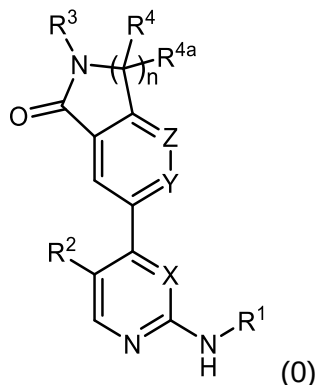


CLAIMS

1. A compound of formula (0):



5 or a pharmaceutically acceptable salt, N-oxide or tautomer thereof; wherein:

n is 1 or 2;

X is CH or N;

Y is selected from CH and C-F;

Z is selected from C-R^z and N;

10 R^z is selected from hydrogen; halogen; methoxy; and C₁₋₃ alkyl optionally substituted with hydroxy or methoxy;

R¹ is selected from:

- -(Alk¹)_t-Cyc¹; wherein t is 0 or 1; and Alk¹ is a C₁₋₄ straight chain or branched alkylene group optionally substituted with 1 or 2 hydroxy groups; and

15 - C₁₋₆ acyclic hydrocarbon groups which are unsubstituted or substituted with 1, 2 or 3 substituents R⁵ selected from hydroxy; oxo; fluorine; and cyano; and wherein 1 or 2 but not all of the carbon atoms of the hydrocarbon group can be replaced by O or N;

Cyc¹ is a cyclic group selected from (a) 3 to 9 membered non-aromatic monocyclic and bicyclic carbocyclic and heterocyclic groups containing 0, 1, 2, or 3 heteroatom ring members selected

20 from O, N, S, S(O) and S(O)₂; (b) 5 to 6 membered monocyclic heteroaryl groups containing 1, 2 or 3 heteroatom ring members of which 1 is N and the others, when present, are selected

from O, N and S; and (c) 3 to 7 membered monocyclic carbocyclic groups; wherein each cyclic group (a), (b) and (c) is unsubstituted or substituted with 1, 2 or 3 substituents R⁶ selected from

hydroxy; oxo; fluorine; amino; NH(Hyd¹); N(Hyd¹)₂; O-Hyd¹; -C(=O)-Hyd¹; -C(=O)-O-Hyd¹ and

25 Hyd¹; where Hyd¹ is a C₁₋₄ non-aromatic hydrocarbon group optionally substituted with one or more substituents selected from fluorine, hydroxyl and methoxy;

R^2 is selected from hydrogen; halogen; and C_{1-3} hydrocarbon groups optionally substituted with one or more fluorine atoms;

R^3 is hydrogen or a group L^1-R^7 ;

R^4 is selected from hydrogen; methoxy; and C_{1-3} alkyl optionally substituted with hydroxy,

5 amino, mono- or di- C_{1-2} alkylamino, a cyclic amino group or methoxy; wherein the cyclic amino group is a saturated 4-7 membered heterocyclic group containing a nitrogen ring member and optionally a second heteroatom ring member selected from O, N and S, wherein the cyclic amino group is linked via a nitrogen ring member thereof to the C_{1-3} alkyl, and wherein the cyclic amino group is optionally substituted with one or two methyl groups; provided that no more than
10 one R^4 can be other than hydrogen or methyl;

R^{4a} is selected from hydrogen and a C_{1-3} alkyl group; L^1 is selected from a bond; Alk^2 , Alk^2-O and $Alk^2-C(=O)$ wherein Alk^2 is a C_{1-4} straight chain or branched alkylene group which is optionally substituted with one or more substituents selected from hydroxy, methoxy, amino, methylamino, dimethylamino and fluorine;

15 R^7 is selected from:

- hydrogen;
- CO_2H ;
- NR^8R^9 ;
- a carbocyclic or heterocyclic group having from 3 to 12 ring members, of which 0, 1, 2 or
20 3 are heteroatom ring members selected from O, N and S and oxidised forms of S, the carbocyclic or heterocyclic group being optionally substituted with one or more substituents R^{10} ; and
- an acyclic C_{1-8} hydrocarbon group optionally substituted with one or more substituents selected from hydroxy; oxo; halogen; cyano; carboxy; amino; mono- or di- C_{1-4}
25 alkylamino; and carbocyclic and heterocyclic groups having from 3 to 12 ring members, of which 0, 1, 2 or 3 are heteroatom ring members selected from O, N and S and oxidised forms of S, the carbocyclic or heterocyclic group being optionally substituted with one or more substituents R^{10} ; wherein one or two but not all of the carbon atoms of the acyclic C_{1-8} hydrocarbon group may optionally be replaced by O, S, SO, SO_2 or NR^{11} ;

