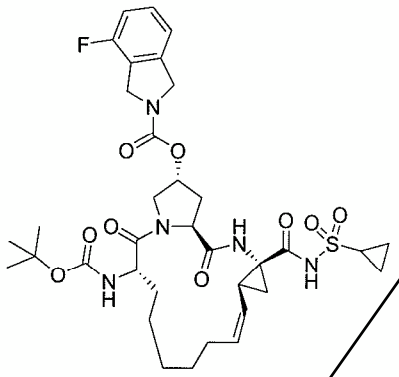
CLAIMS

1. Use of a compound having the formula **XIX,** or a pharmaceutically acceptable salt thereof, in the preparation of a medicine for treating a hepatitis C virus infection in a population of humans, wherein the compound having the formula **XIX** has the following structure:



XIX

wherein the medicine is suitable for administration in combination with peginterferon alfa-2a and ribavirin for a period of time and in amounts effective to reduce HCV RNA levels in the blood of at least 14% of the population of humans to an average level of below about 43 IU/mL.

2. The use of Claim 1, wherein the medicine is suitable for administration about every 6 hours, about every 8 hours, about every 12 hours, about every 24 hours, about every 36 hours or about every 48 hours at a dosage of about 50 mg.

3. The use of Claim 1, wherein the medicine is suitable for administration about every 6 hours, about every 8 hours, about every 12 hours, about every 24 hours, about every 36 hours or about every 48 hours at a dosage of about 100 mg.

4. The use of Claim 1, wherein the medicine is suitable for administration about every 6 hours, about every 8 hours, about every 12 hours, about every 24 hours, about every 36 hours or every about 48 hours at a dosage of about 150 mg.

5. The use of Claim 1, wherein the medicine is suitable for administration about every 6 hours, about every 8 hours, about every 12 hours, about every 24 hours, about every 36 hours or about every 48 hours at a dosage of about 200 mg.

6. The use of any one of Claims 1 to 5, wherein the period of time is about 14 days or less.

7. The use of Claim 6, wherein the period of time is greater than 7 days.

8. The use of Claim 1, wherein the medicine is suitable for administration in combination with peginterferon alfa-2a and ribavirin for a period of time and in amounts effective to reduce HCV RNA levels in the blood of at least 57% of the population of humans to an average level of below about 43 IU/mL.

9. The use of Claim 8, wherein the medicine is suitable for administration in combination with peginterferon alfa-2a and ribavirin for a period of time and in amounts effective to reduce HCV RNA levels in the blood of at least 57% of the population of humans to an average level of below about 25 IU/mL.

10. The use of any one of Claims 8 to 9, wherein the medicine is suitable for administration in combination with peginterferon alfa-2a and ribavirin for a period of time and in amounts effective to reduce HCV RNA levels in the blood of at least 75% of the population of humans to an average level of below about 25 IU/mL.

11. The use of any one of Claims 8 to 10, wherein the medicine is suitable for administration in combination with peginterferon alfa-2a and ribavirin for a period of time and in amounts effective to reduce HCV RNA levels in the blood of at least 88% of the population of humans to an average level of below about 25 IU/mL.

12. The use of Claim 1, wherein the medicine is suitable for administration in combination with peginterferon alfa-2a and ribavirin for a period of time and in amounts effective to reduce HCV RNA levels in the blood of at least 14% of the individuals to a level of below 9.3 IU/mL.

13. The use of Claim 12, wherein the medicine is suitable for administration in combination with peginterferon alfa-2a and ribavirin for a period of time and in amounts effective to reduce HCV RNA levels in the blood of at least 20% of the individuals to a level of below 9.3 IU/mL.

14. The use of any one of Claims 12 to 13, wherein the medicine is suitable for administration in combination with peginterferon alfa-2a and ribavirin for a period of time and in amounts effective to reduce HCV RNA levels in the blood of at least 30% of the individuals to a level of below 9.3 IU/mL.

