)-yl)-4-(dimethylamino)but-2-en-1-one;
- 10 (E)-1-(5-(4-amino-3-(4-phenoxyphenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[c]pyrrol-2(1H)-yl)-4-(dimethylamino)but-2-en-1-one;
- (E)-4-(4-amino-1-(2-(4-(dimethylamino)but-2-en-1-yl)octahydrocyclopenta[c]pyrrol-5-yl)-1H-pyrazolo[3,4-d]pyrimidin-3-yl)-N-(pyrazin-2-yl)benzamide;
- (Z)-methyl 4-(4-amino-1-(2-((E)-4-(dimethylamino)but-2-en-1-yl)octahydrocyclopenta[c]pyrrol-5-yl)-1H-pyrazolo[3,4-d]pyrimidin-3-yl)-N-(4-methylpyridin-2-yl)benzimidate;
- 15 (E)-4-(4-amino-1-(2-(4-(dimethylamino)but-2-en-1-yl)octahydrocyclopenta[c]pyrrol-5-yl)-1H-pyrazolo[3,4-d]pyrimidin-3-yl)-N-(4-(trifluoromethyl)pyridin-2-yl)benzamide;
- 20 1-(5-(4-amino-3-(4-(pyridin-3-yloxy)phenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[c]pyrrol-2(1H)-yl)prop-2-en-1-one;
- (E)-1-(5-(4-amino-3-(4-(pyridin-3-yloxy)phenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[c]pyrrol-2(1H)-yl)-4-(dimethylamino)but-2-en-1-one;
- 25 4-(1-(2-acryloyloctahydrocyclopenta[c]pyrrol-5-yl)-4-amino-1H-pyrazolo[3,4-d]pyrimidin-3-yl)-N-methyl-N-(4-methylpyridin-2-yl)benzamide;
- (E)-4-(4-amino-1-(2-(4-(dimethylamino)but-2-en-1-yl)octahydrocyclopenta[c]pyrrol-5-yl)-1H-pyrazolo[3,4-d]pyrimidin-3-yl)-N-methyl-N-(4-methylpyridin-2-yl)benzamide;
- (E)-1-(5-(4-amino-3-(4-(5-(pyrazin-2-yl)-1,3,4-thiadiazol-2-yl)phenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[c]pyrrol-2(1H)-yl)-4-(dimethylamino)but-2-en-1-one;
- 30 (E)-1-(5-(4-amino-3-(4-(5-(pyridin-2-yl)-1,3,4-oxadiazol-2-yl)phenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[c]pyrrol-2(1H)-yl)-4-(dimethylamino)but-2-en-1-one.

3. A compound as claimed in claim 1 selected from the group comprising of:
- 1-(5-(4-amino-3-(4-phenoxyphenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[c]pyrrol-2(1H)-yl)prop-2-en-1-one;
- 5 1-(5-(4-amino-3-(benzo[d]thiazol-6-yl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[c]pyrrol-2(1H)-yl)prop-2-en-1-one;
- 1-(5-(5-((4-amino-3-(4-phenoxyphenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)methyl)pyridin-2-yl)hexahydropyrrolo[3,4-c]pyrrol-2(1H)-yl)prop-2-en-1-one;
- 10 1-(5-(2-(4-amino-3-(4-phenoxyphenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)ethyl)hexahydropyrrolo[3,4-c]pyrrol-2(1H)-yl)prop-2-en-1-one;
- 1-(5-(4-amino-3-(2-methylbenzo[d]thiazol-6-yl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[c]pyrrol-2(1H)-yl)prop-2-en-1-one;
- 1-(5-(4-amino-3-(benzo[b]thiophen-5-yl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[c]pyrrol-2(1H)-yl)prop-2-en-1-one;
- 15 1-(5-(4-amino-3-(2,3-dihydrobenzo[b]thiophen-5-yl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[c]pyrrol-2(1H)-yl)prop-2-en-1-one;
- 1-(5-(4-amino-3-(dibenzo[b,d]furan-3-yl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[c]pyrrol-2(1H)-yl)prop-2-en-1-one;
- 20 N-(6-(1-(2-acryloyloctahydrocyclopenta[c]pyrrol-5-yl)-4-amino-1H-pyrazolo[3,4-d]pyrimidin-3-yl)benzo[d]thiazol-2-yl)acetamide;
- 1-(5-(4-amino-3-(2-methoxybenzo[d]thiazol-6-yl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[c]pyrrol-2(1H)-yl)prop-2-en-1-one;
- 1-(5-(4-amino-3-(4-phenoxyphenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[c]pyrrol-2(1H)-yl)prop-2-yn-1-one;
- 25 1-(5-(4-amino-3-(3-methoxy-4-phenoxyphenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[c]pyrrol-2(1H)-yl)prop-2-en-1-one;
