Patent Claims

1.) Use of Abituzumab for the manufacture of a medicament for treating colorectal cancer (CRC) and/or metastases thereof in a subject, wherein said subject is characterised by

a) high levels of one or more proteins in at least one body fluid, selected from whole blood, blood serum, blood plasma, exudate, lymph, mucus, peritoneal fluid, saliva, sputum, tears and urine, of said subject that are determined prior to administering said Abituzumab, wherein said one or more proteins are selected from the group consisting of:

TPO	(UniProt ID: P07202),
CCL23.1	(UniProt ID: P55773),
IGHD__IGK._IGL.	(UniProt ID: P01880),
TK1	(UniProt ID: P04183),
IL17A	(UniProt ID: Q16552),
STX1A	(UniProt ID: Q16623), and
PGF	(UniProt ID: P49763);

and optionally

b) low levels of one protein in at least one body fluid of said subject that are determined prior to administering said Abituzumab, wherein said protein is:

TGM3	(UniProt ID: Q08188);

and/or proteins that have at least 95% sequence homology to said proteins.

2.) The method according to claim 1, wherein said subject is characterised by a high level of TPO (UniProt ID: P07202) in said at least one body fluid of said subject that is determined prior to administering said Abituzumab,

and/or a protein that has at least 95% sequence homology to said

protein.

3.) Use according to claim 1 and/or 2, wherein said medicament is for treating colorectal cancer (CRC).

4.) The method according to claim 1, 2 and/or 3, wherein the level of said protein in at least one body fluid of said subject is
a) classified as high, if the respective protein level in said at least one body fluid is at least 2 % higher, more preferably at least 5% higher, even more preferably at least 10% higher and especially at least 25% higher than the median threshold determined for the respective protein,
and/or
b) classified as low, if the respective protein level in said at least one body fluid is at least 2 % lower, more preferably at least 5% lower, even more preferably at least 10% lower and especially at least 25% lower than said median threshold for the respective protein.

5.) The method according to claim 1, 2, 3 and/or 4, wherein said median thresholds are determined in a subject population having colorectal cancer and/or metastases thereof.

6.) The method according to one or more of the preceding claims, wherein said subject is characterised by a high level of the protein
TPO (UniProt ID: P07202)
and/or a protein having at least 99% sequence homology to said protein.

7.) The method according to one or more of the preceding claims, wherein said subject is characterised by the respective levels of one or more proteins having at least 99% sequence homology to said one or more proteins according to claim 1, or wherein said subject is

characterised by the respective levels of one or more proteins that identical to the sequences of said proteins according to claim 1.

8.) Use according to one or more of the preceding claims, wherein said body fluid is selected from the group consisting of blood plasma, blood serum and whole blood.

9.) Use according to to one or more of the preceding claims, wherein said subject is characterised by
a) high levels of one proteinin said at least one body fluid of said subjectthat is determined prior to administering said Abituzumab, wherein said one protein is:
TPO (UniProt ID: P07202);
and optionally
b) low levels of one protein in said at least one body fluid of said subject that is determined prior to administering said Abituzumab, wherein said protein is:
TGM3 (UniProt ID: Q08188).

10.) Use according to claim 9, wherein said medicament comprises Abituzumab in an amount of 500 mg +/- 10%, 750 mg +/- 10%, 1000 mg +/- 10% or 1500 mg +/- 10%.

11.) Use according to claim 9 and/or 10, wherein the level of said protein in said at least one body fluid of said subject is
a) classified as high, if the respective protein level in said at least one body fluid is at least 2 % higher, more preferably at least 5% higher, even more preferably at least 10% higher and especially at least 25% higher than the median threshold determined for the respective protein,
and/or
b) classified as low, if the respective protein level in said at least one

body fluid is at least 2 % lower, more preferably at least 5% lower, even more preferably at least 10% lower and especially at least 25% lower than said median threshold for the respective protein.

12.) Use according to one or more of the preceding claims, wherein said threshold or median threshold for the respective protein is determined from the body fluid of a plurality of subjects being part of a diseased subject population suffering from colorectal cancer (CRC) and/or metastases thereof.

13.) Use according to one or more of the preceding claims, wherein said Abituzumab is administered to said subject in an amount of 100 mg to 3000 mg per month.

14.) Use according to one or more of the preceding claims, wherein said Abituzumab is administered to said subject in an amount of 500 to 2000 mg every week, every second week or every fourth week.

15.) Use according to one or more of the preceding claims, wherein said Abituzumab is administered to said subject in an amount of 500 mg +/- 10% per week, 750 +/- 10% mg per week, thousand milligrams +/- 10% per week or 1500 mg +/- 10% per week, preferably every week, every second week or every fourth week.

16.) Use according to one or more of the preceding claims, wherein said Abituzumab is administered in combination with one or more chemotherapeutic agents, selected from the group consisting of cetuximab, Panitumumab, irinotecan, vinorelbine, capecitabine, leucovorine, oxaliplatin, cisplatin, carboplatin, 5-fluorouracil (5-FU), bevacizumab, aflibercept and regorafenib.

