drug chemotherapy (carboplatin and paclitaxel) by adding a third cytotoxic drug (topotecan, gemcitabine, or doxil) have failed (du Bois et al, 2006 and Pfisterer et al, 2006). The great challenge for the near future will be the selection of patients with advanced ovarian cancer who will most benefit from specific targeted agents in the frontline treatment or maintenance setting. Maintenance therapy after the achievement of a response from initial chemotherapy may represent an approach to provide clinical benefit by delaying disease progression side effects, delaying the need for toxic chemotherapy and prolonging overall survival.

[0004] Poly(ADP-ribose) polymerases (PARPs) are a family of enzymes involved in various activities in response to DNA damage. PARP-1 is a key DNA repair enzyme that mediates single strand break (SSB) repair through the base excision repair (BER) pathway. PARP inhibitors have been demonstrated to selectively kill tumor cells that harbor BRCA1 and BRCA2 mutations. In addition, pre-clinical and preliminary clinical data suggest that PARP inhibitors are selectively cytotoxic for tumors with homologous recombination repair deficiency caused by dysfunction of genes other than BRCA1 or BRCA2.

SUMMARY

[0005] The present disclosure is based in part on the discovery that PARP inhibitors can be used to treat cancers characterized by wild type or mutant BRCA1 and/or BRCA2 ("BRCA genes"), e.g. in the absence or presence of a mutation in the BRCA genes. Accordingly, embodiments of the disclosure relate to methods for treating cancer patients involving administration of an anti-PARP therapy to a patient independent of BRCA status or independent of the DNA repair status of the patient or cancer. In other embodiments, the disclosure relates to methods for treating cancer patients involving administration of an anti-PARP therapy to a patient, wherein the therapy is commenced prior to determining the BRCA status or HRD status of the patient or the cancer. In other embodiments, the disclosure relates to methods for treating cancer patients involving administration of an anti-PARP therapy to a patient, wherein the therapy is commenced in the absence of determining the BRCA status or DNA repair status of the patient or cancer. In other embodiments, the disclosure relates to methods for treating cancer patients involving administration of an anti-PARP therapy to a patient characterized by an absence of a mutation in BRCA1 and/or BRCA2. In other embodiments, the disclosure relates to methods for treating cancer patients involving administration of an anti-PARP therapy to a patient characterized by an absence of a mutation in

a gene involved in DNA repair. In other embodiments, the disclosure relates to methods for treating cancer patients involving administration of an anti-PARP therapy to a patient characterized by an absence of a mutation in a gene involved in homologous recombination. In embodiments, the disclosure relates to methods for treating cancer patients involving administration of an anti-PARP therapy to a patient having a cancer characterized by an absence of a mutation in BRCA1 or BRCA2. In embodiments, the disclosure relates to methods for treating cancer patients involving administration of an anti-PARP therapy to a patient having a cancer characterized by an absence of a mutation in a gene involved in homologous recombination.

[0005a] In one aspect, there is provided use of a therapy that inhibits poly [ADP-ribose] polymerase ("anti-PARP therapy") in the manufacture of a medicament for treating cancer in a patient, wherein the medicament is to be administered independent of DNA repair status, optionally independent of BRCA status, or wherein the administration of the medicament is to commence prior to determining the DNA repair status of the patient or BRCA status of the patient, or wherein the administration of the medicament is to commence in the absence of determining the DNA repair status of the patient or BRCA status of the patient.

[0005b] In another aspect, there is provided use of a therapy that inhibits poly [ADP-ribose] polymerase ("anti-PARP therapy") in the manufacture of a medicament for treating a cancer patient, wherein the patient is characterized by an absence of a mutation in BRCA1 and/or BRCA2, and wherein the cancer is a gynecological cancer selected from the group consisting of: ovarian cancer, fallopian tube cancer, and peritoneal cancer, or wherein the cancer is characterized by an absence of a mutation in BRCA1 or BRCA2, and wherein the cancer is a gynecological cancer selected from the group consisting of: ovarian cancer, fallopian tube cancer, and peritoneal cancer.

[0005c] In another aspect, there is provided use of niraparib in the manufacture of a medicament for treating a patient having a recurrent cancer selected from ovarian cancer, fallopian tube cancer, or peritoneal cancer, wherein the medicament is to be administered to the patient according to a regimen determined to achieve i) prolonged progression free survival as compared to control, ii) a reduced hazard ratio for disease progression or death as compared to control, iii) prolonged overall survival as compared to control, or iv) an overall response rate of at least 30%.