- 4-(1-(2-acryloyloctahydrocyclopenta[c]pyrrol-5-yl)-4-amino-1H-pyrazolo[3,4-d]pyrimidin-3-yl)-N-(pyridin-2-yl)benzamide;
- 30 1-(5-(4-amino-3-(2-phenylbenzo[d]thiazol-6-yl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[c]pyrrol-2(1H)-yl)prop-2-en-1-one;
- 1-(5-(4-amino-3-(benzo[d][1,3]dioxol-5-yl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[c]pyrrol-2(1H)-yl)prop-2-en-1-one;

- 1-(5-(4-amino-3-(4-(5-methyl-1,3,4-oxadiazol-2-yl)phenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[c]pyrrol-2(1H)-yl)prop-2-en-1-one;
- 1-(5-(4-amino-3-(benzo[d]oxazol-6-yl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[c]pyrrol-2(1H)-yl)prop-2-en-1-one;
- 5 3-(4-phenoxyphenyl)-1-(2-(vinylsulfonyl)octahydrocyclopenta[c]pyrrol-5-yl)-1H-pyrazolo[3,4-d]pyrimidin-4-amine;
- 1-(5-(4-amino-3-(2-phenylbenzo[d]oxazol-6-yl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[c]pyrrol-2(1H)-yl)prop-2-en-1-one;
- 1-(5-(4-amino-3-(2-phenoxybenzo[d]thiazol-6-yl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[c]pyrrol-2(1H)-yl)prop-2-en-1-one;
- 10 1-(5-(4-amino-3-(4-(1-methyl-1H-pyrazol-4-yl)phenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[c]pyrrol-2(1H)-yl)prop-2-en-1-one;
- 1-(5-(4-amino-3-(benzo[d]oxazol-5-yl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[c]pyrrol-2(1H)-yl)prop-2-en-1-one;
- 15 1-(5-(4-amino-3-(2-phenylbenzo[d]oxazol-5-yl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[c]pyrrol-2(1H)-yl)prop-2-en-1-one;
- (E)-1-(5-(4-amino-3-(4-phenoxyphenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[c]pyrrol-2(1H)-yl)-4-(dimethylamino)but-2-en-1-one;
- 1-(5-(4-amino-3-(4-(5-(pyridin-2-yl)-1,3,4-oxadiazol-2-yl)phenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[c]pyrrol-2(1H)-yl)prop-2-en-1-one;
- 20 (E)-2-(5-(4-amino-3-(4-phenoxyphenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)octahydrocyclopenta[c]pyrrole-2-carbonyl)-3-cyclopropylacrylonitrile;
- 4-(1-(2-acryloyloctahydrocyclopenta[c]pyrrol-5-yl)-4-amino-1H-pyrazolo[3,4-d]pyrimidin-3-yl)-2-methoxy-N-(4-methylpyridin-2-yl)benzamide;
- 25 4-(1-(2-acryloyloctahydrocyclopenta[c]pyrrol-5-yl)-4-amino-1H-pyrazolo[3,4-d]pyrimidin-3-yl)-N-(4-methylpyridin-2-yl)benzamide;
- N-(4-(1-(2-acryloyloctahydrocyclopenta[c]pyrrol-5-yl)-4-amino-1H-pyrazolo[3,4-d]pyrimidin-3-yl)phenyl)picolinamide;
- 30 4-(1-(2-acryloyloctahydrocyclopenta[c]pyrrol-5-yl)-4-amino-1H-pyrazolo[3,4-d]pyrimidin-3-yl)-N-(benzo[d]thiazol-2-yl)benzamide;
- N-(4-(1-(2-acryloyloctahydrocyclopenta[c]pyrrol-5-yl)-4-amino-1H-pyrazolo[3,4-d]pyrimidin-3-yl)phenyl)pyrazine-2-carboxamide;

- 1-(5-(4-amino-3-(2,2-difluorobenzo[d][1,3]dioxol-5-yl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[c]pyrrol-2(1H)-yl)prop-2-en-1-one;
4-(1-(2-acryloyloctahydrocyclopenta[c]pyrrol-5-yl)-4-amino-1H-pyrazolo[3,4-d]pyrimidin-3-yl)-N-(pyrazin-2-yl)benzamide;
- 5 N-(4-(1-(2-acryloyloctahydrocyclopenta[c]pyrrol-5-yl)-4-amino-1H-pyrazolo[3,4-d]pyrimidin-3-yl)phenyl)benzamide;
1-(5-(4-amino-3-(4-(5-(pyridin-2-yl)-1,3,4-thiadiazol-2-yl)phenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[c]pyrrol-2(1H)-yl)prop-2-en-1-one;
- 10 4-(1-(2-acryloyloctahydrocyclopenta[c]pyrrol-5-yl)-4-amino-1H-pyrazolo[3,4-d]pyrimidin-3-yl)-N-(4-(trifluoromethyl)pyridin-2-yl)benzamide;
