

Claims

- [illegible]

in which:

- | | |
|----------------|--|
| R ¹ | represents methyl, ethyl, trifluoromethyl, 2,2-difluoroethyl, cyano, chloro, bromo, methoxy or difluoromethoxy; |
| R ² | represents hydrogen, methyl, ethyl, fluoro, chloro or bromo; |
| R ³ | represents hydrogen or fluoro; |
| R ⁴ | represents hydrogen or methyl; |
| R ⁵ | independently at each occurrence represents hydrogen, trifluoromethyl or C ₁ -C ₃ alkyl,
R ⁵ being bound to any carbon atom of the ring; |
| R ⁶ | independently at each occurrence represents hydrogen, C ₁ -C ₃ -alkyl or C ₁ -C ₃ -haloalkyl; |
| R ⁷ | represents C ₁ -C ₃ -alkyl or C ₂ -C ₃ -haloalkyl; |
| R ⁸ | represents C ₁ -C ₃ -alkyl or C ₂ -C ₃ -haloalkyl; |
| X | represents NR ⁷ or O; |

Y represents NR^8 or O;

m represents 0, 1, 2 or 3;

n represents 0 or 1;

or an N-oxide, a salt or a tautomer of said compound, or a salt of said N-oxide or tautomer.

2. The compound of formula (I) according to claim 1, wherein:

R^1 represents methyl, ethyl, chloro, methoxy or difluoromethoxy;

R^2 represents methyl, ethyl, fluoro or chloro;

R^3 represents hydrogen or fluoro;

R^4 represents hydrogen or methyl;

R^5 represents hydrogen, methyl or trifluoromethyl,
 R^5 being bound to any carbon atom of the ring;

R^6 represents hydrogen, methyl or trifluoromethyl;

R^7 represents $\text{C}_1\text{-C}_2$ -alkyl or $\text{C}_2\text{-C}_3$ -fluoroalkyl;

R^8 represents $\text{C}_1\text{-C}_2$ -alkyl or $\text{C}_2\text{-C}_3$ -fluoroalkyl;

X represents NR^7 or O;

Y represents NR^8 or O;

m represents 0, 1 or 2;

n represents 0 or 1;

or an N-oxide, a salt or a tautomer of said compound, or a salt of said N-oxide or tautomer.

3. The compound of formula (I) according to claim 1 or 2, wherein:

R^1 represents methyl, ethyl, chloro or methoxy;

R^2 represents, fluoro or chloro;

R^3 represents hydrogen or fluoro;

R^4 represents hydrogen;

- R⁵ represents hydrogen or methyl,
R⁵ being bound to any carbon atom of the ring;
- R⁶ represents hydrogen;
- R⁷ represents methyl;
- R⁸ represents methyl, 2,2,2-trifluoroethyl or 2,2-difluoroethyl;
- X represents NR⁷ or O;
- Y represents NR⁸ or O;
- m represents 0, 1, or 2;
- n represents 0 or 1;

or an N-oxide, a salt or a tautomer of said compound, or a salt of said N-oxide or tautomer.

4. The compound of formula (I) according to any of claims 1 to 3, which is selected from the group consisting of:

3-(3-chloro-2-methoxyanilino)-2-{3-[(1,4-dioxan-2-yl)methoxy]pyridin-4-yl}-1,5,6,7-tetrahydro-4*H*-pyrrolo[3,2-*c*]pyridin-4-one

3-(3-chloro-2-methoxyanilino)-2-(3-[(2*S*)-1,4-dioxan-2-yl]methoxy)pyridin-4-yl)-1,5,6,7-tetrahydro-4*H*-pyrrolo[3,2-*c*]pyridin-4-one

3-(3-chloro-2-methoxyanilino)-2-(3-[(2*R*)-1,4-dioxan-2-yl]methoxy)pyridin-4-yl)-1,5,6,7-tetrahydro-4*H*-pyrrolo[3,2-*c*]pyridin-4-one

2-{3-[(1,4-dioxan-2-yl)methoxy]pyridin-4-yl}-3-(3-fluoro-2-methoxyanilino)-1,5,6,7-tetrahydro-4*H*-pyrrolo[3,2-*c*]pyridin-4-one

