~~What is claimed is~~Claims:

1. A sterile liquid formulation that has an absolute viscosity of ~~about~~ 10 cP or less comprising: (a) an anti-sclerostin immunoglobulin at a concentration of at least 70 mg/mL; and (b) calcium acetate at a concentration ranging from ~~about~~ 1 mM to ~~about~~ 20 mM, wherein the anti-sclerostin immunoglobulin comprises amino acid sequences of: (i) SEQ ID NO: 86 and SEQ ID NO: 84; or (ii) SEQ ID NO: 182 and SEQ ID NO: 180; or (iii) SEQ ID NO: 208 and SEQ ID NO: 207; or (iv) SEQ ID NO: 216 and SEQ ID NO: 214; or (v) SEQ ID NO: 220 and SEQ ID NO: 218.

~~2. The formulation of claim 1, wherein the immunoglobulin comprises amino acid sequences of: SEQ ID NO: 14 and/or SEQ ID NO: 12; or SEQ ID NO: 86 and/or SEQ ID NO: 84; or SEQ ID NO: 68 and/or SEQ ID NO: 66; or SEQ ID NO: 154 and/or SEQ ID NO: 152; or SEQ ID NO: 182 and/or SEQ ID NO: 180; or SEQ ID NO: 208 and/or SEQ ID NO: 207; or SEQ ID NO: 216 and/or SEQ ID NO: 214; or SEQ ID NO: 238 and/or SEQ ID NO: 236.~~

~~3~~2. The formulation of claim 1, further comprising (c) an acetate buffer~~, for example, sodium acetate,~~ at a concentration of from ~~about~~ 5 mM to ~~about~~ 15 mM.

3. The formulation of claim 2, wherein the acetate buffer is sodium acetate.

~~4. A sterile liquid formulation that has an absolute viscosity of about 10 cP or less comprising: (a) an anti-sclerostin immunoglobulin at a concentration of from about 70 mg/mL to about 200 mg/mL; and (b) an acetate salt and/or acetate buffer at a concentration ranging from about 10 mM to about 50 mM acetate, wherein the immunoglobulin comprises amino acid sequences of: SEQ ID NO: 14 and/or SEQ ID NO: 12; or SEQ ID NO: 86 and/or SEQ ID NO: 84; or SEQ ID NO: 68 and/or SEQ ID NO: 66; or SEQ ID NO: 154 and/or SEQ ID NO: 152; or SEQ ID NO: 182 and/or SEQ ID NO: 180; or SEQ ID NO: 208 and/or SEQ ID NO: 207; or SEQ ID NO: 216 and/or SEQ ID NO: 214; or SEQ ID NO: 238 and/or SEQ ID NO: 236.~~

~~5~~4. The formulation of any one of claims 1-~~4~~3, that has a total osmolarity of less than ~~about~~ 350 mOsm/L.

~~6~~5. The formulation of any one of claims ~~1-5~~1-4, wherein the immunoglobulin is present at a concentration of at least 120 mg/mL~~, or optionally 140 mg/mL~~.

6. The formulation of claim 5, wherein the immunoglobulin is present at a concentration of 140 mg/mL.

7. The formulation of any one of claims 1-6, wherein the absolute viscosity of the formulation is ~~about~~ 8 cP or less~~, or optionally about 6 cP or less~~.

8. The formulation of claim 7, wherein the absolute viscosity of the formulation is 6 cP or less.

~~8~~9. The formulation of any one of claims 1-~~7~~8, wherein the formulation further comprises a polyol ~~such as sucrose, for example,~~ in an amount ranging from ~~about~~ 4% w/v to ~~about~~ 6% w/v.

~~9~~10. The formulation of any one of claims 1-~~8~~9, wherein the formulation has a pH ranging from ~~about~~ 4.5 to ~~about~~ 6~~, or optionally about 5 to about 5.5~~.

