Claims

1. An inhibitor that specifically binds to one or more of a C1, C2, C3, C4, C5, and/or C6 domain of Von Willebrand Factor (VWF).

2. The inhibitor according to claim 1, wherein the inhibitor specifically binds to the C5 domain of VWF.

3. The inhibitor according to either claim 1 or claim 2, wherein the inhibitor does not substantially bind to an A1, A2 and/or A3 domain of VWF.

4. The inhibitor according to any preceding claim, wherein the inhibitor binds to a region between amino acid positions 2255 and 2722 of VWF, as substantially set out in SEQ ID No: 1.

5. The inhibitor according to any preceding claim, wherein the inhibitor binds to one or more amino acids in SEQ ID No: 2, or a variant or fragment thereof.

6. The inhibitor according to any preceding claim, wherein the inhibitor binds to one or more amino acids in SEQ ID No: 3, 4, 5, 6, 7, and/or 8, or a variant or fragment thereof.

7. The inhibitor according to any preceding claim, wherein the inhibitor is a biological agent, a small molecule drug, a protein, a nucleic acid, or a pharmaceutical agent.

8. The inhibitor according to claim 7, wherein the inhibitor is an antisense oligonucleotide, siRNA, or dsRNA, which specifically targets a portion of an mRNA encoding one or more of the C1, C2, C3, C4, C5, and/or C6 domain of VWF.

9. The inhibitor according to any one of claims 1 to 6, wherein the inhibitor is an antibody, or an antigen-binding fragment thereof.

10. The inhibitor according to claim 9, wherein the antibody or antigen-binding fragment thereof is a monoclonal antibody or an antigen-binding fragment thereof, optionally wherein the antibody or antigen-binding fragment thereof comprises a

disabled Fc fragment, optionally wherein the disabled Fc fragment comprises one or more amino acid substitution selected from the group consisting of: L234A, L235A, and P329G.

11. The inhibitor according to either claim 9 or claim 10, wherein the antibody or antigen-binding fragment thereof comprises:

(i) a CDR-H1 domain comprising SEQ ID No: 9, a CDR-H2 domain comprising SEQ ID No: 10, a CDR-H3 domain comprising SEQ ID No: 11, a CDR-L1 domain comprising SEQ ID No: 18, a CDR-L2 domain comprising SEQ ID No: 19 and/or a CDR-L3 domain comprising SEQ ID No: 20; or

(ii) a CDR-H1 domain comprising SEQ ID No: 164, a CDR-H2 domain comprising SEQ ID No: 10, a CDR-H3 domain comprising SEQ ID No: 11, a CDR-L1 domain comprising SEQ ID No: 18, a CDR-L2 domain comprising SEQ ID No: 19 and/or a CDR-L3 domain comprising SEQ ID No: 20,

optionally wherein the antibody or antigen-binding fragment thereof comprises at least one, at least two, at least three, at least four, at least five, or at least six of the CDRs.

12. The inhibitor according to any one of claims 9 to 11, wherein the antibody or antigen-binding fragment thereof comprises:

(i) a heavy chain variable region comprising or consisting of SEQ ID No: 16 and a light chain variable region comprising or consisting of SEQ ID No: 25;

(ii) a heavy chain variable region comprising or consisting of SEQ ID No: 156 and a light chain variable region comprising or consisting of SEQ ID No: 25;

(iii) a heavy chain variable region comprising or consisting of SEQ ID No: 165 and a light chain variable region comprising or consisting of SEQ ID No: 25;

(iv) a heavy chain variable region comprising or consisting of SEQ ID No: 172 and a light chain variable region comprising or consisting of SEQ ID No: 25;

(v) a heavy chain variable region comprising or consisting of SEQ ID No: 156 and a light chain variable region comprising or consisting of SEQ ID No: 190;

(vi) a heavy chain variable region comprising or consisting of SEQ ID No: 156 and a light chain variable region comprising or consisting of SEQ ID No: 191;

(vii) a heavy chain variable region comprising or consisting of SEQ ID No: 194 and a light chain variable region comprising or consisting of SEQ ID No: 25;

(viii) a heavy chain variable region comprising or consisting of SEQ ID No: 172 and a light chain variable region comprising or consisting of SEQ ID No: 191;

(ix) a heavy chain variable region comprising or consisting of SEQ ID No: 172 and a light chain variable region comprising or consisting of SEQ ID No: 190;

(x) a heavy chain variable region comprising or consisting of SEQ ID No: 194 and a light chain variable region comprising or consisting of SEQ ID No: 191;

(xi) a heavy chain variable region comprising or consisting of SEQ ID No: 194 and a light chain variable region comprising or consisting of SEQ ID No: 190;

(xii) a heavy chain variable region comprising or consisting of SEQ ID No: 165 and a light chain variable region comprising or consisting of SEQ ID No: 191; or

(xiii) a heavy chain variable region comprising or consisting of SEQ ID No: 165 and a light chain variable region comprising or consisting of SEQ ID No: 190.