30 R^8 is selected from hydrogen and a C_{1-4} hydrocarbon group, the C_{1-4} hydrocarbon group being optionally substituted with 1-2 substituents selected from hydroxy, amino, mono- C_{1-4} alkylamino, di- C_{1-4} alkylamino, and 4-7 membered saturated heterocyclic rings containing 1-2 heteroatom ring members selected from O and N, wherein the mono- C_{1-4} alkylamino, di- C_{1-4} alkylamino, and 4-7 membered saturated heterocyclic rings are each optionally substituted with
35 1-2 hydroxy or C_{1-3} alkyl substituents;

R^9 is selected from:

- hydrogen;
- a carbocyclic or heterocyclic group having from 3 to 12 ring members, of which 0, 1, 2 or 3 are heteroatom ring members selected from O, N and S and oxidised forms of S, the carbocyclic or heterocyclic group being optionally substituted with one or more substituents R^{10} ; and

- an acyclic C_{1-8} hydrocarbon group optionally substituted with one or more substituents selected from hydroxy; oxo; halogen; cyano; carboxy; amino; mono- or di- C_{1-4} alkylamino; and carbocyclic and heterocyclic groups having from 3 to 12 ring members, of which 0, 1, 2 or 3 are heteroatom ring members selected from O, N and S and oxidised forms of S, the carbocyclic or heterocyclic group being optionally substituted with one or more substituents R^{10} ; wherein one or two but not all of the carbon atoms of the acyclic C_{1-8} hydrocarbon group may optionally be replaced by O, S, SO, SO_2 or NR^{11} ;

or NR^8R^9 forms a heterocyclic group having from 4 to 12 ring members wherein, in addition to the nitrogen atom of NR^8R^9 , the heterocyclic group optionally contains 1 or 2 further heteroatom ring members selected from O, N and S and oxidised forms of S; and wherein the heterocyclic group is optionally substituted with one or more substituents R^{10} ;

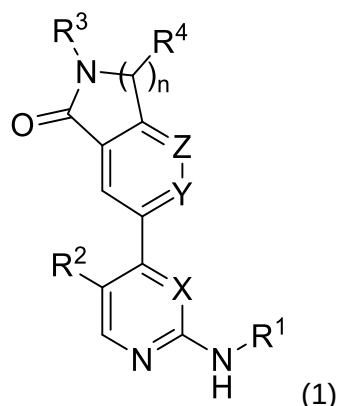
R^{10} is selected from:

- halogen; hydroxy; oxo; cyano;
- OR^{12} wherein R^{12} is C_{1-6} alkyl or C_{3-6} cycloalkyl, each being optionally substituted with halogen;
- an acyclic C_{1-8} hydrocarbon group optionally substituted with one or more substituents selected from hydroxy; oxo; halogen; cyano; carboxy; amino; mono- or di- C_{1-4} alkylamino; and carbocyclic and heterocyclic groups having 3 to 7 ring members of which 0, 1, 2, 3 or 4 are heteroatom ring members selected from N, O and S, wherein the carbocyclic and heterocyclic groups are optionally substituted with one or more substituents R^{13} selected from hydroxy; halogen; cyano; amino; $-NH(Hyd^1)$; $-N(Hyd^1)_2$; and $-(O)_v-Hyd^1$ where v is 0 or 1; wherein one or two but not all of the carbon atoms of the acyclic C_{1-8} hydrocarbon group may optionally be replaced by O, S, SO, SO_2 or NR^{11} ; and
- carbocyclic and heterocyclic groups having 3 to 7 ring members of which 0, 1, 2, 3 or 4 are heteroatom ring members selected from N, O and S, wherein the carbocyclic and heterocyclic groups are optionally substituted with one or more substituents R^{13} ; and

R^{11} is selected from hydrogen and a C_{1-4} hydrocarbon group;

provided that the compound is other than 6-benzyl-3-{2-[(2-methylpyrimidin-4-yl)amino]pyridin-4-yl}-7,8-dihydro-1,6-naphthyridin-5(6H)-one and 3-{2-[(2-methylpyrimidin-4-yl)amino]pyridin-4-yl}-7,8-dihydro-1,6-naphthyridin-5(6H)-one and salts and tautomers thereof.