15. The use of any one of Claims 12 to 14, wherein the medicine is suitable for administration in combination with peginterferon alfa-2a and ribavirin for a period of time and in

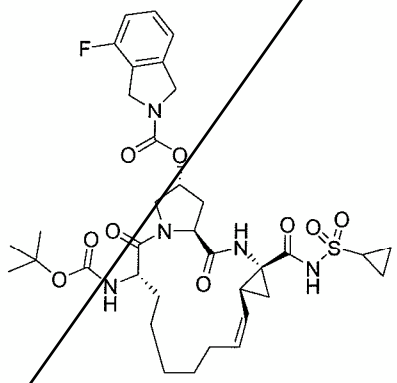
amounts effective to reduce HCV RNA levels in the blood of at least 40% of the individuals to a level of below 9.3 IU/mL.

16. The use of any one of Claims 12 to 15, wherein the amount of peginterferon alfa-2a, ribavirin and compound having the formula **XIX** are effective to reduce HCV RNA in at least 50% of the individuals to a level of below 9.3 IU/mL.

17. The use of Claim 16, wherein the amount of peginterferon alfa-2a, ribavirin and compound having the formula **XIX** are effective to reduce HCV RNA in at least 57% of the individuals to a level of below 9.3 IU/mL.

18. The use of Claim 1, wherein the medicine is suitable for administration one time every day, one time every two days, one time every three days, one time every four days, one time every five days, one time every six days, or one time every seven days.

19. Use of a compound having the formula **XIX**, or a pharmaceutically acceptable salt thereof, in the preparation of a medicine for treating liver fibrosis in a population of humans, wherein the compound having the formula **XIX** has the following structure:



XIX

wherein the medicine is suitable for administration in combination with peginterferon alfa-2a and ribavirin for a period of time and in amounts effective to reduce HCV RNA levels in the blood of at least 14% of the population of humans to an average level of below about 43 IU/mL.

20. The use of Claim 19, wherein the medicine is suitable for administration about every 6 hours, about every 8 hours, about every 12 hours, about every 24 hours, about every 36 hours or about every 48 hours at a dosage of about 50 mg.

21. The use of Claim 19, wherein the medicine is suitable for administration about every 6 hours, about every 8 hours, about every 12 hours, about every 24 hours, about every 36 hours or about every 48 hours at a dosage of about 100 mg.

22. The use of Claim 19, wherein the medicine is suitable for administration about every 6 hours, about every 8 hours, about every 12 hours, about every 24 hours, about every 36 hours or every about 48 hours at a dosage of about 150 mg.

23. The use of Claim 19, wherein the medicine is suitable for administration about every 6 hours, about every 8 hours, about every 12 hours, about every 24 hours, about every 36 hours or about every 48 hours at a dosage of about 200 mg.

24. The use of any one of Claims 19 to 23, wherein the period of time is about 14 days or less.

25. The use of Claim 24, wherein the period of time is greater than 7 days.

26. The use of Claim 19, wherein the medicine is suitable for administration in combination with peginterferon alfa-2a and ribavirin for a period of time and in amounts effective to reduce HCV RNA levels in the blood of at least 57% of the population of humans to an average level of below about 43 IU/mL.

27. The use of Claim 26, wherein the medicine is suitable for administration in combination with peginterferon alfa-2a and ribavirin for a period of time and in amounts effective to reduce HCV RNA levels in the blood of at least 57% of the population of humans to an average level of below about 25 IU/mL.

28. The use of any one of Claims 26 to 27, wherein the medicine is suitable for administration in combination with peginterferon alfa-2a and ribavirin for a period of time and in amounts effective to reduce HCV RNA levels in the blood of at least 75% of the population of humans to an average level of below about 25 IU/mL.

29. The use of any one of Claims 26 to 28, wherein the medicine is suitable for administration in combination with peginterferon alfa-2a and ribavirin for a period of time and in amounts effective to reduce HCV RNA levels in the blood of at least 88% of the population of humans to an average level of below about 25 IU/mL.

30. The use of Claim 19, wherein the medicine is suitable for administration in combination with peginterferon alfa-2a and ribavirin for a period of time and in amounts effective to reduce HCV RNA levels in the blood of at least 14% of the individuals to a level of below 9.3 IU/mL.

