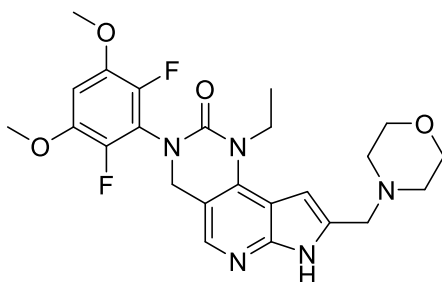


What is claimed is:

1. A salt which is an acid salt of 3-(2,6-difluoro-3,5-dimethoxyphenyl)-1-ethyl-8-(morpholin-4-ylmethyl)-1,3,4,7-tetrahydro-2H-pyrrolo[3',2':5,6]pyrido[4,3-d]pyrimidin-2-one, having the structure:



or a hydrate or solvate thereof, wherein the acid is selected from L-(+)-tartaric acid and D-(-)-tartaric acid, wherein the salt is crystalline, and wherein:

the salt is 3-(2,6-difluoro-3,5-dimethoxyphenyl)-1-ethyl-8-(morpholin-4-ylmethyl)-1,3,4,7-tetrahydro-2H-pyrrolo[3',2':5,6]pyrido[4,3-d]pyrimidin-2-one L-(+)-tartrate having at least one characteristic X-ray powder diffraction peak selected from about 3.8, about 8.5, about 9.1, about 10.3, and about 12.0 degrees 2-theta; or

the salt is 3-(2,6-difluoro-3,5-dimethoxyphenyl)-1-ethyl-8-(morpholin-4-ylmethyl)-1,3,4,7-tetrahydro-2H-pyrrolo[3',2':5,6]pyrido[4,3-d]pyrimidin-2-one D-(-)-tartrate having at least one characteristic XRPD peaks selected from about 7.4, about 10.5, about 12.9, about 13.6, about 14.8, and about 16.4 degrees 2-theta.

~~2. The salt of claim 1, wherein the salt is substantially crystalline.~~

~~3. The salt of claim 1, wherein the salt is crystalline.~~

~~4. The salt of any one of claims 1-3, wherein the acid is selected from L-(+)-tartaric acid, D-(+)-tartaric acid, salicylic acid, fumaric acid, benzenesulfonic acid, ethanesulfonic acid, hydrochloric acid, hydrobromic acid and phosphoric acid.~~

~~5.2. The salt of any one of claims 1-4 which is a hydrate.~~

~~6.3. The salt of any one of claims 1-4 which is a solvate.~~

~~7.4. The salt of any one of claims 1-6, wherein the salt is 3-(2,6-difluoro-3,5-dimethoxyphenyl)-1-ethyl-8-(morpholin-4-ylmethyl)-1,3,4,7-tetrahydro-2H-pyrrolo[3',2':5,6]pyrido[4,3-d]pyrimidin-2-one L-(+)-tartrate.~~

8.5. The salt of ~~any one of~~ claims 1-6, wherein the salt is 3-(2,6-difluoro-3,5-dimethoxyphenyl)-1-ethyl-8-(morpholin-4-ylmethyl)-1,3,4,7-tetrahydro-2H-pyrrolo[3',2':5,6]pyrido[4,3-d]pyrimidin-2-one *D*-~~(+)~~-~~(-)~~-tartrate.

5 **9.** ~~The salt of any one of claims 1-6, wherein the salt is 3-(2,6-difluoro-3,5-dimethoxyphenyl)-1-ethyl-8-(morpholin-4-ylmethyl)-1,3,4,7-tetrahydro-2H-pyrrolo[3',2':5,6]pyrido[4,3-d]pyrimidin-2-one salicylate.~~

10. ~~The salt of any one of claims 1-6, wherein the salt is 3-(2,6-difluoro-3,5-dimethoxyphenyl)-1-ethyl-8-(morpholin-4-ylmethyl)-1,3,4,7-tetrahydro-2H-pyrrolo[3',2':5,6]pyrido[4,3-d]pyrimidin-2-one fumarate.~~