2-(3-[(2*S*)-1,4-dioxan-2-yl]methoxy)pyridin-4-yl)-3-(3-fluoro-2-methoxyanilino)-1,5,6,7-tetrahydro-4*H*-pyrrolo[3,2-*c*]pyridin-4-one

2-(3-[(2*R*)-1,4-dioxan-2-yl]methoxy)pyridin-4-yl)-3-(3-fluoro-2-methoxyanilino)-1,5,6,7-tetrahydro-4*H*-pyrrolo[3,2-*c*]pyridin-4-one

3-(2,3-dichloroanilino)-2-{3-[(1,4-dioxan-2-yl)methoxy]pyridin-4-yl}-1,5,6,7-tetrahydro-4*H*-pyrrolo[3,2-*c*]pyridin-4-one

3-(2,3-dichloroanilino)-2-(3-[(2*S*)-1,4-dioxan-2-yl]methoxy)pyridin-4-yl)-1,5,6,7-tetrahydro-4*H*-pyrrolo[3,2-*c*]pyridin-4-one

3-(2,3-dichloroanilino)-2-(3-[(2*R*)-1,4-dioxan-2-yl]methoxy)pyridin-4-yl)-1,5,6,7-tetrahydro-4*H*-pyrrolo[3,2-*c*]pyridin-4-one

3-(3-chloro-2-methylanilino)-2-{3-[(1,4-dioxan-2-yl)methoxy]pyridin-4-yl}-1,5,6,7-tetrahydro-4H-pyrrolo[3,2-c]pyridin-4-one

3-(3-chloro-2-methoxyanilino)-2-(3-[[*(3R)*-4-methylmorpholin-3-yl]methoxy]pyridin-4-yl)-1,5,6,7-tetrahydro-4H-pyrrolo[3,2-c]pyridin-4-one

3-(3-fluoro-2-methoxyanilino)-2-{3-[(4-methylmorpholin-2-yl)methoxy]pyridin-4-yl}-1,5,6,7-tetrahydro-4H-pyrrolo[3,2-c]pyridin-4-one

3-(3-fluoro-2-methoxyanilino)-2-(3-[[*(2R)*-4-methylmorpholin-2-yl]methoxy]pyridin-4-yl)-1,5,6,7-tetrahydro-4H-pyrrolo[3,2-c]pyridin-4-one

3-(3-fluoro-2-methoxyanilino)-2-(3-[[*(2S)*-4-methylmorpholin-2-yl]methoxy]pyridin-4-yl)-1,5,6,7-tetrahydro-4H-pyrrolo[3,2-c]pyridin-4-one

3-(3-chloro-2-methoxyanilino)-2-{3-[(4-methylmorpholin-2-yl)methoxy]pyridin-4-yl}-1,5,6,7-tetrahydro-4H-pyrrolo[3,2-c]pyridin-4-one

3-(3-chloro-2-methoxyanilino)-2-(3-[[*(2R)*-4-methylmorpholin-2-yl]methoxy]pyridin-4-yl)-1,5,6,7-tetrahydro-4H-pyrrolo[3,2-c]pyridin-4-one

3-(3-chloro-2-methoxyanilino)-2-(3-[[*(2S)*-4-methylmorpholin-2-yl]methoxy]pyridin-4-yl)-1,5,6,7-tetrahydro-4H-pyrrolo[3,2-c]pyridin-4-one

3-(3-chloro-5-fluoro-2-methoxyanilino)-2-(3-[[4-methylmorpholin-2-yl]methoxy]pyridin-4-yl)-1,5,6,7-tetrahydro-4H-pyrrolo[3,2-c]pyridin-4-one

3-(3-chloro-5-fluoro-2-methoxyanilino)-2-(3-[[1,4-dioxan-2-yl]methoxy]pyridin-4-yl)-1,5,6,7-tetrahydro-4H-pyrrolo[3,2-c]pyridin-4-one