13. The inhibitor according to either claim 9 or claim 10, wherein the antibody or antigen-binding fragment thereof comprises:

(i) a CDR-H1 domain comprising SEQ ID No: 27, a CDR-H2 domain comprising SEQ ID No: 28, a CDR-H3 domain comprising SEQ ID No: 29, a CDR-L1 domain comprising SEQ ID No: 36, a CDR-L2 domain comprising SEQ ID No: 37 and/or a CDR-L3 domain comprising SEQ ID No: 38; or

(ii) a CDR-H1 domain comprising SEQ ID No: 164, a CDR-H2 domain comprising SEQ ID No: 28, a CDR-H3 domain comprising SEQ ID No: 29, a CDR-L1 domain comprising SEQ ID No: 36, a CDR-L2 domain comprising SEQ ID No: 37 and/or a CDR-L3 domain comprising SEQ ID No: 38,

optionally wherein the antibody or antigen-binding fragment thereof comprises at least one, at least two, at least three, at least four, at least five, or at least six of the CDRs.

14. The inhibitor according to claim 9 or claim 10 or claim 13, wherein the antibody or antigen-binding fragment thereof comprises:

(i) a heavy chain variable region comprising or consisting of SEQ ID No: 34 and a light chain variable region comprising or consisting of SEQ ID No: 43;

(ii) a heavy chain variable region comprising or consisting of SEQ ID No: 159 and a light chain variable region comprising or consisting of SEQ ID No: 43;

(iii) a heavy chain variable region comprising or consisting of SEQ ID No: 165 and a light chain variable region comprising or consisting of SEQ ID No: 43;

(iv) a heavy chain variable region comprising or consisting of SEQ ID No: 166 and a light chain variable region comprising or consisting of SEQ ID No: 43;

(v) a heavy chain variable region comprising or consisting of SEQ ID No: 167 and a light chain variable region comprising or consisting of SEQ ID No: 43;

(vi) a heavy chain variable region comprising or consisting of SEQ ID No: 168 and a light chain variable region comprising or consisting of SEQ ID No: 43;

(vii) a heavy chain variable region comprising or consisting of SEQ ID No: 169 and a light chain variable region comprising or consisting of SEQ ID No: 43;

(viii) a heavy chain variable region comprising or consisting of SEQ ID No: 170 and a light chain variable region comprising or consisting of SEQ ID No: 43;

(ix) a heavy chain variable region comprising or consisting of SEQ ID No: 171 and a light chain variable region comprising or consisting of SEQ ID No: 43;

(x) a heavy chain variable region comprising or consisting of SEQ ID No: 172 and a light chain variable region comprising or consisting of SEQ ID No: 43;

(xi) a heavy chain variable region comprising or consisting of SEQ ID No: 159 and a light chain variable region comprising or consisting of SEQ ID No: 185;

(xii) a heavy chain variable region comprising or consisting of SEQ ID No: 159 and a light chain variable region comprising or consisting of SEQ ID No: 186;

(xiii) a heavy chain variable region comprising or consisting of SEQ ID No: 194 and a light chain variable region comprising or consisting of SEQ ID No: 43;

(xiv) a heavy chain variable region comprising or consisting of SEQ ID No: 172 and a light chain variable region comprising or consisting of SEQ ID No: 186;

(xv) a heavy chain variable region comprising or consisting of SEQ ID No: 172 and a light chain variable region comprising or consisting of SEQ ID No: 185;

(xvi) a heavy chain variable region comprising or consisting of SEQ ID No: 171 and a light chain variable region comprising or consisting of SEQ ID No: 186;

(xvii) a heavy chain variable region comprising or consisting of SEQ ID No: 171 and a light chain variable region comprising or consisting of SEQ ID No: 185;

