can reduce various side effects of cancer chemotherapy and improve the treatment completion rate of cancer chemotherapy, which resulted in the completion of the present invention.

Accordingly, the present invention is as described below.

[0014]

Disclosed is use of an agent comprising (A) cystine or a derivative thereof and (B) theanine in combination in the manufacture of a medicament for reducing a side effect of cancer chemotherapy, wherein said medicament is to be administered to a subject in need thereof.

In one aspect, there is provided use of an agent comprising (A) cystine or a derivative thereof and (B) theanine in combination in the manufacture of a medicament for reducing a side effect of cancer chemotherapy, wherein said medicament is to be administered to a subject in need thereof, and wherein said side effect is selected from the group consisting of granulocytopenia, stomatitis, anorexia, nausea, vomiting, diarrhea, malaise and exanthema.

In another aspect, there is provided use of an agent for reducing a side effect of cancer chemotherapy and an anticancer agent in combination, in the manufacture of a medicament for treating cancer and reducing a side effect of cancer chemotherapy, wherein said agent for reducing a side effect of cancer chemotherapy comprises (A) cystine or a derivative thereof and (B) theanine, and wherein said side effect is selected from the group consisting of granulocytopenia, stomatitis, anorexia, nausea, vomiting, diarrhea, malaise and exanthema.

In one example, there is provided use of the prophylactic and/or therapeutic drug as described herein in the manufacture of a medicament for preventing and/or treating cancer, wherein said medicament is to be administered to a subject in need thereof.

In yet another aspect, there is provided use of a combination of (A) cystine or a derivative thereof and (B) theanine in the manufacture of a medicament for reducing a side effect of cancer chemotherapy, wherein said side effect is selected from the group consisting of granulocytopenia, stomatitis, anorexia, nausea, vomiting, diarrhea, malaise and exanthema.

In one example, there is provided use of a combination of (A) cystine or a derivative thereof and (B) theanine in the manufacture of a medicament for use in improving the treatment completion rate of cancer chemotherapy.

In yet another aspect, there is provided use of a combination of (A) cystine or a derivative thereof and (B) theanine and an anticancer agent in the manufacture of a medicament for treating cancer and reducing a side effect of cancer chemotherapy, wherein said side effect is selected from the group consisting of granulocytopenia, stomatitis, anorexia, nausea, vomiting, diarrhea, malaise and exanthema.

Claims

1. Use of an agent comprising (A) cystine or a derivative thereof and (B) theanine in combination in the manufacture of a medicament for reducing a side effect of cancer chemotherapy,, wherein said medicament is to be administered to a subject in need thereof, and wherein said side effect is selected from the group consisting of granulocytopenia, stomatitis, anorexia, nausea, vomiting, diarrhea, malaise and exanthema.

2. The use according to claim 1, wherein said agent comprises: a composition comprising (A) cystine or a derivative thereof and (B) theanine.

3. The use according to claim 1 or 2, wherein said agent comprises: a first composition comprising(A) cystine or a derivative thereof; and a second composition comprising(B) theanine.

4. The use according to any one of claims 1 to 3, wherein said agent consists of (A) cystine or a derivative thereof and (B) theanine and at least one selected from the group consisting of binder, excipient, swelling agent, lubricant, flowability improver, gloss agent, sweetener, flavor, preservative, coating agent, carrier and stabilizer.

5. The use according to any one of claims 1 to 3, wherein said agent consists of (A) cystine or a derivative thereof and (B) theanine.

6. The use according to any one of claim 1 to 5, wherein the weight ratio of (A) cystine or a derivative thereof and (B) theanine is A:B=100:1 - 1:100.

7. The use according to any one of claims 1 to 6, wherein the weight ratio of (A) cystine or a derivative thereof and (B)

theanine is A:B=20:1 - 1:2.

8. Use of an agent for reducing a side effect of cancer chemotherapy and an anticancer agent in combination, in the manufacture of a medicament for treating cancer and reducing a side effect of cancer chemotherapy, wherein said agent for reducing a side effect of cancer chemotherapy comprises (A) cystine or a derivative thereof and (B) theanine, and wherein said side effect is selected from the group consisting of granulocytopenia, stomatitis, anorexia, nausea, vomiting, diarrhea, malaise and exanthema.

9. The use according to claim 8, wherein said agent for reducing a side effect of cancer chemotherapy comprises: a composition comprising (A) cystine or a derivative thereof and (B) theanine.

10. The use according to claim 8 or 9, wherein said agent for reducing a side effect of cancer chemotherapy comprises: a first composition comprising(A) cystine or a derivative thereof; and a second composition comprising(B) theanine.

11. The use according to any one of claims 8 to 10, wherein said agent for reducing a side effect of cancer chemotherapy consists of (A) cystine or a derivative thereof and (B) theanine and at least one selected from the group consisting of binder, excipient, swelling agent, lubricant, flowability improver, gloss agent, sweetener, flavor, preservative, coating agent, carrier and stabilizer.

12. The use according to any one of claims 8 to 10, wherein said agent for reducing a side effect of cancer chemotherapy consists of (A) cystine or a derivative thereof and (B) theanine.

13. The use according to any one of claims 8 to 12, wherein the weight ratio of (A) cystine or a derivative thereof and (B) theanine is A:B=100:1 - 1:100.

14. The use according to any one of claims 8 to 13, wherein the weight ratio of (A) cystine or a derivative thereof and (B) theanine is A:B=20:1 - 1:2.

15. Use of a combination of (A) cystine or a derivative thereof and (B) theanine in the manufacture of a medicament for reducing a side effect of cancer chemotherapy, wherein said side effect is selected from the group consisting of granulocytopenia, stomatitis, anorexia, nausea, vomiting, diarrhea, malaise and exanthema.

16. Use of a combination of (A) cystine or a derivative thereof and (B) theanine and an anticancer agent in the manufacture of a medicament for treating cancer and reducing a side effect of cancer chemotherapy, wherein said side effect is selected from the group consisting of granulocytopenia, stomatitis, anorexia, nausea, vomiting, diarrhea, malaise and exanthema.

17. The use according to any one of claims 1 to 16, wherein the cystine derivative comprises cysteine and cysteine derivative.

18. The use according to any one of claims 1 to 17, wherein the cystine derivative is selected from the group consisting of glutathione, glutathione disulfide, glutathione alkyl ester, oxidized glutathione dialkyl ester, cysteine, cysteine alkyl ester, 3-[(carboxymethyl)thio]alanine, N-acylcysteine, N-acylcysteine alkyl ester, N-acylcystine, N-acylcystine alkyl ester, N,N'-diacylcystine, N,N'-diacylcystine dialkyl ester and S-alkylcysteine sulfoxide.

19. The use according to any one of claims 1 to 18, wherein (A) is cystine.

20. The use according to any one of claims 1 to 19, wherein (A) is L-cystine.

21. The use according to any one of claims 1 to 20, wherein (B) is L-theanine.