What is claimed is:

1. A therapeutic antibody, or a therapeutically-active fragment of the antibody, wherein the antibody or fragment comprises at least two therapeutic peptides, ~~and~~ wherein at least one of the therapeutic peptides is incorporated into the constant region of a light chain polypeptide of the antibody or fragment ~~at a position that is structurally permissive to allow for the therapeutic peptide to be presented at the central cleft of the antibody~~ as:

(i) an insertion within a β-turn region of the constant region;

(ii) a replacement within a β-turn region of the constant region;

(iii) an addition to the carboxy-terminus of the constant region;

(iv) an insertion into a position that is downstream from the final β-sheet structure in the constant region; or

(v) an addition at a position that is downstream from the final β-sheet structure in the constant region,

and wherein the therapeutic antibody or therapeutically-active fragment thereof comprises the variable region of a heavy chain polypeptide and the variable region of a light chain polypeptide.

2. The therapeutic antibody, or therapeutically-active fragment thereof, of claim 1, wherein the antibody or fragment comprises a heavy chain polypeptide comprising at least one of the therapeutic peptides, wherein the at least one therapeutic peptide is incorporated:

(a) into the hinge region of the heavy chain polypeptide;

(b) at the junction between the amino-terminus of the hinge region and the region of the heavy chain polypeptide that is upstream to the hinge region;

(c) at the junction between the carboxy-terminus of the hinge region and the region of the heavy chain polypeptide that is downstream of the hinge region; or

(d) at a location starting within fewer than 20 amino acids upstream of the amino-terminus, or fewer than 20 amino acids downstream of the carboxy-terminus, of the hinge region of the heavy chain polypeptide.

~~3. A therapeutic antibody, or a therapeutically-active fragment of the antibody, wherein the antibody or fragment comprises at least two therapeutic peptides, wherein a heavy chain polypeptide of the antibody or fragment comprises at least one of the therapeutic peptides, and wherein the at least one therapeutic peptide is incorporated:~~

~~(a) into the hinge region of the heavy chain polypeptide;~~

~~(b) at the junction between the amino-terminus of the hinge region and the region of the heavy chain polypeptide that is upstream to the hinge region;~~

~~(c) at the junction between the carboxy-terminus of the hinge region and the region of the heavy chain polypeptide that is downstream of the hinge region; or~~

~~(d) at a location starting within fewer than 20 amino acids upstream of the amino- terminus, or fewer than 20 amino acids downstream of the carboxy-terminus, of the hinge region of the heavy chain polypeptide.~~

~~4. The therapeutic antibody, or therapeutically-active fragment thereof, of claim 3, wherein the antibody or fragment comprises a light chain polypeptide in which at least one of the therapeutic peptides is incorporated into the constant region of a light chain polypeptide at a position that is structurally permissive to allow for the therapeutic peptide to be presented at the central cleft of the antibody.~~

~~5. The therapeutic antibody, or therapeutically-active fragment thereof, of any one of claims 1, 2, or 4, wherein the therapeutic peptide is incorporated into the constant region of the light chain polypeptide as:~~

~~(i) an insertion within a β-turn region of the constant region;~~

~~(ii) a replacement within a β-turn region of the constant region;~~

~~(iii) an addition to the carboxy-terminus of the constant region;~~

~~(iv) an insertion into a position that is downstream from the final β-sheet structure in the constant region; or~~

~~(v) an addition at a position that is downstream from the final β-sheet structure in the constant region.~~

~~6~~3. The therapeutic antibody, or therapeutically-active fragment thereof, ~~of any one~~ of claims 1~~-5~~ or 2, wherein the antibody or fragment comprises at least four therapeutic peptides.

~~7~~4. The therapeutic antibody, or therapeutically-active fragment thereof, of any one of claims 1-~~6~~3, further comprising a spacer amino acid sequence that is amino-terminal to at least one therapeutic peptide or a spacer amino acid sequence that is carboxy-terminal to at least one therapeutic peptide.