31. The use of Claim 30, wherein the medicine is suitable for administration in combination with peginterferon alfa-2a and ribavirin for a period of time and in amounts

effective to reduce HCV RNA levels in the blood of at least 20% of the individuals to a level of below 9.3 IU/mL.

32. The use of any one of Claims 30 to 31, wherein the medicine is suitable for administration in combination with peginterferon alfa-2a and ribavirin for a period of time and in amounts effective to reduce HCV RNA levels in the blood of at least 30% of the individuals to a level of below 9.3 IU/mL.

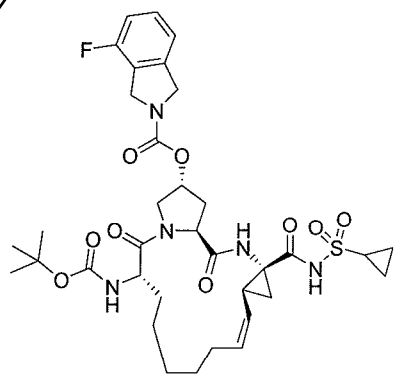
33. The use of any one of Claims 30 to 32, wherein the medicine is suitable for administration in combination with peginterferon alfa-2a and ribavirin for a period of time and in amounts effective to reduce HCV RNA levels in the blood of at least 40% of the individuals to a level of below 9.3 IU/mL.

34. The use of any one of Claims 30 to 33, wherein the amount of peginterferon alfa-2a, ribavirin and compound having the formula **XIX** are effective to reduce HCV RNA in at least 50% of the individuals to a level of below 9.3 IU/mL.

35. The use of any one of Claims 30 to 34, wherein the amount of peginterferon alfa-2a, ribavirin and compound having the formula **XIX** are effective to reduce HCV RNA in at least 57% of the individuals to a level of below 9.3 IU/mL.

36. The use of Claim 19, wherein the medicine is suitable for administration one time every day, one time every two days, one time every three days, one time every four days, one time every five days, one time every six days, or one time every seven days.

37. Use of a compound having the formula **XIX,** or a pharmaceutically acceptable salt thereof, in the preparation of a medicine for increasing liver function in a population of humans, wherein the compound having the formula **XIX** has the following structure:



XIX

wherein the medicine is suitable for administration in combination with peginterferon alfa-2a and ribavirin for a period of time and in amounts effective to reduce

HCV RNA levels in the blood of at least 14% of the population of humans to an average level of below about 43 IU/mL.

38. The use of Claim 37, wherein the medicine is suitable for administration about every 6 hours, about every 8 hours, about every 12 hours, about every 24 hours, about every 36 hours or about every 48 hours at a dosage of about 50 mg.

39. The use of Claim 37, wherein the medicine is suitable for administration about every 6 hours, about every 8 hours, about every 12 hours, about every 24 hours, about every 36 hours or about every 48 hours at a dosage of about 100 mg.

40. The use of Claim 37, wherein the medicine is suitable for administration about every 6 hours, about every 8 hours, about every 12 hours, about every 24 hours, about every 36 hours or every about 48 hours at a dosage of about 150 mg.

41. The use of Claim 37, wherein the medicine is suitable for administration about every 6 hours, about every 8 hours, about every 12 hours, about every 24 hours, about every 36 hours or about every 48 hours at a dosage of about 200 mg.

42. The use of any one of Claims 37 to 41, wherein the period of time is about 14 days or less.

43. The use of Claim 42, wherein the period of time is greater than 7 days.

44. The use of Claim 37, wherein the medicine is suitable for administration in combination with peginterferon alfa-2a and ribavirin for a period of time and in amounts effective to reduce HCV RNA levels in the blood of at least 57% of the population of humans to an average level of below about 43 IU/mL.

45. The use of Claim 44, wherein the medicine is suitable for administration in combination with peginterferon alfa-2a and ribavirin for a period of time and in amounts effective to reduce HCV RNA levels in the blood of at least 57% of the population of humans to an average level of below about 25 IU/mL.

