**Claims**

1. Use of a human von Willebrand factor (VWF) molecule capable of binding to Factor VIII comprising a C1 domain which lacks an O-glycosylation site at an amino acid position equivalent to position 2298 of SEQ ID NO:2 in the manufacture of a medicament for the treatment of a blood coagulation disorder, wherein said blood coagulation disorder is hemophilia A or von Willebrand disease and the VWF molecule has a reduced *in vivo* clearance when compared to native plasma-derived VWF.

2. The use of claim 1, wherein the O-glycosylation site at position 2298 present in native VWF has been inactivated by deleting or substituting one or more amino acids at positions 2292 to 2303 of the VWF amino acid sequence.

3. The use of claim 2, wherein threonine at position 2298 has been deleted or substituted with an amino acid other than threonine and serine.

4. The use of claim 3, wherein said amino acid other than threonine and serine is selected from the group consisting of glycine, alanine, arginine, asparagine, aspartic acid, cysteine, glutamic acid, glutamine, histidine, isoleucine, leucine, lysine, methionine, phenylalanine, proline, tryptophan, tyrosine, and valine.

5. The use of any one of the preceding claims, wherein the VWF molecule comprises an amino acid sequence as shown in SEQ ID NO:10.

6. The use of any one of the preceding claims, wherein the VWF molecule comprises an amino acid sequence as shown in SEQ ID NO:11.

7. The use of claim 2, where a proline at position 2295, 2297, or 2302 has been deleted or substituted with a different amino acid.

8. The use of any one of the preceding claims, which is capable of increasing the half-life of a Factor VIII to be co-administered with said VWF molecule, as compared to the half-life of the Factor VIII to be co-administered with native plasma-derived VWF.

9. The use according to any one of the preceding claims, wherein said use further

comprises a Factor VIII molecule to be administered with the VWF molecule.

10. The use according to claim 9, wherein said VWF molecule and said Factor VIII molecule are to be administered separately.

11. A pharmaceutical composition comprising the VWF molecule capable of binding to Factor VIII and a Factor VIII molecule, wherein the VWF molecule comprises a C1 domain which lacks an O-glycosylation site at an amino acid position equivalent to position 2298 of SEQ ID NO:2.

12. A pharmaceutical kit for use in the treatment of a blood coagulation disorder comprising (i) the VWF molecule capable of binding to Factor VIII and comprising a C1 domain which lacks an O-glycosylation site at an amino acid position equivalent to position 2298 of SEQ ID NO:2 and (ii) a Factor VIII molecule; wherein said blood coagulation disorder is hemophilia A or von Willebrand disease.

13. The pharmaceutical kit of claim 12, wherein said VWF molecule and said Factor VIII molecule are contained in separate compositions.

14. The pharmaceutical kit according to claim 12, when used for simultaneous, separate or sequential use of the VWF molecule and the Factor VIII molecule in the treatment of the blood coagulation disorder.

15. The use of any one of claims 1 to 10 for increasing the half-life of Factor VIII *in vivo*.

16. The use of any one of claims 1 to 10 for prolonging the half-life of Factor VIII in a therapeutic treatment.