3-(3-fluoro-2-methoxyanilino)-2-(3-[[*(3S)*-4-methylmorpholin-3-yl]methoxy]pyridin-4-yl)-1,5,6,7-tetrahydro-4H-pyrrolo[3,2-c]pyridin-4-one

3-(3-chloro-2-methoxyanilino)-2-(3-[[*(3S)*-4-methylmorpholin-3-yl]methoxy]pyridin-4-yl)-1,5,6,7-tetrahydro-4H-pyrrolo[3,2-c]pyridin-4-one

2-(3-[[*(2S)*-4-(2,2-difluoroethyl)morpholin-2-yl]methoxy]pyridin-4-yl)-3-(3-fluoro-2-methoxyanilino)-1,5,6,7-tetrahydro-4H-pyrrolo[3,2-c]pyridin-4-one

3-(3-fluoro-2-methoxyanilino)-2-(3-[[*(2S)*-4-(2,2,2-trifluoroethyl)morpholin-2-yl]methoxy]pyridin-4-yl)-1,5,6,7-tetrahydro-4H-pyrrolo[3,2-c]pyridin-4-one

3-(3-chloro-2-methoxyanilino)-2-{3-[2-(4-dioxan-2-yl)ethoxy]pyridin-4-yl}-1,5,6,7-tetrahydro-4H-pyrrolo[3,2-c]pyridin-4-one

3-(3-chloro-2-methoxyanilino)-2-(3-{2-[[*(2R)*-1,4-dioxan-2-yl]ethoxy]pyridin-4-yl}-1,5,6,7-tetrahydro-4H-pyrrolo[3,2-c]pyridin-4-one

3-(3-chloro-2-methoxyanilino)-2-(3-{2-[[*(2S)*-1,4-dioxan-2-yl]ethoxy]pyridin-4-yl}-1,5,6,7-tetrahydro-4H-pyrrolo[3,2-c]pyridin-4-one

3-(3-chloro-5-fluoro-2-methoxyanilino)-2-(3-[[*(2S)*-4-methylmorpholin-2-yl]methoxy]pyridin-4-yl)-1,5,6,7-tetrahydro-4H-pyrrolo[3,2-c]pyridin-4-one

3-(3-chloro-5-fluoro-2-methoxyanilino)-2-(3-([(2S)-4-(2,2,2-trifluoroethyl)morpholin-2-yl]methoxy}pyridin-4-yl)-1,5,6,7-tetrahydro-4*H*-pyrrolo[3,2-*c*]pyridin-4-one

3-(3-chloro-2-ethylanilino)-2-{3-[(4-methylmorpholin-2-yl)methoxy]pyridin-4-yl}-1,5,6,7-tetrahydro-4*H*-pyrrolo[3,2-*c*]pyridin-4-one

3-(3-chloro-2-methoxyanilino)-2-{3-[(5,5-dimethyl-1,4-dioxan-2-yl)methoxy]pyridin-4-yl}-1,5,6,7-tetrahydro-4*H*-pyrrolo[3,2-*c*]pyridin-4-one

3-(3-chloro-2-methoxyanilino)-2-(3-([(2*R*)-5,5-dimethyl-1,4-dioxan-2-yl]methoxy}pyridin-4-yl)-1,5,6,7-tetrahydro-4*H*-pyrrolo[3,2-*c*]pyridin-4-one

3-(3-chloro-2-methoxyanilino)-2-(3-([(2*S*)-5,5-dimethyl-1,4-dioxan-2-yl]methoxy}pyridin-4-yl)-1,5,6,7-tetrahydro-4*H*-pyrrolo[3,2-*c*]pyridin-4-one

2-(3-([(2*R*)-5,5-dimethyl-1,4-dioxan-2-yl]methoxy}pyridin-4-yl)-3-(3-fluoro-2-methoxyanilino)-1,5,6,7-tetrahydro-4*H*-pyrrolo[3,2-*c*]pyridin-4-one

2-(3-([(2*S*)-5,5-dimethyl-1,4-dioxan-2-yl]methoxy}pyridin-4-yl)-3-(3-fluoro-2-methoxyanilino)-1,5,6,7-tetrahydro-4*H*-pyrrolo[3,2-*c*]pyridin-4-one

