CLAIMS:

1. Use of voxelotor in the manufacture of a medicament for the treatment of sickle cell disease in a patient in need thereof, wherein the patient is to be administered 600 mg to 1500 mg of voxelotor per day, wherein the patient is about 4 years old to less than about 12 years old, and the amount of voxelotor is determined by the patient's body weight.

2. The use of claim 1, wherein the patient's body weight is about 40 kg or greater, and the patient is to be administered 1500 mg of voxelotor per day.

3. The use of claim 1, wherein the patient's body weight is about 20 kg to less than about 40 kg, and the patient is to be administered 900 mg of voxelotor per day.

4. The use of claim 1, wherein the patient's body weight is about 10 kg to less than about 20 kg, and the patient is to be administered 600 mg of voxelotor per day.

5. Use of voxelotor in the manufacture of a medicament for the treatment of sickle cell disease in a patient in need thereof, wherein the patient is to be administered 300 mg to 1000 mg of voxelotor per day, wherein the patient has severe hepatic impairment, the patient is about 4 years old to less than about 12 years old, and the amount of voxelotor is determined by the patient's body weight.

6. The use of claim 5, wherein the patient's body weight is about 40 kg or greater, and the patient is to be administered 900 mg of voxelotor per day.

7. The use of claim 5, wherein the patient's body weight is about 40 kg or greater, and the patient is to be administered 1000 mg of voxelotor per day.

8. The use of claim 5, wherein the patient's body weight is about 20 kg to less than about 40 kg, and the patient is to be administered 600 mg of voxelotor per day.

9. The use of claim 5, wherein the patient's body weight is about 10 kg to less than about 20 kg, and the patient is to be administered 300 mg of voxelotor per day.

10. The use of any one of claims 1-9, wherein voxelotor is to be administered with food or without food.

11. The use of any one of claims 5-10, wherein the patient has a Child-Pugh score of 10-15 points (Child-Pugh C).

12. The use of any one of claims 5-10, wherein the patient suffers from a chronic liver disease.

13. The use of any one of claims 5-10, wherein the patient suffers from a condition selected from the group consisting of liver fibrosis, cirrhosis, hepatocellular carcinoma, hepatic inflammation, hepatic steatosis, nonalcoholic fatty liver disease (NAFLD), nonalcoholic steatohepatitis (NASH), portal hypertension, hepatic encephalopathy, hepatitis, and any combination thereof.

14. The use of any one of claims 5-13, wherein voxelotor is to be administered to the patient once daily and in an oral formulation.

15. The use of claim 14, wherein the oral formulation is tablet.

16. The use of any one of claims 1-15, wherein voxelotor is to be administered to the patient in a single oral dose of one tablet daily, two tablets daily, or three tablets daily.

17. Use of voxelotor in the manufacture of a medicament for the treatment of sickle cell disease in a patient in need thereof, wherein the patient is to be administered 600 mg to 1500 mg of voxelotor once daily, wherein the patient has mild or moderate hepatic impairment, the patient is about 4 years old to less than about 12 years old, and the amount of voxelotor is determined by the patient's body weight.

18. Use of voxelotor and a strong CYP3A4 inducer concurrently in the manufacture of a medicament for the treatment of sickle cell disease in a patient in need thereof, wherein the patient is to be administered a therapeutically effective amount of a strong CYP3A4 inducer and 2000 mg voxelotor orally once daily, wherein the patient is 12 years of age or older.

19. Use of voxelotor and a strong CYP3A4 inducer concurrently in the manufacture of a medicament for the treatment of sickle cell disease in a patient in need thereof, wherein the patient is to be administered a therapeutically effective amount of a strong CYP3A4 inducer and 900 mg to 2100 mg voxelotor orally once daily, wherein the patient is about 4 years old to less than about 12 years old, and the amount of voxelotor is determined by the patient's body weight.

20. The use of claim 19, wherein the patient's body weight is about 40 kg or greater, and the patient is to be administered 2000 mg of voxelotor per day.

21. The use of claim 19, wherein the patient's body weight is about 40 kg or greater, and the patient is to be administered 2100 mg of voxelotor per day.

22. The use of claim 19, wherein the patient's body weight is about 20 kg to less than about 40 kg, and the patient is to be administered 1200 mg of voxelotor per day.

23. The use of claim 19, wherein the patient's body weight is about 10 kg to less than about 20 kg, and the patient is to be administered 900 mg of voxelotor per day.

24. Use of voxelotor in the manufacture of a medicament for the treatment of sickle cell disease in a patient in need thereof, wherein the patient is to be administered a therapeutically effective amount of voxelotor, and advising the patient one or more of the following:

(a) advising the patient that a sensitive CYP3A4 substrate with a narrow therapeutic index, moderate CYP3A4 inducer, strong CYP3A4 inducer, fluconazole, or strong CYP3A4 inhibitor should be avoided or discontinued;

(b) advising the patient that co-administration of voxelotor with a sensitive CYP3A4 substrate with a narrow therapeutic index, moderate CYP3A4 inducer, strong CYP3A4 inducer, fluconazole, or strong CYP3A4 inhibitor can alter the therapeutic effect of voxelotor;

(c) advising the patient that co-administration of voxelotor and a moderate CYP3A4 inducer or strong CYP3A4 inducer can decrease voxelotor plasma concentrations and may lead to reduced efficacy;

(d) advising the patient that co-administration of voxelotor and a strong CYP3A4 inhibitor can increase voxelotor plasma concentrations and may lead to increased toxicity;

(e) advising the patient that co-administration of voxelotor with a sensitive CYP3A4 substrate with a narrow therapeutic index can increase the systemic exposure of the sensitive CYP3A4 substrate with a narrow therapeutic index;

