# TOPARP

<u>Trial of Olaparib in Patients with Advanced Castration Resistant Prostate</u> Cancer.

## PATIENT INFORMATION SHEET

We are inviting you to take part in a clinical trial called TOPARP for patients who have been diagnosed with advanced prostate cancer. Part 1 of this information sheet tells you the purpose of the trial and what will happen to you if you take part. Part 2 gives you more detailed information about the conduct of the trial.

Before deciding to take part, please read it carefully and discuss it with other people if you wish. Please ask your doctor or nurse if there is anything you do not understand or if you want more information.

Thank you for taking the time to read this information.

#### PART 1: About the TOPARP trial

#### What is the purpose of this study?

The main aims of this clinical trial are:

- i. To find out whether a new drug called olaparib is effective in advanced prostate cancer.
- **ii.** To find out if a particular group of patients are more suitable for olaparib treatment than others.

#### Why am I being invited to take part?

You have been invited to participate in this research study because you have been diagnosed with advanced prostate cancer that is no longer responding to standard treatment. This study is trying to find out whether a new treatment called olaparib, is effective in prostate cancer.

#### Do I have to take part?

Your participation in this study is entirely voluntary. It is up to you to decide whether or not you wish to take part. Even if you refuse to participate in this clinical study, you will not be disadvantaged in any way and your future medical treatment will not be affected. If you do decide to take part you will be given this patient information sheet and consent form to read carefully and to sign. A copy of the signed patient information sheet and consent form will be provided to you for your records. If you do decide to take part, you are still free to withdraw from study treatment or from the study at any time.

Likewise, the doctor conducting the study (the "Study Doctor") may decide that your participation in the study is no longer in your best interest and you will be withdrawn from study treatment or from the study. When you stop taking part in the study, you must go through study withdrawal procedures that the Study Doctor considers necessary for your safety. Your participation in the study may also be stopped by the study sponsor, ethics committee or the regulatory authorities. Provided you are agreeable, your GP will be informed about your participation in this study. You will receive a card, which indicates that you are participating in a clinical study.

#### How long will I receive treatment for and how long will I remain on the study?

Your participation in the study will continue until your doctor feels that you are no longer gaining any benefit from treatment, or if you or your doctor feels that any side effects you may be experiencing are unacceptable. You may however decide to stop your participation in the trial at any time. This means that the length of time each patient is in the study will vary.

#### What is olaparib?

Olaparib belongs to a class of drugs called Poly (ADP-ribose) polymerase (PARP) inhibitors, which are currently in clinical development for different types of cancer.

Olaparib is a new drug which has been tested in the laboratory and the clinic and has fulfilled the necessary safety and quality testing that needs to be done before government regulatory agencies will allow the drug to be given to patients in a clinical trial. More than1645 (May 2011) patients with ovarian, breast, and a variety of other cancers have been treated with olaparib, either on its own or in combination with other anti-cancer drugs. The regulatory

agencies are continuing to assess the research and test results in detail from ongoing clinical trials in a range of different cancer types.

#### Why is olaparib being used in this trial?

The cells of the body contain DNA (deoxyribonucleic acid). DNA is the genetic material that provides the inherited information that makes us who we are. If DNA becomes damaged, chemicals inside the cell try to repair it. One chemical made by the body that can repair DNA is a protein called 'PARP-1'. Olaparib stops PARP-1 from working and is therefore known as a PARP-1 inhibitor. In other words, olaparib stops one step in the process of repair of DNA. In doing so, cancer cells that have damaged DNA are unable to repair this damage, and as a result die. In laboratory experiments, olaparib was also found to stop other mechanisms of DNA repair and may have an effect against a wide range of cancers.

Some cancer cells rely more heavily on PARP-1 to repair any damage to DNA, whereas in normal cells there are alternative ways whereby the damage can be repaired. If there is a lot of damage to DNA the cancer cell cannot survive, and because of this it is thought that olaparib could specifically target cancer cells, helping to slow the progress of your disease with less effect on normal tissue. To date, olaparib has been shown to be a useful anticancer treatment in some ovarian, breast and prostate cancers with inherited defects in DNA repair. Scientist believe that there is a larger group of prostate cancer patients who may also benefit from this treatment.

The first part of this study is now complete. During this first part, olaparib was given to patients with advanced prostate cancer. Patients had already received hormonal treatment and docetaxel chemotherapy. Up to 45 patients took part and scientists looked at the type of cancer each patient had and tried to work out if a certain group of the patients benefited from olaparib treatment, or if it had had the same effect in all patients. From this work and other research, scientists think that it is possible some patients are more suitable for olaparib treatment than others, and that this is dependent on the specific type of cancer cells found in different patients.

You are being invited to participate in the second part of the study. In this stage of the study, all patients will have tests done on some of the tumour tissue taken at the time of the initial diagnosis or at another time point prior to commencing the study. These tests will show what type of cancer you have. If you have the type of cancer which we think may be more suitable for olaparib treatment, then you will be invited to take part in the main part of the study.

#### What will my taking part in the trial involve?

#### **<u>Stage 1</u>** - finding out if you are suitable for olaparib treatment:

If you agree to take part in this study, you will be given this information sheet to read and requested to sign the consent form before any study related procedures are performed. You will first be asked to donate some of the tissue that was taken as a biopsy or at surgery, when you were first diagnosed with prostate cancer or at anytime prior to this study. This tissue will be used to test for cancers that are thought to be more suitable for treatment with olaparib. The tissue is usually stored in a laboratory at your hospital. If this is not available, your doctor will need to take a further tissue biopsy.