- ~~11. — The salt of any one of claims 1-6, wherein the salt is 3-(2,6-difluoro-3,5-dimethoxyphenyl)-1-ethyl-8-(morpholin-4-ylmethyl)-1,3,4,7-tetrahydro-2H-pyrrolo[3',2':5,6]pyrido[4,3-d]pyrimidin-2-one besylate.~~
- ~~12. — The salt of any one of claims 1-6, wherein the salt is 3-(2,6-difluoro-3,5-dimethoxyphenyl)-1-ethyl-8-(morpholin-4-ylmethyl)-1,3,4,7-tetrahydro-2H-pyrrolo[3',2':5,6]pyrido[4,3-d]pyrimidin-2-one esylate.~~
- ~~13. — The salt of any one of claims 1-6, wherein the salt is 3-(2,6-difluoro-3,5-dimethoxyphenyl)-1-ethyl-8-(morpholin-4-ylmethyl)-1,3,4,7-tetrahydro-2H-pyrrolo[3',2':5,6]pyrido[4,3-d]pyrimidin-2-one hydrochloride.~~
- ~~14. — The salt of any one of claims 1-6, wherein the salt is 3-(2,6-difluoro-3,5-dimethoxyphenyl)-1-ethyl-8-(morpholin-4-ylmethyl)-1,3,4,7-tetrahydro-2H-pyrrolo[3',2':5,6]pyrido[4,3-d]pyrimidin-2-one hydrobromide.~~
- ~~15. — The salt of any one of claims 1-6, wherein the salt is 3-(2,6-difluoro-3,5-dimethoxyphenyl)-1-ethyl-8-(morpholin-4-ylmethyl)-1,3,4,7-tetrahydro-2H-pyrrolo[3',2':5,6]pyrido[4,3-d]pyrimidin-2-one phosphate.~~
- 16.6. The salt of claim 74, having an X-ray powder diffraction pattern with characteristic peaks as substantially shown in Figure 6.
- 17.7. The salt of claim 85, having an X-ray powder diffraction pattern with characteristic peaks as substantially shown in Figure 2.
- ~~18. — The salt of claim 9, having an X-ray powder diffraction pattern with characteristic peaks as substantially shown in Figure 10.~~
- ~~19. — The salt of claim 10, having an X-ray powder diffraction pattern with characteristic peaks as substantially shown in Figure 21.~~
- ~~20. — The salt of claim 11, having an X-ray powder diffraction pattern with characteristic peaks as substantially shown in Figure 29.~~
- ~~21. — The salt of claim 12, having an X-ray powder diffraction pattern with characteristic peaks as substantially shown in Figure 33.~~
- ~~22. — The salt of claim 13, having an X-ray powder diffraction pattern with characteristic peaks as substantially shown in Figure 13.~~

- ~~23. — The salt of claim 14, having an X-ray powder diffraction pattern with characteristic peaks as substantially shown in Figure 17.~~
- ~~24. — The salt of claim 15, having an X-ray powder diffraction pattern with characteristic peaks as substantially shown in Figure 25.~~
- 5 ~~25.8.~~ 25.8. A pharmaceutical composition comprising a salt of ~~any one of claims 1-24~~, and a pharmaceutically acceptable carrier or excipient.
- ~~26.9.~~ 26.9. A solid oral dosage form comprising the pharmaceutical composition of claim ~~25.8~~.
- ~~27. — A method of inhibiting an EGFR, said method comprising: contacting the EGFR with a salt of any one of claims 1-24.~~
- 10 ~~28. — A method of treating cancer comprising administering to a patient in need thereof a therapeutically effective amount of a salt of any of claims 1-24.~~
- ~~29. — The method of claim 28, wherein the cancer is selected from bladder cancer, breast cancer, cervical cancer, cancer of the small intestine, colorectal cancer, endometrial cancer, gastric cancer, head and neck cancer, kidney cancer, liver cancer, lung cancer, ovarian~~
- 15 ~~cancer, prostate cancer, testicular cancer, uterine cancer, vulvar cancer, esophageal cancer, gall bladder cancer, pancreatic cancer, thyroid cancer, skin cancer, brain cancer, leukemia, multiple myeloma, chronic lymphocytic lymphoma, adult T cell leukemia, B-cell lymphoma, acute myelogenous leukemia, Hodgkin's or non-Hodgkin's lymphoma, Waldenstrom's Macroglobulinemia, myeloproliferative neoplasms, chronic myelogenous lymphoma, acute~~
- 20 ~~lymphoblastic lymphoma, hairy cell lymphoma, Burkett's lymphoma, glioblastoma, melanoma, rhabdosarcoma, lymphosarcoma, and osteosarcoma.~~
- ~~30. — The method of Claim 29 wherein the cancer is bladder cancer.~~
- ~~31. — The method of Claim 29 wherein the liver cancer is cholangiocellular carcinoma.~~
- ~~32. The method of Claim 29 wherein the myeloproliferative neoplasm is 8p11~~
- 25 ~~myeloproliferative syndrome.~~

10. The salt of claim 4, having at least two characteristic X-ray powder diffraction peaks selected from about 3.8, about 8.5, about 9.1, about 10.3, and about 12.0 degrees 2-theta.

11. The salt of claim 4, having at least three characteristic X-ray powder diffraction peaks selected from about 3.8, about 8.5, about 9.1, about 10.3, and about 12.0 degrees 2-theta.

5 12. The salt of claim 5, having at least two characteristic X-ray powder diffraction peaks selected from about 7.4, about 10.5, about 12.9, about 13.6, about 14.8, and about 16.4 degrees 2-theta.

13. The salt of claim 5, having at least three characteristic X-ray powder diffraction peaks selected from about 7.4, about 10.5, about 12.9, about 13.6, about 14.8, and about 16.4
10 degrees 2-theta.