compounds that are subject to static electricity may create problems during manufacturing such as a reduced yield and uneven packaging. Thus, an active chemical compound having a low electrostatic charge is preferable. Hygroscopic compounds present problems due to their moisture absorption which leads to variations in compound mass depending on the amount of water present in the surrounding environment, making it difficult to accurately evaluate the compound's biological efficacy and to ensure the uniformity of pharmaceutical compositions containing the compound. Therefore, an active chemical compound with low hygroscopicity is desirable.

SUMMARY OF THE DISCLOSURE

[0007] One of the objectives of the present disclosure is to provide a novel, stable, and less static crystalline form, co-crystal and/or salt of a compound that is a potent and selective inhibitor of RNR and may be used as an antitumor agent or a therapeutic agent in the treatment of other diseases associated with RNR.

[0008] As a result of extensive studies to identify a chemical compound that satisfies the above-described requirements, the inventors of the present disclosure have discovered stable, low electrostatic and non-hygroscopic forms of sulfonamide compounds having excellent RNR inhibitory activity and use as a therapeutic agent for treating tumors and other diseases associated with RNR. These sulfonamide compounds exist as a crystalline form, such as co-crystals, and/or as a salt form.

[0008a] In one aspect, the present disclosure refers to a crystalline form of a compound selected from the group consisting of: 5-bromo-2-(N-((1S,2R)-2-(6-fluoro-2,3-dimethylphenyl)-1-(5-oxo-4,5-dihydro-1,3,4-oxadiazol-2-yl)propyl)sulfamoyl)benzamide; 5-chloro-2-(N-((1S,2R)-2-(6-fluoro-2,3-dimethylphenyl)-1-(5-oxo-4,5-dihydro-1,3,4-oxadiazol-2-yl)propyl)sulfamoyl)benzamide; 5-chloro-2-(N-((1S,2R)-2-(3-ethyl-6-fluoro-2-methylphenyl)-1-(5-oxo-4,5-dihydro-1,3,4-oxadiazol-2-yl)propyl)sulfamoyl)benzamide; 5-chloro-2-(N-((1S,2R)-2-(3-chloro-6-fluoro-2-methylphenyl)-1-(5-oxo-4,5-dihydro-1,3,4-oxadiazol-2-yl)propyl) sulfamoyl) benzamide; 5-chloro-N-((1S,2R)-2-(6-fluoro-2,3-dimethylphenyl)-1-(5-oxo-4,5-dihydro-1,3,4-oxadiazol-2-yl)propyl)-4-hydroxy-4-methyl-d3-chroman-8-sulfonamide; 5-chloro-N-((1S,2R)-2-(3-chloro-6-fluoro-2-methylphenyl)-1-(5-oxo-4,5-dihydro-1,3,4-oxadiazol-2-yl)propyl)-4-hydroxy-4-methylchroman-8-sulfonamide; N-((1S,2R)-2-(3-bromo-6-fluoro-2-methylphenyl)-1-(5-oxo-4,5-dihydro-1,3,4-oxadiazol-2-yl)propyl)-5-chloro-4-hydroxy-4-methylchroman-8-sulfonamide; 5-chloro-N-((1S,2R)-2-(3-chloro-6-fluoro-2-methylphenyl)-1-(5-oxo-4,5-dihydro-1,3,4-oxadiazol-2-yl)propyl)-4-hydroxy-4-methyl-d3-chroman-8-sulfonamide; and 5-chloro-N-((1S,2R)-2-(6- fluoro-2,3-dimethylphenyl)-1-(5-oxo-4,5-dihydro-1,3,4-oxadiazol-2-yl)propyl)-4-hydroxychroman-8-sulfonamide.