(xviii) a heavy chain variable region comprising or consisting of SEQ ID No: 170 and a light chain variable region comprising or consisting of SEQ ID No: 186;

(xix) a heavy chain variable region comprising or consisting of SEQ ID No: 170 and a light chain variable region comprising or consisting of SEQ ID No: 185;

(xx) a heavy chain variable region comprising or consisting of SEQ ID No: 169 and a light chain variable region comprising or consisting of SEQ ID No: 186;

(xxi) a heavy chain variable region comprising or consisting of SEQ ID No: 169 and a light chain variable region comprising or consisting of SEQ ID No: 185;

(xxii) a heavy chain variable region comprising or consisting of SEQ ID No: 168 and a light chain variable region comprising or consisting of SEQ ID No: 186;

(xxiii) a heavy chain variable region comprising or consisting of SEQ ID No: 168 and a light chain variable region comprising or consisting of SEQ ID No: 185;

(xxiv) a heavy chain variable region comprising or consisting of SEQ ID No: 167 and a light chain variable region comprising or consisting of SEQ ID No: 186;

(xxv) a heavy chain variable region comprising or consisting of SEQ ID No: 167 and a light chain variable region comprising or consisting of SEQ ID No: 185;

(xxvi) a heavy chain variable region comprising or consisting of SEQ ID No: 166 and a light chain variable region comprising or consisting of SEQ ID No: 186;

(xxvii) a heavy chain variable region comprising or consisting of SEQ ID No: 166 and a light chain variable region comprising or consisting of SEQ ID No: 185;

(xxviii) a heavy chain variable region comprising or consisting of SEQ ID No: 194 and a light chain variable region comprising or consisting of SEQ ID No: 186;

(xxix) a heavy chain variable region comprising or consisting of SEQ ID No: 194 and a light chain variable region comprising or consisting of SEQ ID No: 185;

(xxx) a heavy chain variable region comprising or consisting of SEQ ID No: 165 and a light chain variable region comprising or consisting of SEQ ID No: 186; or

(xxxi) a heavy chain variable region comprising or consisting of SEQ ID No: 168 and a light chain variable region comprising or consisting of SEQ ID No: 185.

15. The inhibitor according to either claim 9 or claim 10, wherein the antibody or antigen-binding fragment thereof comprises

(i) a CDR-H1 domain comprising SEQ ID No: 45, a CDR-H2 domain comprising SEQ ID No: 46, a CDR-H3 domain comprising SEQ ID No: 47, a CDR-L1 domain comprising SEQ ID No: 54, a CDR-L2 domain comprising SEQ ID No: 55, and/or a CDR-L3 domain comprising SEQ ID No: 56; or

(ii) a CDR-H1 domain comprising SEQ ID No: 173, a CDR-H2 domain comprising SEQ ID No: 46, a CDR-H3 domain comprising SEQ ID No: 47, a CDR-L1 domain comprising SEQ ID No: 54, a CDR-L2 domain comprising SEQ ID No: 55, and/or a CDR-L3 domain comprising SEQ ID No: 56,

optionally wherein the antibody or antigen-binding fragment thereof comprises at least one, at least two, at least three, at least four, at least five, or at least six of the CDRs.

16. The inhibitor according to claim 9 or claim 10 or claim 15, wherein the antibody or antigen-binding fragment thereof comprises:

(i) a heavy chain variable region comprising or consisting of SEQ ID No: 52 and a light chain variable region comprising or consisting of SEQ ID No: 61;

(ii) a heavy chain variable region comprising or consisting of SEQ ID No: 174 and a light chain variable region comprising or consisting of SEQ ID No: 61;

(iii) a heavy chain variable region comprising or consisting of SEQ ID No: 175 and a light chain variable region comprising or consisting of SEQ ID No: 61;

(iv) a heavy chain variable region comprising or consisting of SEQ ID No: 176 and a light chain variable region comprising or consisting of SEQ ID No: 61;

(v) a heavy chain variable region comprising or consisting of SEQ ID No: 52 and a light chain variable region comprising or consisting of SEQ ID No: 187;

(vi) a heavy chain variable region comprising or consisting of SEQ ID No: 52 and a light chain variable region comprising or consisting of SEQ ID No: 188;

(vii) a heavy chain variable region comprising or consisting of SEQ ID No: 176 and a light chain variable region comprising or consisting of SEQ ID No: 188;

