

Summary of Clinical Trial Results

A study of ipatasertib plus abiraterone compared with abiraterone alone in men with prostate cancer that has spread to other parts of the body

See the end of the summary for the full title of the study.

About this summary

This is a summary of the results of a clinical trial (called a 'study' in this document) and was written for:

- members of the public and
- people who took part in the study.

This summary is based on information known at the time it was written (December 2024).

The study started in June 2017. This summary includes the results that were collected by June 2024. At the time of writing this summary, this study has been completed.

You should not make decisions based on this one summary. Always speak to your doctor before making any decisions about your treatment.

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Thank you to the people who took part in this study

The people who took part have helped researchers to answer important questions about prostate cancer and about treatment with ipatasertib taken with abiraterone.

Key information about this study

- This study was done to see if adding a new medicine to already existing medicines would help keep cancer from getting worse in men with prostate cancer that has spread to other parts of the body. It also was done to see if the new medicine could help these patients live longer.
- In this study, men were given either the new medicine being studied (called ‘ipatasertib’), a drug that blocks the activity of a protein that helps control how cells grow or a placebo (a dummy drug that looks the same as the study medicine but doesn’t contain any real medicine and doesn’t have any medicine-related effect on the body). It was determined completely by chance which treatment each person was given.
- All of the men were given the existing medications abiraterone, a drug that reduces production of male hormones in the body, and prednisone, a drug that helps control some side effects related to abiraterone.
- This study included 1101 men in 26 countries or regions around the world.
- The first analysis for this study—which included data collected until March 2020—has been completed and is described in an earlier summary that can be found at <https://forpatients.roche.com>.
- The final overall survival analysis for this study—which includes data collected until December 2022—has shown that among men taking ipatasertib plus abiraterone and prednisone, half of them had died after about 39 months (exact value: 39.4 months) after being randomised (randomised means being assigned to a medicine by chance), compared with those taking placebo plus abiraterone and prednisone, where half had died after about 37 months (exact value: 36.5 months).
- When looking only at men with tumours that had lost PTEN protein function (a protein that helps control how cells grow), among those taking ipatasertib plus abiraterone and prednisone, half of men had died after about 37 months (exact value: 36.8 months) after being randomised, compared with about 36 months (exact value: 35.8 months) for those taking placebo plus abiraterone and prednisone.
- Using data collected up to June 2024, 46% of men (252 out of 551) taking ipatasertib plus abiraterone had serious side effects (those that are life-threatening, require hospitalisation, or cause lasting problems), compared with 29% of men (158 out of 546) taking the placebo plus abiraterone.
- At the time of writing this summary (December 2024), the study has completed.

1. General information about this study

Why was this study done?

Men with prostate cancer that has spread to other parts of the body are often treated with drugs that lower the amount of male hormones in the body. Male hormones may help the tumours grow, so taking drugs that reduce the amount of male hormones in the body can stop the tumours from getting bigger or even make them shrink. However, some tumours start growing again, even with hormone-reducing drugs. Doctors may then use combinations of drugs that act in different ways to help prevent tumours from growing for a longer period of time.

One of these types of tumours has a protein called PTEN that stops working or, in other words, loses the ability to function (known as 'PTEN loss'). That typically happens in almost half of prostate cancer tumours that have spread to other parts of the body. PTEN is a protein that helps control whether cells grow or maintain themselves. Tumours that have PTEN loss tend to grow faster and make it so that hormone-reducing drugs don't work as well.

In this study, researchers wanted to see if combining a male hormone-reducing drug with a new drug that acts differently (ipatasertib) would stop cancer from growing for longer or keep people alive for longer than the hormone-reducing drug (abiraterone) by itself. They wanted to look at this for all men in the study and then specifically in the men with tumours that had PTEN loss. They also wanted to see whether the combination would be safe for people to take.

The first analysis for this study—which included data collected until March 2020—showed that among men taking ipatasertib plus abiraterone and prednisone, half of them had their cancer get worse after about 19 months (exact value: 19.2 months) after being randomised (being assigned to a medicine by chance), compared with about 17 months (exact value: 16.6 months) for men taking placebo plus abiraterone and prednisone.

When looking only at men with tumours that had PTEN loss, among those taking ipatasertib plus abiraterone and prednisone, half of them had their cancer get worse after about 19 months (exact value: 18.5 months) after being randomised, compared with about 17 months (exact value: 16.5 months) for those taking placebo plus abiraterone and prednisone.

