WHAT IS CLAIMED IS:

1. A composition for use in treating a glycogen storage disease in a subject in need thereof, comprising:

a) an enzyme replacement therapy (ERT) used to treat the glycogen storage disease; and

b) one or more FN3 domains linked to an siRNA molecule that targets glycogen synthase 1 (Gys1), and comprises an siRNA pair comprising:

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 706, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 707;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 10, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 11;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 12, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 13;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 14, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 15;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 16, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 17;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 18, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 19;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 20, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 21;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 22, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 23;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 24, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 25;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 26, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 27;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 28, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 29;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 30, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 31;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 32, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 33;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 34, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 35;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 36, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 37;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 38, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 39;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 40, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 41;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 42, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 43;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 44, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 45;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 46, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 47;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 48, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 49;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 50, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 51;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 52, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 53;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 54, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 55;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 56, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 57;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 58, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 59;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 60, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 61;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 62, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 63;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 64, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 65;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 66, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 67;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 68, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 69;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 600, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 601;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 602, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 603;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 604, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 605;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 606, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 607;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 608, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 609;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 610, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 611;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 612, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 613;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 614, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 615;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 616, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 617;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 618, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 619;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 620, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 621;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 622, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 623;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 624, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 625;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 626, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 627;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 628, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 629;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 630, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 631;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 632, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 633;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 634, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 635;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 636, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 637;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 638, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 639;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 640, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 641;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 642, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 643;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 644, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 645;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 646, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 647;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 648, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 649;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 650, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 651;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 652, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 653;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 654, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 655;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 656, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 657;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 704, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 705;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 70, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 71;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 72, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 73;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 74, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 75;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 76, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 77;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 78, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 79;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 80, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 81;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 82, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 83;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 84, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 85;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 86, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 87;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 658, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 659;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 660, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 661;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 662, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 663;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 664, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 665;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 666, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 667;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 668, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 669;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 670, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 671;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 672, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 673;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 674, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 675;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 676, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 677;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 678, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 679;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 680, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 681;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 682, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 683;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 684, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 685;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 686, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 687;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 688, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 689;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 690, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 691;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 692, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 693;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 694, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 695;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 696, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 697;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 698, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 699;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 700, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 701;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 702, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 703;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 711, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 712;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 793, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 794;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 795, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 796;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 797, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 798;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 799, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 800;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 70, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 1067;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 72, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 1068;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 74, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 1069;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 76, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 1070;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 78, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 1071;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 80, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 1072;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 82, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 1073;

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 84, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 1074; or

a sense strand comprising a modified oligonucleotide of SEQ ID NO: 86, and an antisense strand comprising a modified oligonucleotide of SEQ ID NO: 1075.

2. The composition of claim 1, wherein the glycogen storage disease is selected from the group consisting of Pompe Disease (GSD2, glucosidase alpha acid (GAA) deficiency), Cori's disease or Forbes' disease (GSD3, Glycogen debranching enzyme (AGL) deficiency), Andersen's disease (GSD4, glycogen branching enzyme (GBE1) deficiency), McArdle disease (GSD5, Muscle glycogen phosphorylase (PYGM) deficiency), Tarui's Disease (GSD7, Muscle

phosphofructokinase (PFKM) deficiency), Aldolase A Deficiency (GSD12, aldolase A (ALDOA) deficiency), type II Diabetes/diabetic nephropathy, Lafora Disease, hypoxia, and adult polyglucosan body disease.

3. The composition of claim 1, wherein the ERT comprises one or more enzymes selected from the group consisting of glucosidase alpha acid (GAA), glycogen debranching enzyme (AGL), glycogen branching enzyme (BGE1), muscle glycogen phosphorylase (PYGM), muscle phosphofructokinase (PFKM), aldolase A (ALDOA), malin, laforin, glycogen synthase (GYS2), glucose-6-phosphatase (G6PC / SLC37A4), phosphorylase kinase (PHKA2 / PHKB / PHKG2 / PHKA1), phosphoglycerate mutase (PGAM2), muscle lactate dehydrogenase (LDHA), glucose transporter (GLUT2), β-enolase (ENO3), and glycogenin-1 (GYG1).