2-(3-{2-[(2*R*)-1,4-dioxan-2-yl]ethoxy}pyridin-4-yl)-3-(3-fluoro-2-methoxyanilino)-1,5,6,7-tetrahydro-4*H*-pyrrolo[3,2-*c*]pyridin-4-one

2-(3-{2-[(2*S*)-1,4-dioxan-2-yl]ethoxy}pyridin-4-yl)-3-(3-fluoro-2-methoxyanilino)-1,5,6,7-tetrahydro-4*H*-pyrrolo[3,2-*c*]pyridin-4-one.

3-(3-fluoro-2-methoxyanilino)-2-(3-([(3*R*)-4-methylmorpholin-3-yl]methoxy}pyridin-4-yl)-1,5,6,7-tetrahydro-4*H*-pyrrolo[3,2-*c*]pyridin-4-one

2-{3-[(5,5-dimethyl-1,4-dioxan-2-yl)methoxy]pyridin-4-yl}-3-(3-fluoro-2-methylanilino)-1,5,6,7-tetrahydro-4*H*-pyrrolo[3,2-*c*]pyridin-4-one

2-(3-([(2*S*)-5,5-dimethyl-1,4-dioxan-2-yl]methoxy}pyridin-4-yl)-3-(3-fluoro-2-methylanilino)-1,5,6,7-tetrahydro-4*H*-pyrrolo[3,2-*c*]pyridin-4-one

3-[2-(2,2-difluoroethyl)-3-fluoroanilino]-2-{3-[(1,4-dioxan-2-yl)methoxy]pyridin-4-yl}-1,5,6,7-tetrahydro-4*H*-pyrrolo[3,2-*c*]pyridin-4-one

3-[2-(2,2-difluoroethyl)-3-fluoroanilino]-2-(3-([(2*S*)-4-methylmorpholin-2-yl]methoxy}pyridin-4-yl)-1,5,6,7-tetrahydro-4*H*-pyrrolo[3,2-*c*]pyridin-4-one

3-(3-chloro-2-methylanilino)-2-(3-([(2*S*)-4-methylmorpholin-2-yl]methoxy}pyridin-4-yl)-1,5,6,7-tetrahydro-4*H*-pyrrolo[3,2-*c*]pyridin-4-one

3-(3-chloro-2-methylanilino)-2-(3-([(3*R*)-4-methylmorpholin-3-yl]methoxy}pyridin-4-yl)-1,5,6,7-tetrahydro-4*H*-pyrrolo[3,2-*c*]pyridin-4-one

3-(3-chloro-2-methylanilino)-2-{3-[(5,5-dimethyl-1,4-dioxan-2-yl)methoxy]pyridin-4-yl}-1,5,6,7-tetrahydro-4*H*-pyrrolo[3,2-*c*]pyridin-4-one

3-(3-chloro-2-methylanilino)-2-(3-([(2*S*)-5,5-dimethyl-1,4-dioxan-2-yl]methoxy}pyridin-4-yl)-1,5,6,7-tetrahydro-4*H*-pyrrolo[3,2-*c*]pyridin-4-one

3-(3-chloro-2-methylanilino)-2-(3-([(2*R*)-5,5-dimethyl-1,4-dioxan-2-yl]methoxy)pyridin-4-yl)-1,5,6,7-tetrahydro-4*H*-pyrrolo[3,2-*c*]pyridin-4-one

2-{3-[(1,4-dioxan-2-yl)methoxy]pyridin-4-yl}-3-(3-fluoro-2-methylanilino)-1,5,6,7-tetrahydro-4*H*-pyrrolo[3,2-*c*]pyridin-4-one

2-(3-([(2*S*)-1,4-dioxan-2-yl]methoxy)pyridin-4-yl)-3-(3-fluoro-2-methylanilino)-1,5,6,7-tetrahydro-4*H*-pyrrolo[3,2-*c*]pyridin-4-one

2-(3-([(2*R*)-1,4-dioxan-2-yl]methoxy)pyridin-4-yl)-3-(3-fluoro-2-methylanilino)-1,5,6,7-tetrahydro-4*H*-pyrrolo[3,2-*c*]pyridin-4-one