(viii) a heavy chain variable region comprising or consisting of SEQ ID No: 176 and a light chain variable region comprising or consisting of SEQ ID No: 187;

(ix) a heavy chain variable region comprising or consisting of SEQ ID No: 175 and a light chain variable region comprising or consisting of SEQ ID No: 188;

(x) a heavy chain variable region comprising or consisting of SEQ ID No: 175 and a light chain variable region comprising or consisting of SEQ ID No: 187;

(xi) a heavy chain variable region comprising or consisting of SEQ ID No: 174 and a light chain variable region comprising or consisting of SEQ ID No: 188; or

(xii) a heavy chain variable region comprising or consisting of SEQ ID No: 174 and a light chain variable region comprising or consisting of SEQ ID No: 187.

17. The inhibitor according to either claim 9 or claim 10, wherein the antibody or antigen-binding fragment thereof comprises:

(i) a CDR-H1 domain comprising SEQ ID No: 63, a CDR-H2 domain comprising SEQ ID No: 64, a CDR-H3 domain comprising SEQ ID No: 65, a CDR-L1 domain comprising SEQ ID No: 72, a CDR-L2 domain comprising SEQ ID No: 73, and/or a CDR-L3 domain comprising SEQ ID No: 74; or

(ii) a CDR-H1 domain comprising SEQ ID No: 177, a CDR-H2 domain comprising SEQ ID No: 64, a CDR-H3 domain comprising SEQ ID No: 65, a CDR-L1 domain comprising SEQ ID No: 72, a CDR-L2 domain comprising SEQ ID No: 73, and/or a CDR-L3 domain comprising SEQ ID No: 74.

optionally wherein the antibody or antigen-binding fragment thereof comprises at least one, at least two, at least three, at least four, at least five, or at least six of the CDRs.

18. The inhibitor according to claim 9 or claim 10 or claim 17, wherein the antibody or antigen-binding fragment thereof comprises:

(i) a heavy chain variable region comprising or consisting of SEQ ID No: 70 and a light chain variable region comprising or consisting of SEQ ID No: 79;

(ii) a heavy chain variable region comprising or consisting of SEQ ID No: 160 and a light chain variable region comprising or consisting of SEQ ID No: 79;

(iii) a heavy chain variable region comprising or consisting of SEQ ID No: 178 and a light chain variable region comprising or consisting of SEQ ID No: 79;

(iv) a heavy chain variable region comprising or consisting of SEQ ID No: 179 and a light chain variable region comprising or consisting of SEQ ID No: 79;

(v) a heavy chain variable region comprising or consisting of SEQ ID No: 180 and a light chain variable region comprising or consisting of SEQ ID No: 79;

(vi) a heavy chain variable region comprising or consisting of SEQ ID No: 160 and a light chain variable region comprising or consisting of SEQ ID No: 189;

(vii) a heavy chain variable region comprising or consisting of SEQ ID No: 180 and a light chain variable region comprising or consisting of SEQ ID No: 189;

(viii) a heavy chain variable region comprising or consisting of SEQ ID No: 179 and a light chain variable region comprising or consisting of SEQ ID No: 189; or

(ix) a heavy chain variable region comprising or consisting of SEQ ID No: 178 and a light chain variable region comprising or consisting of SEQ ID No: 189.

19. The inhibitor according to either claim 9 or claim 10, wherein the antibody or antigen-binding fragment thereof comprises:

(i) a CDR-H1 domain comprising SEQ ID No: 81, a CDR-H2 domain comprising SEQ ID No: 82, a CDR-H3 domain comprising SEQ ID No: 83, a CDR-L1 domain comprising SEQ ID No: 90, a CDR-L2 domain comprising SEQ ID No: 91, and/or a CDR-L3 domain comprising SEQ ID No: 92; or

(ii) a CDR-H1 domain comprising SEQ ID No: 181, a CDR-H2 domain comprising SEQ ID No: 82, a CDR-H3 domain comprising SEQ ID No: 83, a CDR-L1 domain comprising SEQ ID No: 90, a CDR-L2 domain comprising SEQ ID No: 91, and/or a CDR-L3 domain comprising SEQ ID No: 92.

optionally wherein the antibody or antigen-binding fragment thereof comprises at least one, at least two, at least three, at least four, at least five, or at least six of the CDRs.