The first analysis for this study was published in a scientific paper ([https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(21\)00580-8/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(21)00580-8/fulltext)) and was described in an earlier summary document that can be found at <https://forpatients.roche.com/>.

What are the study medicines?

This study looked at a new medicine called 'ipatasertib' taken together with 2 other study medications called 'abiraterone' (known by its brand name Zytiga®) and 'prednisone' (known by multiple brand names, including Deltasone®, Meticorten® and Orasone®).

'Abiraterone' and 'prednisone' are the existing medicines given to men with prostate cancer that has spread to other parts of the body.

- You say this as ‘ah – ber – at – er – own’. Abiraterone reduces the production of male hormones in the body. These hormones can help the cancer grow, so reducing the amount of hormones in the body can shrink the tumours or make them grow more slowly.
- You say this as ‘pred – ni – zone’. Prednisone is a drug given with abiraterone to help prevent some side effects, such as high blood pressure or fluid build-up.

The new medicine being studied is ‘ipatasertib’.

- You say this as ‘eye – pat – uh – sir – tib’.
- Ipatasertib blocks a protein called ‘Akt’ that helps to control how cells grow. In cancer cells, Akt can become too active and uncontrolled, causing the tumour to grow. Akt and PTEN are in the same pathway, meaning that they work together to control cell growth. Problems that cause Akt or PTEN to not function normally can lead to tumour formation.

In this study, ipatasertib plus abiraterone/prednisone (**Group A**) was compared to ‘placebo’ plus abiraterone/prednisone (**Group B**).

- You say this as ‘plah – see – bo’.
- The placebo looked the same as ipatasertib but did not contain any real medicine. This means that it did not have any medicine-related effects on the body.
- The researchers gave all the men abiraterone and prednisone, but half of the men got the new medicine (ipatasertib) and the other half did not (placebo) so they could see which benefits or side effects are caused by the new medicine. Side effects are medical problems (such as feeling dizzy) that happen during the study.

What did researchers want to find out?

- Researchers wanted to see whether treating men who have prostate cancer that has spread with a combination of medicines (ipatasertib plus abiraterone/prednisone) would extend the amount of time before their cancer got worse or they died, compared with abiraterone/prednisone by itself.
 - See Section 4: “What were the results of the study?”.
- They also wanted to find out how safe the combination of medicines is by seeing what the side effects were and counting how many men had side effects (plus seeing how severe these side effects were) when taking both medicines together during this study.
 - See Section 5: “What were the side effects?”.

The main questions that researchers wanted to answer were, in Group A and Group B:

1. How much time was there between the patient being randomised into the study and their cancer getting worse or the person dying (in all men in the study)?
2. How much time was there between the patient being randomised into the study and their cancer getting worse or the person dying (in just the men with tumours that have PTEN loss)?
3. How long did men live (all men in the study)?
4. How long did men live (in just the men with tumours that have PTEN loss)?

Other questions that researchers wanted to answer included:

5. How safe is the combination of ipatasertib plus abiraterone/prednisone. What kind of side effects occurred? How many men in **Group A** and **Group B** had side effects and how severe or serious were they?

What kind of study was this?

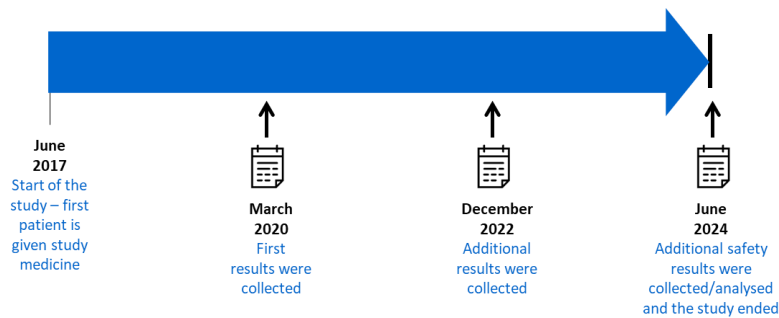
This study was a '**Phase 3**' study. This means that a large number of men with prostate cancer took either abiraterone/prednisone with ipatasertib or abiraterone/prednisone with a placebo. This was to find out if adding ipatasertib to abiraterone/prednisone helped prevent the men's cancer from getting worse. Phase 3 studies are done in a large number of people to see if a drug works better than the usual treatment and is safe enough for it to be 'approved' by the authorities as a treatment that can be prescribed by your doctor.