3-(3-chloro-2-methylanilino)-2-(3-([(2*S*)-1,4-dioxan-2-yl]methoxy)pyridin-4-yl)-1,5,6,7-tetrahydro-4*H*-pyrrolo[3,2-*c*]pyridin-4-one

3-(3-chloro-2-methylanilino)-2-(3-([(2*R*)-1,4-dioxan-2-yl]methoxy)pyridin-4-yl)-1,5,6,7-tetrahydro-4*H*-pyrrolo[3,2-*c*]pyridin-4-one

3-(3-chloro-2-ethylanilino)-2-{3-[(1,4-dioxan-2-yl)methoxy]pyridin-4-yl}-1,5,6,7-tetrahydro-4*H*-pyrrolo[3,2-*c*]pyridin-4-one

3-(3-chloro-2-ethylanilino)-2-(3-([(2*S*)-1,4-dioxan-2-yl]methoxy)pyridin-4-yl)-1,5,6,7-tetrahydro-4*H*-pyrrolo[3,2-*c*]pyridin-4-one

3-(3-chloro-2-ethylanilino)-2-(3-([(2*R*)-1,4-dioxan-2-yl]methoxy)pyridin-4-yl)-1,5,6,7-tetrahydro-4*H*-pyrrolo[3,2-*c*]pyridin-4-one

3-(3-chloro-2-ethylanilino)-2-(3-([(2*R*)-4-methylmorpholin-2-yl]methoxy)pyridin-4-yl)-1,5,6,7-tetrahydro-4*H*-pyrrolo[3,2-*c*]pyridin-4-one

3-(3-chloro-2-ethylanilino)-2-(3-([(2*S*)-4-methylmorpholin-2-yl]methoxy)pyridin-4-yl)-1,5,6,7-tetrahydro-4*H*-pyrrolo[3,2-*c*]pyridin-4-one

3-(3-chloro-2-methoxyanilino)-2-(3-{1-[1,4-dioxan-2-yl]ethoxy}pyridin-4-yl)-1,5,6,7-tetrahydro-4*H*-pyrrolo[3,2-*c*]pyridin-4-one

3-(3-chloro-2-methoxyanilino)-2-(3-{(1*S*)-1-[(2*S*)-1,4-dioxan-2-yl]ethoxy}pyridin-4-yl)-1,5,6,7-tetrahydro-4*H*-pyrrolo[3,2-*c*]pyridin-4-one

3-(3-chloro-2-methoxyanilino)-2-(3-{(1*S*)-1-[(2*R*)-1,4-dioxan-2-yl]ethoxy}pyridin-4-yl)-1,5,6,7-tetrahydro-4*H*-pyrrolo[3,2-*c*]pyridin-4-one

3-(3-chloro-2-methoxyanilino)-2-(3-{(1*R*)-1-[(2*S*)-1,4-dioxan-2-yl]ethoxy}pyridin-4-yl)-1,5,6,7-tetrahydro-4*H*-pyrrolo[3,2-*c*]pyridin-4-one

3-(3-chloro-2-methoxyanilino)-2-(3-{(1*R*)-1-[(2*R*)-1,4-dioxan-2-yl]ethoxy}pyridin-4-yl)-1,5,6,7-tetrahydro-4*H*-pyrrolo[3,2-*c*]pyridin-4-one

3-(3-fluoro-2-methylanilino)-2-{3-[(4-methylmorpholin-2-yl)methoxy]pyridin-4-yl}-1,5,6,7-tetrahydro-4*H*-pyrrolo[3,2-*c*]pyridin-4-one

3-(3-fluoro-2-methylanilino)-2-(3-([(2*R*)-4-methylmorpholin-2-yl]methoxy)pyridin-4-yl)-1,5,6,7-tetrahydro-4*H*-pyrrolo[3,2-*c*]pyridin-4-one