[0005d] In another aspect, there is provided use of niraparib in the manufacture of a medicament for treating a cancer patient, wherein the medicament is to be orally administered to the patient for a period of at least 18 months, wherein the patient is characterized by a BRCA deficiency, and wherein the cancer is a gynecological cancer selected from the group consisting of: ovarian cancer, fallopian tube cancer, and peritoneal cancer, or wherein the cancer is characterized by a BRCA deficiency, and wherein the cancer is a gynecological cancer selected from the group consisting of: ovarian cancer, fallopian tube cancer, and peritoneal cancer.

[0005e] In another aspect, there is provided use of niraparib in the manufacture of a medicament for treating recurrent cancer in a patient lacking homologous repair deficiency, wherein the recurrent cancer is selected from platinum-sensitive ovarian cancer, fallopian tube cancer, or primary peritoneal cancer, and wherein the medicament is to be administered to the patient according to a regimen determined to achieve prolonged progression free survival as compared to control.

[0006] In embodiments, the anti-PARP therapy is administered at a dose equivalent to about 100 mg, about 200 mg, or about 300 mg of niraparib or a salt or derivative thereof. In certain embodiments, the anti-PARP therapy is administered at a dose equivalent to about 100 mg of niraparib or a salt or derivative thereof. In certain embodiments, the anti-PARP therapy is administered at a dose equivalent to about 200 mg of niraparib or a salt or derivative thereof. In certain embodiments, the anti-PARP therapy is administered at a dose equivalent to about 300 mg of niraparib or a salt or derivative thereof.

[0007] In some embodiments, the anti-PARP therapy is administered in a regimen determined to achieve i) prolonged progression free survival as compared to control, ii) a reduced hazard ratio for disease progression or death as compared to control, iii) prolonged overall survival as compared to control, or iv) an overall response rate of at least 30%.

[0008] In embodiments, the anti-PARP therapy comprises administration of an agent that inhibits PARP-1 and/or PARP-2. In some embodiments, the agent is a small molecule, a nucleic acid, a polypeptide (e.g., an antibody), a carbohydrate, a lipid, a metal, or a toxin. In related embodiments, the agent is ABT-767, AZD 2461, BGB-290, BGP 15, CEP 9722, E7016, E7449, fluzoparib, INO1001, JPI 289, MP 124, niraparib, olaparib, ONO2231, rucaparib, SC 101914, talazoparib, veliparib, WW 46, or salts or derivatives thereof. In some related embodiments, the agent is niraparib, olaparib, rucaparib, talazoparib, veliparib, or salts or derivatives thereof. In certain embodiments, the agent is niraparib or a salt or derivative thereof. In certain embodiments, the agent is olaparib or a salt or derivative thereof. In certain embodiments, the agent is rucaparib or a salt or derivative thereof. In certain embodiments, the agent is talazoparib or a salt or derivative thereof. In certain embodiments, the agent is veliparib or a salt or derivative thereof.

by the absence of a mutation in BRCA1 and/or BRCA2. In some embodiments, anti-PARP therapy is useful in treating cancer patients exhibiting a positive HRD status, wherein the patients are further characterized by the absence of a germline mutation in BRCA1 and/or BRCA2. In some embodiments, a positive HRD status is determined by quantifying in a patient sample a number of Indicator Chromosomal Aberration ("CA") regions. In some embodiments, a tumor sample from a patient has a positive HRD status.

[0014] In some embodiments, anti-PARP therapy is useful in treating cancer patients exhibiting an absence of a germline mutation in BRCA1 and BRCA2. In some embodiments, anti-PARP therapy is useful in treating cancer patients with platinum sensitive tumors that also exhibit an absence of a germline mutation in BRCA1 and BRCA2.

[0015] In some embodiments, anti-PARP therapy is useful in treating cancer patients exhibiting an absence of HRD. In some embodiments, anti-PARP therapy is useful in treating platinum sensitive, recurrent ovarian cancer patients, wherein the patient does not have HRD or wherein the patient is characterized by an absence of HRD. In some embodiments, the absence of HRD is further characterized by lacking "chromosomal aberrations" or "CA". CA refers to a detectable variation in a sample's chromosomal DNA. In some embodiments, CA may fall into at least one of three overlapping categories: loss of heterozygosity (LOH), allelic imbalance (e.g., telomeric allelic imbalance (TAI)), or large scale transition (LST).