Z)-methyl 4-(1-(2-acryloyloctahydrocyclopenta[c]pyrrol-5-yl)-4-amino-1H-pyrazolo[3,4-d]pyrimidin-3-yl)-N-(4-methylpyridin-2-yl)benzimidate;
6-(1-(2-acryloyloctahydrocyclopenta[c]pyrrol-5-yl)-4-amino-1H-pyrazolo[3,4-d]pyrimidin-3-yl)-N-(4-methylpyridin-2-yl)nicotinamide;
- 15 1-(5-(4-amino-3-(4-(pyridin-2-yloxy)phenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[c]pyrrol-2(1H)-yl)prop-2-en-1-one;
(E)-4-(4-amino-1-(2-(4-(dimethylamino)but-2-enoyl)octahydrocyclopenta[c]pyrrol-5-yl)-1H-pyrazolo[3,4-d]pyrimidin-3-yl)-N-(pyridin-2-yl)benzamide;
- 20 (E)-4-(4-amino-1-(2-(4-(dimethylamino)but-2-enoyl)octahydrocyclopenta[c]pyrrol-5-yl)-1H-pyrazolo[3,4-d]pyrimidin-3-yl)-N-(4-methylpyridin-2-yl)benzamide;
1-(5-(4-amino-3-(4-(5-(pyrazin-2-yl)-1,3,4-thiadiazol-2-yl)phenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[c]pyrrol-2(1H)-yl)prop-2-en-1-one;
- 25 (E)-1-(5-(4-amino-3-(4-(pyridin-2-yloxy)phenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[c]pyrrol-2(1H)-yl)-4-(dimethylamino)but-2-en-1-one;
(E)-1-(5-(4-amino-3-(4-phenoxyphenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[c]pyrrol-2(1H)-yl)-4-(dimethylamino)but-2-en-1-one;
- 30 (E)-4-(4-amino-1-(2-(4-(dimethylamino)but-2-enoyl)octahydrocyclopenta[c]pyrrol-5-yl)-1H-pyrazolo[3,4-d]pyrimidin-3-yl)-N-(pyrazin-2-yl)benzamide;

- (Z)-methyl 4-(4-amino-1-(2-((E)-4-(dimethylamino)but-2-en-1-yl)octahydrocyclopenta[c]pyrrol-5-yl)-1H-pyrazolo[3,4-d]pyrimidin-3-yl)-N-(4-methylpyridin-2-yl)benzimidate;
- (E)-4-(4-amino-1-(2-(4-(dimethylamino)but-2-en-1-yl)octahydrocyclopenta[c]pyrrol-5-yl)-1H-pyrazolo[3,4-d]pyrimidin-3-yl)-N-(4-(trifluoromethyl)pyridin-2-yl)benzamide;
- 1-(5-(4-amino-3-(4-(pyridin-3-yloxy)phenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[c]pyrrol-2(1H)-yl)prop-2-en-1-one;
- (E)-1-(5-(4-amino-3-(4-(pyridin-3-yloxy)phenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[c]pyrrol-2(1H)-yl)-4-(dimethylamino)but-2-en-1-one;
- 4-(1-(2-acryloyloctahydrocyclopenta[c]pyrrol-5-yl)-4-amino-1H-pyrazolo[3,4-d]pyrimidin-3-yl)-N-methyl-N-(4-methylpyridin-2-yl)benzamide;
- (E)-4-(4-amino-1-(2-(4-(dimethylamino)but-2-en-1-yl)octahydrocyclopenta[c]pyrrol-5-yl)-1H-pyrazolo[3,4-d]pyrimidin-3-yl)-N-methyl-N-(4-methylpyridin-2-yl)benzamide;
- (E)-1-(5-(4-amino-3-(4-(5-(pyrazin-2-yl)-1,3,4-thiadiazol-2-yl)phenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[c]pyrrol-2(1H)-yl)-4-(dimethylamino)but-2-en-1-one;
- (E)-1-(5-(4-amino-3-(4-(5-(pyridin-2-yl)-1,3,4-oxadiazol-2-yl)phenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[c]pyrrol-2(1H)-yl)-4-(dimethylamino)but-2-en-1-one;
- 1-(5-(4-amino-3-(4-phenoxyphenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)-5,6-dihydrocyclopenta[c]pyrrol-2(1H,3H,4H)-yl)prop-2-en-1-one;
- 2-acryloyl-5-(4-amino-3-(4-phenoxyphenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)-2,3-dihydrocyclopenta[c]pyrrole-4,6(1H,5H)-dione;
- 2-acryloyl-5-(4-amino-3-(4-phenoxyphenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)-5,6-dihydrocyclopenta[c]pyrrole-1,3(2H,4H)-dione;
- 1-(5-(4-amino-3-(4-phenoxyphenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[b]pyrrol-1(2H)-yl)prop-2-en-1-one;
- 1-(4-(4-amino-3-(4-phenoxyphenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)-2,3,5,6-tetrahydrocyclopenta[b]pyrrol-1(4H)-yl)prop-2-en-1-one;
- 1-(6-(4-amino-3-(4-phenoxyphenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydro-1H-cyclopenta[c]pyridin-2(3H)-yl)prop-2-en-1-one;