20. The inhibitor according to claim 9 or claim 10 or claim 19, wherein the antibody or antigen-binding fragment thereof comprises:

(i) a heavy chain variable region comprising or consisting of SEQ ID No: 88 and a light chain variable region comprising or consisting of SEQ ID No: 97;

(ii) a heavy chain variable region comprising or consisting of SEQ ID No: 161 and a light chain variable region comprising or consisting of SEQ ID No: 97;

(iii) a heavy chain variable region comprising or consisting of SEQ ID No: 182 and a light chain variable region comprising or consisting of SEQ ID No: 97;

(iv) a heavy chain variable region comprising or consisting of SEQ ID No: 183 and a light chain variable region comprising or consisting of SEQ ID No: 97;

(v) a heavy chain variable region comprising or consisting of SEQ ID No: 184 and a light chain variable region comprising or consisting of SEQ ID No: 97;

(vi) a heavy chain variable region comprising or consisting of SEQ ID No: 161 and a light chain variable region comprising or consisting of SEQ ID No: 192;

(vii) a heavy chain variable region comprising or consisting of SEQ ID No: 161 and a light chain variable region comprising or consisting of SEQ ID No: 193;

(viii) a heavy chain variable region comprising or consisting of SEQ ID No: 184 and a light chain variable region comprising or consisting of SEQ ID No: 193;

(ix) a heavy chain variable region comprising or consisting of SEQ ID No: 184 and a light chain variable region comprising or consisting of SEQ ID No: 192;

(x) a heavy chain variable region comprising or consisting of SEQ ID No: 183 and a light chain variable region comprising or consisting of SEQ ID No: 193;

(xi) a heavy chain variable region comprising or consisting of SEQ ID No: 183 and a light chain variable region comprising or consisting of SEQ ID No: 192;

(xii) a heavy chain variable region comprising or consisting of SEQ ID No: 182 and a light chain variable region comprising or consisting of SEQ ID No: 193; or

(xiii) a heavy chain variable region comprising or consisting of SEQ ID No: 182 and a light chain variable region comprising or consisting of SEQ ID No: 192.

21. The inhibitor according to either claim 9 or claim 10, wherein the antibody or antigen-binding fragment thereof comprises a CDR-H1 domain comprising SEQ ID No: 99, a CDR-H2 domain comprising SEQ ID No: 100, a CDR-H3 domain comprising SEQ

ID No: 101, a CDR-L1 domain comprising SEQ ID No: 108, a CDR-L2 domain comprising SEQ ID No: 109, and/or a CDR-L3 domain comprising SEQ ID No: 110, optionally wherein the antibody or antigen-binding fragment thereof comprises at least one, at least two, at least three, at least four, at least five, or at least six of the CDRs.

22. The inhibitor according to claim 9 or claim 10 or claim 21, wherein the antibody or antigen-binding fragment thereof comprises a heavy chain variable region comprising or consisting of SEQ ID No: 106 and a light chain variable region comprising or consisting of SEQ ID No: 115.

23. The inhibitor according to either claim 9 or claim 10, wherein the antibody or antigen-binding fragment thereof comprises a CDR-H1 domain comprising SEQ ID No: 117, a CDR-H2 domain comprising SEQ ID No: 118, a CDR-H3 domain comprising SEQ ID No: 119, a CDR-L1 domain comprising SEQ ID No: 126, a CDR-L2 domain comprising SEQ ID No: 127, and/or a CDR-L3 domain comprising SEQ ID No: 128, optionally wherein the antibody or antigen-binding fragment thereof comprises at least one, at least two, at least three, at least four, at least five, or at least six of the CDRs.

24. The inhibitor according to claim 9 or claim 10 or claim 23, wherein the antibody or antigen-binding fragment thereof comprises a heavy chain variable region comprising or consisting of SEQ ID No: 124 and a light chain variable region comprising or consisting of SEQ ID No: 133.

25. The inhibitor according to either claim 9 or claim 10, wherein the antibody or antigen-binding fragment thereof comprises a CDR-H1 domain comprising SEQ ID No: 135, a CDR-H2 domain comprising SEQ ID No: 136, a CDR-H3 domain comprising SEQ ID No: 137, a CDR-L1 domain comprising SEQ ID No: 144, a CDR-L2 domain comprising SEQ ID No: 145, and/or a CDR-L3 domain comprising SEQ ID No: 146, optionally wherein the antibody or antigen-binding fragment thereof comprises at least one, at least two, at least three, at least four, at least five, or at least six of the CDRs.

