The claims defining the invention are as follows:

1. A method of prognosis of a patient afflicted with breast cancer, comprising;
(i) determining the level of HER2/CB_2 heteromer expression in a biological sample obtained from said patient by contacting said sample with an antibody that specifically binds to HER2/CB_2 heteromer, or an antigen-binding fragment of the antibody; and
(ii) comparing the level of HER2/CB_2 heteromer expression in the biological sample to a standard level of HER2/CB_2 heteromer obtained from normal or cancer-free tissue or an archived pathology sample containing a known low level of HER2/CB_2 heteromer protein expression;
wherein elevated levels of HER2/CB_2 heteromer expression is indicative of decreased survival rate.

2. A method of predicting the length of overall survival of a patient with breast cancer, comprising:
(i) determining the level of HER2/CB_2 heteromer expression in a biological sample obtained from said patient by contacting said sample with an antibody that specifically binds to HER2/CB_2 heteromer, or an antigen-binding fragment of the antibody; and
(ii) comparing the level of HER2/CB_2 heteromer expression in the biological sample to a standard level of HER2/CB_2 heteromer obtained from normal or cancer-free tissue or an archived pathology sample containing a known low level of HER2/CB_2 heteromer protein expression;
wherein low levels of HER2/CB_2 heteromer expression are predicative of increased length of overall survival.

3. A method of predicting the length of local disease-free survival of a breast cancer patient, comprising:
(i) determining the level of HER2/CB_2 heteromer expression in a biological sample obtained from said patient by contacting said sample with an antibody that specifically binds to HER2/CB_2 heteromer, or an antigen-binding fragment of the antibody; and
(ii) comparing the level of HER2/CB_2 heteromer expression in the biological sample to a standard level of HER2/CB_2 heteromer obtained from normal or cancer-free tissue or an archived pathology sample containing a known low level of HER2/CB_2 heteromer protein expression;
wherein low levels of HER2/CB_2 heteromer expression are predictive of increased length of local disease-free survival rate.

4. A method of diagnosis of breast cancer in a subject, the method comprising:
(i) determining the level of HER2/CB_2 heteromer expression in a biological sample obtained from the subject by contacting said sample with an antibody that specifically binds to HER2/CB_2 heteromer, or an antigen-binding fragment of the antibody; and
(ii) comparing the level of HER2/CB_2 heteromer expression in the biological sample to a standard level of HER2/CB_2 heteromer obtained from normal or cancer-free tissue or an archived pathology sample containing a known low level of HER2/CB_2 heteromer protein expression;
wherein elevated levels of HER2/CB_2 heteromer expression is diagnostic of breast cancer.

5. A method according to any one of claims 1 to 4, wherein the step of determining an expression level of HER2/CB_2 heteromer comprises the step of contacting a HER2/CB_2 heteromer binding composition.

6. A method according to any one of claims 1 to 5, wherein the step of determining an expression level of HER2/CB_2 heteromer is selected from the group consisting of co- localization protocols, co-immunoprecipitation assays, resonance energy transfer techniques, proximity ligation assays and the use of specific probes designed to detect the heteromers.

7. A method according to any one of claims 1 to 6, wherein the step of determining an expression level of HER2/CB_2 heteromer is proximity ligation assay (PLA) or bioluminiscence resonance energy transfer (BRET) assay.

8. A method according to claim 5, wherein the HER2/CB_2 heteromer binding composition comprises an antibody capable of specifically binding to HER2/CB_2 heteromer.

9. A kit when used in a method according to any one of claims 1 to 8 comprising an antibody that specifically binds to HER2/CB_2 heteromer, or an antigen-binding fragment of the antibody and instructions for use.

10. A kit according to claim 9, wherein said antibody is a polyclonal antibody.

11. A kit according to claim 9, wherein said antibody is a monoclonal antibody.