CLAIMS

1. A crystalline HCl salt of linaprazan glurate.

2. The crystalline HCl salt of linaprazan glurate according to claim 1, wherein the crystalline HCl salt is stable at a relative humidity of 94% at room temperature.

3. The crystalline HCl salt of linaprazan glurate according to claim 1 or 2, which is an anhydrate.

4. The crystalline HCl salt of linaprazan glurate according to claim 3 which is Form 1, having an XRPD pattern, obtained with CuKα1-radiation, with at least two peaks at °2θ values selected from the list consisting of 3.8±0.2, 9.1±0.2, 13.8±0.2, 14.0±0.2, 20.0±0.2, 22.9±0.2, 23.4±0.2, 24.4±0.2, 24.6±0.2 and 26.7±0.2.

5. The crystalline HCl salt of linaprazan glurate according to claim 4, wherein Form 1 has an XRPD pattern, obtained with CuKα-radiation, with at least peaks at °2θ values of 20.0±0.2, 24.4±0.2, 24.6±0.2 and 26.7±0.2.

6. The crystalline HCl salt of linaprazan glurate according to claim 4, wherein Form 1 has an XRPD pattern, obtained with CuKα-radiation, with at least peaks at °2θ values of 9.1±0.2, 13.8±0.2, 20.0±0.2, 23.4±0.2, 24.4±0.2, 24.6±0.2 and 26.7±0.2.

7. The crystalline HCl salt of linaprazan glurate according to claim 3 which is Form 1, having an XRPD pattern, obtained with CuKα-radiation, substantially as shown in Figure 1.

8. The crystalline HCl salt of linaprazan glurate according to any one of claims 4 to 7, wherein Form 1 has a DSC curve comprising an endotherm between about 230 °C and about 240 °C, such as at approximately 233 °C.

9. The crystalline HCl salt of linaprazan glurate according to claim 1 or 2, which is a non-stoichiometric hydrate.

10. The crystalline HCl salt of linaprazan glurate according to claim 9 which is Form 2, having an XRPD pattern, obtained with CuKα1-radiation, with at least two peaks at °2θ values selected

from the list consisting of 7.1±0.2, 9.9±0.2, 10.2±0.2, 15.0±0.2, 15.7±0.2, 22.6±0.2, 22.8±0.2 and 25.0±0.2.

11. The crystalline HCl salt of linaprazan glurate according to claim 10, wherein Form 2 has an XRPD pattern, obtained with CuKα1-radiation, with at least peaks at °2θ values of 7.1±0.2, 15.0±0.2, 22.6±0.2 and 25.0±0.2.

12. The crystalline HCl salt of linaprazan glurate according to claim 10, wherein Form 2 has an XRPD pattern, obtained with CuKα1-radiation, with at least peaks at °2θ values of 7.1±0.2, 9.9±0.2, 10.2±0.2, 15.0±0.2, 15.7±0.2, 22.6±0.2, 22.8±0.2 and 25.0±0.2.

13. The crystalline HCl salt of linaprazan glurate according to claim 9, which is Form 2, having an XRPD pattern, obtained with CuKα-radiation, substantially as shown in Figure 2 or Figure 3.

14. The crystalline HCl salt of linaprazan glurate according to any one of claims 10 to 13, wherein Form 2 has a DSC curve comprising an endotherm between about 175 °C and about 185 °C, such as at approximately 180 °C.

15. The crystalline HCl salt of linaprazan glurate according to any one of claims 1 to 14, having a crystallinity of greater than 99%.

16. A pharmaceutical composition comprising a therapeutically effective amount of a crystalline HCl salt of linaprazan glurate according to any one of claims 1 to 15, in association with one or more pharmaceutically acceptable excipients.

17. The crystalline HCl salt of linaprazan glurate according to any one of claims 1 to 15, for use in therapy.

18. Use of the crystalline HCl salt of linaprazan glurate according to any one of claims 1 to 15 in the manufacture of a medicament for the treatment or prevention of a gastrointestinal inflammatory disease or a gastric acid related disease.

19. The use according to claim 18, wherein the gastrointestinal inflammatory disease or the gastric acid related disease is gastritis, gastroesophageal reflux disease (GERD), erosive

gastroesophageal reflux disease (eGERD), H. pylori infection, Zollinger-Ellison syndrome, peptic ulcer disease (including gastric ulcers and duodenal ulcers), bleeding gastric ulcer, symptoms of gastroesophageal reflux disease (including heartburn, regurgitation and nausea), gastrinoma or acute upper gastrointestinal bleeding.

20. The use according to claim 18, wherein the gastrointestinal inflammatory disease or the gastric acid related disease is erosive gastroesophageal reflux disease (eGERD).

21. A process for the preparation of Form 1 of the HCl salt of linaprazan glurate, comprising the steps of:

a) preparing a solution of the free base of linaprazan glurate in acetic acid;
b) adding ethyl acetate;
c) adding concentrated hydrochloric acid, and maintaining stirring until Form 2 of the HCl salt is obtained;
d) recovering the solid obtained in step c);
e) adding ethyl acetate to the solid of step d);
f) slurrying the suspension of step e) until conversion of Form 2 to Form 1 of the HCl salt is completed;
g) recovering the solid obtained in step f); and
h) drying the solid of step g), such as under vacuum and/or at elevated temperature.