- 1-(5-(4-amino-3-(4-phenoxyphenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)-4,5,6,7-tetrahydro-1H-isoindol-2(3H)-yl)prop-2-en-1-one;
- 1-(6-(4-amino-3-(4-phenoxyphenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)-3-azabicyclo[3.2.0]heptan-3-yl)prop-2-en-1-one;
- 5 1-(3-(4-amino-3-(4-phenoxyphenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)-6-azabicyclo[3.2.0]heptan-6-yl)prop-2-en-1-one;
- N-(5-(4-amino-3-(4-phenoxyphenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)octahydropentalen-2-yl)acrylamide;
- 1-(5-(4-amino-3-(4-phenoxyphenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)-3,4,6,7-tetrahydro-1H-cyclopenta[c]pyridin-2(5H)-yl)prop-2-en-1-one;
- 10 1-(5-(4-amino-3-(4-phenoxyphenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydro-1H-isoindol-2(3H)-yl)prop-2-en-1-one;
- 1-(4-(4-amino-3-(4-phenoxyphenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[c]pyrrol-2(1H)-yl)prop-2-en-1-one;
- 15 1-(4-(4-amino-3-(4-phenoxyphenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[b]pyrrol-1(2H)-yl)prop-2-en-1-one;
- 1-(5-(4-amino-3-(4-phenoxyphenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)-2,3,5,6-tetrahydrocyclopenta[b]pyrrol-1(4H)-yl)prop-2-en-1-one;
- 1-(4-(4-amino-3-(4-phenoxyphenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)-5,6-dihydrocyclopenta[c]pyrrol-2(1H,3H,4H)-yl)prop-2-en-1-one;
- 20 1-(6-(4-amino-3-(4-phenoxyphenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)octahydro-1H-cyclopenta[b]pyridin-1-yl)prop-2-en-1-one;
- 1-(5-(4-amino-3-(4-phenoxyphenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)-2,3,4,5,6,7-hexahydro-1H-cyclopenta[b]pyridin-1-yl)prop-2-en-1-one;
- 25 1-(7-(4-amino-3-(4-phenoxyphenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)-2,3,4,5,6,7-hexahydro-1H-cyclopenta[b]pyridin-1-yl)prop-2-en-1-one;
- 1-(6-(4-amino-3-(4-phenoxyphenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)-3,4,6,7-tetrahydro-1H-cyclopenta[c]pyridin-2(5H)-yl)prop-2-en-1-one;
- 1-(7-(4-amino-3-(4-phenoxyphenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)-3,4,6,7-tetrahydro-1H-cyclopenta[c]pyridin-2(5H)-yl)prop-2-en-1-one;
- 30 1-(7-(4-amino-3-(4-phenoxyphenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)-2,3,4,5,6,7-hexahydro-1H-cyclopenta[b]pyridin-1-yl)prop-2-en-1-one;
- 1-(5-(4-amino-3-(benzo[d]thiazol-6-yl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)-5,6-dihydrocyclopenta[c]pyrrol-2(1H,3H,4H)-yl)prop-2-en-1-one;

- 2-acryloyl-5-(4-amino-3-(benzo[d]thiazol-6-yl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)-2,3-dihydrocyclopenta[c]pyrrole-4,6(1H,5H)-dione;
- 2-acryloyl-5-(4-amino-3-(benzo[d]thiazol-6-yl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)-5,6-dihydrocyclopenta[c]pyrrole-1,3(2H,4H)-dione;
- 5 1-(5-(4-amino-3-(benzo[d]thiazol-6-yl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[b]pyrrol-1(2H)-yl)prop-2-en-1-one;
- 1-(4-(4-amino-3-(benzo[d]thiazol-6-yl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)-2,3,5,6-tetrahydrocyclopenta[b]pyrrol-1(4H)-yl)prop-2-en-1-one;
- 1-(6-(4-amino-3-(benzo[d]thiazol-6-yl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydro-1H-cyclopenta[c]pyridin-2(3H)-yl)prop-2-en-1-one;