[0016] Accordingly, in some embodiments, the present disclosure provides a method of administering anti-PARP therapy to a patient having recurrent and/or platinum sensitive cancer selected from ovarian cancer, fallopian tube cancer, or primary peritoneal cancer comprising administering anti-PARP therapy to the patient according to a regimen determined to achieve prolonged progression free survival as compared to control.

[0017] Among other things, the present disclosure demonstrates remarkable clinical efficacy of niraparib, for example when administered to certain patient populations (*e.g.*, populations suffering from or susceptible to certain tumors; populations characterized by presence or level of a particular marker, such as for example HRD status and/or BRCA1/2 mutation, etc.; populations that may or may not have received or be receiving other therapy, etc.) and/or according to certain regimens. In some embodiments, the present disclosure provides a method of administering anti-PARP therapy to a patient having a recurrent and/or platinum sensitive cancer selected from ovarian cancer, fallopian tube cancer, or primary peritoneal cancer comprising administering

anti-PARP therapy to the patient according to a regimen determined to achieve a reduced hazard ratio for disease progression or death as compared to control.

[0018] In some embodiments, the present disclosure provides a method of administering anti-PARP therapy to a patient having a recurrent and/or platinum sensitive cancer selected from ovarian cancer, fallopian tube cancer, or primary peritoneal cancer comprising administering anti-PARP therapy to the patient according to a regimen determined to achieve prolonged overall survival as compared to control.

[0019] In some embodiments, the present disclosure provides a method of administering anti-PARP therapy to a patient having a recurrent and/or platinum sensitive cancer selected from ovarian cancer, fallopian tube cancer, or primary peritoneal cancer comprising administering anti-PARP therapy to the patient according to a regimen determined to achieve an overall response rate of at least 30%. In some embodiments an overall response rate is assessed according to RECIST v1.1 guidelines.

[0020] In some embodiments, the method of administering anti-PARP therapy is according to a regimen determined to achieve prolonged progression free survival 2 as compared to control.

[0021] In some embodiments, the method of administering anti-PARP therapy is according to a regimen determined to achieve extended chemotherapy free interval as compared to control.

[0022] In some embodiments, the method of administering anti-PARP therapy is according to a regimen determined to achieve extended time to first subsequent therapy as compared to control.

[0023] In some embodiments, the method of administering anti-PARP therapy is according to a regimen determined to achieve extended time to second subsequent therapy as compared to control.

[0024] In some embodiments, the recurrent and/or platinum sensitive cancer is ovarian cancer. In some embodiments, the ovarian cancer is platinum sensitive ovarian cancer at the commencement of anti-PARP therapy administration. In some embodiments, the ovarian cancer is recurrent, platinum sensitive ovarian cancer at the commencement of anti-PARP therapy administration. In some embodiments, the ovarian cancer responded to the most recent platinum-based chemotherapy regimen prior to commencement of anti-PARP therapy administration. In some embodiments, response to the most recent platinum-based chemotherapy regimen is a complete response. In some embodiments, response to the most

progression is less than about 0.4. In some embodiments, the hazard ratio for disease progression is less than about 0.3.

[0030] In some embodiments, the regimen is determined to achieve prolonged progression free survival of at least 9 months. In some embodiments, the prolonged progression free survival is at least 12 months. In some embodiments, the prolonged progression free survival is at least 15 months. In some embodiments, the prolonged progression free survival is at least 21 months.

[0031] In some embodiments, the patient has a sporadic mutation in BRCA1 or BRCA2.

[0032] In some embodiments, the patient is characterized by an absence of a germline mutation in BRCA1 or BRCA2. In some embodiments, the patient is characterized by an absence of HRD. In some embodiments, the patient is characterized by an absence of a germline mutation in BRCA1 or BRCA2 and by an absence of HRD.

[0033] In some embodiments, the patient is characterized by an absence of a sporadic mutation in BRCA1 or BRCA2. In some embodiments, the patient is characterized by an absence of HRD. In some embodiments, the patient is characterized by an absence of a sporadic mutation in BRCA1 or BRCA2 and by an absence of HRD. In some embodiments, the absence of HRD is further characterized by lacking "chromosomal aberrations" or "CA". CA refers to a detectable variation in a sample's chromosomal DNA. In some embodiments, CA may fall into at least one of three overlapping categories: loss of heterozygosity (LOH), allelic imbalance (e.g., telomeric allelic imbalance (TAI)), or large scale transition (LST).

[0034] In some embodiments, the patient is characterized by an absence of a mutation in BRCA1 or BRCA2 (e.g., lacking both germline BRCA1/2 and sporadic BRCA1/2 mutations).