Your donated tissue sample will be sent to specialist laboratories at The Institute of Cancer Research to test for the type of prostate cancer you have. Specific tests that have already been studied in the first part of this study will be evaluated in your donated tissue sample. The outcome of the tests will take approximately two to three weeks. The results will then be sent to your doctor who will tell you if you will be eligible for this study. These results will not benefit you in any way and are done for research purposes to understand who is more suitable for olaparib treatment.

If you have not previously had a histological diagnosis or if there isn't any archival tumour tissue to perform these tests you will need to have another small biopsy of your tumour. Although taking these biopsies is routine for many cancers, we emphasise that in your case it will assist us in understanding the cause of this disease and to predict the likely benefit from this treatment. The biopsy may also be used to inform future management of your cancer through results of genetic testing. A sample (biopsy) of cancer tissue will be obtained and this is usually done as a day case. Your doctor will explain to you where he/she plans to take this sample from, the technique that will be used and potential side effects. These biopsies and blood sample analyses will help analyse the genetic make-up of your tumour samples to determine what is unusual in your tumour cells and may help us to understand why some prostate cancers respond to olaparib. In order to confirm that any unusual features found in your tumour cells are not normal, we will also look at the genetic make-up of some of your normal cell DNA. This means we will be collecting normal cells from you from a blood test and by scraping the inside of your mouth.

If your test results from your tumour tissue show that you are eligible, and you agree to continue in the study we will ask you to attend a screening visit where the study team will perform a number of tests (if these have not already been done as part of your normal care) to see if you are eligible to take part in this study.

#### Stage 2 - What further tests will be performed to see if I am suitable for the trial?

#### What will my taking part in the trial involve?

You will be asked to attend a screening visit where the research team will perform a number of tests to ensure that you meet the inclusion criteria for the study. These criteria are aimed at excluding patients in whom it may be unsafe to administer olaparib and to reduce the risk of side effects. These tests are performed within a 28 day period prior to your first dose of study treatment and this is called the "screening period". This screening period may include one or more actual visits to the hospital to have all necessary tests performed. Your visit to the hospital for all these tests may take several hours.

If you are eligible to take part in the study, you will be asked to return to the clinic to receive your study treatment. You will also be required to attend regular hospital appointments so that we can monitor how your cancer responds to the treatment and any side effects you may experience.

#### What happens if I am eligible for the study?

If your test results show that you are eligible and you agree to continue in the study we will ask you to attend the clinic for the first cycle of treatment. You will be required to take the olaparib tablets in the morning and in the evening, every day and to attend regular hospital appointments so that we can see how your cancer responds to the treatment and monitor any side effects you may experience.

#### If you are not eligible for the study:

If your screening test results show you would not be suitable for this study your doctor will discuss alternative treatment options with you.

#### What screening assessments will be performed?

The following will be performed or organised at your screening visit:

- General medical history, oncology history and physical examination including vital signs (heart rate, blood pressure, respirations, temperature, weight and height)
- List of medications you are taking (including prescription and over-the-counter vitamins and alternative medications)
- You will be asked about any disease-related symptoms you are experiencing.
- You will be asked to complete a questionnaire to assess pain and medication use
- An ECG (electrocardiogram) to assess your heart rhythm
- Assessment of your cancer by a CT (or MRI) scan of your chest, abdomen and pelvis and if needed other areas
- A bone scan to evaluate the spread of cancer to your bones.
- You will be asked to provide a urine sample for routine safety urine tests and for research (small urine sample and 24 hour collection)
- You will be asked to provide a blood sample approximately 93mls or 19 teaspoons in total), for measurement of your full blood count, kidney function, blood salts (biochemistry), PSA, cholesterol and other lipids, testosterone, random glucose and for research into your disease.
- You will be asked to provide a swab of the inside of your cheek (buccal swab) for research into your disease
- You will be asked to spit into a small container several times to collect saliva for research into your disease
- A fresh tumour biopsy will be performed (this is a mandatory).
- You may be asked if you wish to have an additional imaging test, a special MRI examination called diffusion weighted MRI (DW-MRI), to look at your tumour in better detail. Your doctors will go through with you what is involved and potential side effects. This is optional and patients who wish to have DW-MRI will be required to sign a separate consent form

#### What happens next?

If you are found to be suitable for the trial based on the screening assessments and wish to participate in the study, you will be required to return to the clinic for a Cycle 1, Day 1 visit. During this visit your doctor or nurse will:

- Conduct a physical examination including vital signs (heart rate, blood pressure, respirations, temperature, weight and height)
- Obtain information about any disease-related symptoms you are experiencing
- Obtain information about any changes to any medications you are taking
- You will be asked to complete a questionnaire to assess pain and medication use
- Obtain a blood sample (approximately 93mls or 19 teaspoons in total). Patients at the Royal Marsden NHS Foundation site will have an additional blood sample taken at Cycle 1 Day 1 making the total volume for these patients 103mls or approximately 22 teaspoons. This sample will be used for routine safety checks and for research into your disease
- Urine collection for research (small urine sample and 24 hour urine collection)

If the safety assessments are met, you will receive a one cycle (28 days) supply of study treatment at the Cycle 1, Day 1 visit. Your nurse or doctor will explain how to take the olaparib tablets each day and encourage you to keep a note of the tablets you take in the treatment diary provided. In Cycle 1 you will return to clinic on Day 8 and on Day 15 for additional assessments. Thereafter the scheduled clinic visits will be at the start of each cycle (about once every 28 days), for as long as you are on study treatment.