4. The composition of any one of claims 1-3, wherein the one or more FN3 domains comprises an FN3 domain that binds to CD71.

5. The composition of any one of claims 1-3, wherein the siRNA molecule that targets Gys1 is an siRNA molecule that reduces the expression of GYS1.

6. The composition of claim 1, wherein:
the glycogen storage disease is Pompe Disease,
the FN3 domain is a polypeptide that binds to CD71, and
the ERT comprises administering glucosidase alpha acid (GAA); or
the glycogen storage disease is Lafora Disease,
the FN3 domain is a polypeptide that binds to CD71, and
the ERT comprises administering malin, laforin, or both.

7. The composition of claim 1, wherein the siRNA molecule is covalently linked to the FN3 domain through a chemical linker covalently attached to the sense strand or the antisense strand of the siRNA molecule,

8. The composition of claim 1, wherein the siRNA molecule linked to the FN3 domain is conjugated to a cysteine residue of the FN3 domain.

9. The composition of claim 8, wherein the cysteine in the FN3 domain is at a position that corresponds to residue 6, 8, 10, 11, 14, 15, 16, 20, 30, 34, 38, 40, 41, 45, 47, 48, 53, 54, 59, 60, 62, 64, 70, 88, 89, 90, 91, or 93 of the FN3 domain comprising the amino acid sequence based on SEQ ID NO: 713.

10. The composition of claim 1, wherein the FN3 domain has an amino acid sequence selected from the group consisting of SEQ ID NOs: 509, 708, and 710.

11. The composition of claim 1, wherein the FN3 domain comprises:

an amino acid sequence that is at least 95% identical to an amino acid sequence of SEQ ID NOs: 273, 288-291, 301-310, 312-572, 592-599, or 708-710; or

an amino acid of SEQ ID NOs: 273, 288-291, 301-310, 312-572, 592-599, or 708-710.

12. A kit for treating a glycogen storage disease, the kit comprising a first container comprising a pharmaceutical composition comprising an FN3 domain that binds to CD71 linked to an siRNA molecule that targets Gys1 and comprises a sense strand and antisense strand, and a second container comprising a pharmaceutical composition comprising an enzyme replacement therapy (ERT) to treat the glycogen storage disease

13. The kit of claim 12, wherein the glycogen storage disease is selected from the group consisting of Pompe Disease (GSD2, glucosidase alpha acid (GAA) deficiency), Cori's disease or Forbes' disease (GSD3, Glycogen debranching enzyme (AGL) deficiency), Andersen's disease (GSD4, glycogen branching enzyme (GBE1) deficiency), McArdle disease (GSD5, Muscle glycogen phosphorylase (PYGM) deficiency), Tarui's Disease (GSD7, Muscle phosphofructokinase (PFKM) deficiency), Aldolase A Deficiency (GSD12, aldolase A (ALDOA) deficiency), type II Diabetes/diabetic nephropathy, Lafora Disease, hypoxia, and adult polyglucosan body disease.

14. The kit of claim 12, wherein the ERT comprises glucosidase alpha acid (GAA), glycogen debranching enzyme (AGL), glycogen branching enzyme (BGE1), muscle glycogen phosphorylase (PYGM), muscle phosphofructokinase (PFKM), aldolase A (ALDOA), malin, laforin, glycogen synthase (GYS2), glucose-6-phosphatase (G6PC / SLC37A4), phosphorylase kinase (PHKA2 / PHKB / PHKG2 / PHKA1), phosphoglycerate mutase (PGAM2), muscle

lactate dehydrogenase (LDHA), glucose transporter (GLUT2), β-enolase (ENO3), and glycogenin-1 (GYG1), or a combination thereof.

15. The kit of claim 12, wherein the first container comprises a pharmaceutical composition comprising an FN3 domain that binds CD71 linked to a siRNA molecule that targets Gys1 and the second container comprises a pharmaceutical composition comprising the enzyme of GAA.