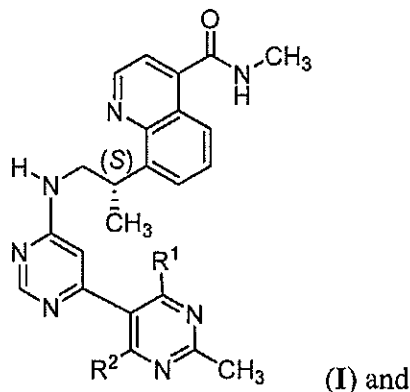


CLAIMS

1. A co-crystal comprising a compound of the formula:



a co-crystal former, wherein the co-crystal former is adipic acid, wherein each of R¹ and R² is independently hydrogen or deuterium.

2. The co-crystal of claim 1, wherein a molar ratio of adipic acid to the compound of formula I is about 1 to 2.
3. The co-crystal of claim 2, wherein the compound of formula I is (*S*)-*N*-methyl-8-(1-((2'-methyl-[4,5'-bipyrimidin]-6-yl)amino)propan-2-yl)quinoline-4-carboxamide.
4. The co-crystal of claim 2, wherein the compound of formula I is (*S*)-*N*-methyl-8-(1-((2'-methyl-4',6'-dideutero-[4,5'-bipyrimidin]-6-yl)amino)propan-2-yl)quinoline-4-carboxamide.
5. The co-crystal of claim 3 or 4
- a) having X-ray powder diffraction peaks at about 6.46, 7.91, 11.92, 12.26, 12.99, 14.19, 18.68, and 19.07 °2-Theta +/- 0.2, obtained at room temperature using a Cu source; and/or
 - b) having a DSC peak in its DSC thermogram at about 195 °C and about 245 °C.
6. A pharmaceutical composition comprising the co-crystal according to claim 1.

7. The pharmaceutical composition of claim 6, wherein the compound of formula I is (*S*)-*N*-methyl-8-(1-((2'-methyl-[4,5'-bipyrimidin]-6-yl)amino)propan-2-yl)quinoline-4-carboxamide, the co-crystal former is adipic acid; or

wherein the compound of formula I is (*S*)-*N*-methyl-8-(1-((2'-methyl-4',6'-dideutero-[4,5'-bipyrimidin]-6-yl)amino)propan-2-yl)quinoline-4-carboxamide, the co-crystal former is adipic acid.

8. The pharmaceutical composition of claim 7, wherein the molar ratio of the compound of formula I to adipic acid is about 2 to 1.

9. A method of making a co-crystal comprising:

a) grinding, heating, co-subliming, co-melting, or contacting either (*S*)-*N*-methyl-8-(1-((2'-methyl-[4,5'-bipyrimidin]-6-yl)amino)propan-2-yl)quinoline-4-carboxamide or (*S*)-*N*-methyl-8-(1-((2'-methyl-4',6'-dideutero-[4,5'-bipyrimidin]-6-yl)amino)propan-2-yl)quinoline-4-carboxamide with a co-crystal former under crystallization conditions so as to form the co-crystal in solid phase, wherein the co-crystal former is adipic acid; or

b) providing a pre-existing co-crystal as a seed to prepare the co-crystal, wherein the pre-existing co-crystal comprises: (i) either (*S*)-*N*-methyl-8-(1-((2'-methyl-[4,5'-bipyrimidin]-6-yl)amino)propan-2-yl)quinoline-4-carboxamide or (*S*)-*N*-methyl-8-(1-((2'-methyl-4',6'-dideutero-[4,5'-bipyrimidin]-6-yl)amino)propan-2-yl)quinoline-4-carboxamide; and (ii) adipic acid; and the co-crystal to be formed comprises: (i) either (*S*)-*N*-methyl-8-(1-((2'-methyl-[4,5'-bipyrimidin]-6-yl)amino)propan-2-yl)quinoline-4-carboxamide or (*S*)-*N*-methyl-8-(1-((2'-methyl-4',6'-dideutero-[4,5'-bipyrimidin]-6-yl)amino)propan-2-yl)quinoline-4-carboxamide; and (ii) adipic acid.

10. A co-crystal of any one of claims 1-5, or a pharmaceutical composition of any one of claims 6-8, for use in

a) potentiating a therapeutic regimen for the treatment of cancer in a patient; or

b) treating cancer in a patient.

11. The co-crystal of any one of claims 1-5, or a pharmaceutical composition of any one of claims 6-8, for use in treating cancer in a patient according to claim 10, further comprising administering an additional anticancer therapy; optionally

wherein the additional anticancer therapy is an anticancer agent or radiation therapy, or both; optionally,

wherein the anticancer agent is a chemotherapeutic agent; optionally, wherein the chemotherapeutic agent is etoposide, doxorubicin, daunorubicin, epirubicin or bleomycin.

12. The co-crystal of any one of claims 1-5, or a pharmaceutical composition of any one of claims 6-8, for use in potentiating a therapeutic regimen for the treatment of cancer in a patient according to claim 10, wherein the therapeutic regimen is an anticancer agent or radiation therapy, or both; optionally, wherein the anticancer agent is a chemotherapeutic agent; optionally, wherein the chemotherapeutic agent is etoposide, doxorubicin, daunorubicin, epirubicin or bleomycin.