46. The use of any one of Claims 44 to 45, wherein the medicine is suitable for administration in combination with peginterferon alfa-2a and ribavirin for a period of time and in amounts effective to reduce HCV RNA levels in the blood of at least 75% of the population of humans to an average level of below about 25 IU/mL.

47. The use of any one of Claims 44 to 46, wherein the medicine is suitable for administration in combination with peginterferon alfa-2a and ribavirin for a period of time and in

amounts effective to reduce HCV RNA levels in the blood of at least 88% of the population of humans to an average level of below about 25 IU/mL.

48. The use of Claim 37, wherein the medicine is suitable for administration in combination with peginterferon alfa-2a and ribavirin for a period of time and in amounts effective to reduce HCV RNA levels in the blood of at least 14% of the individuals to a level of below 9.3 IU/mL.

49. The use of Claim 48, wherein the medicine is suitable for administration in combination with peginterferon alfa-2a and ribavirin for a period of time and in amounts effective to reduce HCV RNA levels in the blood of at least 20% of the individuals to a level of below 9.3 IU/mL.

50. The use of any one of Claims 48 to 49, wherein the medicine is suitable for administration in combination with peginterferon alfa-2a and ribavirin for a period of time and in amounts effective to reduce HCV RNA levels in the blood of at least 30% of the individuals to a level of below 9.3 IU/mL.

51. The use of any one of Claims 48 to 50, wherein the medicine is suitable for administration in combination with peginterferon alfa-2a and ribavirin for a period of time and in amounts effective to reduce HCV RNA levels in the blood of at least 40% of the individuals to a level of below 9.3 IU/mL.

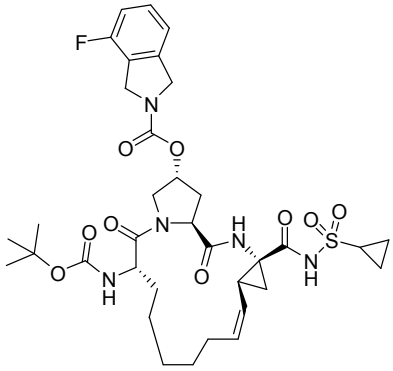
52. The use of any one of Claims 48 to 51, wherein the amount of peginterferon alfa-2a, ribavirin and compound having the formula **XIX** are effective to reduce HCV RNA in at least 50% of the individuals to a level of below 9.3 IU/mL.

53. The use of any one of Claims 48 to 52, wherein the amount of peginterferon alfa-2a, ribavirin and compound having the formula **XIX** are effective to reduce HCV RNA in at least 57% of the individuals to a level of below 9.3 IU/mL.

54. The use of Claim 37, wherein the medicine is suitable for administration one time every day, one time every two days, one time every three days, one time every four days, one time every five days, one time every six days, or one time every seven days.

CLAIMS

1. Use of a compound**,** or a pharmaceutically acceptable salt thereof, in the preparation of a medicine for treating a hepatitis C virus infection in a population of humans, wherein the compound has the following structure:



wherein the medicine is suitable for administration in combination with peginterferon alfa-2a and ribavirin for a period of time and in amounts effective to reduce HCV RNA levels in the blood of at least 14% of the population of humans to an average level of below 43 IU/mL.

2. The use of Claim 1, wherein the medicine is suitable for administration every 6 hours, every 8 hours, every 12 hours, every 24 hours, every 36 hours or every 48 hours at a dosage of 50 mg.

3. The use of Claim 1, wherein the medicine is suitable for administration every 6 hours, every 8 hours, every 12 hours, every 24 hours, every 36 hours or every 48 hours at a dosage of 100 mg.

4. The use of Claim 1, wherein the medicine is suitable for administration every 6 hours, every 8 hours, every 12 hours, every 24 hours, every 36 hours or every 48 hours at a dosage of 150 mg.

5. The use of Claim 1, wherein the medicine is suitable for administration every 6 hours, every 8 hours, every 12 hours, every 24 hours, every 36 hours or every 48 hours at a dosage of 200 mg.