~~8~~5. The therapeutic antibody, or therapeutically-active fragment thereof, of any one of claims 1-~~7~~4, wherein at least one therapeutic peptide is an agonist peptide.

~~9~~6. The therapeutic antibody, or therapeutically-active fragment thereof, of any one of claims 1-~~8~~5, wherein at least one therapeutic peptide is a peptidomimetic.

~~10~~7. The therapeutic antibody, or therapeutically-active fragment thereof, of claim ~~9~~6, wherein the peptidomimetic is a TPO mimetic.

~~11~~8. The therapeutic antibody, or therapeutically-active fragment thereof, of claim ~~10~~7, wherein the TPO mimetic comprises the amino acid sequence depicted in SEQ ID NO:1.

~~12~~9. The therapeutic antibody, or therapeutically-active fragment thereof, of claim ~~10~~-7 or ~~11~~8, wherein the antibody comprises:

(i) a light chain polypeptide comprising the amino acid sequence depicted in SEQ ID NO:10;

(ii) a heavy chain polypeptide comprising the amino acid sequence depicted in SEQ ID NO:12; or

(iii) a light chain polypeptide comprising the amino acid sequence depicted in SEQ ID NO:10 and a heavy chain polypeptide comprising the amino acid sequence depicted in SEQ ID NO:12.

10. A therapeutic antibody, or a therapeutically-active fragment of the antibody, wherein the antibody or fragment comprises a heavy chain polypeptide comprising at least two therapeutic peptides, wherein each therapeutic peptide is a thrombopoietin (TPO) mimetic peptide, wherein at least one of the therapeutic peptides is incorporated:

(a) into the hinge region of the heavy chain polypeptide;

(b) at the junction between the amino-terminus of the hinge region and the region of the heavy chain polypeptide that is upstream to the hinge region;

(c) at the junction between the carboxy-terminus of the hinge region and the region of the heavy chain polypeptide that is downstream of the hinge region; or

(d) at a location starting within fewer than 20 amino acids upstream of the amino-terminus, or fewer than 20 amino acids downstream of the carboxy-terminus, of the hinge region of the heavy chain polypeptide, and wherein the therapeutic antibody or

therapeutically-active fragment thereof comprises the variable region of the heavy chain polypeptide.

11. A therapeutic antibody, or a therapeutically-active fragment of the antibody, comprising at least two therapeutic peptides, wherein the therapeutic antibody or therapeutically-active fragment thereof comprises the variable region of a heavy chain polypeptide and the variable region of a light chain polypeptide, and wherein at least one of the therapeutic peptides is incorporated:

(a) into the hinge region of the heavy chain polypeptide;

(b) at the junction between the amino-terminus of the hinge region and the region of the heavy chain polypeptide that is upstream to the hinge region;

(c) at the junction between the carboxy-terminus of the hinge region and the region of the heavy chain polypeptide that is downstream of the hinge region; or

(d) at a location starting within fewer than 20 amino acids upstream of the amino-terminus, or fewer than 20 amino acids downstream of the carboxy-terminus, of the hinge region of the heavy chain polypeptide.

12. The therapeutic antibody, or therapeutically-active fragment thereof, of claim 11, wherein at least one therapeutic peptide is an agonist peptide.

13. The therapeutic antibody, or therapeutically-active fragment thereof, of claim 11 or 12, wherein at least one therapeutic peptide is a peptidomimetic.

14. The therapeutic antibody, or therapeutically-active fragment thereof, of claim 13, wherein the peptidomimetic is a TPO mimetic.

15. The therapeutic antibody, or therapeutically-active fragment thereof, of claim 14, wherein each therapeutic peptide is a TPO mimetic.

16. The therapeutic antibody, or therapeutically-active fragment thereof, of any one of claims 10, 14, or 15, wherein the TPO mimetic comprises the amino acid sequence depicted in SEQ ID NO:1.