#### What happens after I have started olaparib treatment?

Once you have started taking your tablets you will have an assessment every week during the first 3 weeks of treatment.

After **1 Week** of treatment (Cycle 1 Day 8), your doctor or nurse will:

- Perform a physical examination as clinically indicted
- Measure your vital signs
- Discuss whether you have experienced any side effects
- Discuss whether you had any changes to any medications you are taking
- Check the your treatment diary and ensure that there are no issues with compliance
- Collect a blood sample (approximately 74mls or 15 teaspoons in total), this sample will be used for routine safety checks and for research into your disease
- Repeat the tumour biopsy (at any point in cycle1, on or after day 8)
- Urine collection for research into your disease (24 hour urine collection)

After **2 Weeks** of treatment (Cycle 1 Day 15) you will have a blood test (approximately 20mls or 4 teaspoons) for research into your disease. Your doctor or nurse will be available to discuss any side effects or concerns that you might have during the first 2 weeks of treatment.

After **4 Weeks** of treatment you will have completed your first 'cycle' of treatment. At this visit your doctor or nurse will:

- Perform a physical examination as clinically indicated
- Measure your weight and vital signs
- Take a blood samples: this sample will be used for assessment of safety and for biomarker research into your disease
- Obtain a urine sample for research into you disease (24 hour urine collection)
- Discuss whether you have experienced any side effects or had any changes to any medications you are taking
- Check the number of tablets you have taken so you should bring all your medication bottles to this visit
- Complete a questionnaire to assess pain and medication use

**Every 4 weeks thereafter** you will attend the clinic to repeat the assessments you had at the 4-week visit. Twenty-four hour urine and a further small urine sample for research in to your disease will be obtained at cycle 3, cycle 6 and at the end of treatment. All participants' ongoing will have approximately 74-78mls of blood (15-16 teaspoons) collected at cycle 2 and cycle 3. Up to 45 mls of blood (9 teaspoons) will be taken at cycles 4 and 5. Approximately 24mls of blood (5 teaspoons) will be obtained at cycle 6. Beyond cycle 6 patients will have 38 mls (approximately 8 teaspoons) of blood collected at cycle 7 and every 3<sup>rd</sup> cycle thereafter and between 12mls to 18 mls (approximately 3-4 teaspoons) for all other cycles. The blood samples obtained will be utilised for both routine safety checks and research into your disease.

At each of your 4 weekly study visits you will be assessed for any side effects and will be asked whether you have taken any new medications. If you suffer from a side effect caused

by the study drug, it may have to be stopped for a period of time. If the side effect improves you may be asked to restart the study drug possibly at a lower dose.

#### Are there additional hospital visits?

In addition to the above clinic visits, you will have a CT (or MRI) scan and bone scan after every 3<sup>rd</sup> cycle of treatment. These will be organised approximately one week before your next clinic appointment. The scan results will be used to assess your disease status and response to olaparib treatment.

#### Treatment Discontinuation

Your olaparib treatment will continue until your doctor feels that you are no longer getting any benefit from the tablets, or if you or your doctor feels that any side effects you may be experiencing are unacceptable. You may also decide to stop your participation in the trial at any time. On the day you are taken off study treatment you may have some of the research tests performed. These can either be done on the day you come off the study treatment or when you come back for your end of treatment (EOT) visit. At this visit your doctor or nurse will:

- Get you to complete a questionnaire to assess pain and medication use
- Collect a urine sample for research into your disease (this should be done at either study drug discontinuation or during the EOT visit)
- Collect blood (approximately 18 mls or 4 teaspoons in total), for measurement of your full blood count, kidney function, blood salts (biochemistry), PSA, cholesterol and other lipids, and for biomarker research. The research bloods (approximately 75mls or 15 teaspoons in total) should either be done when the patients stops drug or when they present for the EOT visit)
- A fresh tumour biopsy (optional) will be performed (at any point from stopping treatment to the EOT visit)

• You will be asked to return any unused medication or the empty bottle, if applicable The study doctor will discuss your next treatment options with you.

#### End-of-Treatment (EOT) Visit

The following will be performed and organised at your end of treatment visit (EOT) which will be thirty days after your last olaparib tablet:

- General medical history, oncology history and physical examination including vital signs (heart rate, blood pressure, respirations, temperature, weight and height)
- List of medications you are taking (including prescription and over-the-counter vitamins and herbal remedies, vitamins, and supplements)
- You will be asked about any disease-related symptoms you are experiencing
- You will be asked about any new or continuing side effects or illnesses you have had since your last visit
- You will be asked to complete a questionnaire to assess pain and medication use
- You will be asked to provide a urine sample for research into your disease (this should be done at either when you stop taking olaparib or when you come back for you final safety check during the EOT visit)
- Blood (approximately 18 mls or 4 teaspoons in total), for measurement of your full blood count, kidney function, blood salts (biochemistry), PSA, cholesterol and other lipids, testosterone and random glucose. The research bloods (75mls or 15 teaspoons in total) could either be done when the patients stop olaparib or when they present for the EOT visit.
- A fresh tumour biopsy (optional) will be performed (the biopsy can be performed at

any point from stopping treatment to the EOT visit)

• You will be asked to return any unused medication or the empty bottle, if you have not done so already.