6. The use of any one of Claims 1 to 5, wherein the period of time is 14 days or less.

7. The use of Claim 6, wherein the period of time is greater than 7 days.

8. The use of Claim 1, wherein the medicine is suitable for administration in combination with peginterferon alfa-2a and ribavirin for a period of time and in amounts

effective to reduce HCV RNA levels in the blood of at least 57% of the population of humans to an average level of below 43 IU/mL.

9. The use of Claim 8, wherein the medicine is suitable for administration in combination with peginterferon alfa-2a and ribavirin for a period of time and in amounts effective to reduce HCV RNA levels in the blood of at least 57% of the population of humans to an average level of below 25 IU/mL.

10. The use of any one of Claims 8 to 9, wherein the medicine is suitable for administration in combination with peginterferon alfa-2a and ribavirin for a period of time and in amounts effective to reduce HCV RNA levels in the blood of at least 75% of the population of humans to an average level of below 25 IU/mL.

11. The use of any one of Claims 8 to 10, wherein the medicine is suitable for administration in combination with peginterferon alfa-2a and ribavirin for a period of time and in amounts effective to reduce HCV RNA levels in the blood of at least 88% of the population of humans to an average level of below 25 IU/mL.

12. The use of Claim 1, wherein the medicine is suitable for administration in combination with peginterferon alfa-2a and ribavirin for a period of time and in amounts effective to reduce HCV RNA levels in the blood of at least 14% of the individuals to a level of below 9.3 IU/mL.

13. The use of Claim 12, wherein the medicine is suitable for administration in combination with peginterferon alfa-2a and ribavirin for a period of time and in amounts effective to reduce HCV RNA levels in the blood of at least 20% of the individuals to a level of below 9.3 IU/mL.

14. The use of any one of Claims 12 to 13, wherein the medicine is suitable for administration in combination with peginterferon alfa-2a and ribavirin for a period of time and in amounts effective to reduce HCV RNA levels in the blood of at least 30% of the individuals to a level of below 9.3 IU/mL.

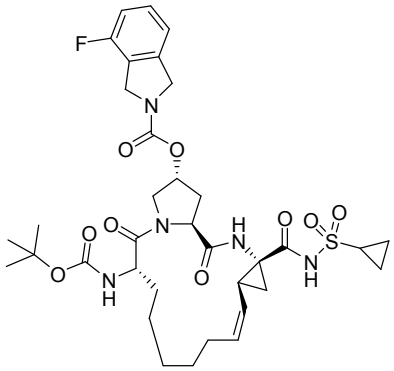
15. The use of any one of Claims 12 to 14, wherein the medicine is suitable for administration in combination with peginterferon alfa-2a and ribavirin for a period of time and in amounts effective to reduce HCV RNA levels in the blood of at least 40% of the individuals to a level of below 9.3 IU/mL.

16. The use of any one of Claims 12 to 15, wherein the amount of peginterferon alfa-2a, ribavirin and said compound **XIX** are effective to reduce HCV RNA in at least 50% of the individuals to a level of below 9.3 IU/mL.

17. The use of Claim 16, wherein the amount of peginterferon alfa-2a, ribavirin and said compound are effective to reduce HCV RNA in at least 57% of the individuals to a level of below 9.3 IU/mL.

18. The use of Claim 1, wherein the medicine is suitable for administration one time every day, one time every two days, one time every three days, one time every four days, one time every five days, one time every six days, or one time every seven days.

19. Use of a said compound**,** or a pharmaceutically acceptable salt thereof, in the preparation of a medicine for treating liver fibrosis in a population of humans, wherein the said compound has the following structure:



wherein the medicine is suitable for administration in combination with peginterferon alfa-2a and ribavirin for a period of time and in amounts effective to reduce HCV RNA levels in the blood of at least 14% of the population of humans to an average level of below 43 IU/mL.

20. The use of Claim 19, wherein the medicine is suitable for administration every 6 hours, every 8 hours, every 12 hours, every 24 hours, every 36 hours or every 48 hours at a dosage of 50 mg.