[0035] In some embodiments, the patient has a tumor with a positive homologous recombination deficiency status.

[0036] In some embodiments, the present disclosure provides a method of administering anti-PARP therapy to a patient characterized by an absence of a germline BRCA1/2 mutation, wherein the patient has a tumor with a positive homologous recombination deficiency status.

[0037] In some embodiments, the present disclosure provides a method of administering anti-PARP therapy to a patient having a sporadic mutation in BRCA1 or BRCA2, wherein the patient has a tumor with a positive homologous recombination deficiency status.

[0038] In some embodiments, the present disclosure provides a method of administering anti-PARP therapy to a patient characterized by an absence of a mutation in BRCA1/2 (i.e., a

$BRCA^{wt}$ patient), wherein the patient has a tumor with a positive homologous recombination deficiency status.

[0039] In some embodiments, the patient has a tumor with a negative homologous recombination deficiency status. In some embodiments, the patient has a tumor further characterized by being negative for germline mutations in BRCA1 or BRCA2.

[0040] In some embodiments, the present disclosure provides a method of administering anti-PARP therapy to a patient characterized by a germline mutation in BRCA1 or BRCA2 ($gBRCA^{mut}$) according to a regimen determined to achieve a hazard ratio for disease progression of less than about 0.4. In some such embodiments, the hazard ratio for disease progression is less than about 0.3.

[0041] In some embodiments, the present disclosure provides a method of administering anti-PARP therapy to a patient characterized by a germline mutation in BRCA1 or BRCA2 ($gBRCA^{mut}$) according to a regimen determined to achieve prolonged progression free survival of at least 9 months. In some such embodiments, the prolonged progression free survival is at least 12 months or at least 21 months.

[0042] In some embodiments, the present disclosure provides a method of administering anti-PARP therapy to a patient characterized by an absence of a germline BRCA1/2 mutation, wherein the patient has a tumor with a positive homologous recombination deficiency status, according to a regimen determined to achieve a hazard ratio for disease progression of less than about 0.5. In some such embodiments, the hazard ratio for disease progression is less than about 0.4.

[0043] In some embodiments, the present disclosure provides a method of administering anti-PARP therapy to a patient characterized by an absence of a germline BRCA1/2 mutation, wherein the patient has a tumor with a positive homologous recombination deficiency status, according to a regimen determined to achieve prolonged progression free survival of at least 12 months.

[0044] In some embodiments, the present disclosure provides a method of administering anti-PARP therapy to a patient characterized by an absence of a germline BRCA1/2 mutation according to a regimen determined to achieve a hazard ratio for disease progression of less than about 0.5.

[0045] In some embodiments, the present disclosure provides a method of administering anti-PARP therapy to a patient characterized by an absence of a germline BRCA1/2 mutation according to a regimen determined to achieve prolonged progression free survival of at least 9 months or at least 12 months.

[0046] In some embodiments, the present disclosure provides a method of administering anti-PARP therapy to a patient having a sporadic mutation in BRCA1 or BRCA2, wherein the patient has a tumor with a positive homologous recombination deficiency status, according to a regimen determined to achieve a hazard ratio for disease progression of less than about 0.4. In some embodiments, the hazard ratio for disease progression is less than about 0.3.

[0047] In some embodiments, the present disclosure provides a method of administering anti-PARP therapy to a patient having a sporadic mutation in BRCA1 or BRCA2, wherein the patient has a tumor with a positive homologous recombination deficiency status, according to a regimen determined to achieve prolonged progression free survival of at least 20 months.

[0048] In some embodiments, the present disclosure provides a method of administering anti-PARP therapy to a patient characterized by an absence of a BRCA1/2 mutation (i.e., a $BRCA^{wt}$ patient), wherein the patient has a tumor with a positive homologous recombination deficiency status, according to a regimen determined to achieve a hazard ratio for disease progression of less than about 0.5. In some embodiments, the hazard ratio for disease progression is less than about 0.4.

[0049] In some embodiments, the present disclosure provides a method of administering anti-PARP therapy to a patient characterized by an absence of a BRCA1/2 mutation (i.e., a $BRCA^{wt}$ patient), wherein the patient has a tumor with a positive homologous recombination deficiency status, according to a regimen determined to achieve prolonged progression free survival of at least 9 months or at least 12 months.

[0050] In some embodiments, the present disclosure provides a method of administering anti-PARP therapy to a patient characterized by an absence of a germline BRCA1/2 mutation, wherein the patient has a tumor with a negative homologous recombination deficiency status.

