CLAIMS

1. ~~Composition for use in~~Use of a composition in the manufacture of a medicament for the prevention and/or in the treatment of cardiotoxicity induced by at least one chemotherapeutic agent in a subject undergoing chemotherapy, the composition comprising an active agent, said active agent containing the amino acids leucine, isoleucine, valine, threonine, lysine and citric acid, succinic acid, malic acid.

2. ~~Composition for use~~Use according to claim 1, wherein said chemotherapeutic agent is selected in the group consisting of anthracyclines, HER2/ErbB2 inhibitors, tyrosine-kinase inhibitors, vascular endothelial growth factor inhibitors, immune checkpoint inhibitors, said anthracyclines being preferably selected in the group consisting of doxorubicin, epirubicin, daunorubicin, idarubicin, pixantrone, sabarubicin, valrubicin, derivatives thereof.

3. ~~Composition for use~~Use according to claim 1 or claim 2, wherein the weight ratio between the sum of citric acid, malic acid, succinic acid and the sum of the branched chain amino acids leucine, isoleucine, valine plus lysine and threonine is comprised between 0.05 and 0.3, preferably between 0.1 and 0.25.

4. ~~Composition for use~~Use according to any one of the preceding claims, wherein the weight ratio between the overall amount of citric acid, malic acid, succinic acid and the overall amount of the branched chain amino acids leucine, isoleucine, valine is comprised between 0.1 and 0.4, preferably between 0.15 and 0.35.

5. ~~Composition for use~~Use according to any one of the preceding claims, wherein the weight ratio between citric acid and the sum of malic acid and succinic acid is comprised between 1.0 and 4.0, preferably between 1.5 and 2.5.

6. ~~Composition for use~~Use according to any one of the preceding claims, wherein the citric acid:malic acid:succinic acid weight ratio is comprised between 10:1:1 and 2:1.5:1.5, preferably between 7:1:1 and 1.5:1:1, more preferably between 5:1:1 and 3:1:1.

7. ~~Composition for use~~Use according to any one of the preceding claims, wherein said active agent further comprises at least one amino acid selected in the group consisting of histidine, phenylalanine, methionine, tryptophan, tyrosine, cysteine.

8. ~~Composition for use~~Use according to any one of the preceding claims,

wherein said active agent further comprises histidine, phenylalanine, methionine, tryptophan, cysteine and optionally tyrosine.

9. ~~Composition for use~~Use according to any one of the preceding claims, wherein the ratio between the overall molar amount of citric acid, malic acid, succinic acid and the overall molar amount of methionine, phenylalanine, histidine and tryptophan is higher than 1.35.

10. ~~Composition for use~~Use according to any one of the preceding claims, wherein the ratio between the overall molar amount of the three acids citric acid, succinic acid, malic acid and the overall molar amount of lysine and threonine is comprised between 0.10 and 0.70, preferably between 0.15 and 0.55.

11. ~~Composition for use~~Use according to any one of the preceding claims, wherein the weight or molar amount of citric acid is higher than the overall weight or molar amount of both malic acid and succinic acid.

12. ~~Composition for use~~Use according to any one of the preceding claims, wherein the weight ratio between leucine and citric acid is comprised between 5 and 1, preferably between 2.50 and 3.50.

13. ~~Composition for use~~Use according to any one of the preceding claims, wherein said composition is free of arginine.

14. ~~Composition for use~~Use according to any one of the preceding claims, wherein said composition is free of serine, proline, alanine.

15. Use of a ~~C~~combined preparation comprising the composition according to any one of claims 1 to 14 and at least one chemotherapeutic agent in the manufacture of a medicament for simultaneous, separate, sequential use in preventing and/or treating the cardiotoxicity induced by said at least one chemotherapeutic agent in a subject affected by cancer.