2. A compound of formula (1):



or a pharmaceutically acceptable salt or tautomer thereof; wherein:

n is 1 or 2;

5 X is CH or N;

Y is selected from CH and C-F;

Z is selected from C-R² and N;

R² is selected from hydrogen; halogen; and C₁₋₃ alkyl optionally substituted with hydroxy or methoxy;

10 R¹ is selected from:

- (Alk¹)_t-Cyc¹; wherein t is 0 or 1; and Alk¹ is a C₁₋₄ straight chain or branched alkylene group optionally substituted with 1 or 2 hydroxy groups; and
 - C₁₋₆ acyclic hydrocarbon groups which are unsubstituted or substituted with 1, 2 or 3 substituents R⁵ selected from hydroxy; oxo; fluorine; and cyano; and wherein
- 15 1 or 2 but not all of the carbon atoms of the hydrocarbon group can be replaced by O or N;

Cyc¹ is a cyclic group selected from (a) 3 to 9 membered non-aromatic monocyclic and bicyclic carbocyclic and heterocyclic groups containing 0, 1, 2, or 3 heteroatom ring members selected from O, N, S and S(O)₂; (b) 5 to 6 membered monocyclic heteroaryl groups containing 1, 2 or 3 heteroatom ring members of which 1 is N and the others, when present, are selected from O, N and S; and (c) 3 to 7 membered monocyclic carbocyclic groups; wherein each cyclic group (a), (b) and (c) is unsubstituted or substituted with 1, 2 or 3 substituents R⁶ selected from hydroxy; oxo; fluorine; amino; NH(Hyd¹); N(Hyd¹)₂; O-Hyd¹; -C(=O)-Hyd¹; -C(=O)-O-Hyd¹ and Hyd¹; where Hyd¹ is a C₁₋₄ non-aromatic hydrocarbon group optionally substituted with one or more substituents selected from fluorine, hydroxyl and methoxy;

20

25

R² is selected from hydrogen; halogen; and C₁₋₃ hydrocarbon groups optionally substituted with one or more fluorine atoms;

R³ is hydrogen or a group L¹-R⁷;

R⁴ is selected from hydrogen and C₁₋₃ alkyl optionally substituted with hydroxy, amino, mono- or di-C₁₋₂ alkylamino, a cyclic amino group or methoxy; wherein the cyclic amino group is a saturated 4-7 membered heterocyclic group containing a nitrogen ring member and optionally a second heteroatom ring member selected from O, N and S, wherein the cyclic amino group is linked via a nitrogen ring member thereof to the C₁₋₃ alkyl, and wherein the cyclic amino group is optionally substituted with one or two methyl groups; provided that no more than one R⁴ can be other than hydrogen or methyl;

L¹ is selected from a bond; Alk², Alk²-O and Alk²-C(=O) wherein Alk² is a C₁₋₄ straight chain or branched alkylene group which is optionally substituted with one or more substituents selected from hydroxy, methoxy, amino, methylamino, dimethylamino and fluorine;

R⁷ is selected from:

- hydrogen;
- CO₂H;
- NR⁸R⁹;
- a carbocyclic or heterocyclic group having from 3 to 12 ring members, of which 0, 1, 2 or 3 are heteroatom ring members selected from O, N and S and oxidised forms of S, the carbocyclic or heterocyclic group being optionally substituted with one or more substituents R¹⁰; and
- an acyclic C₁₋₈ hydrocarbon group optionally substituted with one or more substituents selected from hydroxy; oxo; halogen; cyano; carboxy; amino; mono- or di-C₁₋₄ alkylamino; and carbocyclic and heterocyclic groups having from 3 to 12 ring members, of which 0, 1, 2 or 3 are heteroatom ring members selected from O, N and S and oxidised forms of S, the carbocyclic or heterocyclic group being optionally substituted with one or more substituents R¹⁰; wherein one or two but not all of the carbon atoms of the acyclic C₁₋₈ hydrocarbon group may optionally be replaced by O, S, SO, SO₂ or NR¹¹;