3-(3-fluoro-2-methylanilino)-2-(3-([(2S)-4-methylmorpholin-2-yl]methoxy)pyridin-4-yl)-1,5,6,7-tetrahydro-4*H*-pyrrolo[3,2-*c*]pyridin-4-one

2-(3-([1,4-dioxan-2-yl]methoxy)pyridin-4-yl)-3-(2-ethyl-3-fluoroanilino)-1,5,6,7-tetrahydro-4*H*-pyrrolo[3,2-*c*]pyridin-4-one

2-(3-([(2R)-1,4-dioxan-2-yl]methoxy)pyridin-4-yl)-3-(2-ethyl-3-fluoroanilino)-1,5,6,7-tetrahydro-4*H*-pyrrolo[3,2-*c*]pyridin-4-one

2-(3-([(2S)-1,4-dioxan-2-yl]methoxy)pyridin-4-yl)-3-(2-ethyl-3-fluoroanilino)-1,5,6,7-tetrahydro-4*H*-pyrrolo[3,2-*c*]pyridin-4-one

2-(3-([5,5-dimethyl-1,4-dioxan-2-yl]methoxy)pyridin-4-yl)-3-(2-ethyl-3-fluoroanilino)-1,5,6,7-tetrahydro-4*H*-pyrrolo[3,2-*c*]pyridin-4-one

2-(3-([(2R)-5,5-dimethyl-1,4-dioxan-2-yl]methoxy)pyridin-4-yl)-3-(2-ethyl-3-fluoroanilino)-1,5,6,7-tetrahydro-4*H*-pyrrolo[3,2-*c*]pyridin-4-one

2-(3-([(2S)-5,5-dimethyl-1,4-dioxan-2-yl]methoxy)pyridin-4-yl)-3-(2-ethyl-3-fluoroanilino)-1,5,6,7-tetrahydro-4*H*-pyrrolo[3,2-*c*]pyridin-4-one

3-(3-chloro-2-methoxyanilino)-2-[3-({1-[4-methylmorpholin-2-yl]ethyl}oxy)pyridin-4-yl]-1,5,6,7-tetrahydro-4*H*-pyrrolo[3,2-*c*]pyridin-4-one

3-(3-chloro-2-methoxyanilino)-2-[3-({(1*R*)-1-[(2*R*)-4-methylmorpholin-2-yl]ethyl}oxy)pyridin-4-yl]-1,5,6,7-tetrahydro-4*H*-pyrrolo[3,2-*c*]pyridin-4-one

3-(3-chloro-2-methoxyanilino)-2-[3-({(1*S*)-1-[(2*S*)-4-methylmorpholin-2-yl]ethyl}oxy)pyridin-4-yl]-1,5,6,7-tetrahydro-4*H*-pyrrolo[3,2-*c*]pyridin-4-one

3-(3-chloro-2-methoxyanilino)-2-[3-({(1*R*)-1-[(2*S*)-4-methylmorpholin-2-yl]ethyl}oxy)pyridin-4-yl]-1,5,6,7-tetrahydro-4*H*-pyrrolo[3,2-*c*]pyridin-4-one

3-(3-chloro-2-methoxyanilino)-2-[3-({(1*S*)-1-[(2*R*)-4-methylmorpholin-2-yl]ethyl}oxy)pyridin-4-yl]-1,5,6,7-tetrahydro-4*H*-pyrrolo[3,2-*c*]pyridin-4-one

5. Use of a compound of general formula (I) according to any of claims 1 to 4 in the manufacture of a medicament for the treatment or prophylaxis of diseases.

6. ~~Use of a compound of general formula (I)~~ The use according to claim 5, wherein the diseases are hyperproliferative diseases and/or disorders responsive to induction of cell death.

7. ~~Use of a compound of general formula (I)~~ The use according to claim 6, wherein the hyperproliferative diseases and/or disorders responsive to induction of cell death are haematological tumours, solid tumours and/or metastases thereof.

8. ~~Use of a compound of formula (I)~~The use according to claim 7, wherein the tumour harbors a mutant EGFR and/or metastases thereof.

9. ~~Use of a compound of formula (I)~~The use according to claim 7, wherein the tumour is lung cancer, particularly lung cancer harboring a mutant EGFR with exon 20 insertion mutation, and/or metastases thereof.

