CLAIMS

1. A method of mobilizing a population of hematopoietic stem cells, the method comprising administering (i) a CXCR2 agonist selected from the group consisting of Gro-β and Gro-β T, and (ii) a CXCR4 antagonist, intravenously or subcutaneously to a human subject, wherein the CXCR4 antagonist is administered to the human subject from 30 minutes to 180 minutes prior to administration of the CXCR2 agonist.

2. The method of claim 1, wherein the CXCR2 agonist is Gro-β T.

3. The method of claim 1 or 2, wherein the CXCR2 agonist is to be administered to the subject at a dose of from 50 μg/kg to 300 μg/kg or from 100 μg/kg to 250 μg/kg.

4. The method of claim 3, wherein the CXCR2 agonist is to be administered to the subject at a dose of from 125 μg/kg to 225 μg/kg.

5. The method of claim 4, wherein the CXCR2 agonist is to be administered to the subject at a dose of about 150 μg/kg.

6. The method of claim 3, wherein the CXCR2 agonist is to be administered to the subject at a dose of about 50 μg/kg.

7. The method of claim 3, wherein the CXCR2 agonist is to be administered to the subject at a dose of about 70 μg/kg.

8. The method of claim 3, wherein the CXCR2 agonist is to be administered to the subject at a dose of about 75 μg/kg.

9. The method of any one of claims 1-8, wherein the CXCR2 agonist is to be administered intravenously to the subject.

10. The method of any one of claims 1-9, wherein the CXCR4 antagonist is to be administered subcutaneously to the subject.

11. The method of any one of claims 1-10, wherein the CXCR4 antagonist is plerixafor or a pharmaceutically acceptable salt thereof.

12. The method of claim 11, wherein the plerixafor or pharmaceutically acceptable salt thereof is to be administered to the subject at a dose of from 50 µg/kg to 500 µg/kg.

13. The method of claim 12, wherein the plerixafor or pharmaceutically acceptable salt thereof is to be administered to the subject at a dose of from 200 µg/kg to 300 µg/kg.

14. The method of claim 13, wherein the plerixafor or pharmaceutically acceptable salt thereof is to be administered to the subject at a dose of about 240 µg/kg.