The study was '**randomised**'. This means that it was determined by chance which of the medicines each participant would be given—like tossing a coin. Randomly choosing which medicine people take makes it more likely that the types of people in both groups (for example, age, race) will be similar and thus comparable. Other than the medicines being tested in each group, all other care was the same in both groups.

This was a '**double-blind**' study. This means that neither the men taking part in the study nor the study doctors or nurses knew which of the study medicines they were taking. 'Blinding' of a study is done so that any effect seen from the medicine is not due to something people expect to happen if they know which medicine they were taking.

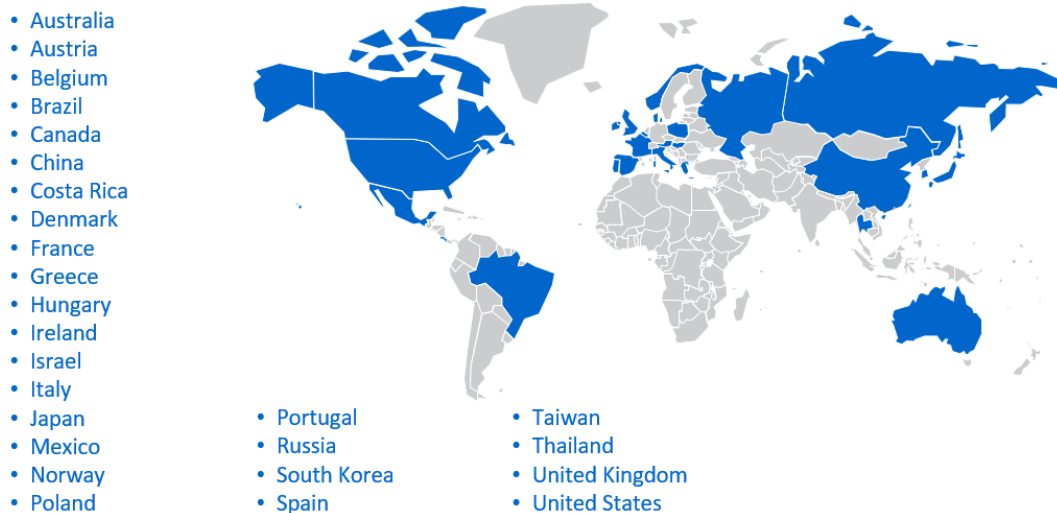
When and where did the study take place?

The study started in June 2017 and ended in June 2024, by which time all data were collected and finalised. The first results of the study were collected in March 2020 and were reported in a previous publication ([https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(21\)00580-8/](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(21)00580-8/)). This summary includes all of the data collected up until June 2024. At the time of writing this summary (December 2024), the study has ended.



The timeline (📅) shows when the information shown in this summary was collected over 7 years (June 2024) after the study started.

The study took place at 200 study centres in 26 countries or regions around the world. The following map shows the countries and regions where this study took place.



2. Who took part in this study?

This study included 1101 men with prostate cancer that had spread to other parts of the body. Those who took part in the study were between 44 and 93 years old.

Men could take part in the study if:

- They had a score between 0 and 3 out of 10 on a measure of how much pain the man had been having. A score of 0 to 3 means that the man has no symptoms or mild symptoms related to the cancer.

Men who had been treated with chemotherapy (a type of medicine that kills cancer cells) for their current disease could not take part, but they could take part if they had received chemotherapy along with hormone-reducing drugs as a treatment during an earlier stage of the disease.

3. What happened during the study?

During the study, men were selected by chance to get one of the 2 treatments.