R⁸ is selected from hydrogen and a C₁₋₄ hydrocarbon group, the C₁₋₄ hydrocarbon group being optionally substituted with 1-2 substituents selected from hydroxy, amino, mono-C₁₋₄ alkylamino, di-C₁₋₄ alkylamino, and 4-7 membered saturated heterocyclic rings containing 1-2 heteroatom ring members selected from O and N, wherein the mono-C₁₋₄ alkylamino, di-C₁₋₄ alkylamino, and 4-7 membered saturated heterocyclic rings are each optionally substituted with 1-2 hydroxy or C₁₋₃ alkyl substituents;

R⁹ is selected from:

- hydrogen;
- a carbocyclic or heterocyclic group having from 3 to 12 ring members, of which 0, 1, 2 or 3 are heteroatom ring members selected from O, N and S and oxidised forms of S, the carbocyclic or heterocyclic group being optionally substituted with one or more substituents R¹⁰; and
- an acyclic C₁₋₈ hydrocarbon group optionally substituted with one or more substituents selected from hydroxy; oxo; halogen; cyano; carboxy; amino; mono- or di-C₁₋₄ alkylamino; and carbocyclic and heterocyclic groups having from 3 to 12 ring members, of which 0, 1, 2 or 3 are heteroatom ring members selected from O, N and S and oxidised forms of S, the carbocyclic or heterocyclic group being optionally substituted with one or more substituents R¹⁰; wherein one or two but not all of the carbon atoms of the acyclic C₁₋₈ hydrocarbon group may optionally be replaced by O, S, SO, SO₂ or NR¹¹;

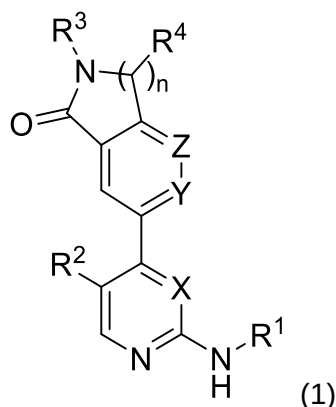
or NR⁸R⁹ forms a heterocyclic group having from 4 to 12 ring members wherein, in addition to the nitrogen atom of NR⁸R⁹, the heterocyclic group optionally contains 1 or 2 further heteroatom ring members selected from O, N and S and oxidised forms of S; and wherein the heterocyclic group is optionally substituted with one or more substituents R¹⁰;

R¹⁰ is selected from:

- halogen; hydroxy; oxo; cyano;
- OR¹² wherein R¹² is C₁₋₆ alkyl or C₃₋₆ cycloalkyl, each being optionally substituted with halogen;
- an acyclic C₁₋₈ hydrocarbon group optionally substituted with one or more substituents selected from hydroxy; oxo; halogen; cyano; carboxy; amino; mono- or di-C₁₋₄ alkylamino; and carbocyclic and heterocyclic groups having 3 to 7 ring members of which 0, 1, 2, 3 or 4 are heteroatom ring members selected from N, O and S, wherein the carbocyclic and heterocyclic groups are optionally substituted with one or more substituents R¹³ selected from hydroxy; halogen; cyano; and -(O)_v-Hyd¹ where v is 0 or 1; wherein one or two but not all of the carbon atoms of the acyclic C₁₋₈ hydrocarbon group may optionally be replaced by O, S, SO, SO₂ or NR¹¹; and
- carbocyclic and heterocyclic groups having 3 to 7 ring members of which 0, 1, 2, 3 or 4 are heteroatom ring members selected from N, O and S, wherein the carbocyclic and heterocyclic groups are optionally substituted with one or more substituents R¹³; and

5

3. A compound of formula (1)



or a pharmaceutically acceptable salt or tautomer thereof; wherein:

10 n is 1 or 2;

X is CH or N:

Y is selected from CH and C-F;

Z is selected from C-R^Z and N;

15

R^1 is selected from:

- 20

25

Hyd¹; where Hyd¹ is a C₁₋₄ non-aromatic hydrocarbon group optionally substituted with one or more substituents selected from fluorine, hydroxyl and methoxy;

R² is selected from hydrogen; halogen; and C₁₋₃ hydrocarbon groups optionally substituted with one or more fluorine atoms;