#### **Description of Scans:**

#### Computed Tomography (CT)

CT scan uses special x-ray equipment to take pictures of the inside of your body to evaluate the extent of the cancer. It involves you lying down and keeping still on the scanner table for about 20 minutes. Usually, an intravenous agent is injected into your vein to obtain clearer pictures and you may also have to drink an oral contrast agent. You may experience discomfort related to lying still while the CT scan is being carried out.

#### Magnetic Resonance Imaging (MRI)

MRI scans use magnetic and radio waves to take pictures of the inside of your body. Although there is no x-ray exposure, the procedure takes longer (40 minutes to an hour) and involves keeping still while lying down on the scanner table. It can be noisy and you will be in a narrower tunnel compared to CT. Some patients may feel claustrophobic and may experience discomfort related to lying still in an enclosed space for a prolonged period of time while the MRI scan is being taken. A MRI will only be performed if your disease is better visualised on an MRI scan rather than a CT scan.

#### Bone scan

A bone scan is used to identify abnormal processes involving the bone such as tumour, infection, or fracture. A bone scan uses bone-seeking radioactive material that is injected into a vein so it travels through the bloodstream. The radioactive material collects in the bones in particular in areas where there is cancer. You then lie on a bed so a camera can take special pictures of your bones. The dose of radioactive material is safe, and virtually disappears from your body within 24 hours.

These standard imaging techniques will help your doctor to understand the extent and state of your cancer before you start treatment and to monitor your response to olaparib treatment.

#### Diffusion-weighted MRI (DW-MRI)

DW-MRI is a special form of an MRI and provides additional information regarding the tumour, which cannot be evaluated with other imaging techniques. The MRI studies will include a baseline scan and follow-up MRI scans during the treatment. Your doctors will explain what is involved. This part of the study is optional and if you wish to have these additional imaging you will be required to sign a separate Patient Information Sheet and Consent Form. We are keen to evaluate if DW-MRI will provide a better way of studying prostate cancer in the bone.

### How will the scan results and PSA be used to interpret my disease response and duration of treatment?

This study uses bone scans to assess your prostate cancer in the bones. Because arthritis and early bone disease flares from treatment can cause spots to appear on bone scans, the scan will be repeated several weeks later. Cancer spots will remain the same, but arthritis spots and bone flares may disappear. Prostate Specific Antigen (PSA) tests can be unreliable as an indicator of benefit to some new prostate cancer therapy such as PARP

inhibitors. Additionally, early rises in PSA can occur because the death of prostate cancer cells may release PSA into the blood. Such early rises in PSA can be mistaken for progression of your cancer. Please ask your study doctor if you have any question about this. Because both bone scan and PSA tests can only be correctly interpreted after a period of time, your doctor may need to perform a confirmatory bone scan at least 6 weeks after the bone scan performed at your treatment visit to confirm whether or not your cancer is truly progressing. This may require an unplanned visit to the clinic and unplanned PSA tests.

If you decide to participate, you will be asked to remain in the study until your cancer worsens (according to the CT, MRI, or bone scan results), you are unable to tolerate the study treatment, your doctors determines that you should begin another cancer treatment, or you decide to withdraw consent.

#### **Description of Special Research Tests**

Within this research study, special research test are being conducted to improve our understanding of the action of olaparib on cancer cells and to identify the type of prostate cancer that will respond best to this treatment. The samples that will be collected from you during the study will allow us to look at many different substances produced in the body and will help us understand which patients to treat with olaparib in the future. A brief description of the different research samples to be collected is provided below:

#### **Tumour Tissue**

As mentioned above you will first be asked to donate some of the tumour tissue that was obtained during a biopsy or at surgery, when you were first diagnosed with prostate cancer or at another time point prior to this study. This tumour material will be analysed to determine your suitability to participate in this study. If you are suitable for the study and decide to participate, you will be required to have between 2 or 3 tumour biopsies. The first biopsy will be performed during the screening period before you start treatment. The second biopsy will be taken at any point from day 8 to day 28 of the first cycle to study the effect of the olaparib on your cancer. You will be requested to have the final biopsy when you come of study treatment. The third biopsy is optional.

The biopsy procedure will involve taking a small sample of your tumour tissue using a special needle. The sample may be taken from the prostate itself or from another site such as lymph nodes, bone or liver where there is evidence of cancer. The location of the biopsy will vary between patients and will be decided based on what is suitable and feasible for the patient. In most cases the biopsy will be performed as a day case under radiological guidance (e.g. ultrasound or CT). You will receive local anaesthetic for this procedure to numb the area where the biopsy is being taken. You may experience some mild pain, bruising or soreness as a result of the biopsy. There is a very small risk of infection or of bleeding at the site of biopsy and an even smaller risk of damage to structures that lie close to the entry path of the biopsy needle. Painkillers will be prescribed for you to take home with you if required. In most cases these side effects can be easily managed with simple measures and will resolve. Your doctor will explain in detail the procedure and the potential side effects to you, depending on where the tumour is located.

These tumour biopsies are an important aspect of this study and will help us to further understand the effect of the study drug on your tumour, identify specific features in the cancer that can predict responses to treatment and study reasons why prostate cancers stop responding to olaparib treatment. The tumour tissue collected will help us in the future to predict which patients will benefit from olaparib treatment.

