CLAIMS:

What is claimed is:

1. A single-stranded modified oligonucleotide consisting of 12 to 30 linked nucleosides and having a nucleobase sequence comprising a portion of at least 12, at least 13, at least 14, at least 15, at least 16, at least 17, at least 18 at least 19, or at least 20 contiguous nucleobases complementary to an equal length portion of nucleobases 1053-1109 of SEQ ID NO: 1, wherein the nucleobase sequence of the modified oligonucleotide is at least 90% complementary to SEQ ID NO: 1 or SEQ ID NO: 2, wherein the modified oligonucleotide comprises:

   a gap segment consisting of linked deoxynucleosides;
   a 5' wing segment consisting of linked nucleosides; and
   a 3' wing segment consisting of linked nucleosides;

   wherein the gap segment is positioned between the 5' wing segment and the 3' wing segment and wherein each nucleoside of each wing segment comprises a modified sugar moiety or each wing segment comprises nucleosides comprising a modified sugar moiety and nucleosides comprising an unmodified sugar moiety, and wherein the single-stranded modified oligonucleotide reduces Ataxin-2 mRNA and/or protein expression.

2. A single-stranded modified oligonucleotide consisting of 12 to 30 linked nucleosides and having a nucleobase sequence comprising at least 12, at least 13, at least 14, at least 15, at least 16, at least 17, at least 18, at least 19, or 20 consecutive nucleobases of any of the nucleobase sequences of SEQ ID NOs: 18, 19 or 98, wherein the nucleobase sequence of the modified oligonucleotide is at least 90% complementary to SEQ ID NO: 1 or SEQ ID NO: 2, wherein the modified oligonucleotide comprises:

   a gap segment consisting of linked deoxynucleosides;
   a 5' wing segment consisting of linked nucleosides; and
   a 3' wing segment consisting of linked nucleosides;

   wherein the gap segment is positioned between the 5' wing segment and the 3' wing segment and wherein each nucleoside of each wing segment comprises a modified sugar moiety, or each wing segment comprises nucleosides comprising a modified sugar moiety and nucleosides comprising an unmodified sugar moiety, and wherein the single-stranded modified oligonucleotide reduces Ataxin-2 mRNA and/or protein expression.

3. The single-stranded modified oligonucleotide of claim 1 or 2, wherein the nucleobase sequence of the modified oligonucleotide is at least 95%, or 100% complementary to SEQ ID NO: 1 or

SEQ ID NO: 2.

4. The single-stranded modified oligonucleotide of any one of claims 1-3, wherein at least one internucleoside linkage is a modified internucleoside linkage; optionally wherein:

a) at least one modified internucleoside linkage is a phosphorothioate internucleoside linkage; or

b) each modified internucleoside linkage is a phosphorothioate internucleoside linkage.

5. The single-stranded modified oligonucleotide of any one of claims 1-4, wherein:

a) at least one internucleoside linkage is a phosphodiester internucleoside linkage; and/or

b) at least one internucleoside linkage is a phosphorothioate linkage and at least one internucleoside linkage is a phosphodiester linkage.

6. The single-stranded modified oligonucleotide of any one of claims 1-5, wherein at least one nucleoside comprises a modified nucleobase; optionally wherein the modified nucleobase is a 5-methylcytosine.

7. The single-stranded modified oligonucleotide of any one of claims 1-6, wherein each nucleoside of each wing segment comprises a modified sugar moiety.

8. The single-stranded modified oligonucleotide of any one of claims 1-7, wherein at least one modified sugar moiety is a bicyclic sugar moiety; optionally wherein the bicyclic sugar moiety comprises a 4'-CH(R)-O-2' bridge wherein R is, independently, H, C_1-C_4 alkyl, or a protecting group; further optionally wherein:

a) R is methyl; or

b) R is H.

9. The single-stranded modified oligonucleotide of any one of claims 1-7, wherein at least one modified sugar moiety comprises a 2'-O-methoxyethyl group or a 2'-O-CH_3 group.

10. The single-stranded modified oligonucleotide of any one of claims 1-9, wherein the modified oligonucleotide comprises:

a gap segment consisting of 10 linked deoxynucleosides;
a 5' wing segment consisting of 5 linked nucleosides; and
a 3' wing segment consisting of 5 linked nucleosides;

wherein the gap segment is positioned between the 5' wing segment and the 3' wing segment and wherein each nucleoside of each wing segment comprises a modified sugar moiety.

11. The single-stranded modified oligonucleotide of any one of claims 1-10, wherein the modified oligonucleotide consists of 20 linked nucleosides.

12. The single-stranded modified oligonucleotide of any one of claims 1-11, wherein the modified oligonucleotide comprises a conjugate group.

13. A single-stranded modified oligonucleotide consisting of 20 linked nucleosides and having a nucleobase sequence comprising at least 15 consecutive nucleobases of SEQ ID NO: 18, wherein the nucleobase sequence of the modified oligonucleotide is 100% complementary to SEQ ID NO: 1 or SEQ ID NO: 2, wherein at least one nucleoside of the modified oligonucleotide comprises a modified sugar moiety, wherein the at least one modified sugar moiety comprises a 2'-O-methoxyethyl group, wherein at least one nucleoside comprises a modified nucleobase that is a 5-methylcytosine, wherein at least one internucleoside linkage is a phosphorothioate linkage and at least one internucleoside linkage is a phosphodiester linkage, wherein the modified oligonucleotide comprises:

    a gap segment consisting of linked deoxynucleosides;
    a 5' wing segment consisting of linked nucleosides; and
    a 3' wing segment consisting of linked nucleosides;

    wherein the gap segment is positioned between the 5' wing segment and the 3' wing segment, wherein each nucleoside of each wing segment comprises a modified sugar moiety, and wherein the single-stranded modified oligonucleotide reduces Ataxin-2 mRNA and/or protein expression.

14. A single-stranded modified oligonucleotide consisting of 20 linked nucleosides and having a nucleobase sequence comprising at least 19 consecutive nucleobases of SEQ ID NO: 19, wherein the nucleobase sequence of the modified oligonucleotide is 100% complementary to SEQ ID NO: 1 or SEQ ID NO: 2, wherein at least one nucleoside of the modified oligonucleotide comprises a modified sugar moiety, wherein the at least one modified sugar moiety comprises a 2'-O-methoxyethyl group, wherein at least one nucleoside comprises a modified nucleobase that is a 5-methylcytosine, wherein at least one internucleoside linkage is a phosphorothioate linkage and at least one internucleoside linkage is a phosphodiester linkage, wherein the modified oligonucleotide comprises:

    a gap segment consisting of linked deoxynucleosides;
    a 5' wing segment consisting of linked nucleosides; and
    a 3' wing segment consisting of linked nucleosides;

wherein the gap segment is positioned between the 5’ wing segment and the 3’ wing segment, wherein each nucleoside of each wing segment comprises a modified sugar moiety, and wherein the single-stranded modified oligonucleotide reduces Ataxin-2 mRNA and/or protein expression.

15. A composition comprising the single-stranded modified oligonucleotide of any one of claims 1-14 and at least one of a pharmaceutically acceptable carrier or diluent.

16. The composition of claim 15 wherein the pharmaceutically acceptable diluent is phosphate-buffered saline (PBS); and/or wherein the modified oligonucleotide is a sodium salt or a potassium salt.