[0008b] In another aspect, the present disclosure refers to a benzoic acid salt of a compound selected from the group consisting of: 5-bromo-2-(N-((1S,2R)-2-(6-fluoro-2,3-dimethylphenyl)-1-(5-oxo-4,5-dihydro-1,3,4-oxadiazol-2-yl)propyl)sulfamoyl)benzamide; 5-chloro-2-(N-((1S,2R)-2-(6-fluoro-2,3-dimethylphenyl)-1-(5-oxo-4,5-dihydro-1,3,4-oxadiazol-2-yl)propyl)sulfamoyl)benzamide; 5-chloro-2-(N-((1S,2R)-2-(3-ethyl-6-fluoro-2-methylphenyl)-1-(5-oxo-4,5-dihydro-1,3,4-oxadiazol-2-yl)propyl)sulfamoyl)benzamide; 5-chloro-2-(N-((1S,2R)-2-(3-chloro-6-fluoro-2-methylphenyl)-1-(5-oxo-4,5-dihydro-1,3,4-oxadiazol-2-yl)propyl) sulfamoyl) benzamide; 5-chloro-N-((1S,2R)-2-(6-fluoro-2,3-dimethylphenyl)-1-(5-oxo-4,5-dihydro-1,3,4-oxadiazol-2-yl)propyl)-4-hydroxy-4-methyl-d3-chroman-8-sulfonamide; 5-chloro-N-((1S,2R)-2-(3-chloro-6-fluoro-2-methylphenyl)-1-(5-oxo-4,5-dihydro-1,3,4-oxadiazol-2-yl)propyl)-4-hydroxy-4-methylchroman-8-sulfonamide; N-((1S,2R)-2-(3-bromo-6-fluoro-2-methylphenyl)-1-(5-oxo-4,5-dihydro-1,3,4-oxadiazol-2-yl)propyl)-5-chloro-4-hydroxy-4-methylchroman-8-sulfonamide; 5-chloro-N-((1S,2R)-2-(3-chloro-6-fluoro-2-methylphenyl)-1-(5-oxo-4,5-dihydro-1,3,4-oxadiazol-2-yl)propyl)-4-hydroxy-4-methyl-d3-chroman-8-sulfonamide; and 5-chloro-N-((1S,2R)-2-(6-fluoro-2,3-dimethylphenyl)-1-(5-oxo-4,5-dihydro-1,3,4-oxadiazol-2-yl)propyl)-4-hydroxychroman-8-sulfonamide.

[0008c] In yet another aspect, the present disclosure refers to a pharmaceutical composition comprising (i) the crystalline form as described herein or the benzoic acid salt as described herein, and (ii) a pharmaceutically acceptable carrier. In yet another aspect, the present disclosure refers to the use of the pharmaceutical composition as described herein in the manufacture of a medicament for inhibiting ribonucleotide reductase, wherein a therapeutically effective amount of the pharmaceutical composition is to be administered to a human subject in need thereof. In yet another aspect, the present disclosure refers to an anti-tumor agent comprising the crystalline form as described herein or the benzoic acid salt as described herein as an active ingredient.

[0008d] In yet another aspect, the present disclosure refers to the use of the crystalline form as described herein or the benzoic acid salt as described herein for manufacturing a ribonucleotide reductase inhibitor. In still another aspect, the present disclosure refers to the use of the crystalline form as described herein, wherein the anti-tumor agent is an oral anti-tumor agent.

[0009] Various examples of the present disclosure provide the following sections [1] to [28].

[1] A crystalline form of a compound selected from the group consisting of:

5-bromo-2-(N-((1S,2R)-2-(6-fluoro-2,3-dimethylphenyl)-1-(5-oxo-4,5-dihydro-1,3,4-oxadiazol-2-yl)propyl)sulfamoyl)benzamide;

5-chloro-2-(N-((1S,2R)-2-(6-fluoro-2,3-dimethylphenyl)-1-(5-oxo-4,5-dihydro-1,3,4-oxadiazol-2-

yl)propyl)sulfamoyl)benzamide;

5-chloro-2-(N-((1S,2R)-2-(3-ethyl-6-fluoro-2-methylphenyl)-1-(5-oxo-4,5-dihydro-1,3,4-oxadiazol-2-yl)propyl)sulfamoyl)benzamide;

5-chloro-2-(N-((1S,2R)-2-(3-chloro-6-fluoro-2-methylphenyl)-1-(5-oxo-4,5-dihydro-1,3,4-oxadiazol-2-yl)propyl) sulfamoyl) benzamide;

5-chloro-N-((1S,2R)-2-(6-fluoro-2,3-dimethylphenyl)-1-(5-oxo-4,5-dihydro-1,3,4-oxadiazol-2-yl)propyl)-4-hydroxy-4-methyl-d3-chroman-8-sulfonamide;

5-chloro-N-((1S,2R)-2-(3-chloro-6-fluoro-2-methylphenyl)-1-(5-oxo-4,5-dihydro-1,3,4-oxadiazol-2-yl)propyl)-4-hydroxy-4-methylchroman-8-sulfonamide;