(f) advising the patient to replace a strong CYP3A4 inhibitor or fluconazole with an alternative drug;

(g) if co-administration of a strong CYP3A4 inhibitor or fluconazole is unavoidable, decreasing the dose of voxelotor to 1000 mg per day;

(h) if co-administration of a moderate CYP3A4 inducer or strong CYP3A4 inducer is unavoidable, increasing the dose of voxelotor to 2500 mg per day;

(i) if co-administration of a CYP3A4 inducer is unavoidable and the patient is about 12 years old or older, increasing the dose of voxelotor to 2000 mg per day;

(j) if co-administration of a CYP3A4 inducer is unavoidable and the patient is about 4 years old to less than about 12 years old, increasing the dose of voxelotor to 900 mg to 2100 mg voxelotor mg per day depending on the patient's body weight;

(k) if co-administration of a strong CYP3A4 inducer is unavoidable and the patient is about 12 years old or older, increasing the dose of voxelotor to 2500 mg per day;

(l) if co-administration of a moderate CYP3A4 inducer is unavoidable and the patient is about 12 years old or older, increasing the dose of voxelotor to 2000 mg per day;

(m) if co-administration of a strong CYP3A4 inducer is unavoidable and the patient is about 4 years old to less than about 12 years old, increasing the dose of voxelotor to 900 mg to 2500 mg voxelotor mg per day depending on the patient's body weight;

(n) if co-administration of a moderate CYP3A4 inducer is unavoidable and the patient is about 4 years old to less than about 12 years old, increasing the dose of voxelotor to 900 mg to 2100 mg voxelotor mg per day depending on the patient's body weight; or

(o) if co-administration of a sensitive CYP3A4 substrate with a narrow therapeutic index is unavoidable, decreasing the dose of the sensitive CYP3A4 substrate with a narrow therapeutic index.

25. The use of any one of claims 1-17 and 19-24, wherein the patient may suffer from pyrexia, vomiting, rash, abdominal pain, diarrhea, and headache.

26. The use of any one of claims 1-17 and 19-24, wherein the patient may suffer from vomiting.

27. The use of any one of claims 1-17 and 19-26, wherein voxelotor is to be administered as an oral suspension.

28. The use of any one of the preceding claims, wherein a tablet of voxelotor is dispersed in a liquid before administration.

29. The use of claim 15, wherein one tablet of voxelotor is dispersed in 5 mL of liquid.

30. The use of claim 15, wherein two tablets of voxelotor are dispersed in 10 mL of liquid.

31. The use of claim 15, wherein three tablets of voxelotor are dispersed in 15 mL of liquid.

32. The use of claim 15, wherein four tablets of voxelotor are dispersed in 20 mL of liquid.

33. The use of claim 15, wherein four tablets of voxelotor are dispersed in 20 mL of liquid.

34. The use of claim 15, wherein five tablets of voxelotor are dispersed in 25 mL of liquid.

35. The use of claim 15, wherein seven tablets of voxelotor are dispersed in 35 mL of liquid.

36. The use of claim 15, wherein eight tablets of voxelotor are dispersed in 40 mL of liquid.

37. Use of voxelotor and a moderate CYP3A4 inducer concurrently in the manufacture of a medicament for the treatment of sickle cell disease in a patient in need thereof, wherein the patient is to be administered a therapeutically effective amount of a moderate CYP3A4 inducer and 2000 mg voxelotor orally once daily, wherein the patient is 12 years of age or older.

38. Use of voxelotor and a strong CYP3A4 inducer concurrently in the manufacture of a medicament for the treatment of sickle cell disease in a patient in need thereof, wherein the patient is to be administered a therapeutically effective amount of a strong CYP3A4 inducer and 900 mg to 2500 mg voxelotor orally once daily, wherein the patient is about 4 years old to less than about 12 years old, and the amount of voxelotor is determined by the patient’s body weight.

39. The use of claim 38, wherein the patient’s body weight is about 40 kg or greater, and the patient is to be administered 2500 mg of voxelotor per day.

40. The use of claim 38, wherein the patient's body weight is about 40 kg or greater, and the patient is to be administered 2400 mg of voxelotor per day.

41. The use of claim 38, wherein the patient's body weight is about 20 kg to less than about 40 kg, and the patient is to be administered 1500 mg of voxelotor per day.

42. The use of claim 38, wherein the patient's body weight is about 10 kg to less than about 20 kg, and the patient is to be administered 900 mg of voxelotor per day.

43. Use of voxelotor and a moderate CYP3A4 inducer concurrently in the manufacture of a medicament for the treatment of sickle cell disease in a patient in need thereof, wherein the patient is to be administered a therapeutically effective amount of a moderate CYP3A4 inducer and 900 mg to 2100 mg voxelotor orally once daily, wherein the patient is about 4 years old to less than about 12 years old, and the amount of voxelotor is determined by the patient's body weight.

44. The use of claim 43, wherein the patient's body weight is about 40 kg or greater, and the patient is to be administered 2000 mg of voxelotor per day.

45. The use of claim 43, wherein the patient's body weight is about 40 kg or greater, and the patient is to be administered 2100 mg of voxelotor per day.

46. The use of claim 43, wherein the patient's body weight is about 20 kg to less than about 40 kg, and the patient is to be administered 1200 mg of voxelotor per day.

47. The use of claim 43, wherein the patient's body weight is about 10 kg to less than about 20 kg, and the patient is to be administered 900 mg of voxelotor per day.

48. The use of any one of the preceding claims, wherein the patient is to be further administered hydroxyurea.