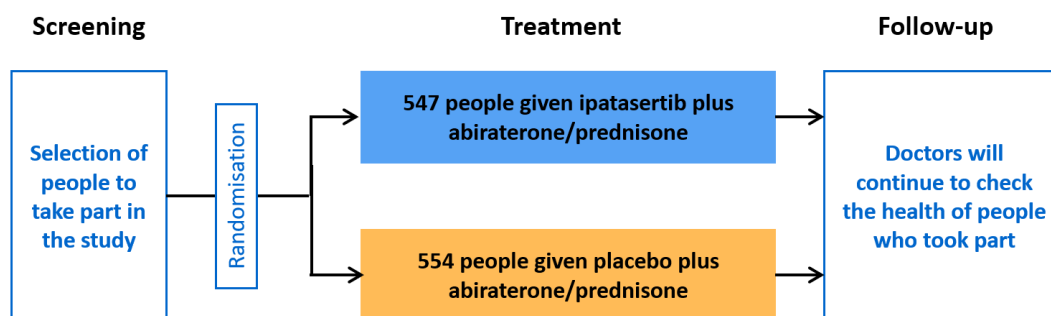
The treatment groups were:

- **Group A:** ipatasertib (new medicine) plus abiraterone/prednisone (existing medicine)
- **Group B:** placebo plus abiraterone/prednisone (existing medicine)

All drugs were taken orally (by mouth) every day. This table shows the number of men in each group.

	Group A Ipatasertib plus abiraterone/ prednisone	Group B Placebo plus abiraterone/ prednisone
Number of men taking this medicine	547	554

People in the study took the treatments for up to 7 years. When the study finished, the people who took part were asked to go back to their study centre for more visits to check their overall health. Look below to see more information about what happened in the study.



4. What were the results of the study?

Question 1: In **Group A** and **Group B**, how much time was there between the patient being randomised into the study and their cancer getting worse or the person dying in all men in the study?

- Based on the first analysis from the study, for men taking ipatasertib plus abiraterone and prednisone, half of them had their cancer get worse or they died after about 19 months after being randomised, compared with about 17 months for those taking placebo plus abiraterone and prednisone.

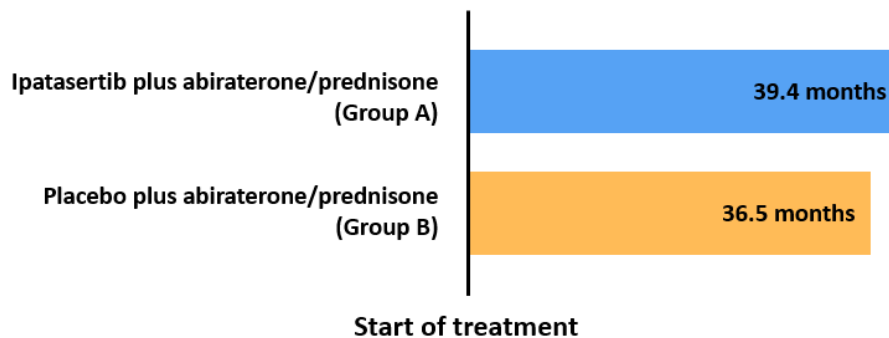
Question 2: In **Group A** and **Group B**, how much time was there between the patient being randomised into the study and their cancer getting worse or the person dying in just the men with tumours that have PTEN loss?

In the first analysis, for men with tumours that had PTEN loss, among those taking ipatasertib plus abiraterone and prednisone, half of them had their cancer get worse after about 19 months after being randomised, compared with about 17 months for those taking placebo plus abiraterone and prednisone.

Question 3: In Group A and Group B, how long did men live among all men in the study?

In the final analysis from the study, researchers looked at how much time there was before half of the men died in each group for all 1101 men in the study.

How long did it take for half of the men in each treatment arm to die?



In **Group A**, half of the men had died after about 39 months (some took longer and some took less than 39 months). In **Group B**, half of the men had died after about 37 months.

As of December 2022:

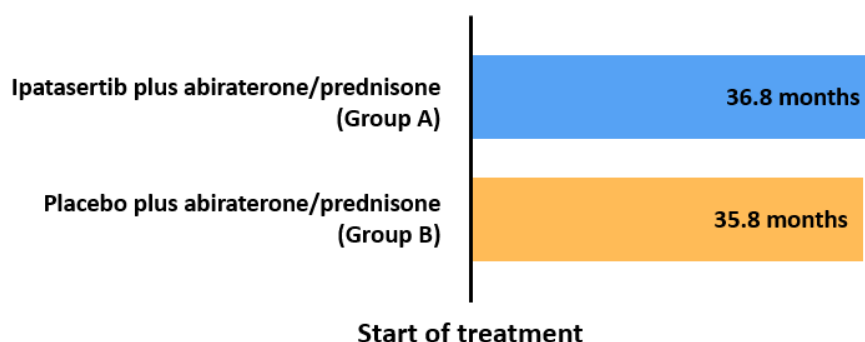
- In **Group A**, over half of the men (318 out of 547, or 58%) had died.
- In **Group B**, over half of the men (351 out of 554, or 63%) had died.

