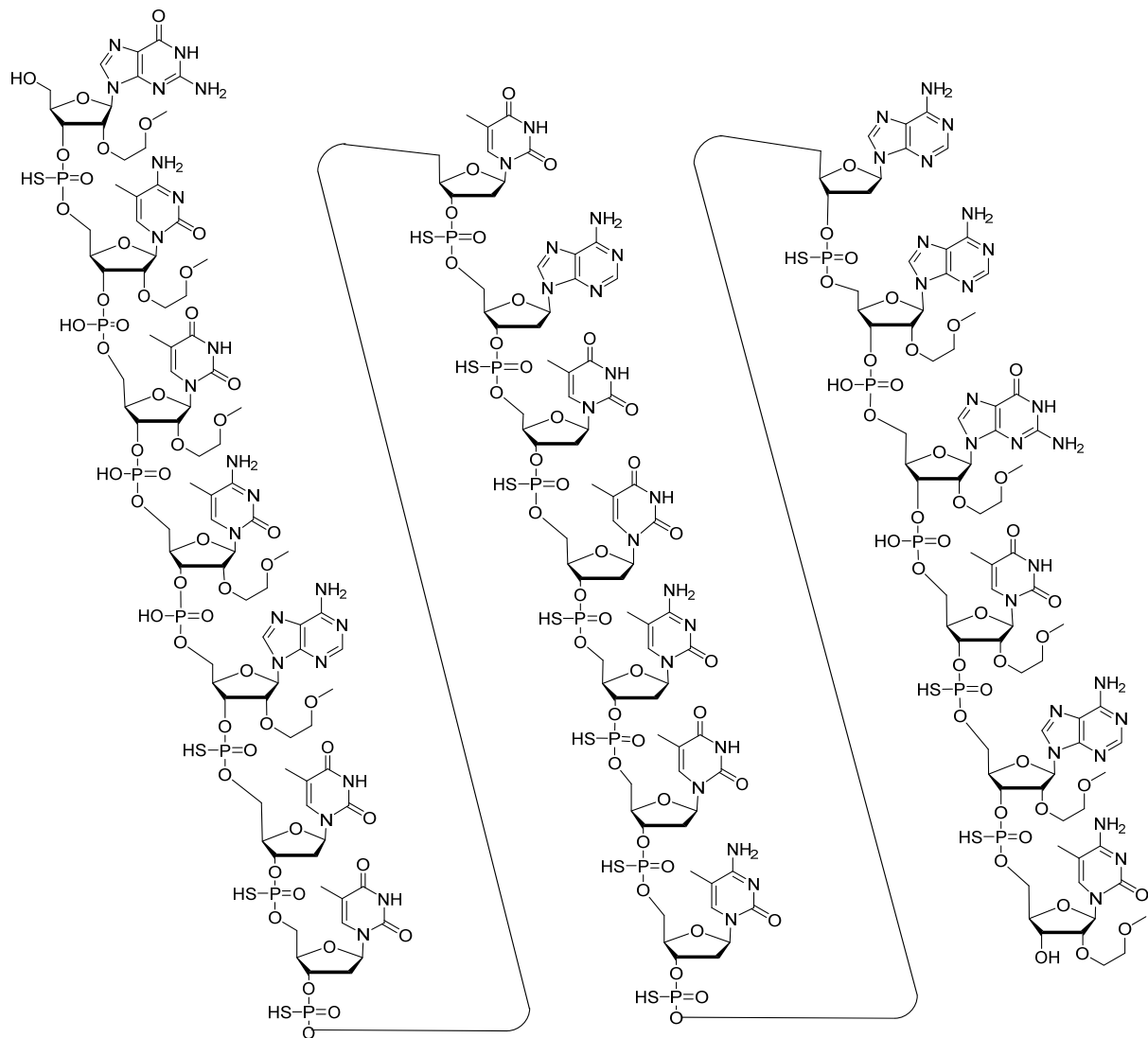


CLAIMS:

1. A modified oligonucleotide according to the following chemical structure:

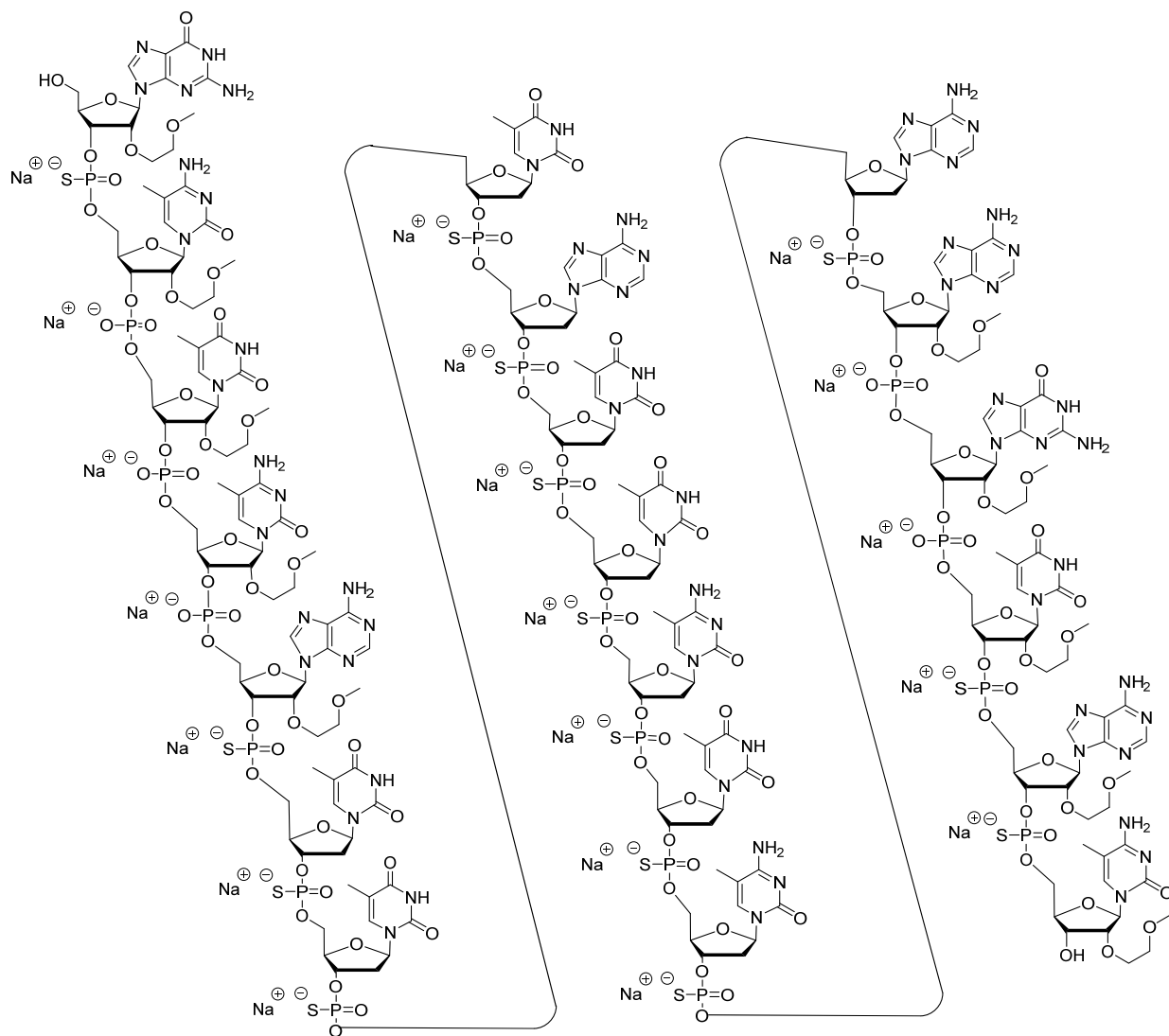


(SEQ ID NO: 423)

or a salt thereof.

2. The modified oligonucleotide of claim 1, which is the sodium salt or the potassium salt.

3. A modified oligonucleotide according to the following chemical structure:



(SEQ ID NO: 423).

4. An oligomeric compound comprising a modified oligonucleotide according to the following chemical notation:

Ges ^mCeo Teo ^mCeo Aes Tds Tds Tds Ads Tds Tds ^mCds Tds ^mCds Ads Aeo Geo Tes Aes ^mCe
(SEQ ID NO: 423); wherein,

A = an adenine nucleobase,

^mC = a 5-methylcytosine nucleobase,

G = a guanine nucleobase,

T = a thymine nucleobase,

e = a 2'-MOE sugar moiety,
d = a 2'-β-D deoxyribosyl sugar moiety,
s = a phosphorothioate internucleoside linkage, and
o = a phosphodiester internucleoside linkage.

5. A population of modified oligonucleotides of claim 1, wherein all of the phosphorothioate internucleoside linkages of the modified oligonucleotide are stereorandom.

6. A pharmaceutical composition comprising the modified oligonucleotide of claim 1 and a pharmaceutically acceptable diluent.

7. The pharmaceutical composition of claim 6, wherein the pharmaceutically acceptable diluent is phosphate-buffered saline (PBS) or artificial cerebrospinal fluid.

8. The pharmaceutical composition of claim 7, wherein the pharmaceutical composition consists essentially of the modified oligonucleotide and artificial cerebrospinal fluid.

9. The pharmaceutical composition of claim 7, wherein the pharmaceutical composition consists essentially of the modified oligonucleotide and PBS.

10. A population of modified oligonucleotides of claim 3, wherein all of the phosphorothioate internucleoside linkages of the modified oligonucleotide are stereorandom.

11. A pharmaceutical composition comprising the modified oligonucleotide of claim 3 and a pharmaceutically acceptable diluent.

