BIVALENT VACCINE COMPOSITIONS AND THEIR USE FOR TUMOR THERAPY

CLAIMS:

1- A vaccine composition comprising the ECDs of Her1 and Her2 receptors in the same proportion and very small size proteoliposomes derived from proteins of the outer membrane of *Neisseria meningitidis* and GM3 (VSSP-GM3) to induce an immune response against malignant tumors that express Her1 and Her2 receptors, wherein the ECDs of Her1 and Her2 receptors are found in a concentration range from 100 to 800 ug/ dose.

2- The vaccine composition of claim 1 wherein said composition further comprises a pharmaceutically acceptable adjuvant.

3- The vaccine composition of claim 2 wherein the pharmaceutically suitable adjuvant is Alumina.

4- The use of ECDs of Her1 and Her2 receptors in the same proportion and very small size proteoliposomes derived from proteins of the outer membrane of *Neisseria meningitidis* and GM3 (VSSP-GM3) in the manufacture of a vaccine composition of claim 1 for the treatment of malignant tumors by inducing an immune response against malignant tumors that express the Her1 and Her2 receptors.

5- The use of claim 4 wherein the composition is to be administered subcutaneously.

6- The use of claim 5 wherein the composition is to be administered subcutaneously every two weeks to complete a total of 5 doses and subsequently monthly as a maintenance dose for at least one year.