Men in Group A had a 9% lower chance of dying than men in Group B, but we do not know if this difference was caused by the medicine or if it happened by chance.

Question 4: In Group A and Group B, how long did men with tumours that have PTEN loss live?

Another piece of information that researchers collected was how much time there was before the person died in each group when only looking at the 521 men who had tumours that had lost PTEN.

How long did it take for half of the men with PTEN loss in each treatment arm to die?



In **Group A**, half of the men died after about 37 months (some took longer and some took less than 37 months). In **Group B**, half of the men died after about 36 months.

As of December 2022:

- In **Group A**, over half of the men (158 out of 260, or 61%) had died.
- In **Group B**, over half of the men (170 out of 261, or 65%) had died.

Among men whose tumours had PTEN loss, those in Group A had a 6% lower chance of dying than men in Group B, but we do not know if this difference was caused by the medicine or if it happened by chance.

- This section only shows the key results from this study. You can find information about all other results on the websites at the end of this summary (see Section 8).

5. What were the side effects?

Side effects are medical problems (such as feeling dizzy) that happen during the study.

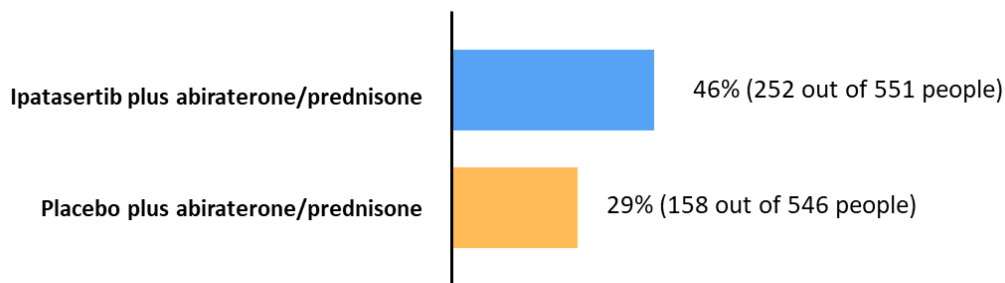
- Some side effects were caused by treatments in the study.
- Not all of the men in this study had all of the side effects.
- Side effects were mild to serious (meaning it is life-threatening, needs hospital care, or causes lasting problems).
- The side effects were different from person to person.
- It is important to be aware that the side effects reported here are from only this study. Therefore, the side effects shown here may be different from those seen in other studies or those that appear on the medicine leaflets.

Serious side effects

A side effect is considered 'serious' if it is life-threatening, needs hospital care, or causes lasting problems.

About 46% of the men taking ipatasertib plus abiraterone/prednisone had a serious side effect, compared with about 29% of the men taking placebo plus abiraterone/prednisone.

How many people had at least one serious side effect?



In total, 37 in every 100 men (37%) had at least 1 serious side effect during this study.

Some men died due to side effects that occurred during the time they were in the study. These were:

- 39 out of 551 men (7%) in the ipatasertib plus abiraterone/prednisone group
 - 3 of these men died due to side effects that the doctors determined were related to ipatasertib; the side effects were high blood sugar, high acid level in body fluids, pneumonia, and lung inflammation from a chemical.
- 31 out of 546 men (6%) in the placebo plus abiraterone/prednisone group
 - 2 of these men died due to side effects that the doctors determined were related to placebo; the side effects were lower respiratory tract infection and heart muscle inflammation.

During the study, some men decided or were directed by their doctor to stop taking their medicine because of side effects:

- In the ipatasertib plus abiraterone/prednisone group, 135 out of 551 men (25%) had side effects that caused them to stop taking ipatasertib.
- In the placebo plus abiraterone/prednisone group, 33 out of 546 men (6%) had side effects that caused them to stop taking the placebo.

Most common side effects

In this study 549 out of 551 men (nearly 100%) taking ipatasertib plus abiraterone/prednisone had a side effect of any kind (not serious, meaning that it was an undesirable effect, but one that was not life-threatening and did not require hospitalisation or have lasting effects, or serious), compared with 525 out of 546 of men (96%) taking placebo plus abiraterone/prednisone.