#### **Research Blood Tests**

Blood samples will be collected at mutiple time points during the study. Tumour cells and other substances found in blood may be useful to identify which type of prostate cancer will benefit from olaparib treatment. You may be asked not to eat anything from the night before your clinic appointment until after some of the blood tests.

#### **Research Urine Test**

Urine samples will be colleced at several time points during the study to examine the effect of olaparib on you cancer and on your bones. Two types of urine samples will be collected; 1) all urine produced in the 24 hour period preceeding your clinic visit ansd 2) the urine sample after you have completely emptied your bladder on the morning of your clinic visit

#### **Research Buccal Swab**

A swab of the cells of the inside of your cheek will be collected at the begininng of the study as the cells may be useful to identify which type of prostate cancer will benefit from olapatib treatment.

#### **Research Saliva Collection**

You will be asked to spit into a container several times to collect saliva as substances found in saliva may be useful to identify which type of prostate cancer will benefit from olaparib treatment.

#### Genetic analysis performed in research samples

This study involves looking in great detail at the DNA of your tumour (DNA sequencing) from biopsies and blood samples and of your normal cells as a comparison. These tests are being performed to determine which subtypes of prostate cancer are sensitive to olaparib treatment.

We cannot guarantee giving you the results of these genetic tests due to unpredictable variability in sample quality. Rarely, the results of these genomic analyses may provide us with information that could potentially be relevant for your treatment, or indicate that your family members may have a higher risk of getting cancer or another disease. If this arises, your doctors will refer you (and your family if indicated) to an appropriate doctor with genetic expertise. You have a choice about how much information you wish to receive about the results of these tests since they could potentially impact you and your family. You can indicate that you choose not to be made aware of these results in the consent form that you sign for this trial. Since you are participating in a cancer trial, however, we will always tell you about any results that may have a "direct impact" on the clinical management of your cancer. Please feel free to ask any questions and discuss your preferences with the study team members.

#### How and when should the tablets be taken?

Olaparib tablets should be taken with a glass of water and can be taken with a light meal. The tablets should be taken twice daily, four tablets in the morning and four in the evening with a gap of approximately 12 hours. Tablets must be swallowed whole with a glass of water.

On the days of your clinic visits the doctor may ask you to wait to take your morning tablets until after you have had your blood tests. This is because some samples need to be taken

before you take your tablets and some after you take your tablets. It is extremely important that you take the trial medicine exactly as your doctor tells you.

#### What happens if I miss a dose?

If you forget to take your tablets, and it is within 2 hours of the time you normally take them, then you should take them as soon as possible. If it is more than 2 hours after the time you normally take them, you should wait until the next time you would have taken the tablets. You should never take more than a single day's dose of tablets within a day.

You are encouraged to keep a record of taking the medication each day in the diary that will be provided. You should make a note if you miss a dose and tell your doctor or nurse at your next visit. Take any unused tablets or empty bottles with you each time you visit the clinic, so that your nurse can record how many tablets you have taken.

#### What happens if I vomit after taking the tablets?

If you vomit within 30 minutes of taking your tablets, and the tablets can actually be seen in your vomit, you may take another dose. Otherwise the dose should be missed and you should then take the next prescribed dose.

#### What are the side effects of olaparib treatment?

Olaparib has been given to more than 2103 (October 2013) patients so far in clinical trials. We know that the following side effects have been seen in previous studies. No one can predict which of these you may experience and you may also experience side effects, which are not listed here.

Most side effects are mild to moderate and will disappear soon after starting treatment. It is, however, important to report them to your hospital team at each visit so that treatment for any unwanted side effects can be discussed. Some of the side effects that have been observed in clinical trials are highlighted below:

- **Anaemia:** the number of red cells in your blood may decrease, which can lead to shortness of breath, fatigue, and in some instances may require blood transfusions (when you are given new blood or blood-based products from a donor).
- **Neutropenia:** the number of a certain type of white blood cell may decrease, which can lead to a reduced ability to fight certain infections. Although this does not mean you will get an infection, it is important that you contact your Study Doctor immediately if you become unwell or have a fever, even if this is after-hours or at the weekend. If you have a fever or infection, you may be admitted to hospital for treatment with intravenous (i.e., given directly into a vein) antibiotics.
- **Thrombocytopenia:** the number of platelets (another type of cell) in your blood may decrease which could lead to easy bruising, prolonged bleeding, or rarely, spontaneous bleeding. This will be monitored by the laboratory safety tests that will be done in this study. However, if you do experience any symptoms, you should contact your Study Doctor as soon as you can. Rarely, if the platelet numbers are too low, a platelet transfusion may be required.
- **Nausea or vomiting** (feeling sick or actually being sick). If required you will be offered medication to control these symptoms.
- **Fatigue** (feeling tired, weary, exhausted).
- **Diarrhoea:** if required you will be offered medication to control these symptoms
- Lung inflammation (pneumonitis). Although this is rare you should inform your Study Doctor if you experience any symptoms of shortness of breath.

• Other side effects, for example mouth ulcers, decrease in kidney function, abdominal pain or discomfort, decreased appetite, seizure, decrease of electrolytes (salts) in your body, injury of blood vessels supplying the brain and causing a stroke, bone marrow disorder, have been observed in previous clinical trials, but it is not yet known if these were related to olaparib, or if they were unrelated events possibly due to the patients' cancer disease or another cause (e.g. previous chemotherapy). Assessing the full range of side effects of olaparib is an important part of this clinical trial.