17.) Use according to one or more of the preceding claims, wherein said

Abituzumab is administered in combination or addtionally in combination with one or more chemotherapeutic agents,
a) selected from the group consisting of Leupropreline acetate, bicalutamide, nilutamide, triptoreline, goserelíne, flutamide, cyproterone, busereline and degarelix,
b) selected from the group consisting of Zoledronic acid,Pamidronic acid, Clodronate disodium, Alendronic acid and Ibandronic acid, and/or
c) selected from the group consisting of Abiraterone, Abiraterone acetate, Prednisone, Enzalutamide, Radium Ra 223 dichloride, Docetaxel, Sipuleucel-T, Cabazitaxel and Mitoxantrone.

18.) A method to identify tumours from colorectal cancer (CRC) and/or metastases thereof in a subject likely to benefit from treatment with Abituzumab, said method comprising
a) determining the levels of one or more proteins, selected from the group consisting of TPO (UniProt ID: P07202), CCL23.1 (UniProt ID: P55773), IGHD__IGK._IGL. (UniProt ID: P01880), STX1A (UniProt ID: Q16623), TK1 (UniProt ID: P04183), IL17A (UniProt ID: Q16552), PGF (UniProt ID: P49763) and/or TGM3 (UniProt ID: Q08188) in at least one body fluid, selected from whole blood, blood serum, blood plasma, exudate, lymph, mucus, peritoneal fluid, saliva, sputum, tears and urine, of said subject prior to administering said Abituzumab, wherein
a) a high level one or more proteins selected from the group consisting of:

TPO	(UniProt ID: P07202),
CCL23.1	(UniProt ID: P55773),
IGHD__IGK._IGL.	(UniProt ID: P01880),
TK1	(UniProt ID: P04183),
IL17A	(UniProt ID: Q16552),
STX1A	(UniProt ID: Q16623), and

PGF (UniProt ID: P49763),

and/or

b) a low level of the protein TGM3 (UniProt ID: Q08188);

identify a said tumour likely to benefit from the treatment with said Abituzumab.

19.) A method to identify tumours from colorectal cancer (CRC) and/or metastases thereof in a subject likely to benefit from treatment with Abituzumab, said method comprising determining the level of the protein STX1A (UniProt ID: Q16623) and/or a protein having at least 95% or at least 99% sequence homology to STX1A, in one or more body fluids, selected from whole blood, blood serum, blood plasma, exudate, lymph, mucus, peritoneal fluid, saliva, sputum, tears and urine, of said subject, wherein a high level thereof identifies a said tumour likely to benefit from the treatment with said Abituzumab.

20.) The method according to one or more of the preceding claims and especially according to claim 18 and/or19, wherein the level of protein in said one or more body fluids is

a) classified as high, if the respective protein level in said one or more body fluid is at least 2 % higher, more preferably at least 5% higher, even more preferably at least 10% higher and especially at least 25% higher than the median threshold determined for the respective protein,

and/or

b) classified as low, if the respective protein level in said one or more body fluids is at least 2 % lower, more preferably at least 5% lower, even more preferably at least 10% lower and especially at least 25% lower than said median threshold for the respective protein.

21.) The method according to one or more of the preceding claims, wherein the one or more body fluids comprise blood plasma or

consist of blood plasma.

22.) The method according to one or more of the preceding claims, wherein the at least one pan αv integrin inhibitor comprises Abituzumab or is Abituzumab.

23.) A method to identify a subject suffering from colorectal cancer (CRC) and/or metastases thereof responsive to treatment withAbituzumab, comprising

a) determining the levels of one or more proteins, selected from the group consisting of TPO (UniProt ID: P07202), CCL23.1 (UniProt ID: P55773), IGHD__IGK._IGL. (UniProt ID: P01880), STX1A (UniProt ID: Q16623), TK1 (UniProt ID: P04183), IL17A (UniProt ID: Q16552), PGF (UniProt ID: P49763) and/or TGM3 (UniProt ID: Q08188); and/or proteins having at least 99 % sequence homology to said one or more proteins, in at least one body fluid, selected from whole blood, blood serum, blood plasma, exudate, lymph, mucus, peritoneal fluid, saliva, sputum, tears and urine, of said subject, wherein

a) a high level one or more proteins selected from the group consisting of:

TPO	(UniProt ID: P07202),
CCL23.1	(UniProt ID: P55773),
IGHD__IGK._IGL.	(UniProt ID: P01880),
TK1	(UniProt ID: P04183),
IL17A	(UniProt ID: Q16552),
STX1A	(UniProt ID: Q16623), and
PGF	(UniProt ID: P49763), and/or

proteins having at least 99 % sequence homology to said one or more proteins;

and/or

b) a low level of the protein TGM3 (UniProt ID: Q08188) and/or a protein having at least 99 % sequence homology to said protein;

identify a subject responsive to treatment with Abituzumab.

24.) Use according to one or more of claims 1-17, wherein said subject is a human subject.

25.) The method according to one or more of claims 18-23, wherein said subject is a human subject.