This table shows the most common side effects. These are the side effects that happened in one-fifth (20%) or more of the men in either **Group A** or **Group B**. These side effects could have been serious or not serious. Some men had more than one side effect. This means that they are included in more than one row in the table.

Most common side effects reported in this study	Men taking ipatasertib plus abiraterone/prednisone (551 men in total)	Men taking placebo plus abiraterone/prednisone (546 men in total)
Diarrhoea	81%	25%
High level of sugar in the blood	43%	17%
Low energy levels	24%	20%
Back pain	20%	24%
Feeling sick (nausea)	29%	12%
Joint pain	19%	22%
Low level of red blood cells	24%	14%
Rash	29%	9%
Liver problems	21%	10%

Some men left the study without taking any study medicines, so they were not included in the total number in the table.

Other side effects

You can find information about other side effects (not shown in the sections above) on the websites listed at the end of this summary—see Section 8.

6. How has this study helped research?

The information presented here is from one study of 1101 men with prostate cancer that has spread to other parts of the body. These results helped researchers learn more about prostate cancer and a new medicine, ipatasertib.

The study has shown that:

- In **Group A**, half of the men died after 39 months. In **Group B**, half of the men died after 37 months.
- When only looking at men with tumours that had PTEN loss, half of the men died after 37 months in **Group A**, and half of the men died after 36 months in **Group B**.
- Serious side effects were more common in **Group A** (46%) than in **Group B** (29%).
- 39 out of 551 men (7%) in **Group A** and 31 out of 546 men (6%) in **Group B** died due to side effects that occurred while they were in the study.
- The most common side effects in **Group A** were diarrhoea (81%), high level of sugar in the blood (43%), feeling sick (29%), rash (29%), low energy level (24%), low level of red blood cells (24%), liver problems (21%) and back pain (20%).
- The most common side effects in **Group B** were diarrhoea (25%), back pain (24%), joint pain (22%) and low energy level (20%).

You should not make decisions based on this one summary. Always speak with your doctor before making any decisions about your treatment.

7. Are there plans for other studies?

No further studies are planned for this drug in this disease.

This study started in June 2017 and ended in June 2024. This summary includes the data collected up until June 2024.

8. Where can I find more information?

You can find more information about this study on the websites listed below:

- <https://clinicaltrials.gov/ct2/show/NCT03072238>
- <https://www.clinicaltrialsregister.eu/ctr-search/search?query=2016-004429-17>
- <https://forpatients.roche.com/en/trials/cancer/prostate-cancer/ipatasertib-plus-abiraterone-plus-prednisone-prednisolone--relat.html>

If you want to find out more about the results of this study, the full title of the scientific paper we described here is: “Final Overall Survival and Identification of Molecular Subtypes and Genomic Alterations Associated With Clinical Outcomes in Patients Treated With Ipatasertib and Abiraterone in the Phase 3 IPATential150 trial”. The authors of the scientific paper are: Johann de Bono, Sergio Bracarda, Cora N. Sternberg, Kim N. Chi, David Olmos, Shahneen Sandhu, Christophe Massard, Nobuaki Matsubara, Christopher Sweeney and others. The paper is published in the journal *European Urology* [<https://doi.org/10.1016/j.eururo.2024.12.015>].

Who can I contact if I have questions about this study?

If you have any more questions after reading this summary:

- Visit the ForPatients platform and fill out the contact form:
<https://forpatients.roche.com/en/trials/cancer/prostate-cancer/ipatasertib-plus-abiraterone-plus-prednisone-prednisolone--relat.html>
- Contact a representative at your local Roche office.

If you took part in this study and have any questions about the results:

- Speak with the study doctor or staff at the study hospital or clinic.

If you have questions about your own treatment:

- Speak with the doctor in charge of your treatment.

Who organised and paid for this study?

This study was organised and paid for by F. Hoffmann-La Roche Ltd who have their headquarters in Basel, Switzerland.

Full title of the study and other identifying information

The full title of this study is: “Ipatasertib Plus Abiraterone Plus Prednisone/Prednisolone, Relative to Placebo Plus Abiraterone plus Prednisone/Prednisolone in Adult Male Patients With Metastatic Castration-Resistant Prostate Cancer”.

The study is known as ‘IPATential150’.

- The protocol number for this study is: CO39303.
- The ClinicalTrials.gov identifier for this study is: NCT03072238.
- The EudraCT number for this study is: 2016-004429-17.