10. ~~Use of a compound of formula (I)~~The use according to claim 7, wherein the tumour is lung cancer, particularly lung cancer harboring a mutant EGFR with in-frame deletions in exon 19 (such as EGFR E746_A750del) or point mutations in exon 21 (e.g. L858R), and/or metastases thereof

11. ~~Use of a compound of formula (I)~~The use according to claim 7, wherein the tumour is lung cancer, particularly lung cancer harboring a mutant EGFR with a D770_N771insSVD C797S, E746_A750del C797S, or L858R C797S acquired resistance mutation, and/or metastases thereof

12. ~~Use of a compound of formula (I)~~The use according to claim 7, wherein the tumour is lung cancer, particularly lung cancer harboring a mutant ERBB2 with exon 20 insertion mutations (such as ERBB2 A775_G776insYVMA), and/or metastases thereof

13. A pharmaceutical composition comprising at least one compound of general formula (I) according to any of claims 1 to 4, together with at least one pharmaceutically acceptable auxiliary.

14. A composition according to claim 13 for the treatment of haematological tumours, solid tumours and/or metastases thereof.

15. A combination comprising one or more first active ingredients selected from a compound of general formula (I) according to any of claims 1 to 4, and one or more second active ingredients selected from chemotherapeutic anti-cancer agents and target-specific anti-cancer agents.

16. An *in vitro* method of inhibiting EGF-receptor kinase activity in a cancer cell, the method comprising contacting the cancer cell with a compound of general formula (I) according to any of claims 1 to 4.

17. Use of a compound of general formula (I) according to any of claims 1 to 4 in the manufacture of a medicament for inhibiting EGF-receptor kinase activity in a cancer cell~~The method of claim 16, wherein the cancer cell is *in vitro* or *in vivo*.~~

18. An *in vitro* method of reducing the survival of a cancer cell or inducing death in a cancer cell, the method comprising contacting a cancer cell comprising a mutation in an EGF-receptor with a compound of general formula (I) according to any of claims 1 to 4.

19. Use of a compound of general formula (I) according to any of claims 1 to 4 in the manufacture of a medicament for reducing the survival of a cancer cell or inducing death in a cancer cell, wherein the cancer cell comprises a mutation in an EGF-receptor.

~~19~~20. The method of claim 18, or the use of claim 19~~any one of claims 16 to 18, wherein the EGF-receptor comprises a mutation in exon 20.~~

~~20~~21. The method of claim 16, 18 or 20, or the use of claim 17, 19 or 20~~any one of claims 16 to 19, wherein the cancer cell is derived from a cancer selected from the group consisting of leukemia, myelodysplastic syndrome, malignant lymphoma, head and neck tumours, gastrointestinal tumours, endocrine tumours, mammary and other gynaecological tumours, urological tumours, skin tumours, and sarcomas.~~

~~21~~22. The method or use of claim 2021, wherein the cancer cell is derived from a cancer selected from the group consisting of inverted sinonasal papilloma or inverted sinonasal papilloma associated sinonasal squamous cell carcinoma.

~~22~~23. Use of A method of treating cancer in a subject, the method comprising administering to the subject an effective amount of a compound of general formula (I) according to any of claims 1 to 4in the manufacture of a medicament for treating cancer in a subject.

~~23~~24. A method of treating cancer in a subject~~The use of claim 23, wherein the cancer is or has acquired resistance to an anti-EGF receptor therapy, the method comprising administering to the subject an effective amount of a compound of general formula (I) according to any of claims 1 to 4.~~

~~24~~25. Use of a compound of general formula (I) according to any of claims 1 to 4 in the manufacture of a medicament for enhancing the efficacy of an anti-EGF-receptor therapy in a subject, wherein the medicament is to be administered in combination with A method of

~~enhancing the efficacy of an anti-EGF receptor therapy, the method comprising administering to the subject an anti-EGF receptor therapy in combination with a compound of general formula (I) according to any of claims 1 to 4.~~

~~2526.~~ The method use of any one of claims ~~22-23 or 24~~ to 24, wherein the cancer is selected from the group consisting of leukemia, myelodysplastic syndrome, malignant lymphoma, head and neck tumours, tumours of the thorax, gastrointestinal tumours, endocrine tumours, mammary and other gynaecological tumours, urological tumours, skin tumours, and sarcomas.

