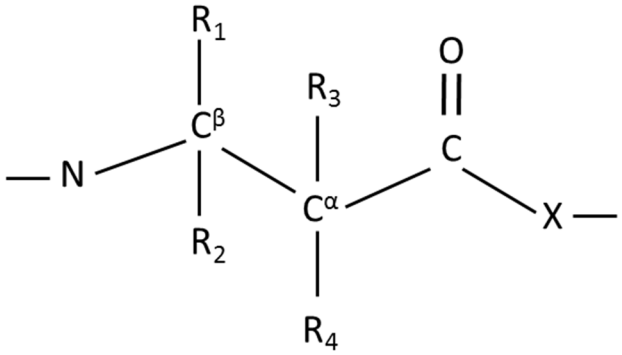
Claims:

1. Use of an oncolytic peptide in the manufacture of a medicament for the treatment of a subject having a tumor, wherein said medicament is concurrently, sequentially or combined administered with a composition which comprises chitosan and/or a chitosan derivative.

2. Use as claimed in claim 1, wherein said medicament comprises one or more oncolytic peptides and/or wherein said composition comprises one or more different chitosans and/or chitosan derivatives and/or wherein said medicament and/or said composition comprises a physiologically acceptable carrier.

3. Use as claimed in any of claims 1 to 2, wherein the oncolytic peptide is a 9-mer peptide or a pharmaceutically acceptable salt thereof, which consists of 9 amino acids in a linear arrangement, wherein of those 9 amino acids, 5 are cationic and 4 are lipophilic, and wherein of these 4 lipophilic amino acids, 3 are tryptophan and 1 is a non-genetically coded amino acid, preferably wherein the cationic amino acids are lysine or arginine and/or wherein the non-genetically coded amino acid is diphenylalanine or biphenylalanine, more preferably wherein the oncolytic peptide is selected from the group consisting of LTX-302, LTX-313, LTX-315, LTX-320 and LTX-329 and most preferably wherein the oncolytic peptide is LTX-315.

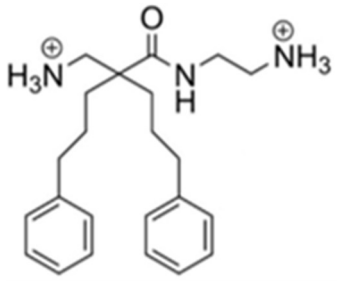
4. Use as claimed in any of claims 1 to 2, wherein the oncolytic peptide is a peptide, peptidomimetic or amino acid derivative having a net positive charge of at least +2 and incorporating a disubstituted β amino acid, wherein each of the substituting groups in the β amino acid comprises at least 7 non-hydrogen atoms, is lipophilic and has at least one cyclic group, wherein one or more cyclic groups within a substituting group are optionally fused to one or more cyclic groups within the other substituting group, preferably wherein the oncolytic peptide is a compound that incorporates a group of formula (VI)



(VI)

wherein X and N have their normal valencies and are bound to other parts of said compound and wherein any 2 from R_1, R_2, R_3 and R_4 are hydrogen atoms and 2 are

substituting groups, which comprise at least 7 non-hydrogen atoms, are lipophilic and include a cyclic group, wherein said cyclic group is not attached directly either to the α or β carbon atom and is optionally linked or fused to a cyclic group in the other substituting group, and wherein X represents O, C, N or S, more preferably wherein the incorporated group of formula (VI) has an amidated C-terminus and most preferably wherein the oncolytic peptide is LTX-401, i.e. the compound of formula (VII)



(VII)

5. Use as claimed in any of the preceding claims, wherein the oncolytic peptide is in the form of a pharmaceutically acceptable salt and/or wherein the medicament comprises the oncolytic peptide at a concentration of from 0.1 to 30 mg/ml and/or has a pH of from 4.0 to 7.4.

6. Use as claimed in any of the preceding claims, wherein the composition comprises preferably chitosan and/or wherein the chitosan and/or chitosan derivative has a degree of deacetylation (DDA) of about 50 to 99% and/or wherein the composition comprises 0.1 to 5% w/w of the chitosan and/or the chitosan derivative.

7. Use as claimed in any of the preceding claims, wherein the composition comprises a very low molecular weight, low molecular weight or medium molecular weight chitosan and/or chitosan derivative.

8. Use as claimed in any of the preceding claims, wherein the medicament and/or the composition has a viscosity of from 1.0 to 300 cP.