[0051] In some embodiments, the patient has high grade serous ovarian cancer or high grade predominantly serous histology ovarian cancer.

[0052] In some embodiments, the methods involve continued treatment until disease progression or unacceptable toxicity.

CLAIMS

1. Use of a therapy that inhibits poly [ADP-ribose] polymerase ("anti-PARP therapy") in the manufacture of a medicament for treating cancer in a patient, wherein the medicament is to be administered independent of DNA repair status, optionally independent of BRCA status, or

wherein the administration of the medicament is to commence prior to determining the DNA repair status of the patient or BRCA status of the patient, or

wherein the administration of the medicament is to commence in the absence of determining the DNA repair status of the patient or BRCA status of the patient.

2. The use of claim 1, wherein the patient is characterized by an absence of a mutation in BRCA1 and/or BRCA2

3. Use of a therapy that inhibits poly [ADP-ribose] polymerase ("anti-PARP therapy") in the manufacture of a medicament for treating a cancer patient, wherein the patient is characterized by an absence of a mutation in BRCA1 and/or BRCA2, and wherein the cancer is a gynecological cancer selected from the group consisting of: ovarian cancer, fallopian tube cancer, and peritoneal cancer, or

wherein the cancer is characterized by an absence of a mutation in BRCA1 or BRCA2, and wherein the cancer is a gynecological cancer selected from the group consisting of: ovarian cancer, fallopian tube cancer, and peritoneal cancer.

4. The use of any one of claims 1-3, wherein the medicament is to be administered at a dose equivalent to about 100 mg, about 200 mg, or about 300 mg of niraparib or a salt or derivative thereof.

5. The use of any one of claims 1-4, wherein the medicament comprises an agent that inhibits PARP-1 and/or PARP-2.

6. The use of claim 5, wherein the agent is niraparib or a salt or derivative thereof.

7. The use of claim 1 or claim 2, wherein the cancer is a gynecological cancer, optionally wherein the gynecological cancer is selected from the group consisting of: ovarian cancer, fallopian tube cancer, peritoneal cancer, and breast cancer.

8. The use of any one of claims 1-7, wherein the cancer is a recurrent cancer.

9. The use of any one of claims 1-8, wherein the medicament prolongs progression free survival as compared to control, and/or

wherein the medicament reduces the hazard ratio for disease progression or death as compared to control, and/or

wherein the medicament prolongs overall survival as compared to control, and/or

wherein the medicament achieves an overall response rate of at least 30%.

10. Use of niraparib in the manufacture of a medicament for treating a patient having a recurrent cancer selected from ovarian cancer, fallopian tube cancer, or peritoneal cancer, wherein the medicament is to be administered to the patient according to a regimen determined to achieve i) prolonged progression free survival as compared to control, ii) a reduced hazard ratio for disease progression or death as compared to control, iii) prolonged overall survival as compared to control, or iv) an overall response rate of at least 30%.

11. The use of any one of claims 1-10, wherein the cancer is ovarian cancer (e.g. wherein the patient has high grade serous ovarian cancer or high grade predominantly serous histology ovarian cancer), optionally wherein the ovarian cancer is platinum sensitive at the commencement of administration of the medicament, or

wherein the cancer is fallopian tube cancer, optionally wherein the fallopian tube cancer is platinum sensitive at the commencement of administration of the medicament, or

wherein the cancer is peritoneal cancer, optionally wherein the peritoneal cancer is platinum sensitive at the commencement of administration of the medicament.

12. The use of any one of claims 1-11, wherein the patient is characterized by an absence of a mutation in BRCA1 and/or BRCA2, optionally wherein the patient is characterized by an

absence of a germline mutation in BRCA1 and/or BRCA2, or wherein the patient is characterized by an absence of a sporadic mutation in BRCA1 and/or BRCA2.

13. The use of any one of claims 1 and 4-11, wherein the patient has a tumor with a positive homologous recombination deficiency status.

14. The use of any one of claims 1-12, wherein the patient has a tumor with a negative homologous recombination deficiency status.

15. The use of any one of claims 10-14, wherein the regimen is determined to achieve a hazard ratio for disease progression of less than about 0.5, optionally wherein the hazard ratio for disease progression is less than about 0.3, and/or
wherein the regimen is determined to achieve prolonged progression free survival of at least 9 months, optionally wherein the prolonged progression free survival is at least 12 months, especially wherein the prolonged progression free survival is at least 21 months.