#### What else will happen to me during the trial?

You will be able to continue day to day activities as normal during the trial. You will need to attend the clinic visits and other tests such as the CT and bone scans as described. Some people may not feel like driving after having tests such as a CT scan, it is recommended that someone comes with you when you attend for your hospital appointments.

You will be required to take the olaparib tablets every day, and we ask that you bring back all your medication bottles (including empty ones) to each of your clinic visits. If you miss a dose for any reason, you will need to keep a note of this and tell your doctor at your next visit. You will also need to tell your doctor about any changes to any other medications you are taking, and any side effects you experience while in the study.

You will need to store the tablets at room temperature and take the medication as instructed by your study team.

You will be given a card, which will provide details about the TOPARP trial and that you are taking olaparib. Please carry it with you at all times while you are taking part in this trial.

#### What precautions should I take if I choose to participate in this trial?

You are encouraged to report anything that is troubling you to your doctor.

We don't know the effects olaparib might have on the development of sperm and as such you must use adequate contraception during the study and for 3 months following your last dose of treatment. You should abstain from sperm donation for this time. If your partner becomes pregnant whilst you are taking part in the study you must contact your study doctor immediately.

#### Blood donation:

You are not allowed to donate blood while in the study or for 3 months following your last dose of study medication.

#### Other medicines:

Your doctor will closely monitor all the medications you are taking and you should tell your doctor of any changes to your medications while you are participating in the study including any over the counter or herbal medications you are taking.

#### How many other patients will be taking part in the TOPARP trial?

Up to 45 patients have taken part in part 1 of this study. Another 44 patients with advanced prostate cancer will be invited to take part in this part of the study from hospitals across the UK.

#### What are the benefits of taking part?

There is no promise that the study treatment you receive in this study will help you. It is hoped that potential benefits may include improving disease related symptoms and decreasing the size of your tumour. Participation in this trial is based on the expectation that the benefit associated with participation, even considering the risk of harmful reactions to the study medications, may be better than the alternative treatments. The information gained from this study may help in the treatment of future patients with cancer similar to yours.

Please discuss with your study doctor which alternative treatments are available for you.

#### What are the possible disadvantages of taking part?

Olaparib is an unlicensed drug, which means that it is still experimental and not all of its side effects are yet known. You may therefore experience some side effects, which are not listed above. There is no way of predicting if you will experience any, or how severe they will be. You must contact your study doctor if you experience any side effects even or if you are not sure that any problems you may have are related to the taking the tablets.

Taking part in this research study will involve several additional visits to the clinic. Being involved in any research study requires a degree of commitment, such as regular clinic visits and additional tests.

During this study, blood samples will be drawn to perform a variety of tests. The number of blood tests required in this study is more than if you were receiving treatment outside of a research study. Risks linked with blood sampling include pain from the needle being inserted, light headedness, possible fainting and (rarely) infection.

As part of the study you will be required to have CT scans and bone scans at screening, cycles 3, 4, 7 10 and every third cycle of treatment thereafter to monitor your cancer. By taking part in this study you will have twice as many CT and bone scans as you would if you did not take part. Having a CT scan will expose you to an amount of radiation comparable to 8 years' worth of normal background radiation in the UK. Having a bone scan will expose you to an amount of radiation. As part of this study you will also have 2 or 3 tumour biopsies which may take place under CT guidance. You would not have this type of CT scan if you did not take part in this study. Having a CT-guided biopsy will expose you to an amount of radiation comparable to 3 years' worth of normal background radiation comparable in the UK. Radiation can cause cell damage which may in the long term be harmful. However in view of your clinical condition, the radiation exposure is not significant and the risk of long term harm is considered to be negligible. In rare cases, you may have an allergic reaction to the contrast material "dye" given for CT scans. If you have had allergic reactions to X-ray dyes in the past, you should let your study doctor know.

MRI scans involve the use of strong magnets to image the body. When having an MRI scan you will be made as comfortable as possible before you start. You will be asked to remain still during the entire procedure. People who are afraid of being in enclosed spaces may feel anxious or nervous while in the scanner. Also, some people find it hard or painful to hold one position for more than a few minutes.

The electrocardiogram for the electrical tracing of your heartbeat involves placing small electrodes on the surface of your skin. Rarely, a slight redness or inflammation may appear due to the adhesives used to attach the electrodes to the skin.

Occasionally during the course of a study you may be found to have a previously undiagnosed medical condition. In this situation your study doctor will take the necessary steps to ensure you receive appropriate treatment.

Possible risks, discomforts or inconveniences associated with the collection of biopsies will depend upon the type of biopsy performed.

The local anaesthetic you receive before the biopsy procedures will be injected using a syringe and a small needle and may cause a brief stinging sensation. If you have any known allergies relating to anaesthetics these should be discussed with your study doctor. The taking of a biopsy may cause some pain, redness, swelling, slight bruising at the biopsy site and rarely fainting. There is a small risk of bleeding, infection, wound healing problems following your biopsy. You will have the opportunity to discuss all the possible side effects and the type of biopsy your tumour will require with your study doctor.

If you hold private medical insurance, you should check with the company issuing the insurance before agreeing to take part in this clinical study, as you will need to ensure that your taking part in the study will not affect the insurance.

#### Will my GP be involved?

Yes, your GP will be notified about your participation in this study. By signing the consent form you are agreeing to this.

#### What happens when the research study stops?

You will be asked to take the study drug until your doctor thinks you are no longer gaining any benefit from treatment or you are going to start on a new treatment for your cancer.