N-((1S,2R)-2-(3-bromo-6-fluoro-2-methylphenyl)-1-(5-oxo-4,5-dihydro-1,3,4-oxadiazol-2-yl)propyl)-5-chloro-4-hydroxy-4-methylchroman-8-sulfonamide;

5-chloro-N-((1S,2R)-2-(3-chloro-6-fluoro-2-methylphenyl)-1-(5-oxo-4,5-dihydro-1,3,4-oxadiazol-2-yl)propyl)-4-hydroxy-4-methyl-d3-chroman-8-sulfonamide; and

5-chloro-N-((1S,2R)-2-(6- fluoro-2,3-dimethylphenyl)-1-(5-oxo-4,5-dihydro-1,3,4-oxadiazol-2-yl)propyl)-4-hydroxychroman-8-sulfonamide.

[2] The crystalline form according to section [1], wherein the chemical purity of the crystalline form is 90 % or more.

[3] The crystalline form according to section [1] or [2], wherein the optical purity of the crystalline form is 100 %ee.

[4] The crystalline form according to any one of sections [1]-[3], wherein the crystalline form is stable upon exposure to conditions of about 40 °C and about 75 % relative humidity for about four weeks.

[5] The crystalline form according to any one of sections [1]-[4], wherein the crystalline form further comprises benzoic acid.

[6] The crystalline form according to any one of sections [1]-[5], wherein the crystalline form is a co-crystal of benzoic acid and the compound.

[7] A pharmaceutical composition comprising (i) the crystalline form of any one of sections [1]-[6] and (ii) a pharmaceutically acceptable carrier.

[8] A method of inhibiting ribonucleotide reductase *in vivo* comprising administering to a human subject in need thereof a therapeutically effective amount of the pharmaceutical composition according to section [7]. In some examples, the inhibition of ribonucleotide reductase occurs in a tumor cell in the human subject.

[9] An anti-tumor agent comprising the crystalline form of any one of sections [1]-[6] as an active ingredient. In some examples, the anti-tumor agent is an oral anti-tumor agent.

[10] Use of the crystalline form of any one of sections [1]-[6] for manufacturing a ribonucleotide reductase inhibitor.

[11] Use of the crystalline form of any one of sections [1]-[6] as a medicament.

[12] Use of the crystalline form of any one of sections [1]-[6] as an anti-tumor agent. In some examples, the anti-tumor agent is an oral anti-tumor agent.

[13] The crystalline form of any one of sections [1]-[6] for use as a ribonucleotide reductase inhibitor.

[14] The crystalline form of any one of sections [1]-[6] for use in preventing or treating tumors.

[15] The crystalline form of any one of sections [1]-[6] for use in preventing or treating tumors by orally administering the compound.

[16] The crystalline form of any one of sections [1]-[6], wherein the compound or the benzoic acid may be substituted with one or more radioactive isotopes or a non-radioactive isotope.

[17] A benzoic acid salt of a compound selected from the group consisting of:

5-bromo-2-(N-((1S,2R)-2-(6-fluoro-2,3-dimethylphenyl)-1-(5-oxo-4,5-dihydro-1,3,4-oxadiazol-2-yl)propyl)sulfamoyl)benzamide;

5-chloro-2-(N-((1S,2R)-2-(6-fluoro-2,3-dimethylphenyl)-1-(5-oxo-4,5-dihydro-1,3,4-oxadiazol-2-yl)propyl)sulfamoyl)benzamide;

5-chloro-2-(N-((1S,2R)-2-(3-ethyl-6-fluoro-2-methylphenyl)-1-(5-oxo-4,5-dihydro-1,3,4-oxadiazol-2-yl)propyl)sulfamoyl)benzamide;

5-chloro-2-(N-((1S,2R)-2-(3-chloro-6-fluoro-2-methylphenyl)-1-(5-oxo-4,5-dihydro-1,3,4-oxadiazol-2-yl)propyl) sulfamoyl) benzamide;

5-chloro-N-((1S,2R)-2-(6-fluoro-2,3-dimethylphenyl)-1-(5-oxo-4,5-dihydro-1,3,4-oxadiazol-2-yl)propyl)-4-hydroxy-4-methyl-d3-chroman-8-sulfonamide;

5-chloro-N-((1S,2R)-2-(3-chloro-6-fluoro-2-methylphenyl)-1-(5-oxo-4,5-dihydro-1,3,4-oxadiazol-2-yl)propyl)-4-hydroxy-4-methylchroman-8-sulfonamide;

N-((1S,2R)-2-(3-bromo-6-fluoro-2-methylphenyl)-1-(5-oxo-4,5-dihydro-1,3,4-oxadiazol-2-yl)propyl)-5-chloro-4-hydroxy-4-methylchroman-8-sulfonamide;

5-chloro-N-((1S,2R)-2-(3-chloro-6-fluoro-2-methylphenyl)-1-(5-oxo-4,5-dihydro-1,3,4-oxadiazol-2-yl)propyl)-4-hydroxy-4-methyl-d3-chroman-8-sulfonamide; and

5-chloro-N-((1S,2R)-2-(6- fluoro-2,3-dimethylphenyl)-1-(5-oxo-4,5-dihydro-1,3,4-oxadiazol-2-yl)propyl)-4-hydroxychroman-8-sulfonamide.

[18] A pharmaceutical composition comprising (i) the benzoic acid salt of section [17] and (ii) a pharmaceutically acceptable carrier.

[19] A method of inhibiting ribonucleotide reductase *in vivo* comprising administering to a human subject in need thereof a therapeutically effective amount of the pharmaceutical composition according to section [18]. In some examples, the inhibition of ribonucleotide reductase occurs in a tumor cell in the human subject.

[20] An anti-tumor agent comprising the benzoic acid salt of section [17] as an active ingredient. In some examples, the anti-tumor agent is an oral anti-tumor agent.

[21] Use of the benzoic acid salt of section [17] for manufacturing a ribonucleotide reductase inhibitor.

[22] Use of the benzoic acid salt of section [17] as a medicament.

[23] Use of the benzoic acid salt of section [17] as an anti-tumor agent. In some examples, the anti-tumor agent is an oral anti-tumor agent.

[24] The benzoic acid salt of section [17] for use as a ribonucleotide reductase inhibitor.

[25] The benzoic acid salt of section [17] for use in preventing or treating tumors.

[26] The benzoic acid salt of section [17] for use in preventing or treating tumors by orally administering the compound.

[27] The benzoic acid salt of section [17], wherein the benzoic acid may be substituted with one or more radioactive isotope or a non-radioactive isotope.

[28] The present disclosure relates to the crystalline forms of any one of sections [1]-[6], the co-crystals of section [6] and/or the benzoic acid salts of section [17] that act as RNR inhibitors.

[00010] The crystalline forms, co-crystals and/or benzoic acid salts of the present disclosure exhibit excellent RNR-inhibiting activity and stability and are also easy to handle because they are non- hygroscopic and/or non-electrostatic. Accordingly, the crystalline forms, co-crystals and/or benzoic acid salts described herein are suitable for use in the treatment of diseases associated with RNR.

BRIEF DESCRIPTION OF THE DRAWINGS

[00011] Figure 1 depicts a diagram illustrating the daily variations in relative tumor volume (hereinafter also referred to as “RTV”) after treatment with an exemplary compound disclosed herein.

[00012] Figure 2 depicts a diagram illustrating the daily variations in RTV after treatment with an exemplary compound disclosed herein.

[00013] Figure 3 depicts a diagram illustrating the daily variations in RTV after treatment with an exemplary compound disclosed herein.

[00014] Figure 4 depicts a diagram illustrating the daily variations in RTV after treatment with an exemplary compound disclosed herein.

[00015] Figure 5 depicts an exemplary crystalline form disclosed herein. The exemplary crystalline form had a crystal size of 0.15 × 0.20 × 0.25 mm, was colorless, and had plate shape.

[00016] Figure 6 depicts a powder X-ray diffraction (XRD) chart of an exemplary co-crystal.

[00017] Figure 7 depicts a differential scanning calorimetric (DSC) curve an exemplary co-crystal.

[00018] Figure 8 depicts moisture adsorption / desorption isothermal curves of a co-crystal of an exemplary compound (A) and of a free form of the same compound (B).

