What is claimed is:

1. A method of preventing, reducing risk of developing, or treating a blood disorder, comprising administering to a subject a C1q inhibitor.

2. The method of claim 1, wherein the C1q inhibitor is an antibody, an aptamer, an antisense nucleic acid or a gene editing agent.

3. The method of claim 1, wherein the inhibitor is an anti-C1q antibody.

4. The method of claim 3, wherein the anti-C1q antibody inhibits the interaction between C1q and an autoantibody or between C1q and C1r, or between C1q and C1s.

5. The method of claim 3, wherein the anti-C1q antibody promotes clearance of C1q from circulation or a tissue.

6. The method of any one of claims 3-5, wherein the anti-C1q antibody has a dissociation constant (K_D) that ranges from 100 nM to 0.005 nM or less than 0.005 nM.

7. The method of any one of claims 3-6, wherein the anti-C1q antibody binds C1q with a binding stoichiometry that ranges from 20:1 to 1.0:1 or less than 1.0:1.

8. The method of claim 7, wherein the antibody is an anti-C1q antibody that binds C1q with a binding stoichiometry that ranges from 6:1 to 1.0:1 or less than 1.0:1.

9. The method of claim 8, wherein the antibody is an anti-C1q antibody that binds C1q with a binding stoichiometry that ranges from 2.5:1 to 1.0:1 or less than 1.0:1.

10. The method of any one of claims 3-9, wherein the antibody specifically binds to and neutralizes a biological activity of C1q.

11. The method of claim 10, wherein the biological activity is (1) C1q binding to an autoantibody, (2) C1q binding to C1r, (3) C1q binding to C1s, (4) C1q binding to IgM, (5) C1q binding to phosphatidylserine, (6) C1q binding to pentraxin-3, (7) C1q binding to C-reactive protein (CRP), (8) C1q binding to globular C1q receptor (gC1qR), (9) C1q binding

to complement receptor 1 (CR1), (10) C1q binding to beta-amyloid, (11) C1q binding to calreticulin, (12) C1q binding to apoptotic cells, or (13) C1q binding to B cells.

12. The antibody of claim 10 or 11, wherein the biological activity is (1) activation of the classical complement activation pathway, (2) reduction in lysis and/or reduction in C3 deposition, (3) activation of antibody and complement dependent cytotoxicity, (4) CH50 hemolysis, (5) a reduction in red blood cell lysis, (6) a reduction in red blood cell phagocytosis, (7) a reduction in dendritic cell infiltration, (8) inhibition of complement-mediated red blood cell lysis, (9) a reduction in lymphocyte infiltration, (10) a reduction in macrophage infiltration, (11) a reduction in antibody deposition, (12) a reduction in neutrophil infiltration, (13) a reduction in platelet phagocytosis, (14) a reduction in platelet lysis, (15) an improvement in transplant graft survival, (16) a reduction in macrophage mediated phagocytosis, (17) a reduction in autoantibody mediated complement activation, (18) a reduction in red blood cell destruction due to transfusion reactions, (19) a reduction in red blood cell lysis due to alloantibodies, (20) a reduction in hemolysis due to transfusion reactions, (21) a reduction in alloantibody mediated platelet lysis, (22) an improvement in anemia, (23) a reduction in eosinophilia, (24) a reduction in C3 deposition on red blood cells (*e.g.,* a reduction of deposition of C3b, iC3b, etc., on RBCs), (25) a reduction in C3 deposition on platelets (*e.g.,* a reduction of deposition of C3b, iC3b, etc., on platelets), (26) reduction in anaphylatoxin production, (27) a reduction in autoantibody mediated blister formation, (28) a reduction in autoantibody induced erythematosus, (29) a reduction in red blood cell destruction due to transfusion reactions, (30) a reduction in platelet lysis due to transfusion reactions, (31) a reduction in mast cell activation, (32) a reduction in mast cell histamine release, (33) a reduction in vascular permeability, (34) a reduction in complement deposition on transplant graft endothelium, (35) B-cell antibody production, (36) dendritic cell maturation, (37) T-cell proliferation, (38) cytokine production, (39) microglia activation, (40) Arthus reaction, (41) a reduction of anaphylatoxin generation in transplant graft endothelium, or (42) activation of complement receptor 3 (CR3/C3) expressing cells.

13. The method of claim 12, wherein CH50 hemolysis comprises human CH50 hemolysis.

14. The method of claim 12 or 13, wherein the antibody is capable of neutralizing from at least about 50%, to about 100% of human CH50 hemolysis.