The study could also be stopped by the study sponsor, ethics committee or the regulatory authorities if they thought that the treatment was not providing a benefit or was not safe in some way. If your study treatment is stopped, by either the sponsor, your study doctor or at your own request, your study doctor will arrange your continuing care.

#### What alternative treatments are there?

If you do not want to take part in the study there may be other treatment options available. These may include other experimental anti-cancer drugs, chemotherapy and radiation therapy. There is also supportive care without anti-cancer treatment. Study staff will discuss these alternative treatments and the risks and benefits associated with these treatments with you before you decide to take part in this study.

Below is a table summarising the study visits and assessments:								
Treatment Cycle	Screening	Cycle 1	Cycle 1	Cycle 1	Cycle 2, 3, 5, 6, 8, 9, 11, 12	Cycle 4, 7,10,etc	Cycle 4, 7 ,10, etc	End of Treatment
Activities	Day -28 to Day -1	Day 1	Day 8	Day 15	Day 1	Up to 8 days Before the cycle		30 days after last olaparib tablet
Informed Consent	x							
Medical History	x				X		x	x
Tumour Biopsy	x		X (C1D8± 21 days)					X (optional)
Physical Examination	x	x		x	X		x	x
Complete Pain Questionnaire	x	x			x		x	х
12 Lead ECG	X							
Routine Safety Bloods	x	х	x		x		X	х
Testosterone Level	x							
PSA Levels	x	x					X (C4,7, 10 & every subsequent 3 <sup>rd</sup> cycle)	x
Bone Scan	x					X(C4,7& every subsequent 3rd cycle)		
DW-MRI (optional)	x					X(C4,7& every subsequent 3rd cycle)		
CT Scan	x					X(C4,7& every subsequent 3rd cycle)		
Blood, Urine, Buccal and Saliva Research Tests								
Research Blood Test	x	x	x	x	X (C2, 3,5,6 )		X(4,7 and every subsequent 3 <sup>rd</sup> cycle)	x
Research Urine Test	x	x			X(C3,6)			x
Buccal (cheek) swab	x							
Saliva Collection	x							
	(C)							

Below is a table summarising the study visits and assessments:

Abbreviations: Cycle (C)

#### This completes Part 1 of the Information Sheet.

#### Please read the additional information in Part 2 before making your decision.

#### PART 2 – GENRAL INFORMATION ABOUT HOW TOPARP IS CONDUCTED

#### What will happen to any samples I give?

In the TOPARP study we ask that all patients donate some of their initial tumour tissue, which was taken at the time of diagnosis or at another time point prior to starting the study. Additional sample collection during the study will include fresh tumour biopsies and blood and urine samples for research into your tumour. Details of the samples requested are described in Part 1 of this information sheet. Please tick the appropriate part of the consent form if you agree to the collection of these samples.

Any samples you donate will be used to help us understand why people develop prostate cancer and how they react to treatment with olaparib. If we can show why some patients react to their treatment differently, this knowledge could help many patients in the future.

The group of medical professionals overseeing the TOPARP trial will also oversee the sample collection. Your tumour tissue or blood samples may be labelled with your initials and hospital pathology number when they are sent to the research lab. When they arrive at the laboratory they will be coded and personal details removed. The coding will maintain your confidentiality whilst allowing biological details to be compared to treatment findings.

The tumour samples will be stored securely at The Institute of Cancer Research Laboratory. Any excess blood samples will be destroyed when the tests are completed. Much of the blood and tumour sample analyses previously described will be conducted in The Institute of Cancer Research Laboratory, but some of the samples may also be sent to other research institutes or companies approved by The Institute of Cancer Research for the respective analyses. In all cases, your confidentially will be maintained.

Surplus archival tumour and biopsy material will be stored at The Institute of Cancer Research Laboratory indefinitely and in some cases returned to the local laboratories after the study is complete, depending on local practice. You are asked to give permission for possible future research using these samples. The confidential nature of the tissue and associated data will be fully protected, and any other research using your tissue will first be reviewed and approved by an ethics committee.

#### How will confidentiality be maintained?

Your medical notes will need to be seen by authorised members of the research team at your hospital, so that they can collect information needed for the TOPARP trial, and also to check that it is correct. Your name, date of birth, post code and NHS number (CHI number in Scotland) will be passed to the Institute of Cancer Research Clinical Trials and Statistics Unit (ICR-CTSU) where the study is being coordinated when you join the trial so that they can find you again if you lose touch with your hospital in the future.

Information from your medical records about your treatment and disease will be sent to the Trials Office on specially designed forms. You will be given a unique trial registration number when you join the trial which will be used together with your initials and date of birth, on all the forms / information that are sent to the Trials Office. All information about you will be treated as strictly confidential and nothing that might identify you will be revealed to any third party.

We will be contacting your hospital from time to time to find out how you are getting on. Ideally we would like to do this for life, but patients sometimes change address and/or GP or lose touch with their hospital. If this happens we would like to use national records, which are kept on everyone's health status to find out how you are. One of these is held at the General Register Office (GRO). We will need to give them enough information to identify you. This is usually your name, date of birth postcode and NHS number (or Community Health Index (CHI) and/or hospital number in Scotland). Any details we receive from any source are confidential and will only be used for the purposes of the trial. Please initial the consent form to show that we have your permission to do this.

