WHAT IS CLAIMED:

1. Use of an activin receptor type IIB (ActRIIB) ligand trap in the manufacture of a medicament for treating myelofibrosis associated anemia in a human subject being treated with fedratinib or a pharmaceutically acceptable salt or hydrate thereof, wherein the medicament is to be administered in combination with fedratinib or a pharmaceutically acceptable salt or hydrate thereof, wherein the subject prior to treatment with the medicament is red blood cell transfusion-dependent, wherein red blood cell transfusion-dependent means that the subject is receiving at least 4 red blood cell transfusions during a period of at least 84 days, wherein the subject is to be subcutaneously administered a dose of 1.33 mg/kg of the ActRIIB ligand trap every 21 days, and wherein the ActRIIB ligand trap is a fusion protein comprising an extracellular domain, a linker, and an Fc portion of an IgG, wherein the amino acid sequence of the extracellular domain consists of the amino acid sequence of SEQ ID NO: 9.

2. Use of an activin receptor type IIB (ActRIIB) ligand trap in the manufacture of a medicament for treating myelofibrosis associated anemia in a human subject being treated with fedratinib or a pharmaceutically acceptable salt or hydrate thereof, wherein the medicament is to be administered in combination with fedratinib or a pharmaceutically acceptable salt or hydrate thereof, wherein subject prior to treatment with the medicament is red blood cell transfusion-dependent, wherein red blood cell transfusion-dependent means that the subject is receiving at least 4 red blood cell transfusions during a period of at least 84 days, wherein the subject is to be subcutaneously administered a dose of 1.33 mg/kg of the ActRIIB ligand trap every 21 days, , and wherein the ActRIIB ligand trap is a fusion protein comprising an extracellular domain, a linker, and an Fc portion of an IgG, wherein the amino acid sequence of the extracellular domain consists of the amino acid sequence of SEQ ID NO: 9.

3. The use of claim 2, wherein the dose of the ActRIIB ligand trap is increased to 1.75 mg/kg every 21 days if after 6 weeks the subject is not red blood cell transfusion-independent or has had a hemoglobin level increase of less than 1 g/dL from the subject’s baseline hemoglobin level prior to administration of the medicament.

4. The use of claim 2, wherein the dose of the medicament is decreased to 1 mg/kg every 21 days if after 3 weeks, the subject has had a hemoglobin level increase of greater than 2 g/dL from the subject's baseline hemoglobin level prior to administration of the medicament and has received no red blood cell transfusions.

5. The use of any one of claims 1 to 4, wherein red blood cell transfusion-dependent means that the subject is receiving 4 to 12 red blood cell transfusions during the period of at least 84 days.

6. The use of any one of claims 1 to 5, wherein the subject prior to administration of the medicament has a hemoglobin level of less than 11.5 g/dL.

7. The use of any one of claims 1 to 6, wherein the subject prior to administration of the medicament has a hemoglobin level of less than 9.5 g/dL.

8. The use of claim 6, wherein the subject prior to administration of the medicament has a hemoglobin level of between 7 g/dL and 7.5 g/dL, between 7.5 g/dL and 8 g/dL, between 8 g/dL and 8.5 g/dL, between 8.5 g/dL and 9.0 g/dL, between 9.0 g/dL and 9.5 g/dL, or between 9.5 g/dL and 10.0 g/dL.

9. The use of claim 7, wherein the subject prior to administration of the medicament has a hemoglobin level of between 7 g/dL and 7.5 g/dL, between 7.5 g/dL and 8 g/dL, between 8 g/dL and 8.5 g/dL, or between 8.5 g/dL and 9.0 g/dL.

10. The use of any one of claims 1 to 9, wherein the administration of the medicament results in the subject being red blood cell transfusion-independent for a period of at least 84 consecutive days.

11. The use of any one of claims 1 to 10, wherein the fedratinib or a pharmaceutically acceptable salt or hydrate thereof is to be administered daily to the subject.

12. The use of claim 11, wherein a dose of 400 mg/day of fedratinib or a pharmaceutically acceptable salt or hydrate thereof is to be orally administered daily to the subject.

13. The use of any one of claims 1 to 12, wherein the amino acid sequence of the fusion protein consists of an amino acid sequence that is at least 90% identical to the amino acid sequence of SEQ ID NO: 11.

14. The use of any one of claims 1 to 12, wherein the amino acid sequence of the fusion protein consists of an amino acid sequence that is at least 95% identical to the amino acid sequence of SEQ ID NO: 11.

15. The use of any one of claims 1 to 12, wherein the amino acid sequence of the fusion protein comprises an amino acid sequence that is at least 98% identical to the amino acid sequence of SEQ ID NO: 11.

16. The use of any one of claims 1 to 12, wherein the amino acid sequence of the fusion protein comprises the amino acid sequence of SEQ ID NO: 11.

17. The use of any one of claims 1 to 12, wherein the amino acid sequence of the fusion protein consists of an amino acid sequence that is at least 98% identical to the amino acid sequence of SEQ ID NO: 11.

18. The use of any one of claims 1 to 12, wherein the amino acid sequence of the fusion protein consists of the amino acid sequence of SEQ ID NO: 11.

19. The use of any one of claims 1 to 12, wherein the amino acid sequence of the fusion protein comprises the amino acid sequence encoded by the nucleotide sequence of SEQ ID NO: 34.

20. The use of any one of claims 1 to 12, wherein the amino acid sequence of the fusion protein consists of the amino acid sequence encoded by the nucleotide sequence of SEQ ID NO: 34.

21. The use of any one of claims 1 to 20, wherein the subject prior to administration of the medicament has a Dynamic International Prognostic Scoring System (DIPSS) intermediate or high-risk myeloproliferative neoplasm (MPN) associated myelofibrosis.

22. The use of any one of claims 1 to 21, wherein the subject has intermediate or High-Risk Primary Myelofibrosis (PMF), Post-Polycythemia Vera Myelofibrosis (post-PV MF), or Post-Essential Thrombocythemia Myelofibrosis (post-ET MF).