15. The method of any one of claims 12-14, wherein the antibody is capable of neutralizing at least 50% of CH50 hemolysis at a dose of less than 150 ng/ml, less than 100 ng/ml, less than 50 ng/ml, or less than 20 ng/ml.

16. The method of any one of claims 3-15, wherein the antibody is a monoclonal antibody, a polyclonal antibody, a recombinant antibody, a humanized antibody, a human antibody, a chimeric antibody, a monovalent antibody, a multispecific antibody, an antibody fragment, or antibody derivative thereof.

17. The method of claim 16, wherein the antibody is an antibody fragment and the antibody fragment is a Fab fragment, a Fab' fragment, a F(ab')2 fragment, a Fv fragment, a diabody, or a single chain antibody molecule.

18. The method of any one of claims 3-17, wherein the antibody comprises a light chain variable domain comprising an HVR-L1 having the amino acid sequence of SEQ ID NO: 5, an HVR-L2 having the amino acid of SEQ ID NO: 6, and an HVR-L3 having the amino acid of SEQ ID NO: 7.

19. The method of any one of claims 3-18, wherein the antibody comprises a heavy chain variable domain comprising an HVR-H1 having the amino acid sequence of SEQ ID NO: 9, an HVR-H2 having the amino acid of SEQ ID NO: 10, and an HVR-H3 having the amino acid of SEQ ID NO: 11.

20. The method of any one of claims 3-19, wherein the antibody comprises a light chain variable domain comprising an amino acid sequence with at least about 95% homology to the amino acid sequence selected from SEQ ID NO: 4 and 35-38 and wherein the light chain variable domain comprises an HVR-L1 having the amino acid sequence of SEQ ID NO: 5, an HVR-L2 having the amino acid of SEQ ID NO: 6, and an HVR-L3 having the amino acid of SEQ ID NO: 7.

21. The method of claim 20, wherein the light chain variable domain comprising an amino acid sequence selected from SEQ ID NO: 4 and 35-38.

22. The method of any one of claims 3-21, wherein the antibody comprises a heavy chain variable domain comprising an amino acid sequence with at least about 95% homology to the amino acid sequence selected from SEQ ID NO: 8 and 31-34 and wherein the heavy chain variable domain comprises an HVR-H1 having the amino acid sequence of SEQ ID NO: 9, an HVR-H2 having the amino acid of SEQ ID NO: 10, and an HVR-H3 having the amino acid of SEQ ID NO: 11.

23. The method of claim 22, wherein the heavy chain variable domain comprising an amino acid sequence selected from SEQ ID NO: 8 and 31-34.

24. The method of any one of claims 3-23, wherein the antibody is an antibody fragment comprising a heavy chain Fab fragment of SEQ ID NO: 39 and a light chain Fab fragment of SEQ ID NO: 40.

25. The method of any one of claims 3-24, wherein the antibody is administered by parenteral injection or infusion.

26. The method of claim 25, wherein the parenteral injection or infusion is a subcutaneous or intramuscular injection.

27. The method of claim 25, wherein the parenteral injection or infusion is an intravenous injection or infusion.

28. The method of any one of claims 3-23, wherein the antibody is a full-length antibody.

29. The method of claim 28, wherein the antibody is administered to the subject by intravenous injection or infusion at a dose between 10 mg/kg and 150 mg/kg.

30. The method of claim 29, wherein the antibody is administered to the subject by intravenous injection or infusion at a dose between 75 mg/kg and 100 mg/kg.

31. The method of any one of claims 28-30, wherein the antibody is administered once a week.

32. The method of any one of claims 28-30, wherein the antibody is administered once every other week.

33. The method of any one of claims 28-30, wherein the antibody is administered once a month.

34. The method of claim 28, wherein the antibody is administered to the subject by subcutaneous or intramuscular injection at a dose between 1 mg/kg and 10 mg/kg.

35. The method of claim 34, wherein the antibody is administered to the subject by subcutaneous or intramuscular injection at a dose between 3 mg/kg and 5 mg/kg.

36. The method of claims 34 or 35, wherein the antibody is administered daily.

37. The method of claims 34 or 35, wherein the antibody is administered once every other day.

38. The method of claims 34 or 35, wherein the antibody is administered once a week.

39. The method of claims 34 or 35, wherein the antibody is administered once every other week.

40. The method of claims 34 or 35, wherein the antibody is administered once a month.

41. The method of any one of claims 3-24, wherein the antibody is an antibody fragment.

42. The method of claim 41, wherein the antibody fragment is administered to the subject by intravenous injection or infusion.

43. The method of claim 41, wherein the antibody fragment is administered to the subject by intramuscular injection.

44. The method of claim 41, wherein the antibody fragment is administered to the subject by subcutaneous injection.

45. The method of any one of claims 41-44, wherein the antibody fragment is administered at a dose between 0.1 mg/kg and 50 mg/kg.