5 R³ is hydrogen or a group L¹-R⁷;

R⁴ is selected from hydrogen and C₁₋₂ alkyl optionally substituted with hydroxy, amino, mono- or di-C₁₋₂ alkylamino, a cyclic amino group or methoxy; wherein the cyclic amino group is a saturated 4-7 membered heterocyclic group containing a nitrogen ring member and optionally a second heteroatom ring member selected from O, N and S, wherein the cyclic amino group is
10 linked via a nitrogen ring member thereof to the C₁₋₂ alkyl, and wherein the cyclic amino group is optionally substituted with one or two methyl groups; provided that no more than one R⁴ can be other than hydrogen or methyl;

L¹ is selected from a bond; Alk², Alk²-O and Alk²-C(=O) wherein Alk² is a C₁₋₄ straight chain or branched alkylene group which is optionally substituted with one or more substituents selected
15 from hydroxy, methoxy, amino, methylamino, dimethylamino and fluorine;

R⁷ is selected from:

- hydrogen;
- CO₂H;
- NR⁸R⁹;
- 20 • a carbocyclic or heterocyclic group having from 3 to 12 ring members, of which 0, 1, 2 or 3 are heteroatom ring members selected from O, N and S and oxidised forms of S, the carbocyclic or heterocyclic group being optionally substituted with one or more substituents R¹⁰; and
- an acyclic C₁₋₈ hydrocarbon group optionally substituted with one or more substituents
25 selected from hydroxy; oxo; halogen; cyano; carboxy; amino; mono- or di-C₁₋₄ alkylamino; and carbocyclic and heterocyclic groups having from 3 to 12 ring members, of which 0, 1, 2 or 3 are heteroatom ring members selected from O, N and S and oxidised forms of S, the carbocyclic or heterocyclic group being optionally substituted with one or more substituents R¹⁰; wherein one or two but not all of the carbon atoms of
30 the acyclic C₁₋₈ hydrocarbon group may optionally be replaced by O, S, SO, SO₂ or NR¹¹;

R⁸ is selected from hydrogen and a C₁₋₄ hydrocarbon group optionally substituted with hydroxy; amino or mono- or di-C₁₋₄ alkylamino

R⁹ is selected from:

- hydrogen;
- 35 • a carbocyclic or heterocyclic group having from 3 to 12 ring members, of which 0, 1, 2 or 3 are heteroatom ring members selected from O, N and S and oxidised forms of S, the

carbocyclic or heterocyclic group being optionally substituted with one or more substituents R^{10} ; and

- an acyclic C_{1-8} hydrocarbon group optionally substituted with one or more substituents selected from hydroxy; oxo; halogen; cyano; carboxy; amino; mono- or di- C_{1-4} alkylamino; and carbocyclic and heterocyclic groups having from 3 to 12 ring members, of which 0, 1, 2 or 3 are heteroatom ring members selected from O, N and S and oxidised forms of S, the carbocyclic or heterocyclic group being optionally substituted with one or more substituents R^{10} ; wherein one or two but not all of the carbon atoms of the acyclic C_{1-8} hydrocarbon group may optionally be replaced by O, S, SO, SO_2 or NR^{11} ; or NR^8R^9 forms a heterocyclic group having from 4 to 12 ring members wherein, in addition to the nitrogen atom of NR^8R^9 , the heterocyclic group optionally contains 1 or 2 further heteroatom ring members selected from O, N and S and oxidised forms of S; and wherein the heterocyclic group is optionally substituted with one or more substituents R^{10} ;

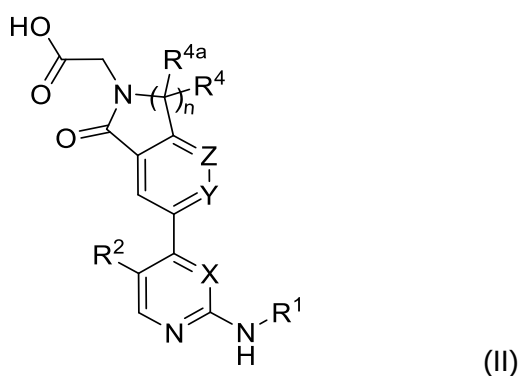
R^{10} is selected from:

- halogen; hydroxy; oxo; cyano;
- OR^{12} wherein R^{12} is C_{1-6} alkyl or C_{3-6} cycloalkyl, each being optionally substituted with halogen;
- an acyclic C_{1-8} hydrocarbon group optionally substituted with one or more substituents selected from hydroxy; oxo; halogen; cyano; carboxy; amino; mono- or di- C_{1-4} alkylamino; and carbocyclic and heterocyclic groups having 3 to 6 ring members of which 0, 1 or 2 are heteroatom ring members selected from N, O and S, wherein the carbocyclic and heterocyclic groups are optionally substituted with one or more substituents R^{13} selected from hydroxy; halogen; cyano; and $-(O)_v-Hyd^1$ where v is 0 or 1; wherein one or two but not all of the carbon atoms of the acyclic C_{1-8} hydrocarbon group may optionally be replaced by O, S, SO, SO_2 or NR^{11} ; and
- carbocyclic and heterocyclic groups having 3 to 6 ring members of which 0, 1, 2, 3 or 4 are heteroatom ring members selected from N, O and S, wherein the carbocyclic and heterocyclic groups are optionally substituted with one or more substituents R^{13} ; and

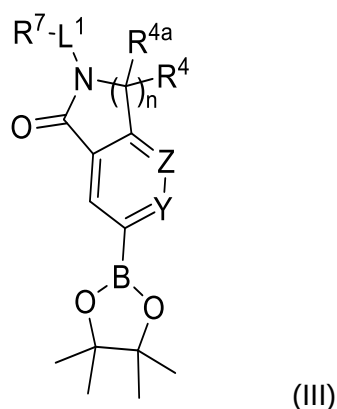
R^{11} is selected from hydrogen and a C_{1-4} hydrocarbon group;

provided that the compound is other than 6-benzyl-3-{2-[(2-methylpyrimidin-4-yl)amino]pyridin-4-yl}-7,8-dihydro-1,6-naphthyridin-5(6H)-one and 3-{2-[(2-methylpyrimidin-4-yl)amino]pyridin-4-yl}-7,8-dihydro-1,6-naphthyridin-5(6H)-one and salts and tautomers thereof.

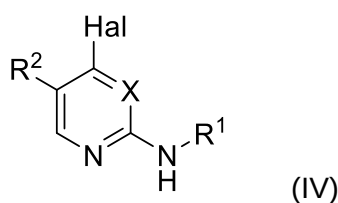
4. A pharmaceutical composition comprising a compound as defined in any one of claims 1 to 3 and a pharmaceutically acceptable excipient.
5. A compound as defined in any one of claims 1 to 3 for use in medicine, for example for use in the prophylaxis or treatment of disease states or conditions mediated by ERK1/2, such as cancers.
6. A method for the preparation of a compound of the formulae (0), (1) and subformulae thereof as defined in any one of claims 1 to 3, which method comprises:
 - (a) (i) reacting a compound of formula (II):



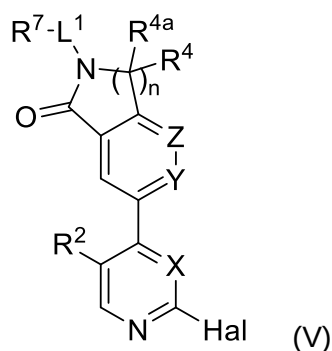
- with a compound of formula HNR^8R^9 under amide forming conditions; or
- (ii) reacting a compound of formula (III):



- with a compound of formula (IV):

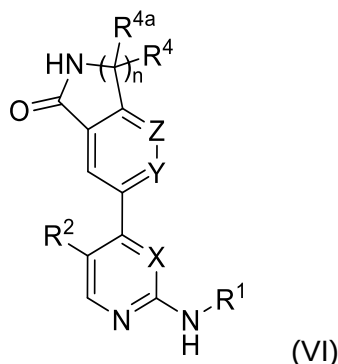


- in the presence of a palladium catalyst, wherein Hal is a suitable leaving group such as halide; or
- (iii) reacting a compound of formula (V):



wherein Hal is a suitable leaving group such as halide, with a compound of formula R^1NH_2 ; or

(iv) reacting a compound of formula (VI):



with a compound of formula R^7L^1-J , wherein J is a suitable leaving group; and/or

(b) deprotection of a protected derivative of a compound of formulae (0), (1) and subformulae thereof; and/or

(c) interconverting a compound of formulae (0), (1) and subformulae thereof or protected derivative thereof to a further compound of formulae (0), (1) and subformulae thereof or protected derivative thereof; and

(d) optionally forming a pharmaceutically acceptable salt of a compound of formulae (0), (1) and subformulae thereof;

wherein R^1 , R^2 , R^4 , R^{4a} , R^7 , L^1 , X, Y and Z are as defined in claim 1.