21. The use of Claim 19, wherein the medicine is suitable for administration every 6 hours, every 8 hours, every 12 hours, every 24 hours, every 36 hours or every 48 hours at a dosage of 100 mg.

22. The use of Claim 19, wherein the medicine is suitable for administration every 6 hours, every 8 hours, every 12 hours, every 24 hours, every 36 hours or every 48 hours at a dosage of 150 mg.

23. The use of Claim 19, wherein the medicine is suitable for administration every 6 hours, every 8 hours, every 12 hours, every 24 hours, every 36 hours or every 48 hours at a dosage of 200 mg.

24. The use of any one of Claims 19 to 23, wherein the period of time is 14 days or less.

25. The use of Claim 24, wherein the period of time is greater than 7 days.

26. The use of Claim 19, wherein the medicine is suitable for administration in combination with peginterferon alfa-2a and ribavirin for a period of time and in amounts effective to reduce HCV RNA levels in the blood of at least 57% of the population of humans to an average level of below 43 IU/mL.

27. The use of Claim 26, wherein the medicine is suitable for administration in combination with peginterferon alfa-2a and ribavirin for a period of time and in amounts effective to reduce HCV RNA levels in the blood of at least 57% of the population of humans to an average level of below 25 IU/mL.

28. The use of any one of Claims 26 to 27, wherein the medicine is suitable for administration in combination with peginterferon alfa-2a and ribavirin for a period of time and in amounts effective to reduce HCV RNA levels in the blood of at least 75% of the population of humans to an average level of below 25 IU/mL.

29. The use of any one of Claims 26 to 28, wherein the medicine is suitable for administration in combination with peginterferon alfa-2a and ribavirin for a period of time and in amounts effective to reduce HCV RNA levels in the blood of at least 88% of the population of humans to an average level of below 25 IU/mL.

30. The use of Claim 19, wherein the medicine is suitable for administration in combination with peginterferon alfa-2a and ribavirin for a period of time and in amounts effective to reduce HCV RNA levels in the blood of at least 14% of the individuals to a level of below 9.3 IU/mL.

31. The use of Claim 30, wherein the medicine is suitable for administration in combination with peginterferon alfa-2a and ribavirin for a period of time and in amounts effective to reduce HCV RNA levels in the blood of at least 20% of the individuals to a level of below 9.3 IU/mL.

32. The use of any one of Claims 30 to 31, wherein the medicine is suitable for administration in combination with peginterferon alfa-2a and ribavirin for a period of time and in amounts effective to reduce HCV RNA levels in the blood of at least 30% of the individuals to a level of below 9.3 IU/mL.

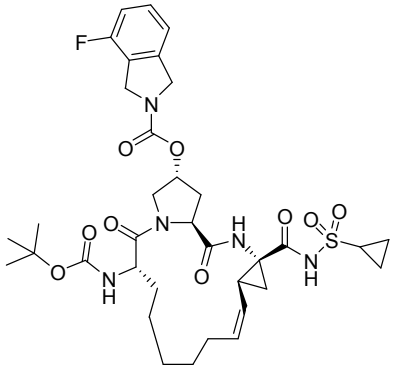
33. The use of any one of Claims 30 to 32, wherein the medicine is suitable for administration in combination with peginterferon alfa-2a and ribavirin for a period of time and in amounts effective to reduce HCV RNA levels in the blood of at least 40% of the individuals to a level of below 9.3 IU/mL.

34. The use of any one of Claims 30 to 33, wherein the amount of peginterferon alfa-2a, ribavirin and said compound are effective to reduce HCV RNA in at least 50% of the individuals to a level of below 9.3 IU/mL.

35. The use of any one of Claims 30 to 34, wherein the amount of peginterferon alfa-2a, ribavirin and said compound are effective to reduce HCV RNA in at least 57% of the individuals to a level of below 9.3 IU/mL.

36. The use of Claim 19, wherein the medicine is suitable for administration one time every day, one time every two days, one time every three days, one time every four days, one time every five days, one time every six days, or one time every seven days.