Claims

1. A crystalline form of a compound selected from the group consisting of:

5-bromo-2-(N-((1S,2R)-2-(6-fluoro-2,3-dimethylphenyl)-1-(5-oxo-4,5-dihydro-1,3,4-oxadiazol-2-yl)propyl)sulfamoyl)benzamide;

5-chloro-2-(N-((1S,2R)-2-(6-fluoro-2,3-dimethylphenyl)-1-(5-oxo-4,5-dihydro-1,3,4-oxadiazol-2-yl)propyl)sulfamoyl)benzamide;

5-chloro-2-(N-((1S,2R)-2-(3-ethyl-6-fluoro-2-methylphenyl)-1-(5-oxo-4,5-dihydro-1,3,4-oxadiazol-2-yl)propyl)sulfamoyl)benzamide;

5-chloro-2-(N-((1S,2R)-2-(3-chloro-6-fluoro-2-methylphenyl)-1-(5-oxo-4,5-dihydro-1,3,4-oxadiazol-2-yl)propyl) sulfamoyl) benzamide;

5-chloro-N-((1S,2R)-2-(6-fluoro-2,3-dimethylphenyl)-1-(5-oxo-4,5-dihydro-1,3,4-oxadiazol-2-yl)propyl)-4-hydroxy-4-methyl-d3-chroman-8-sulfonamide;

5-chloro-N-((1S,2R)-2-(3-chloro-6-fluoro-2-methylphenyl)-1-(5-oxo-4,5-dihydro-1,3,4-oxadiazol-2-yl)propyl)-4-hydroxy-4-methylchroman-8-sulfonamide;

N-((1S,2R)-2-(3-bromo-6-fluoro-2-methylphenyl)-1-(5-oxo-4,5-dihydro-1,3,4-oxadiazol-2-yl)propyl)-5-chloro-4-hydroxy-4-methylchroman-8-sulfonamide;

5-chloro-N-((1S,2R)-2-(3-chloro-6-fluoro-2-methylphenyl)-1-(5-oxo-4,5-dihydro-1,3,4-oxadiazol-2-yl)propyl)-4-hydroxy-4-methyl-d3-chroman-8-sulfonamide; and

5-chloro-N-((1S,2R)-2-(6- fluoro-2,3-dimethylphenyl)-1-(5-oxo-4,5-dihydro-1,3,4-oxadiazol-2-yl)propyl)-4-hydroxychroman-8-sulfonamide.

2. The crystalline form according to claim 1, wherein the compound is

5-chloro-2-(N-((1S,2R)-2-(6-fluoro-2,3-dimethylphenyl)-1-(5-oxo-4,5-dihydro-1,3,4-oxadiazol-2-yl)propyl)sulfamoyl)benzamide.

3. The crystalline form according to claim 1 or 2, wherein the chemical purity of the crystalline form is 90 % or more.

4. The crystalline form according to any one of the preceding claims, wherein the optical purity of the crystalline form is 100 %ee.

5. The crystalline form according to any one of the preceding claims, wherein the crystalline form is stable upon exposure to about 40 °C and about 75 % relative humidity for about four weeks.

6. The crystalline form according to any one of the preceding claims, further comprising benzoic acid.

7. The crystalline form according to any one of the preceding claims, wherein the crystalline form is a co-crystal of benzoic acid and the compound.

8. The crystalline form according to claim 6 or 7, wherein the molar ratio of the compound and benzoic acid is 1:1.

9. A benzoic acid salt of a compound selected from the group consisting of:

5-bromo-2-(N-((1S,2R)-2-(6-fluoro-2,3-dimethylphenyl)-1-(5-oxo-4,5-dihydro-1,3,4-oxadiazol-2-yl)propyl)sulfamoyl)benzamide;

5-chloro-2-(N-((1S,2R)-2-(6-fluoro-2,3-dimethylphenyl)-1-(5-oxo-4,5-dihydro-1,3,4-oxadiazol-2-yl)propyl)sulfamoyl)benzamide;

5-chloro-2-(N-((1S,2R)-2-(3-ethyl-6-fluoro-2-methylphenyl)-1-(5-oxo-4,5-dihydro-1,3,4-oxadiazol-2-yl)propyl)sulfamoyl)benzamide;

5-chloro-2-(N-((1S,2R)-2-(3-chloro-6-fluoro-2-methylphenyl)-1-(5-oxo-4,5-dihydro-1,3,4-oxadiazol-2-yl)propyl) sulfamoyl) benzamide;