- 10 1-(5-(4-amino-3-(benzo[d]thiazol-6-yl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)-4,5,6,7-tetrahydro-1H-isoindol-2(3H)-yl)prop-2-en-1-one;
- 1-(6-(4-amino-3-(benzo[d]thiazol-6-yl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)-3-azabicyclo[3.2.0]heptan-3-yl)prop-2-en-1-one;
- 15 1-(3-(4-amino-3-(benzo[d]thiazol-6-yl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)-6-azabicyclo[3.2.0]heptan-6-yl)prop-2-en-1-one;
- N-(5-(4-amino-3-(benzo[d]thiazol-6-yl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)octahdropentalen-2-yl)acrylamide;
- 1-(5-(4-amino-3-(benzo[d]thiazol-6-yl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)-3,4,6,7-tetrahydro-1H-cyclopenta[c]pyridin-2(5H)-yl)prop-2-en-1-one;
- 20 1-(5-(4-amino-3-(benzo[d]thiazol-6-yl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydro-1H-isoindol-2(3H)-yl)prop-2-en-1-one;
- 1-(4-(4-amino-3-(benzo[d]thiazol-6-yl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[c]pyrrol-2(1H)-yl)prop-2-en-1-one;
- 25 1-(4-(4-amino-3-(benzo[d]thiazol-6-yl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[b]pyrrol-1(2H)-yl)prop-2-en-1-one;
- 1-(5-(4-amino-3-(benzo[d]thiazol-6-yl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)-2,3,5,6-tetrahydrocyclopenta[b]pyrrol-1(4H)-yl)prop-2-en-1-one;
- 1-(4-(4-amino-3-(benzo[d]thiazol-6-yl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)-5,6-dihydrocyclopenta[c]pyrrol-2(1H,3H,4H)-yl)prop-2-en-1-one;
- 30 1-(6-(4-amino-3-(benzo[d]thiazol-6-yl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)octahydro-1H-cyclopenta[b]pyridin-1-yl)prop-2-en-1-one;
- 1-(5-(4-amino-3-(benzo[d]thiazol-6-yl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)-2,3,4,5,6,7-hexahydro-1H-cyclopenta[b]pyridin-1-yl)prop-2-en-1-one;

- 1-(7-(4-amino-3-(benzo[d]thiazol-6-yl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)-2,3,4,5,6,7-hexahydro-1H-cyclopenta[b]pyridin-1-yl)prop-2-en-1-one;
- 1-(6-(4-amino-3-(benzo[d]thiazol-6-yl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)-3,4,6,7-tetrahydro-1H-cyclopenta[c]pyridin-2(5H)-yl)prop-2-en-1-one;
- 5 1-(7-(4-amino-3-(benzo[d]thiazol-6-yl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)-3,4,6,7-tetrahydro-1H-cyclopenta[c]pyridin-2(5H)-yl)prop-2-en-1-one;
- 1-(7-(4-amino-3-(benzo[d]thiazol-6-yl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)-2,3,4,5,6,7-hexahydro-1H-cyclopenta[b]pyridin-1-yl)prop-2-en-1-one;
- 1-(5-(4-amino-3-(benzo[b]thiophen-5-yl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)-5,6-dihydrocyclopenta[c]pyrrol-2(1H,3H,4H)-yl)prop-2-en-1-one;
- 10 1-(6-(4-amino-3-(benzo[b]thiophen-5-yl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydro-1H-cyclopenta[c]pyridin-2(3H)-yl)prop-2-en-1-one;
- 1-(6-(4-amino-3-(benzo[b]thiophen-5-yl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)-3-azabicyclo[3.2.0]heptan-3-yl)prop-2-en-1-one;
- 15 N-(5-(4-amino-3-(benzo[b]thiophen-5-yl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)octahydropentalen-2-yl)acrylamide;
- 1-(5-(4-amino-3-(benzo[b]thiophen-5-yl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)-3,4,6,7-tetrahydro-1H-cyclopenta[c]pyridin-2(5H)-yl)prop-2-en-1-one;
- 1-(5-(4-amino-3-(2,3-dihydrobenzo[b]thiophen-5-yl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)-5,6-dihydrocyclopenta[c]pyrrol-2(1H,3H,4H)-yl)prop-2-en-1-one;
