CLAIMS

1. An isolated or purified antisense oligomer for modifying pre-mRNA splicing in the CNOT3 gene transcript or part thereof, wherein the antisense oligomer is selected from the list comprising: SEQ ID NOs:4, 7-9, 11, 14-18, 26, 27, 30-35, 39, 40, 44-48, 53-57, 59, 60, 64, 67, 69, 70, and 72-74.

2. The antisense oligomer of claim 1 wherein the antisense oligomer contains one or more nucleotide positions subject to an alternative chemistry or modification chosen from the list comprising: (i) a modified backbone structure; (ii) modified sugar moieties; (iii) resistance to RNase H; (iv) oligomeric mimetic chemistry.

3. The antisense oligomer of claim 2 wherein the antisense oligomer is further modified by: (i) chemical conjugation to a moiety; and/or (ii) tagging with a cell penetrating peptide.

4. The antisense oligomer of any one of claims 1 to 3, wherein the antisense oligomer is a phosphorodiamidate morpholino oligomer.

5. The antisense oligomer of any one of claims 1 to 4, wherein when any uracil (U) is present in the nucleotide sequence, the uracil (U) is replaced by a thymine (T).

6. The antisense oligomer of any one of claims 1 to 5 that operates to induce skipping of one or more of the exons of the CNOT3 gene transcript or part thereof.

7. The antisense oligomer of any one of claims 1 to 5 that results in the expression of a PRPF31 protein between 1.5 and 5 fold higher than the expression of the PRPF31 protein in subjects with symptomatic PRPF31 mutations.

8. A method for manipulating splicing in a CNOT3 gene transcript *ex vivo*, the method including the step of:

    a) providing one or more of the antisense oligomers according to any one of claims 1 to 7 and allowing the oligomer(s) to bind to a target nucleic acid site.

9. A pharmaceutical, prophylactic, or therapeutic composition to treat, prevent or ameliorate the effects of a disease related to CNOT3 expression in a patient, the composition comprising:

    a) one or more antisense oligomers according to any one of claims 1 to 7, and

    b) one or more pharmaceutically acceptable carriers and/or diluents.

10. Use of purified and isolated antisense oligomers according to any one of claims 1 to 7, for the manufacture of a medicament to treat, prevent or ameliorate the effects of a disease associated with CNOT3 expression.

11. A kit to treat, prevent or ameliorate the effects of a disease associated with CNOT3 expression in a patient, which kit comprises at least an antisense oligomer according to any one of claims 1 to 7 and combinations or cocktails thereof, packaged in a suitable container, together with instructions for its use.

12. The composition of claim 9, method of claim 8, use of claim 10 or kit of claim 11, wherein the CNOT3 expression related disease is retinitis pigmentosa.

13. The composition of claim 9, method of claim 8, use of claim 10 or kit of claim 11, wherein the subject with the disease associated with CNOT3 expression is a human.

14. The composition of claim 9, method of claim 8, use of claim 10 or kit of claim 11 that results in the expression of a PRPF31 protein between 1.5 and 5 fold higher than the expression of the PRPF31 protein in subjects with symptomatic PRPF31 mutations.

15. The antisense oligomer of any one of claims 1 to 7 selected from the list consisting of: SEQ ID NOs: 4, 7, 9, 11, 15-18, 27, 30, 34, 35 and 64.

16. The antisense oligomer of claim 16 selected from the list consisting of: SEQ ID NOs: 4, 7, 27, 30, 34 and 64.