37. Use of a said compound**,** or a pharmaceutically acceptable salt thereof, in the preparation of a medicine for increasing liver function in a population of humans, wherein the said compound has the following structure:



wherein the medicine is suitable for administration in combination with peginterferon alfa-2a and ribavirin for a period of time and in amounts effective to reduce HCV RNA levels in the blood of at least 14% of the population of humans to an average level of below 43 IU/mL.

38. The use of Claim 37, wherein the medicine is suitable for administration every 6 hours, every 8 hours, every 12 hours, every 24 hours, every 36 hours or every 48 hours at a dosage of 50 mg.

39. The use of Claim 37, wherein the medicine is suitable for administration every 6 hours, every 8 hours, every 12 hours, every 24 hours, every 36 hours or every 48 hours at a dosage of 100 mg.

40. The use of Claim 37, wherein the medicine is suitable for administration every 6 hours, every 8 hours, every 12 hours, every 24 hours, every 36 hours or every 48 hours at a dosage of 150 mg.

41. The use of Claim 37, wherein the medicine is suitable for administration every 6 hours, every 8 hours, every 12 hours, every 24 hours, every 36 hours or every 48 hours at a dosage of 200 mg.

42. The use of any one of Claims 37 to 41, wherein the period of time is 14 days or less.

43. The use of Claim 42, wherein the period of time is greater than 7 days.

44. The use of Claim 37, wherein the medicine is suitable for administration in combination with peginterferon alfa-2a and ribavirin for a period of time and in amounts effective to reduce HCV RNA levels in the blood of at least 57% of the population of humans to an average level of below 43 IU/mL.

45. The use of Claim 44, wherein the medicine is suitable for administration in combination with peginterferon alfa-2a and ribavirin for a period of time and in amounts effective to reduce HCV RNA levels in the blood of at least 57% of the population of humans to an average level of below 25 IU/mL.

46. The use of any one of Claims 44 to 45, wherein the medicine is suitable for administration in combination with peginterferon alfa-2a and ribavirin for a period of time and in amounts effective to reduce HCV RNA levels in the blood of at least 75% of the population of humans to an average level of below 25 IU/mL.

47. The use of any one of Claims 44 to 46, wherein the medicine is suitable for administration in combination with peginterferon alfa-2a and ribavirin for a period of time and in amounts effective to reduce HCV RNA levels in the blood of at least 88% of the population of humans to an average level of below 25 IU/mL.

48. The use of Claim 37, wherein the medicine is suitable for administration in combination with peginterferon alfa-2a and ribavirin for a period of time and in amounts effective to reduce HCV RNA levels in the blood of at least 14% of the individuals to a level of below 9.3 IU/mL.

49. The use of Claim 48, wherein the medicine is suitable for administration in combination with peginterferon alfa-2a and ribavirin for a period of time and in amounts effective to reduce HCV RNA levels in the blood of at least 20% of the individuals to a level of below 9.3 IU/mL.

50. The use of any one of Claims 48 to 49, wherein the medicine is suitable for administration in combination with peginterferon alfa-2a and ribavirin for a period of time and in amounts effective to reduce HCV RNA levels in the blood of at least 30% of the individuals to a level of below 9.3 IU/mL.

51. The use of any one of Claims 48 to 50, wherein the medicine is suitable for administration in combination with peginterferon alfa-2a and ribavirin for a period of time and in amounts effective to reduce HCV RNA levels in the blood of at least 40% of the individuals to a level of below 9.3 IU/mL.

52. The use of any one of Claims 48 to 51, wherein the amount of peginterferon alfa-2a, ribavirin and said compound are effective to reduce HCV RNA in at least 50% of the individuals to a level of below 9.3 IU/mL.

53. The use of any one of Claims 48 to 52, wherein the amount of peginterferon alfa-2a, ribavirin and said compound are effective to reduce HCV RNA in at least 57% of the individuals to a level of below 9.3 IU/mL.

54. The use of Claim 37, wherein the medicine is suitable for administration one time every day, one time every two days, one time every three days, one time every four days, one time every five days, one time every six days, or one time every seven days.