- 20 1-(6-(4-amino-3-(2,3-dihydrobenzo[b]thiophen-5-yl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydro-1H-cyclopenta[c]pyridin-2(3H)-yl)prop-2-en-1-one
- 1-(6-(4-amino-3-(2,3-dihydrobenzo[b]thiophen-5-yl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)-3-azabicyclo[3.2.0]heptan-3-yl)prop-2-en-1-one;
- 25 N-(5-(4-amino-3-(2,3-dihydrobenzo[b]thiophen-5-yl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)octahydropentalen-2-yl)acrylamide;
- 1-(5-(4-amino-3-(2,3-dihydrobenzo[b]thiophen-5-yl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)-3,4,6,7-tetrahydro-1H-cyclopenta[c]pyridin-2(5H)-yl)prop-2-en-1-one;
- 30 N-(6-(1-(2-acryloyl-1,2,3,4,5,6-hexahydrocyclopenta[c]pyrrol-5-yl)-4-amino-1H-pyrazolo[3,4-d]pyrimidin-3-yl)benzo[d]thiazol-2-yl)acetamide;
- N-(6-(1-(2-acryloyloctahydro-1H-cyclopenta[c]pyridin-6-yl)-4-amino-1H-pyrazolo[3,4-d]pyrimidin-3-yl)benzo[d]thiazol-2-yl)acetamide;

- N-(5-(3-(2-acetamidobenzo[d]thiazol-6-yl)-4-amino-1H-pyrazolo[3,4-d]pyrimidin-1-yl)octahydropentalen-2-yl)acrylamide;
- (E)-1-(5-(4-amino-3-(4-phenoxyphenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)-5,6-dihydrocyclopenta[c]pyrrol-2(1H,3H,4H)-yl)-4-(dimethylamino)but-2-en-1-one;
- 5 (E)-1-(6-(4-amino-3-(4-phenoxyphenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydro-1H-cyclopenta[c]pyridin-2(3H)-yl)-4-(dimethylamino)but-2-en-1-one;
- (E)-1-(6-(4-amino-3-(4-phenoxyphenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)-3-azabicyclo[3.2.0]heptan-3-yl)-4-(dimethylamino)but-2-en-1-one;
- 10 (E)-1-(5-(4-amino-3-(4-phenoxyphenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)-3,4,6,7-tetrahydro-1H-cyclopenta[c]pyridin-2(5H)-yl)-4-(dimethylamino)but-2-en-1-one;
- (E)-1-(5-(4-amino-3-(benzo[d]thiazol-6-yl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[c]pyrrol-2(1H)-yl)-4-(dimethylamino)but-2-en-1-one;
- 15 (E)-1-(5-(4-amino-3-(benzo[d]thiazol-6-yl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)-5,6-dihydrocyclopenta[c]pyrrol-2(1H,3H,4H)-yl)-4-(dimethylamino)but-2-en-1-one;
- (E)-1-(6-(4-amino-3-(benzo[d]thiazol-6-yl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydro-1H-cyclopenta[c]pyridin-2(3H)-yl)-4-(dimethylamino)but-2-en-1-one;
- 20 (E)-1-(6-(4-amino-3-(benzo[d]thiazol-6-yl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)-3-azabicyclo[3.2.0]heptan-3-yl)-4-(dimethylamino)but-2-en-1-one;
- (E)-1-(5-(4-amino-3-(benzo[d]thiazol-6-yl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)-3,4,6,7-tetrahydro-1H-cyclopenta[c]pyridin-2(5H)-yl)-4-(dimethylamino)but-2-en-1-one;
- 25 1-(5-(4-amino-3-(4-benzoylphenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[c]pyrrol-2(1H)-yl)prop-2-en-1-one;
- 4-(1-(2-acryloyloctahydrocyclopenta[c]pyrrol-5-yl)-4-amino-1H-pyrazolo[3,4-d]pyrimidin-3-yl)-N-phenylbenzamide;
- 30 4-(1-(2-acryloyloctahydrocyclopenta[c]pyrrol-5-yl)-4-amino-1H-pyrazolo[3,4-d]pyrimidin-3-yl)-N-methyl-N-phenylbenzamide;
- 4-(1-(2-acryloyloctahydrocyclopenta[c]pyrrol-5-yl)-4-amino-1H-pyrazolo[3,4-d]pyrimidin-3-yl)-2-methyl-N-phenylbenzamide

- 4-(1-(2-acryloyloctahydrocyclopenta[c]pyrrol-5-yl)-4-amino-1H-pyrazolo[3,4-d]pyrimidin-3-yl)-2-methoxy-N-phenylbenzamide;
- 4-(1-(2-acryloyloctahydrocyclopenta[c]pyrrol-5-yl)-4-amino-1H-pyrazolo[3,4-d]pyrimidin-3-yl)-N,2-dimethyl-N-phenylbenzamide;
- 5 4-(1-(2-acryloyloctahydrocyclopenta[c]pyrrol-5-yl)-4-amino-1H-pyrazolo[3,4-d]pyrimidin-3-yl)-2-methoxy-N-methyl-N-phenylbenzamide;