5-chloro-N-((1S,2R)-2-(6-fluoro-2,3-dimethylphenyl)-1-(5-oxo-4,5-dihydro-1,3,4-oxadiazol-2-yl)propyl)-4-hydroxy-4-methyl-d3-chroman-8-sulfonamide;

5-chloro-N-((1S,2R)-2-(3-chloro-6-fluoro-2-methylphenyl)-1-(5-oxo-4,5-dihydro-1,3,4-oxadiazol-2-yl)propyl)-4-hydroxy-4-methylchroman-8-sulfonamide;

N-((1S,2R)-2-(3-bromo-6-fluoro-2-methylphenyl)-1-(5-oxo-4,5-dihydro-1,3,4-oxadiazol-2-yl)propyl)-5-chloro-4-hydroxy-4-methylchroman-8-sulfonamide;

5-chloro-N-((1S,2R)-2-(3-chloro-6-fluoro-2-methylphenyl)-1-(5-oxo-4,5-dihydro-1,3,4-oxadiazol-2-yl)propyl)-4-hydroxy-4-methyl-d3-chroman-8-sulfonamide; and

5-chloro-N-((1S,2R)-2-(6- fluoro-2,3-dimethylphenyl)-1-(5-oxo-4,5-dihydro-1,3,4-oxadiazol-2-yl)propyl)-4-hydroxychroman-8-sulfonamide.

10. The benzoic acid salt according to claim 9, wherein the compound is

5-chloro-2-(N-((1S,2R)-2-(6-fluoro-2,3-dimethylphenyl)-1-(5-oxo-4,5-dihydro-1,3,4-oxadiazol-2-yl)propyl)sulfamoyl)benzamide.

11. A pharmaceutical composition comprising (i) the crystalline form of any one of claims 1-8 or the benzoic acid salt of any one of claims 9-10, and (ii) a pharmaceutically acceptable carrier.

12. Use of the pharmaceutical composition according to claim 11 in the manufacture of a medicament for inhibiting ribonucleotide reductase, wherein a therapeutically effective amount of the pharmaceutical composition is to be administered to a human subject in need thereof.

13. The use according to claim 12, wherein the inhibition of ribonucleotide reductase occurs in a tumor cell in the human subject.

14. An anti-tumor agent comprising the crystalline form of any one of claims 1-8 or the benzoic acid salt of any one of claims 9-10 as an active ingredient.

15. The anti-tumor agent of claim 14, wherein the anti-tumor agent is an oral anti-tumor agent.

16. Use of the crystalline form of any one of claims 1-8 or the benzoic acid salt of any one of claims 9-10 for manufacturing a ribonucleotide reductase inhibitor.

17. The crystalline form of any one of claims 1-8 or the benzoic acid salt of any one of claims 9-10 for use as a medicament.

18. The crystalline form of any one of claims 1-8 or the benzoic acid salt of any one of claims 9-10 for use as an anti-tumor agent.

19. Use of the crystalline form of claim 18, wherein the anti-tumor agent is an oral anti-tumor agent.

20. The crystalline form according to any one of claims 1-8 or the benzoic acid salt of any one of claims 9-10 for use as a ribonucleotide reductase inhibitor.

21. The crystalline form according to any one of claims 1-8 or the benzoic acid salt of any one of claims 9-10 for use in preventing or treating tumors.

22. The crystalline form according to any one of claims 1-8 or the benzoic acid salt of any one of claims 9-10 for use in preventing or treating tumors, wherein the compound is to be orally administered to a subject.

23. The crystalline form according to any one of claims 1-8, wherein a powder X-ray diffraction pattern of the crystalline form has two or more peaks at (2θ ± 0.2°) of 6.8°, 7.8°, 11.2°, 13.4°, 13.7°, 16.0°, 17.1°, 17.8° and 23.2°.

24. The crystalline form according to any one of claims 1-8, wherein a powder X-ray diffraction pattern of the crystalline form has a diffraction angle (2θ ± 0.2°) of 6.8°, 7.8°, 11.2°, 13.4°, 13.7°, 16.0°, 17.1°, 17.8° and 23.2°.

25. The crystalline form according to any one of claims 1-8, wherein the crystalline form has an endothermic peak from 155 °C to 168 °C as measured by DSC.

26. The crystalline form according to any one of claims 1-8, wherein the crystalline form has an endothermic peak at 162 °C as measured by DSC.

27. The pharmaceutical composition according to claim 11 for use in therapy.