11. The formulation of claim 10, wherein the formulation has a pH ranging from 5 to 5.5.

~~10~~12. A method for reducing the viscosity of a protein formulation, the method comprising; adding calcium acetate at a concentration of between ~~about~~ 1 mM and ~~about~~ 20 mM, to an anti-sclerostin immunoglobulin formulation,

wherein the formulation comprises an immunoglobulin at a concentration of from ~~about~~ 70 mg/mL to ~~about~~ 200 mg/mL, wherein the anti-sclerostin immunoglobulin comprises amino acid sequences of: (i) SEQ ID NO: 86 and SEQ ID NO: 84; or (ii) SEQ ID NO: 182 and SEQ ID NO: 180; or (iii) SEQ ID NO: 208 and SEQ ID NO: 207; or (iv) SEQ ID NO: 216 and SEQ ID NO: 214; or (v) SEQ ID NO: 238 and SEQ ID NO: 236; and

wherein the viscosity of the formulation with the calcium acetate is reduced compared to the viscosity of an antibody formulation without the calcium acetate.

~~11~~13. The method of claim ~~10~~ 12, wherein the immunoglobulin comprises the amino acid sequences of SEQ ID NO: 86 and/or SEQ ID NO: 84.

~~12~~14. A sterile liquid formulation that has an absolute viscosity of ~~about~~ 10 cP or less comprising: (a) ~~Ab-5~~ an antibody having heavy chains of SEQ ID NO: 90 and light chains of SEQ ID NO: 88 at a concentration of ~~at least~~ 70 mg/mL to ~~about~~ 200 mg/mL; (b) calcium acetate at a concentration ranging from ~~about~~ 1 mM to ~~about~~ 20 mM; and (c) a polyol ~~such as sucrose, for example,~~ in an amount ranging from ~~about~~ 4% w/v to ~~about~~ 6% w/v.

15. The formulation of claim 9 or claim 14, wherein the polyol is sucrose.

~~13~~16. ~~A~~ The sterile liquid formulation according to claim 1, ~~comprising:~~
~~(a) an anti-sclerostin immunoglobulin at a concentration of at least 70 mg/mL to about 200 mg/mL, wherein the immunoglobulin comprises amino acid sequences of: SEQ ID NO: 14 and/or SEQ ID NO: 12; or SEQ ID NO: 86 and/or SEQ ID NO: 84; or SEQ ID NO: 68 and/or SEQ ID NO: 66; or SEQ ID NO: 154 and/or SEQ ID NO: 152; or SEQ ID NO: 182 and/or SEQ ID NO: 180; or SEQ ID NO: 208 and/or SEQ ID NO: 207; or SEQ ID NO: 216 and/or SEQ ID NO: 214; or SEQ ID NO: 220 and/or SEQ ID NO: 218; or SEQ ID NO: 238 and/or SEQ ID NO: 236; and~~
~~(b) calcium acetate at a concentration ranging from about 1 mM to about 20 mM,~~ wherein the calcium acetate reduces the absolute viscosity of the formulation by at least ~~10~~50% compared to the viscosity of an antibody formulation without the calcium acetate.

~~14~~17. Use of a therapeutically effective amount of the formulation according to any one of claims ~~1-9, 12 and 13~~1-10 and 14-16 in the preparation of a medicament for ~~the treatment of a patient with suffering from~~ improving the outcome of an orthopaedic procedure~~s~~, a dental procedure~~s~~, implant surgery, joint replacement, bone grafting, bone cosmetic surgery and bone repair ~~such as fracture healing, nonumion healing, delayed union healing and facial reconstruction~~ in a patient.

18. The use of claim 17, wherein the bone repair is fracture healing, nonunion healing, delayed union healing and facial reconstruction.

~~15~~19. A formulation according to any one of claims ~~1-9, 12 and 13~~1-10 and 14-16 for use in the treatment of a patient with suffering from orthopedic procedures, dental procedures, implant surgery, joint replacement, bone grafting, bone cosmetic surgery and bone repair such as fracture healing, nonunion healing, delayed union healing and facial reconstruction.