46. The method of claim 45, wherein the antibody fragment is administered at a dose between 0.3 mg/kg and 10 mg/kg.

47. The method of any one of claims 41-46, wherein the antibody fragment is administered daily.

48. The method of any one of claims 41-46, wherein the antibody fragment is administered once every other day.

49. The method of any one of claims 41-46, wherein the antibody fragment is administered once a week.

50. The method of any one of claims 41-46, wherein the antibody fragment is administered once every other week.

51. The method of any one of claims 41-46, wherein the antibody fragment is administered once a month.

52. The method of any one of claims 47-51, wherein the antibody fragment is administered at an initial predose that is higher than the daily, once every other day, once a week, once every other week, or once a month dose.

53. The method of claim 52, wherein the initial predose is between 3 mg/kg and 50 mg/kg.

54. The method of claim 53, wherein the initial predose is between 3 mg/kg and 20 mg/kg.

55. The method of any one of claims 41-54, wherein the antibody fragment has a shorter half-life as compared to its corresponding full-length antibody.

56. The method of any one of claims 41-55, wherein the antibody fragment is rapidly cleared, thereby sparing C1q activity outside the subject's blood space.

57. The method of any one of claims 41-56, wherein the antibody selectively inhibits C1q within the subject's blood space, thereby sparing C1q activity outside the subject's blood space.

58. The method of claim 57, wherein the blood space is confined within a blood vessel.

59. The method of claim 58, wherein the blood vessel is an artery, an arteriole, a capillary, a venule, or a vein.

60. The method of any one of claims 57-59, wherein the blood space comprises serum, platelets, endothelial cells, blood cells, or hematopoietic cells.

61. The method of any one of claims 57-60, wherein inhibiting C1q within the subject's blood space reduces tissue damage in a highly vascularized tissue.

62. The method of claim 61, wherein the highly vascularized tissue is kidney, alveoli, capillary bed, or glomerulus.

63. The method of any one of claims 1-62, wherein the blood disorder is a complement-mediated blood disorder.

64. The method of claim any one of claims 1-63, wherein the blood disorder is cold agglutinin hemolytic anemia (cold agglutinin disease), cold antibody hemolytic anemia, ABO incompatible acute hemolytic reactions, warm agglutinin hemolytic anemia, warm antibody hemolytic anemia, warm autoimmune hemolytic anemia (WAIHA), autoimmune hemolytic anemia (AIHA) autoimmune thrombocytopenia, antiphospholipid syndrome, Evan's syndrome, , neonatal alloimmune thrombocytopenia, red blood cell alloimmunization, Felty's syndrome, antibody mediated thrombocytopenia, heparin-induced thrombocytopenia (HIT), heparin-induced thrombocytopenia and thrombosis (HITT), thrombotic thrombocytopenic purpura (TTP), immune thrombocytopenic purpura (ITP), thrombocytopenia, thrombosis, vasculitis, lupus nephritis, systemic lupus erythematosus (SLE), glomerulonephritis, anti-phospholipid antibody syndrome (APS), an infection, or a drug-induced hematologic disorder.

65. The method of claim 64, wherein the infection is pneumonia, mycoplasma, mononucleosis, hepatitis C, human immunodeficiency virus (HIV), or coronavirus.

66. The method of any one of claim 65, wherein the coronavirus is selected from SARS-CoV, MERS-CoV, HCoV, HKU1, and SARS-CoV-2.

67. The method of claim 66, wherein the coronavirus is SARS-CoV-2.

68. The method of claim 67, wherein the subject has SARS-CoV-2 infection, which has been confirmed by reverse-transcription polymerase chain reaction (RT-PCR) from respiratory tract or blood specimens.

69. The method of claim 64, wherein the blood disorder is cold agglutinin hemolytic anemia (cold agglutinin disease).

70. The method of claim 64, wherein the blood disorder is warm autoimmune hemolytic anemia (WAIHA).

71. The method of claim 64, wherein the blood disorder is lupus nephritis.

72. The method of claim 64, wherein the blood disorder is heparin-induced thrombocytopenia (HIT).

73. The method of claim 64, wherein the blood disorder is heparin-induced thrombocytopenia and thrombosis (HITT).

74. The method of claim 64, wherein the blood disorder is immune thrombocytopenic purpura (ITP).

75. The method of claim 64, wherein the drug-induced hematologic disorder is aplastic anemia, agranulocytosis, megaloblastic anemia, hemolytic anemia, or thrombocytopenia.