Representatives from the ICR-CTSU, the NHS Trust relevant to your taking part in research, the MHRA and ethics committee approving the trial and AstraZeneca (the pharmaceutical company that manufacture and supply olaparib) may need to see your hospital or clinic records to the extent permitted by applicable laws and regulations to make sure the information received is correct. All information will be kept confidential.

By signing the attached consent form you agree to access to your original medical records as outlined above.

#### Data Sharing

We would like to be able to combine the medical information we collect about patients in this trial with information collected as part of other studies, if in the future it is a useful way of advancing our knowledge about prostate cancer and its treatment. If this happens, the completely anonymised information about you may be passed to other researchers, but they would not be able to identify you from the information provided.

#### What happens if I don't want to carry on with the trial?

Your participation is voluntary. If you agree to take part and then change your mind later on, you can withdraw from the study at any point without giving a reason. If you withdraw from the trial, it will not affect the standard of care you receive. Your doctor will discuss alternative treatment with you and offer you the most suitable treatment available.

If you should withdraw fully from the study, study data collected before your withdrawal may still be processed along with other data collected as part of the clinical study. However no new data will be added to the study database and you may request that all retained identifiable samples are destroyed to prevent future analysis.

You will be asked to return to the clinic to undergo the tests and evaluations scheduled for the safety follow-up visit. You retain the right to decide whether data from the visit can be used.

If you were to withdraw from treatment, we would like your permission for your hospital to send information on your progress to the Trials Office. This is so that the overall quality of the trial is not impaired.

#### What if there is a problem?

If you have any concern about any aspects of the study you should ask to speak with your study doctor or research nurse who will do their best to answer your questions (contact details in part 1). If you remain unhappy and wish to complain about any aspect of the way you have been approached or treated during the course of this trial, the normal National Health Service complaints mechanisms are available to you. We recommend that you obtain a copy of your hospitals complaints procedure or policy if you intend to make a complaint. Concerns should be raised by speaking to a member of staff at your hospital or by talking to

the local Patient Advice and Liaison Service (PALS), which has been established in every NHS Trust and Primary Care Trust (PCT).

Your progress will be watched closely and you will be offered whatever help is available to cope with any side effects observed. Occasionally some patients need a short stay in hospital for side effects to be treated, and on rare occasions these can be serious. If this were to happen, full details of what has happened will be reviewed carefully by the consultant oncologist who has overall responsibility for the TOPARP trial. These details may also be sent to the MHRA who oversee the safety of people who take part in any research involving drugs. We may also need to send this information to the ethics committee who approved the trial, all the doctors who are responsible for patients in this study, and to AstraZeneca. We are required to provide this information to these parties by law, but you will not be identifiable in any of the information that is sent, and all information will be kept confidential.

Healthcare professionals working on clinical trials are covered by NHS Indemnity and if you are harmed by taking part in this trial you may have grounds for a legal action, but you may have to pay for it.

#### What if I have private medical insurance?

If you have private medical insurance please check with the company that your medical insurance policy will not be affected before agreeing to take part in this trial.

#### What will happen to the results of the clinical trial?

Independent experts will review the progress of the research, and the results will be published in a scientific journal as soon as there is enough information to be sure the results are reliable. The results will help to decide how to treat advanced prostate cancer in the future. The results from this trial may also contribute to reviews of worldwide evidence about this type of cancer and its treatment. You will not be identified in any report or publication relating to this research.

#### What if relevant information becomes available?

Sometimes we get new information about the treatment being studied, which may affect your willingness to continue in the study. If this happens, your study doctor will tell you in a timely manner and discuss whether you should continue in the study. If you decide to continue in the study, you may be asked to sign an updated informed consent form. If you decide to discontinue, your study doctor will make arrangements for your future care.

If the study is stopped for any other reason, we will tell you and arrange your continuing care.

#### Who is organising and funding the research?

The research trial is being carried out by a network of doctors across the UK. The trial is coordinated by The Institute of Cancer Research. The research is approved and funded by Cancer Research UK. AstraZeneca, the company who manufacture olaparib, are supplying the drug free of charge and providing additional funding to support the management of the trial.

Your doctor will not receive any payments for including you in this research trial.

#### Who has reviewed the trial?

The trial has been approved by Cancer Research UK's Clinical Trials Awards and Advisory Committee, The National Institute for Health Research, one of the UK National Research Ethics Committees and the UK Regulatory Agency (Medicines and Healthcare Regulatory Agency, MHRA).

#### What do I have to do now?

You will have some time to think about the trial and make your decision. You may wish to discuss it with your GP, family or friends. Please keep this information sheet and a copy of the signed consent form. If, at any time, you have any questions about the trial you should contact your consultant.

#### Who else can I contact for further information?

You have the right to ask questions about this study at any time and are encouraged to do so. You can call the study doctor or hospital if you feel that you are developing any unwanted side effect, or if you believe you have been injured as a result of your receiving study treatment, or if you have any questions about this study or your participation in this study.

Macmillan Cancer Support is a registered charity providing information, emotional support and publications about all aspects of cancer for cancer patients and their families. They have published useful information about (1) prostate cancer (2) cancer treatments and (3) clinical trials in general. You can contact one of their specialist cancer nurses on their freephone number, 0808 808 00 00 or look on their internet website; (http://www.macmillan.org.uk/Home.aspx).

You can learn more about clinical trials on the Cancer Research UK's patient website (www.cancerhelp.org.uk)

#### Thank you for interest in our research.

#### Contact Details

If, at any time, you have any questions about the trial you should contact your hospital team:

Your specialist is:

Contact phone numbers: