Claims

1. A unit dosage form for subcutaneous administration of a variant Fc region, wherein the Fc domains of the variant Fc region comprise the amino acids Y, T, E, K, F, and Y at EU positions 252, 254, 256, 433, 434, and 436, respectively, wherein:

(a) the variant Fc region has an RD_{iv}, which results in a PK_{iv} and a PD_{iv} in a subject upon intravenous administration;

(b) the unit dosage form comprises an RD_{sc} of the variant Fc region, which results in a PK_{sc} and a PD_{sc} in a subject upon subcutaneous administration; and

(c) the ratio PK_{sc}/PK_{iv} is less than 0.8 and the ratio PD_{sc}/PD_{iv} is from 0.9 to 1.1.

2. A unit dosage form for subcutaneous administration of a variant Fc region, wherein the Fc domains of the variant Fc region comprise the amino acids Y, T, E, K, F, and Y at EU positions 252, 254, 256, 433, 434, and 436, respectively, wherein:

(a) the variant Fc region has an RD_{iv}, which results in a PK_{iv} and a BL_{iv} in a subject upon intravenous administration;

(b) the unit dosage form comprises an RD_{sc} of the variant Fc region, which results in a PK_{sc} and a BL_{sc} in a subject upon subcutaneous administration; and

(c) the ratio PK_{sc}/PK_{iv} is less than 0.8 and the ratio BL_{sc}/BL_{iv} is of 0.9 to 1.1.

3. A unit dosage form for subcutaneous administration of a variant Fc region, wherein the Fc domains of the variant Fc region comprise the amino acids Y, T, E, K, F, and Y at EU positions 252, 254, 256, 433, 434, and 436, respectively, wherein the amount subcutaneous dose of the variant Fc region in the unit dosage form was determined by a method comprising the steps of:

(a) administration of a subcutaneous dose of the variant Fc region to a subject, wherein the variant Fc region has an RD_{iv}, which results in a PK_{iv} and a BL_{iv};

(b) determining the BL_{sc} of the variant Fc region;

(c) determining the PK_{sc} of the variant Fc region; and

(d) determining a subcutaneous dose that would result in a BL_{sc} / BL_{iv} ratio of 0.9 to 1.1 and a PK_{sc}/PK_{iv} ratio less than 0.8.

4. Use of a variant Fc region in the manufacture of a medicament for treating an autoimmune disease in a subject with a subcutaneous dose of the variant Fc region, wherein

the Fc domains of the variant Fc region comprise the amino acids Y, T, E, K, F, and Y at EU positions 252, 254, 256, 433, 434, and 436 respectively, and wherein the subcutaneous dose of the variant Fc region comprises a therapeutically effective dose of the variant Fc region that was determined by a method comprising the steps of:

(a) administration of a subcutaneous dose of the variant Fc region to a subject, wherein the variant Fc region has an RD_{iv}, which results in a PK_{iv} and a BL_{iv};

(b) determining the BL_{sc} of the variant Fc region;

(c) determining the PK_{sc} of the variant Fc region; and

(d) determining a subcutaneous dose that would result in a BL_{sc} / BL_{iv} ratio of 0.9 to 1.1 and a PK_{sc}/PK_{iv} ratio less than 0.8.

5. The use of claim 4, wherein the BL_{sc} and the BL_{iv} are levels of total IgG in a serum sample of the subject.

6. The use of any one of claims 4 to 5, wherein the variant Fc region is efgartigimod.

7. The use of claim 6, wherein the RD_{iv} is 10 mg/kg or 25 mg/kg.

8. The use of any one of claims 4 to 7, wherein the therapeutically effective dose of the variant Fc region is to be co-administered with a hyaluronidase enzyme, or is to be administered before or after a hyaluronidase enzyme.

9. The use of claim 8, wherein the hyaluronidase enzyme comprises an amino acid sequence selected from the group consisting of SEQ ID NO: 5-96.

10. The use of claim 8 or claim 9, wherein the hyaluronidase enzyme is rHuPH20.

11. The use of any one of claims 8 to 10, wherein the amount of hyaluronidase enzyme is from 1000 U/ml to 3000 U/ml.

12. The use of any one of claims 8 to 10, wherein the amount of hyaluronidase enzyme is 2000 U/ml.

13. The use of any one of claims 4 to 12, wherein the weekly dose of the variant Fc region between 950 and 1050 mg.

14. The use of any one of claims 4 to 13, wherein the autoimmune disease is myasthenia gravis.