7. A process according to claim 6 wherein the compound of the formulae (0), (1) or subformulae thereof is selected from:

(2R)-2-(6-{5-chloro-2-[(oxan-4-yl)amino]pyrimidin-4-yl}-1-oxo-2,3-dihydro-1H-isoindol-2-yl)-N-[(1S)-1-(3-fluoro-5-methoxyphenyl)-2-hydroxyethyl]propanamide;

(2R)-2-(6-{5-Chloro-2-[(oxan-4-yl)amino]pyrimidin-4-yl}-1-oxo-2,3-dihydro-1H-isoindol-2-yl)-N-[(1S)-2-hydroxy-1-(2-methoxypyridin-4-yl)ethyl]propanamide;

(R)-2-(6-(5-chloro-2-((2-methoxypyridin-4-yl)amino)pyrimidin-4-yl)-1-oxoisindolin-2-yl)-N-((S)-1-(3-fluoro-5-methoxyphenyl)-2-hydroxyethyl)propanamide;

(R)-2-(6-(5-chloro-2-((2-methylpyrimidin-4-yl)amino)pyrimidin-4-yl)-1-oxoisindolin-2-yl)-N-((S)-1-(6-(dimethylamino)pyridin-2-yl)-2-hydroxyethyl)propanamide;

(2R)-2-(6-{5-chloro-2-[(oxan-4-yl)amino]pyrimidin-4-yl}-1-oxo-2,3-dihydro-1H-isindol-2-yl)-N-[(1S)-2-hydroxy-1-[6-(4-methylpiperazin-1-yl)pyridin-2-yl]ethyl]propanamide;

5 and

(2R)-2-(6-{5-chloro-2-[(oxan-4-yl)amino]pyrimidin-4-yl}-1-oxo-2,3-dihydro-1H-isindol-2-yl)-N-[(1R)-1-[3-fluoro-5-(4-methylpiperazin-1-yl)phenyl]ethyl]propenamide.

8. A combination of a compound according to any one of claims 1 to 3 and another
10 therapeutic agent (e.g. an anti-cancer agent).
9. A pharmaceutical composition comprising a compound according to any one of claims 1 to 3 together with a pharmaceutically acceptable carrier and one or more therapeutic agent(s) (e.g. anti-cancer agents).
- 15 10. A compound as defined in any one of claims 1 to 3 or a pharmaceutical composition according to claim 4 for use in the prophylaxis of treatment of cancer wherein the compound or composition is used in combination with one or more other compounds or therapies.
11. The use of a compound as defined in any one of claims 1 to 3 for the manufacture of a
20 medicament for the prophylaxis or treatment of a cancer, optionally in combination with one or more other compounds or therapies.
12. The compound of any one of claims 1 to 3, or a pharmaceutically acceptable salt or tautomer thereof, for use in:
 - 25 (a) the treatment of a disease state or condition mediated by ERK1/2; or
 - (b) the treatment of cancer mediated by ERK1/2; or
 - (c) the treatment of hepatocellular carcinoma, melanoma, oesophageal, renal, colon, colorectal, lung, breast, bladder, gastrointestinal, ovarian or prostate cancer; or
 - (d) the treatment of a disease or condition being characterized by mutant Ras, mutant BRAF or
30 mutant MEK.
13. Use of the compound of any one of claims 1 to 3, or a pharmaceutically acceptable salt or tautomer thereof, in the manufacture of a medicament for:
 - (a) the treatment of a disease state or condition mediated by ERK1/2; or
 - 35 (b) the treatment of cancer mediated by ERK1/2; or

- (c) the treatment of hepatocellular carcinoma, melanoma, oesophageal, renal, colon, colorectal, lung, breast, bladder, gastrointestinal, ovarian or prostate cancer; or
- (d) the treatment of a disease or condition being characterized by mutant Ras, mutant BRAF or mutant MEK.

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- 14. A compound, compound for use, method, use, pharmaceutical composition or combination according to any one of Embodiments 0.1 to 1.179, 2.1, 3.1 to 3.35, 4.1 to 4.9, 5.1 to 5.4 and 6.1 to 6.10.

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