17. The therapeutic antibody, or therapeutically-active fragment thereof, of any one of claims 10-16, wherein the antibody comprises a heavy chain polypeptide comprising the amino acid sequence depicted in SEQ ID NO:12.

~~13~~18. The therapeutic antibody, or therapeutically-active fragment thereof, of any one of claims 1-~~12~~17, wherein the antibody or therapeutically-active fragment thereof is selected from the group consisting of a monoclonal antibody, a humanized antibody, a chimerized antibody, a chimeric antibody, a deimmunized ~~human~~ antibody, a fully human antibody, and an ~~F(ab')2~~ $F(ab')_2$ fragment.

~~14~~19. The therapeutically-active fragment of any one of claims 1-~~12~~18, wherein the therapeutically-active fragment is selected from the group consisting of an Fd fragment,

an Fab fragment, and an Fab' fragment, and wherein the therapeutically-active fragment comprises:

at least two of the therapeutic peptides; and

at least part of a hinge region of a heavy chain polypeptide or at least part of the carboxy-terminus of a light chain polypeptide.

~~15. The therapeutic antibody, or therapeutically-active fragment thereof, of any one of claims 1-14, wherein all of the therapeutic peptides are identical.~~

~~16~~20. A composition comprising the therapeutic antibody, or therapeutically-active fragment, of any one of claims 1-~~15~~19, and a pharmaceutically acceptable carrier.

~~17~~21. Use of a composition comprising a therapeutically-effective amount of the therapeutic antibody, or therapeutically-active fragment thereof, of any one of claims ~~10-12~~7-10 or 14-17, in the manufacture of a medicament for increasing platelet production in a subject in need thereof.

~~18~~22. The use of claim 17, wherein the subject has: a disorder related to insufficient platelet counts or a cancer.

~~19~~23. The use of claim ~~18~~22, wherein the disorder is selected from the group consisting of Bernard-Soulier syndrome, idiopathic thrombocytopenic purpura, Wiskott-Aldrich syndrome, hypersplenism, thrombotic microangiopathies, disseminated intravascular coagulation, heparin-induced thrombocytopenia (HIT), von Willebrand disease, variant von Willebrand disease, thrombocytopenia resulting from HIV infection, thrombocytopenia resulting from chronic liver disease, a drug-induced platelet insufficiency, and Glanzmann's thrombasthenia.

~~20~~24. The use of any one of claims ~~17-19~~21-23, wherein the subject has been administered, or will be administered, a chemotherapy regimen or a radiotherapy regimen.

~~21~~25. The use of any one of claims ~~17-20~~21-24, wherein the subject is a human.

~~22~~26. The use of claim ~~20~~24, wherein the therapeutic antibody or therapeutically-active fragment thereof is to be administered to the subject:

(i) prior to and during or following the chemotherapy or the radiotherapy regimen;

(ii) prior to the chemotherapy or the radiotherapy regimen; or

(iii) during or following the chemotherapy or the radiotherapy regimen.

~~23. The use of any one of claims 20-22, wherein the chemotherapy or radiotherapy regimen is (i) more potent or (ii) administered more frequently to a subject than would be safely possible in the absence of administering the therapeutic antibody or therapeutically-active fragment thereof.~~

~~24~~27. An isolated polypeptide comprising ~~an~~ the amino acid sequence ~~that comprises at least one TPO mimetic peptide amino acid sequence and is:~~

~~(i) at least 80% identical to the amino acid sequence~~ depicted in SEQ ID NO:10~~;~~ or

~~(ii) at least 80% identical to the amino acid sequence depicted in~~ SEQ ID NO:12.

~~25~~28. An isolated nucleic acid encoding a polypeptide comprising ~~an~~ the amino acid sequence ~~that comprises at least one TPO mimetic peptide amino acid sequence, wherein said polypeptide is:~~

~~(i) at least 80% identical to the amino acid sequence~~ depicted in SEQ ID NO:10~~;~~ or

~~(ii) at least 80% identical to the amino acid sequence depicted in~~ SEQ ID NO:12.