

CLAIMS

1. A crystalline form of 6-(difluoromethyl)-8-[(1R,2R)-2-hydroxy-2-methyl-cyclopentyl]-2-[[1-(methylsulfonyl)piperidin-4-yl]amino]pyrido[2,3-*d*]pyrimidin-7(8*H*)-one (PF-06873600) free base, having a powder X-ray diffraction (PXRD) pattern comprising peaks at 2Θ values of: 9.6, 18.3 and $22.1^\circ 2\Theta \pm 0.2^\circ 2\Theta$.
2. The crystalline form of claim 1, having a PXRD pattern further comprising a peak at the 2Θ value of: $6.9^\circ 2\Theta \pm 0.2^\circ 2\Theta$.
3. The crystalline form of claim 1 or 2, having a Raman spectrum comprising one or more wavenumber (cm^{-1}) values selected from the group consisting of: 1589, 1626 and $1673 \text{ cm}^{-1} \pm 2 \text{ cm}^{-1}$.
4. The crystalline form of any one of claims 1 to 3, having a ^{13}C solid state NMR spectrum comprising one or more resonance (ppm) values selected from the group consisting of: 28.8, 133.2 and $161.4 \text{ ppm} \pm 0.2 \text{ ppm}$.
5. The crystalline form of any one of claims 1 to 4, having a ^{19}F solid state NMR spectrum comprising a resonance (ppm) value of: $-109.6 \text{ ppm} \pm 0.2 \text{ ppm}$.
6. A crystalline form of PF-06873600 free base, having a ^{19}F solid state NMR spectrum comprising resonance (ppm) values of: -109.6 and $-122.7 \text{ ppm} \pm 0.2 \text{ ppm}$.
7. The crystalline form of claim 6, having a PXRD pattern comprising one or more peaks at 2Θ values selected from the group consisting of: 9.6, 18.3 and $22.1^\circ 2\Theta \pm 0.2^\circ 2\Theta$.
8. The crystalline form of claim 6 or 7, having a Raman spectrum comprising one or more wavenumber (cm^{-1}) values selected from the group consisting of: 1589, 1626 and $1673 \text{ cm}^{-1} \pm 2 \text{ cm}^{-1}$.
9. The crystalline form of claim 6, 7 or 8, having a ^{13}C solid state NMR spectrum comprising one or more resonance (ppm) values selected from the group consisting of: 28.8, 133.2 and $161.4 \text{ ppm} \pm 0.2 \text{ ppm}$.

10. A crystalline form of PF-06873600 free base, having a Raman spectrum comprising wavenumber (cm^{-1}) values of: 1254, 1528, 1589, 1626 and $1673 \text{ cm}^{-1} \pm 2 \text{ cm}^{-1}$.

11. A crystalline form of PF-06873600 free base, having a ^{13}C solid state NMR spectrum comprising resonance (ppm) values of: 28.8, 42.0, 123.0, 133.2 and $161.4 \text{ ppm} \pm 0.2 \text{ ppm}$.

12. A crystalline form of PF-06873600 free base, having: (a) a powder X-ray diffraction (PXRD) pattern comprising peaks at 2θ values of: 9.6, 18.3 and $22.1^\circ 2\theta \pm 0.2^\circ 2\theta$; (b) a Raman spectrum comprising one or more wavenumber (cm^{-1}) values selected from the group consisting of: 1589, 1626 and $1673 \text{ cm}^{-1} \pm 2 \text{ cm}^{-1}$; (c) a ^{13}C solid state NMR spectrum comprising one or more resonance (ppm) values selected from the group consisting of: 28.8, 133.2 and $161.4 \text{ ppm} \pm 0.2 \text{ ppm}$; or (d) a ^{19}F solid state NMR spectrum comprising a resonance (ppm) value of: $-109.6 \text{ ppm} \pm 0.2 \text{ ppm}$; or a combination of two or more of (a), (b), (c) and (d).

13. The crystalline form of any one of claims 1 to 12 which is substantially pure and free of alternative forms.

14. The crystalline form of any one of claims 1 to 13, wherein the crystalline form is PF-06873600 free base (Form 1).

15. A pharmaceutical composition comprising the crystalline form of PF-06873600 free base according to any one of claims 1 to 14, and a pharmaceutically acceptable carrier or excipient.

~~16. A method of treating abnormal cell growth in a mammal comprising administering to the mammal a therapeutically effective amount of the crystalline form of PF-06873600 free base according to any one of claims 1 to 14.~~

~~17. The method of claim 16, wherein the abnormal cell growth is cancer.~~

~~18~~16. Use of a crystalline form of PF-06873600 free base according to any one of claims 1 to 14 in a manufacture of a medicament for the treatment of ~~a method of treating abnormal cell growth in a mammal.~~

~~19~~17. The use of claim ~~16~~18, wherein the abnormal cell growth is cancer.

~~20. The crystalline form of PF-06873600 free base according to any one of claims 1 to 14 for use in a method of treating abnormal cell growth in a mammal.~~

~~21. The crystalline form of claim 20, wherein the abnormal cell growth is cancer.~~