16. Use of niraparib in the manufacture of a medicament for treating a cancer patient, wherein

the medicament is to be orally administered to the patient for a period of at least 18 months,

wherein the patient is characterized by a BRCA deficiency, and wherein the cancer is a gynecological cancer selected from the group consisting of: ovarian cancer, fallopian tube cancer, and peritoneal cancer, or

wherein the cancer is characterized by a BRCA deficiency, and wherein the cancer is a gynecological cancer selected from the group consisting of: ovarian cancer, fallopian tube cancer, and peritoneal cancer.

17. The use of any one of claims 1-16, wherein the medicament is to be administered continuously until disease progression or unacceptable toxicity, optionally wherein the dose of the medicament is to be reduced in response to toxicity, especially wherein the dose of the anti-PARP therapy is to be reduced from about a dose equivalent to about 300 mg to a dose

equivalent to about 200 mg, or wherein the dose of niraparib is to be reduced from about 300 mg to about 200 mg.

18. The use of any one of claims 1-17, wherein the medicament is to be administered in a plurality of oral doses, optionally wherein the medicament is to be administered as once daily (QD) dosing, and/or

wherein the medicament is to be administered for at least one 28 day cycle of dosing, and/or

wherein the medicament is to be administered orally in one or more unit dosage forms, optionally wherein the one or more unit dosage forms are capsules.

19. The use of any of claims 1-3, 5-16, and 18, wherein the oral dose is an amount within a range equivalent to about 5 to about 400 mg of niraparib, optionally wherein the amount is equivalent to about 5, about 10, about 25, about 50, about 100, about 150, about 200, about 250, about 300, about 350, or about 400 mg of niraparib,

especially wherein the amount is equivalent to about 300 mg of niraparib, or wherein the amount is equivalent to about 200 mg of niraparib, or wherein each unit dosage form comprises an amount equivalent to about 100 mg, about 200 mg, or about 300 mg of niraparib.

20. The use of claim 18, wherein each QD dose is equivalent to about 100 mg, about 200 mg, or about 300 mg of niraparib, or

wherein each QD dose is to be administered as three unit dosage forms equivalent to about 100 mg of niraparib.

21. The use of any one of claims 9-20, wherein progression free survival is characterized by a complete response of one or more target tumors, or

wherein progression free survival is characterized by a partial response of one or more target tumors.

22. The use of any one of claims 1-21, wherein the medicament is to be administered to the patient in a fasted state, or

wherein the medicament is to be administered to the patient in a fed state.

23. The use of any one of claims 9-22, wherein the prolonged progression free survival is at least 9 months, optionally wherein the prolonged progression free survival is at least 12 months, at least 15 months, at least 18 months, at least 21 months, at least 24 months, at least 27 months, at least 30 months, at least 33 months, or at least 36 months.

24. The use of claim 10-23, wherein the hazard ratio for disease progression is about 0.3, or
wherein the hazard ratio for disease progression is about 0.45, or
wherein the hazard ratio for disease progression is about 0.5, or
wherein the hazard ratio for disease progression is less than about 0.5, optionally wherein the hazard ratio for disease progression is less than about 0.45, less than about 0.4, less than about 0.35, or less than about 0.3.

25. The use of any one of claims 1-24, wherein the medicament is to be administered as a maintenance therapy.

26. Use of niraparib in the manufacture of a medicament for treating recurrent cancer in a patient lacking homologous repair deficiency, wherein the recurrent cancer is selected from platinum-sensitive ovarian cancer, fallopian tube cancer, or primary peritoneal cancer, and wherein the medicament is to be administered to the patient according to a regimen determined to achieve prolonged progression free survival as compared to control.

27. The use of any one of claims 1-23, wherein the medicament has further been determined to achieve improved progression free survival 2 as compared to control.

28. The use of any one of claims 1-27, wherein the medicament has further been determined to achieve improved chemotherapy free interval as compared to control, and/or
wherein the medicament has further been determined to achieve improved time to first subsequent therapy as compared to control, and/or

wherein the medicament has further been determined to achieve improved time to second subsequent therapy as compared to control, and/or

wherein the medicament has been determined to not have a detrimental effect on Quality of Life as determined by FOSI and/or EQ-5D-5L, and/or

wherein the medicament has been determined to not impact the effectiveness of a subsequent treatment with a chemotherapeutic agent, optionally wherein the next chemotherapeutic agent is a platinum agent, especially wherein the platinum agent is selected from cisplatin, carboplatin, oxaliplatin, nedaplatin, triplatin tetranitrate, phenanthriplatin, picoplatin, or satraplatin.