CLAIMS

1. A pharmaceutical composition comprising a pharmaceutically effective amount of each drug in a drug combination selected from the group consisting of:

decitabine and mitomycin C;

bortezomib and mechlorethamine hydrochloride;

decitabine and mechlorethamine hydrochloride;

decitabine, mechlorethamine hydrochloride, and mitomycin C;

bortezomib, decitabine, and mitomycin C;

bortezomib, mechlorethamine hydrochloride, and decitabine; and

bortezomib, mechlorethamine hydrochloride, decitabine, and mitomycin C.

2. A pharmaceutical composition comprising a pharmaceutically effective amount of each drug in a drug combination selected from the group consisting of:

bortezomib and dexamethasone;

bortezomib, panobinostat, and dexamethasone;

bortezomib, mechloroethamine hydrochloride, and dexamethasone; and

bortezomib, mechloroethamine hydrochloride, panobinostat, and dexamethasone.

3. The pharmaceutical composition of claim 1 or 2, wherein the pharmaceutically effective amount of each drug in the drug combination is below a maximum tolerated dosage.

4. Use of a pharmaceutically effective amount of each drug in a drug combination selected from the group consisting of:

decitabine and mitomycin C;

bortezomib and mechlorethamine hydrochloride;

decitabine and mechlorethamine hydrochloride;

decitabine, mechlorethamine hydrochloride, and mitomycin C;

bortezomib, decitabine, and mitomycin C;

bortezomib, mechlorethamine hydrochloride, and decitabine; and

bortezomib, mechlorethamine hydrochloride, decitabine, and mitomycin C;

in the preparation of a medicament for treating bortezomib-resistant multiple myeloma in a subject in need thereof.

5. Use of a pharmaceutically effective amount of each drug in a drug combination comprising bortezomib and at least one additional drug selected from the group consisting of mechlorethamine hydrochloride, decitabine, and mitomycin C; in the preparation of a medicament for treating bortezomib-resistant multiple myeloma in a subject in need thereof.

6. Use of a pharmaceutically effective amount of each drug in a drug combination selected from the group consisting of:

bortezomib and dexamethasone;

bortezomib, panobinostat, and dexamethasone;

bortezomib, mechloroethamine hydrochloride, and dexamethasone; and

bortezomib, mechloroethamine hydrochloride, panobinostat, and dexamethasone;

in the preparation of a medicament for treating bortezomib-sensitive multiple myeloma in a subject in need thereof.

7. The use of any one of claims 4, 5, and 6, wherein two or more drugs in the drug combination are to be administered sequentially.

8. The use of any one of claims 4, 5, and 6, wherein two or more drugs in the drug combination are to be administered concurrently.

9. The use of any one of claims 4 to 8, wherein the subject is a mammal.

10. The use of any one of claims 4 to 8, wherein the subject is a human.

11. The use of any one of claims 4 to 10, wherein the pharmaceutically effective amount of each drug in the drug combination is below a maximum tolerated dosage.

12. The pharmaceutical composition according to any one of claims 1 to 3, for use in the treatment of bortezomib-resistant multiple myeloma in a subject in need thereof.

13. A drug combination comprising bortezomib and at least one additional drug selected from the group consisting of mechlorethamine hydrochloride, decitabine, and mitomycin C

for use in the treatment of bortezomib-resistant multiple myeloma in a subject in need thereof.

14. The pharmaceutical composition of claim 12 or the drug combination of claim 13, wherein two or more drugs in the drug combination are to be administered sequentially.

15. The pharmaceutical composition of claim 12 or the drug combination of claim 13, wherein two or more drugs in the drug combination are to be administered concurrently.

16. The pharmaceutical composition of claim 12 or the drug combination of claim 13, wherein the subject is a mammal.

17. The pharmaceutical composition of claim 12 or the drug combination of claim 13, wherein the subject is a human.

18. The drug combination of any one of claims 13 to 17, wherein each drug in the drug combination has a pharmaceutically effective amount below a maximum tolerated dosage.