12. The pharmaceutical composition of claim 11, wherein the pharmaceutically acceptable diluent is phosphate-buffered saline (PBS) or artificial cerebrospinal fluid.

13. The pharmaceutical composition of claim 12, wherein the pharmaceutical composition consists essentially of the modified oligonucleotide and artificial cerebrospinal fluid.

14. The pharmaceutical composition of claim 12, wherein the pharmaceutical composition consists essentially of the modified oligonucleotide and PBS.

15. A population of oligomeric compounds of claim 4, wherein all of the phosphorothioate internucleoside linkages of the modified oligonucleotide are stereorandom.

16. A pharmaceutical composition comprising the oligomeric compound of claim 4 and a pharmaceutically acceptable diluent.

17. The pharmaceutical composition of claim 16, wherein the pharmaceutically acceptable diluent is phosphate-buffered saline (PBS) or artificial cerebrospinal fluid.

18. The pharmaceutical composition of claim 17, wherein the pharmaceutical composition consists essentially of the oligomeric compound and artificial cerebrospinal fluid.

19. The pharmaceutical composition of claim 17, wherein the pharmaceutical composition consists essentially of the oligomeric compound and PBS.

20. A pharmaceutical composition comprising the population of modified oligonucleotides of claim 5 and a pharmaceutically acceptable diluent.

21. The pharmaceutical composition of claim 20, wherein the pharmaceutically acceptable diluent is phosphate-buffered saline (PBS) or artificial cerebrospinal fluid.

22. The pharmaceutical composition of claim 21, wherein the pharmaceutical composition consists essentially of the population of modified oligonucleotides and artificial cerebrospinal fluid.

23. The pharmaceutical composition of claim 21, wherein the pharmaceutical composition consists essentially of the population of modified oligonucleotides and PBS.

24. A pharmaceutical composition comprising the population of modified oligonucleotides of claim 10 and a pharmaceutically acceptable diluent.

25. The pharmaceutical composition of claim 24, wherein the pharmaceutically acceptable diluent is phosphate-buffered saline (PBS) or artificial cerebrospinal fluid.

26. The pharmaceutical composition of claim 25, wherein the pharmaceutical composition consists essentially of the population of modified oligonucleotides and artificial cerebrospinal fluid.

27. The pharmaceutical composition of claim 25, wherein the pharmaceutical composition consists essentially of the population of modified oligonucleotides and PBS.

28. A pharmaceutical composition comprising the population of oligomeric compounds of claim 15 and a pharmaceutically acceptable diluent.

29. The pharmaceutical composition of claim 28, wherein the pharmaceutically acceptable diluent is phosphate-buffered saline (PBS) or artificial cerebrospinal fluid.

30. The pharmaceutical composition of claim 29, wherein the pharmaceutical composition consists essentially of the population of oligomeric compounds and artificial cerebrospinal fluid.

31. The pharmaceutical composition of claim 29, wherein the pharmaceutical composition consists essentially of the population of oligomeric compounds and PBS.

32. A population of modified oligonucleotides of claim 2, wherein all of the phosphorothioate internucleoside linkages of the modified oligonucleotide are stereorandom.

33. A pharmaceutical composition comprising the modified oligonucleotide of claim 2 and a pharmaceutically acceptable diluent.

34. The pharmaceutical composition of claim 33, wherein the pharmaceutically acceptable diluent is phosphate-buffered saline (PBS) or artificial cerebrospinal fluid.

35. The pharmaceutical composition of claim 34, wherein the pharmaceutical composition consists essentially of the modified oligonucleotide and artificial cerebrospinal fluid.

36. The pharmaceutical composition of claim 34, wherein the pharmaceutical composition consists essentially of the modified oligonucleotide and PBS.

37. A pharmaceutical composition comprising the population of modified oligonucleotides of claim 32 and a pharmaceutically acceptable diluent.

38. The pharmaceutical composition of claim 37, wherein the pharmaceutically acceptable diluent is phosphate-buffered saline (PBS) or artificial cerebrospinal fluid.

39. The pharmaceutical composition of claim 38, wherein the pharmaceutical composition consists essentially of the population of modified oligonucleotides and artificial cerebrospinal fluid.

40. The pharmaceutical composition of claim 38, wherein the pharmaceutical composition consists essentially of the population of modified oligonucleotides and PBS.

41. The pharmaceutical composition of claim 6 for use in therapy.

42. Use of a therapeutically effective amount of the pharmaceutical composition of claim 6 in the manufacture of a medicament for the treatment of a disease associated with ATXN3, wherein the disease is a neurodegenerative disease.

43. The use of claim 42, wherein the neurodegenerative disease is SCA3.

44. The use of claim 42, wherein the medicament ameliorates at least one symptom or hallmark of the neurodegenerative disease.

45. The use of claim 44, wherein the symptom or hallmark is any of ataxia, neuropathy, and aggregate formation.

46. The use of claim 42, wherein the medicament is to be administered to a human.