- 4-(1-(2-acryloyloctahydrocyclopenta[c]pyrrol-5-yl)-4-amino-1H-pyrazolo[3,4-d]pyrimidin-3-yl)-2-methyl-N-(pyridin-2-yl)benzamide;
- 4-(1-(2-acryloyloctahydrocyclopenta[c]pyrrol-5-yl)-4-amino-1H-pyrazolo[3,4-d]pyrimidin-3-yl)-2-methoxy-N-(pyridin-2-yl)benzamide;
- 10 4-(1-(2-acryloyloctahydrocyclopenta[c]pyrrol-5-yl)-4-amino-1H-pyrazolo[3,4-d]pyrimidin-3-yl)-2-methyl-N-(4-methylpyridin-2-yl)benzamide;
- 4-(1-(2-acryloyloctahydrocyclopenta[c]pyrrol-5-yl)-4-amino-1H-pyrazolo[3,4-d]pyrimidin-3-yl)-2-methyl-N-(4-(trifluoromethyl)pyridin-2-yl)benzamide;
- 15 4-(1-(2-acryloyloctahydrocyclopenta[c]pyrrol-5-yl)-4-amino-1H-pyrazolo[3,4-d]pyrimidin-3-yl)-2-methoxy-N-(4-(trifluoromethyl)pyridin-2-yl)benzamide;
- 4-(1-(2-acryloyl-1,2,3,4,5,6-hexahydrocyclopenta[c]pyrrol-5-yl)-4-amino-1H-pyrazolo[3,4-d]pyrimidin-3-yl)-N-phenylbenzamide;
- 4-(1-(1-acryloyloctahydrocyclopenta[b]pyrrol-5-yl)-4-amino-1H-pyrazolo[3,4-d]pyrimidin-3-yl)-N-phenylbenzamide;
- 20 4-(4-amino-1-(2-(vinylsulfonyl)octahydrocyclopenta[c]pyrrol-5-yl)-1H-pyrazolo[3,4-d]pyrimidin-3-yl)-N-phenylbenzamide;
- (E)-4-(4-amino-1-(2-(4-(dimethylamino)but-2-enoyl)octahydrocyclopenta[c]pyrrol-5-yl)-1H-pyrazolo[3,4-d]pyrimidin-3-yl)-N-phenylbenzamide;
- 25 (E)-4-(4-amino-1-(2-(4-(cyclopropyl(methyl)amino)but-2-enoyl)octahydrocyclopenta[c]pyrrol-5-yl)-1H-pyrazolo[3,4-d]pyrimidin-3-yl)-N-phenylbenzamide;
- (Z)-4-(4-amino-1-(2-(2-cyano-3-cyclopropylacryloyl)octahydrocyclopenta[c]pyrrol-5-yl)-1H-pyrazolo[3,4-d]pyrimidin-3-yl)-N-phenylbenzamide;
- 30 1-(5-(4-amino-3-(4-(5-phenyl-1,3,4-oxadiazol-2-yl)phenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[c]pyrrol-2(1H)-yl)prop-2-en-1-one;

- 4-(1-(2-acryloyloctahydrocyclopenta[c]pyrrol-5-yl)-4-amino-1H-pyrazolo[3,4-d]pyrimidin-3-yl)-N-(5-chloropyridin-2-yl)benzamide;
- 1-(5-(4-amino-3-(4-(morpholinomethyl)phenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[c]pyrrol-2(1H)-yl)prop-2-en-1-one;
- 5 1-(5-(4-amino-3-(4-(piperidin-1-ylmethyl)phenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[c]pyrrol-2(1H)-yl)prop-2-en-1-one;
- 1-(5-(4-amino-3-(4-((3,4-dihydroisoquinolin-2(1H)-yl)methyl)phenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[c]pyrrol-2(1H)-yl)prop-2-en-1-one;
- 10 1-(5-(4-amino-3-(4-((tetrahydrofuran-2-yl)oxy)phenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[c]pyrrol-2(1H)-yl)prop-2-en-1-one;
- 1-(5-(4-amino-3-(4-(1-morpholinoethyl)phenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[c]pyrrol-2(1H)-yl)prop-2-en-1-one;
- 1-(5-(4-amino-3-(4-(pyrrolidin-1-ylmethyl)phenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[c]pyrrol-2(1H)-yl)prop-2-en-1-one;
- 15 1-(5-(4-amino-3-(4-((dimethylamino)methyl)phenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[c]pyrrol-2(1H)-yl)prop-2-en-1-one;
- N-(4-(1-(2-acryloyloctahydrocyclopenta[c]pyrrol-5-yl)-4-amino-1H-pyrazolo[3,4-d]pyrimidin-3-yl)benzyl)acetamide;
- 20 1-(5-(4-amino-3-(4-(2-morpholinoethoxy)phenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[c]pyrrol-2(1H)-yl)prop-2-en-1-one;
- 2-(4-(1-(2-acryloyloctahydrocyclopenta[c]pyrrol-5-yl)-4-amino-1H-pyrazolo[3,4-d]pyrimidin-3-yl)benzyl)isoindoline-1,3-dione;
- 1-(5-(4-amino-3-(4-((3,4-dihydroisoquinolin-2(1H)-yl)methyl)phenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[c]pyrrol-2(1H)-yl)prop-2-en-1-one;
