

CLAIMS

- 5 1. Ex vivo use of interleukin-8 (IL-8) as a biomarker for predicting the outcome of the treatment with aflibercept, or ziv-aflibercept of a patient with cancer.
- 10 2. A method of determining whether a patient with cancer is a candidate for aflibercept therapy for the said cancer comprising the step of subjecting a patient's biological sample to at least one assay to measure at baseline the IL-8 level, wherein the biological sample is chosen from the group consisting of blood, serum and plasma, wherein when the biological sample IL-8 level is low relative to a reference level of expression of IL-8, the patient is identified as a candidate for therapy for cancer.
- 15 3. A method of determining whether a patient with cancer is a candidate for aflibercept therapy for the said cancer comprising the step of subjecting a patient's biological sample to at least one assay to measure at baseline the IL-8 level, wherein the biological sample is chosen from the group consisting of blood, serum and plasma, wherein when the biological sample IL-8 level is high relative to a reference level of expression of IL-8, the patient is identified as not being a candidate for therapy for cancer.
- 20 4. The method according to any of claims 2 and 3, wherein the reference level of expression of IL-8 is between 10 and 30 pg/ml.
- 25 5. The method according to any of claims 2 to 4, wherein the reference level of expression of IL-8 is 19 pg/ml.
- 30 6. The method according to any of claims 2 to 5, wherein the cancer is colon cancer, a colorectal cancer or a rectal cancer.
7. The method according to claim 6, wherein the colorectal cancer is a metastatic colorectal cancer.
- 35 8. The method according to any of claims 2 to 7, wherein the IL-8 level which is determined is the circulating level.
- 40 9. The method according to any of claims 2 and 4 to 8, wherein therapeutically effective amounts of aflibercept, oxaliplatin, 5-fluorouracil (5-FU) and folinic acid are to be administered to said patient.
10. The method according to any of claims 2 and 4 to 8, wherein therapeutically effective amounts of aflibercept, folinic acid, 5-fluorouracil (5-FU) and irinotecan are to be administered to said patient.
11. The method according to any of claims 2 and 4 to 10, wherein said patient has previously been treated with therapy based on oxaliplatin or on bevacizumab.

12. The method according to any of claims 2 and 4 to 11, wherein said patient has failed with chemotherapy, radiotherapy or surgery.

13. The method according to any one of claims 2 and 4 to 12, wherein folinic acid at a dosage comprised between 200 mg/m^2 and 600 mg/m^2 , 5-fluorouracil (5-FU) at a dosage comprised between 2000 mg/m^2 and 4000 mg/m^2 , irinotecan at a dosage comprised between 100 mg/m^2 and 300 mg/m^2 and aflibercept at a dosage comprised between 1 mg/kg and 10 mg/kg are to be administered to the patient.

14. The method according to any one of claims 2 and 4 to 13, wherein folinic acid at a dosage of 400 mg/m^2 , 5-fluorouracil (5-FU) at a dosage of 2800 mg/m^2 , irinotecan at a dosage of 180 mg/m^2 and aflibercept at a dosage of 4 mg/kg are to be administered to the patient.

15. The method according to any one of claims 2 and 4 to 14, wherein folinic acid is to be administered intravenously at a dosage of 400 mg/m^2 , 5-fluorouracil (5-FU) is to be administered intravenously at a dosage of 2800 mg/m^2 , irinotecan is to be administered intravenously at a dosage of 180 mg/m^2 and aflibercept is to be administered intravenously at a dosage of 4 mg/kg and wherein the combination are to be administered every two weeks.

16. The method according according to any one of claims 2 and 4 to 15, wherein folinic acid, 5- fluorouracil (5-FU), irinotecan and aflibercept are to be administered intravenously every two weeks for a period comprised between 9 and 18 weeks.

17. The method according according to any one of claims 2 and 4 to 16, wherein folinic acid is to be administered intravenously immediately after aflibercept administration.

18. The method according according to any one of claims 2 and 4 to 17, wherein folinic acid is to be administered intravenously immediately after aflibercept administration over a period of 2 hours.