~~2627.~~ The method use of claim ~~2526~~, wherein the cancer is selected from the group consisting of inverted sinonasal papilloma or inverted sinonasal papilloma associated sinanonasal squamous cell carcinoma.

~~2728.~~ The method use of claim ~~2526~~, wherein the tumour of the thorax is non-small cell lung cancer.

~~2829.~~ The method of claim 16, or the use of claim 17, 24 or 25~~any one of claims 16 to 27~~, wherein the EGF-receptor comprises a mutation.

~~2930.~~ The method or use of claim ~~29~~8, wherein the EGF-receptor comprises a mutation in exon 20.

~~3031.~~ The method or use of claim ~~2930~~, wherein the EGF-receptor comprises an insertion in exon 20.

~~3132.~~ The method or use of claim ~~31~~0, wherein the EGF-receptor comprises an insertion between amino acids V769-D770 and/or between D770-N771.

~~3233.~~ The method or use of claim ~~32~~4, wherein the insertion is an ASV and/or SVD insertion.

~~3334.~~ The method or use of claim ~~31~~0, wherein the EGF-receptor ~~comprising~~ comprises an ASV insertion between amino acids V769-D770 and/or a SVD insertion between amino acids D770-N771.

~~3435.~~ A method of selecting a patient for cancer treatment with a compound of general formula (I) according to any of claims 1 to 4, the method comprising detecting the presence of

a mutation in exon 20 of the EGF-receptor in a biological sample of the subject, thereby determining that the patient should be treated with said compound.

~~3536.~~ Use of a compound of general formula (I) according to any of claims 1 to 4 in the manufacture of a medicament for use in combination therapy for treating a subject with cancer, wherein the medicament is to be administered to the subject in combination with ~~A method for treating a patient with cancer, the method comprising administering to the subject an anti-EGF receptor therapy in combination with a compound of general formula (I) according to any of claims 1 to 4, wherein the subject is~~ to be treated has been selected for the combination therapy by detecting the presence of a mutation in exon 20 of the EGF-receptor in a biological sample of the subject.

~~3637.~~ The method of claim ~~34-35,~~ or the use of claim 36 ~~or 35,~~ wherein the EGF-receptor comprises an insertion in exon 20.

~~3738.~~ The method or use of claim ~~37~~ 6, wherein the EGF-receptor comprises an insertion between amino acids V769-D770 and/or between amino acids D770-N771.

~~3839.~~ The method or use of claim ~~37-38,~~ wherein the insertion is an ASV and/or SVD insertion.

~~3940.~~ The method or use of claim ~~37~~ 6, wherein the EGF-receptor comprising an ASV insertion between amino acids V769-D770 and/or a SVD insertion between amino acids D770-N771.

~~4041.~~ The method of ~~any one of claims 16, 18~~ or 35, or the use of claim 24 ~~23 or 36, 34 and 35,~~ wherein the cancer is lung cancer, particularly lung cancer harboring a mutant EGFR with in-frame deletions in exon 19 (such as EGFR E746_A750del) or point mutations in exon 21 (e.g. L858R), and/or metastases thereof.

~~4142.~~ The method of ~~any one of claims 16, 18~~ or 35, or the use of claim 23 or 36, 24, 34 and 35, wherein the cancer is lung cancer, particularly lung cancer harboring a mutant EGFR with a D770_N771insSVD C797S, E746_A750del C797S, or L858R C797S acquired resistance mutation, and/or metastases thereof

~~4243.~~ The method of ~~any one of claims 16, 18~~ or 35, or the use of claim 23 or 36, 24, 34 and 35, wherein the cancer is lung cancer, particularly lung cancer harboring a mutant ERBB2 with exon 20 insertion mutations (such as ERBB2 A775_G776insYVMA), and/or metastases thereof.