- 25 1-(5-(4-amino-3-(4-(azepan-1-ylmethyl)phenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[c]pyrrol-2(1H)-yl)prop-2-en-1-one;
- 1-(5-(4-amino-3-(4-((hexahydro-1H-isoindol-2(3H)-yl)methyl)phenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[c]pyrrol-2(1H)-yl)prop-2-en-1-one;
- 30 1-(5-(4-amino-3-(4-(thiomorpholinomethyl)phenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[c]pyrrol-2(1H)-yl)prop-2-en-1-one;

1-(5-(4-amino-3-(4-((1,1-dioxidobenzo[d]isothiazol-2(3H)-yl)methyl)phenyl)-
1H-pyrazolo[3,4-d]pyrimidin-1-yl)hexahydrocyclopenta[c]pyrrol-2(1H)-
yl)prop-2-en-1-one;

2-(4-(1-(2-acryloyloctahydrocyclopenta[c]pyrrol-5-yl)-4-amino-1H-
5 pyrazolo[3,4-d]pyrimidin-3-yl)benzyl)isoindolin-1-one.

4. A pharmaceutical composition comprising a therapeutically effective amount of a compound of Formula (I) as claimed in claim 1 and optionally one or more pharmaceutically acceptable carriers, diluents or excipients.
5. The pharmaceutical composition of a compound of Formula (I) as claimed in claim 1 which is useful for treating a disease, disorder or condition, which would benefit from inhibition of tyrosine kinase (s), such as BTK activity to provide clinical benefit in diseases such as autoimmune disorders, an inflammatory disease, or an allergy disease selected from rheumatoid arthritis or lupus erythromatosis, asthma, allergic rhinitis, B-cell proliferative disorder such as B-cell lymphoma, multiple sclerosis, mantle cell lymphoma, chronic lymphocytic lymphoma / leukemia, diffuse large B-cell lymphoma, Follicular lymphoma or chronic lymphocytic leukemia, B-cell polymphocytic leukemia.
6. Use of a compound of Formula (I) according to any of the preceding claims or its suitable pharmaceutical composition for the treatment of a disease selected from rheumatoid arthritis, lupus erythromatosis, asthma, allergic rhinitis, B-cell lymphoma, multiple sclerosis, mantle cell lymphoma, chronic lymphocytic lymphoma, leukemia, diffuse large B-cell lymphoma, Follicular lymphoma, chronic lymphocytic leukemia and B-cell polymphocytic leukemia, ~~disorder or condition, which would benefit from inhibition of tyrosine kinase (s), such as BTK activity.~~
7. A medicine for the treatment of a disease, disorder or condition, which would benefit from inhibition of tyrosine kinase (s), such as BTK activity, which comprises administering a therapeutically effective amount of compound of Formula (I) or its pharmaceutical composition as defined in any of the preceding claims to a patient or subject in need thereof.

8. Use of the compound of formula (I) as claim in claim 1 and a suitable pharmaceutically acceptable agent selected from anti-cancer and anti-inflammatory agents or their pharmaceutically acceptable salts for the treatment of ~~autoimmune and allergic disorders, such as~~ rheumatoid arthritis, systemic lupus erythromatosis, scleroderma, asthma, allergic rhinitis, allergic eczema, B-cell lymphoma, multiple sclerosis, juvenile rheumatoid arthritis, juvenile idiopathic arthritis, inflammatory bowel disease, graft versus host disease, psoriatic arthritis, ankylosing spondylitis and uveritis, B cell lymphoma, multiple sclerosis, diffuse large B-cell lymphoma, follicular lymphoma or chronic lymphocytic leukemia and B-cell prolymphocytic leukemia.