26. The inhibitor according to claim 9 or claim 10 or claim 25, wherein the antibody or antigen-binding fragment thereof comprises a heavy chain variable region comprising or consisting of SEQ ID No: 142 and a light chain variable region comprising or consisting of SEQ ID No: 151.

27. An inhibitor according to any one of claims 1 to 26, for use in therapy.

28. Use of an inhibitor according to any one of claims 1 to 26 in the manufacture of a medicament for treating, preventing or ameliorating a condition caused by platelet-mediated aggregation.

29. The use according to claim 28, wherein the condition caused by platelet-mediated aggregation may be selected from the group consisting of: a thrombotic-related condition; thrombotic thrombocytopenic purpura (TTP); acquired thrombotic thrombocytopenic purpura (aTTP), acute coronary syndrome (ACS), atherosclerosis, ischemic stroke, atrial fibrillation (AF), acute myocardial infarction (AMI), cardiovascular disease (CVD), thrombosis, unstable angina, stable angina, angina pectoris, embolus formation, deep vein thrombosis, haemolytic uremic syndrome, haemolytic anaemia, acute renal failure, thrombolytic complications, disseminated intravascular coagulation, coronary heart disease, thromboembolic complications, restenosis, chronic unstable angina, peripheral vascular disease, arterial thrombosis, pre-eclampsia, embolism, restenosis, sepsis, vascular inflammation, glomerulonephritis, and thrombotic condition resulting from a coronavirus infection.

30. A pharmaceutical composition comprising an inhibitor according to any one of claims 1 to 26, and optionally a pharmaceutically acceptable vehicle.

31. An antibody or antigen-binding fragment thereof obtained by a method comprising:
(i) a host organism is to be immunised with one or more of a C1, C2, C3, C4, C5, and/or C6 domain of Von Willebrand Factor (VWF); and
(ii) collecting an antibody or antigen-binding fragment thereof from the host that has been immunised.

32. A polynucleotide sequence encoding the inhibitor as defined in any one of claims 9 to 26.

33. An expression cassette comprising a polynucleotide sequence according to claim 32.

34. A recombinant vector comprising the expression cassette according to claim 33.

35. A host cell comprising the polynucleotide sequence according to claim 32, the expression cassette according to claim 33, or the vector according to claim 34.

36. A method of preparing the inhibitor according to any one of claims 9 to 26, the method comprising:

a) introducing, into a host cell, the vector of claim 34; and

b) culturing the host cell under conditions to result in the production of the inhibitor according to any one of claims 9 to 26.

37. The inhibitor according to any one of claims 9 to 26, for use in diagnosis or prognosis.

38. The inhibitor according to any one of claims 9 to 26, for use in diagnosing or prognosing a condition caused by platelet-mediated aggregation.

39. A method of diagnosing or prognosing a condition caused by platelet-mediated aggregation in a subject, the method comprising detecting VWF in a biological sample obtained from the subject with the inhibitor according to any one of claims 9 to 26.

40. A kit for diagnosing a subject suffering from a condition caused by platelet-mediated aggregation, or for providing a prognosis of the subject's condition, the kit comprising an inhibitor according to any one of claims 9 to 26 for detecting VWF in a sample from a test subject.

41. The inhibitor according to claim 38, the method according to claim 39, or the kit according to claim 40, wherein the condition caused by platelet-mediated aggregation may be selected from the group consisting of: a thrombotic-related condition; thrombotic thrombocytopenic purpura (TTP); acquired thrombotic thrombocytopenic purpura (aTTP), acute coronary syndrome (ACS), atherosclerosis, ischemic stroke, atrial fibrillation (AF), acute myocardial infarction (AMI), cardiovascular disease (CVD), thrombosis, unstable angina, stable angina, angina pectoris, embolus formation, deep vein thrombosis, haemolytic uremic syndrome, haemolytic anaemia, acute renal failure, thrombolytic complications, disseminated intravascular coagulation, coronary heart disease, thromboembolic complications, restenosis, chronic unstable angina, peripheral vascular disease, arterial thrombosis, pre-eclampsia,

embolism, restenosis, sepsis, vascular inflammation, glomerulonephritis, and thrombotic condition resulting from a coronavirus infection.