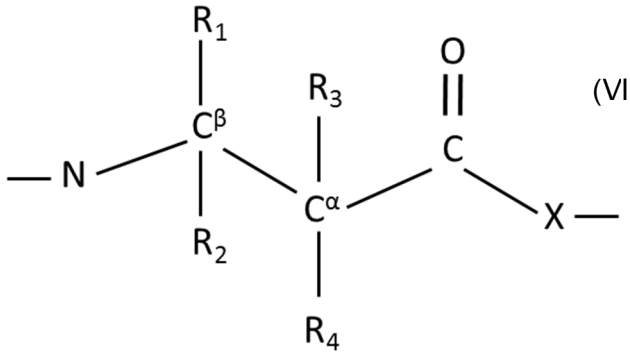
9. Use as claimed in any of the preceding claims, wherein the medicament is administered into the tumor and the composition is administered into the tumor and/or into the tissue immediately surrounding the tumor and/or wherein said tumor is a tumor selected from the group consisting of tumors of breast cancer, ovarian cancer, colon cancer, prostate cancer, bone cancer, colorectal cancer, gastric cancer, skin cancer, small cell lung cancer, non-small cell lung cancer, pancreatic cancer, thyroid cancers, kidney cancer, liver cancer, cancer of the bile duct, brain cancer, cervical cancer, bladder cancer, esophageal cancer; Hodgkin's disease and adrenocortical cancer.

10. Composition comprising i) an oncolytic peptide and ii) chitosan and/or a chitosan derivative.

11. Composition as claimed in claim 10, comprising one or more oncolytic peptides and/or comprising one or more different chitosans and/or chitosan derivatives and/or comprising a physiologically acceptable carrier.

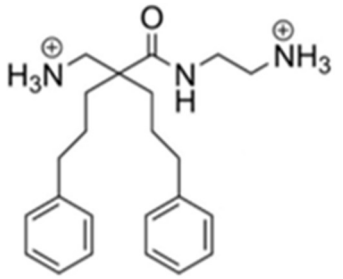
12. Composition as claimed in any of claims 10 to 11, wherein the oncolytic peptide is a 9-mer peptide or a pharmaceutically acceptable salt thereof, which consists of 9 amino acids in a linear arrangement, wherein of those 9 amino acids, 5 are cationic and 4 are lipophilic, and wherein of these 4 lipophilic amino acids, 3 are tryptophan and 1 is a non-genetically coded amino acid, preferably wherein the cationic amino acids are lysine or arginine and/or wherein the non-genetically coded amino acid is diphenylalanine or biphenylalanine, more preferably wherein the oncolytic peptide is selected from the group consisting of LTX-302, LTX-313, LTX-315, LTX-320 and LTX-329 and most preferably wherein the oncolytic peptide is LTX-315.

13. Composition as claimed in any of claims 10 to 11, wherein the oncolytic peptide is a peptide, peptidomimetic or amino acid derivative having a net positive charge of at least +2 and incorporating a disubstituted β amino acid, wherein each of the substituting groups in the β amino acid comprises at least 7 non-hydrogen atoms, is lipophilic and has at least one cyclic group, wherein one or more cyclic groups within a substituting group are optionally fused to one or more cyclic groups within the other substituting group, preferably wherein the oncolytic peptide is a compound that incorporates a group of formula (VI)



wherein X *and* N *have their normal valencies* and are bound to other parts of said compound and wherein any 2 from R_1, R_2, R_3 and R_4 are hydrogen atoms and 2 are substituting groups, which comprise at least 7 non-hydrogen atoms, are lipophilic and include a cyclic group, wherein said cyclic group is not attached directly either to the α or β carbon atom and is optionally linked or fused to a cyclic group in the other substituting group, and wherein X represents O, C, N or S, more preferably wherein the

incorporated group of formula (VI) has an amidated C-terminus and most preferably wherein the oncolytic peptide is LTX-401, i.e. the compound of formula (VII)



(VII)

14. Composition as claimed in any of claims 10 to 13, wherein the oncolytic peptide is in the form of a pharmaceutically acceptable salt and/or comprises the oncolytic peptide at a concentration of from 0.1 to 30 mg/ml.

15. Composition as claimed in any of claims 10 to 14, comprising preferably chitosan and/or wherein the chitosan and/or chitosan derivative has a degree of deacetylation (DDA) of about 50 to 99% and/or comprising 0.1 to 5% w/w of the chitosan and/or the chitosan derivative, preferably comprising a very low molecular weight, low molecular weight or medium molecular weight chitosan and/or chitosan derivative.

16. Composition as defined in any of claims 10 to 15 for use as a medicament.

17. Use of a composition as defined in any of claims 10 to 15 for the manufacture of a medicament for the treatment of a subject having a tumor.

18. Method for preparing a composition as defined in any of claims 10 to 15, wherein chitosan and/or a chitosan derivative is dispersed, suspended or dissolved in a physiologically acceptable carrier and the oncolytic peptide is dissolved in said dispersion, suspension or solution or wherein chitosan and/or a chitosan derivative is dispersed, suspended or dissolved in a solution of the oncolytic peptide in the physiologically acceptable carrier.

19. Kit comprising a medicament and a composition as defined in any of claims 1 to 9 or comprising parts/components to prepare said medicament and composition and optionally comprising instructions for preparing a composition as defined in any of claims 10 to 15 by combining said medicament and said composition.