

Summary of Clinical Trial Results

A study of atezolizumab compared with placebo, both given with bevacizumab and chemotherapy, in people with different types of ovarian cancer

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

About this summary

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

- Members of the public and
- People who took part in the study.

This summary is based on information known at the time of writing.

This study started in March 2017 and ended in August 2022. This summary was written after the study had ended.

One study can't tell us everything about how safe a medicine is and how well it works. It takes lots of people in many studies to find out everything we need to know. The results from this study may be different from other studies with the same medicine.

This means that you should not make decisions based on this one summary – always speak to your doctor before making any decisions about your treatment.

Contents of the summary

1. General information about this study
2. Who took part in this study?
3. What happened during the study?
4. What were the results of the study?
5. What were the side effects?
6. How has this study helped research?
7. Are there plans for other studies?
8. Where can I find more information?

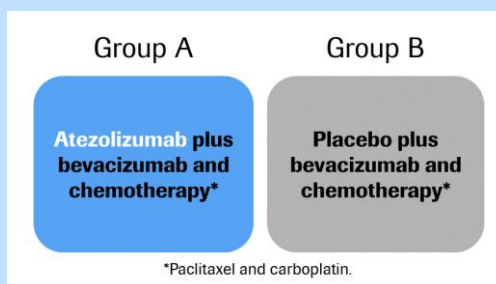
Thank you to the people who took part in this study

The people who took part in this study have helped researchers answer important questions about ovarian cancer and the medicine being studied – 'atezolizumab' – taken together with bevacizumab and chemotherapy.

Key information about this study

Why was this study done?

- This study was done to compare how 2 combinations of drugs worked in people with ovarian cancer, including fallopian tube cancer and primary peritoneal cancer.
- The 2 combinations were:
 - The medicine being studied – called ‘**atezolizumab**’ – taken together with ‘**bevacizumab**’ and 2 commonly used chemotherapy drugs called ‘**paclitaxel**’ and ‘**carboplatin**’
 - **Placebo** taken together with **bevacizumab** and 2 commonly used chemotherapy drugs called **paclitaxel** and **carboplatin**
- Some people started taking these medicines before they had surgery to remove the cancer and some started taking them after surgery.
- People were divided into 2 study groups as shown here, so that the effects of the different combinations of medicines could be compared.



- This study included **1301 people in 22 countries**. 1286 of these people were given one of the study treatments above.

What were the results?

- The main findings were that:
 - Half of the people in **Group A** were free of disease progression for 19.5 months after starting the drug.
 - Half of the people in **Group B** were free of disease progression for 18.4 months after starting the drug.
 - In **Group A** and **Group B**, it took a similar amount of time for the cancer to get worse.
 - Half of the people in **Group A** survived for 50.5 months after starting the drug.
 - Half of the people in **Group B** survived for 46.6 months after starting the drug.
 - People in **Group A** and **Group B** lived for a similar amount of time after starting their study treatment.

- This shows researchers that adding atezolizumab to bevacizumab and chemotherapy does not work better to treat the cancer than just bevacizumab and chemotherapy.

How many people had serious side effects due to study medicines?

- **Group A:** 35% of people (223 out of 642 people)
- **Group B:** 21% of people (135 out of 644 people)
- At the time of writing this summary, the study has ended.

1. General information about this study

Why was this study done?

Doctors use information about cancer cells to group ovarian cancers into different types to help them decide which treatments will work best. The most common type of ovarian cancer is called ‘epithelial ovarian cancer’ – it starts in the cells that cover the ovaries. Two other types – ‘fallopian tube cancer’ and ‘primary peritoneal cancer’ – are similar to epithelial ovarian cancer and are treated the same way. Fallopian tube cancer starts in the fallopian tubes which connect the ovaries to the womb (uterus). Primary peritoneal cancer is related to ovarian cancer and starts in the peritoneum, a thin layer of tissue that lines the abdomen and covers some of the organs.

Chemotherapy that kills cancer cells using platinum is called ‘platinum-based chemotherapy’. This type of treatment can use 2 different types of chemotherapy drugs taken together. However, chemotherapy may work for only a short time, and then the cancer may get worse again. Sometimes, doctors add other medicines, such as bevacizumab, to chemotherapy to help treat the cancer. Bevacizumab (also known by its brand name, Avastin[®]) stops the cancer from growing new blood vessels, so the cancer cells are starved of blood and can't grow.

New medicines are needed to be able to treat the cancer – shrink the tumour and stop it from coming back – more effectively and help people to live longer. If the tumour shrinks, people may also be able to manage their cancer better. Immunotherapy is a new type of medicine that helps some people's own immune system attack cancer cells. Immunotherapy may work better in some people than in others, or it may work for only a short time. This may be because the cancer cells can hide from the immune system's attacks. Scientists think that types of chemotherapy can wake up the immune system to help it find cancer cells. Taking immunotherapy together with chemotherapy could help the immunotherapy to attack cancer cells.

In this study, researchers wanted to see if taking an immunotherapy drug (atezolizumab) together with bevacizumab and chemotherapy would help treat people with ovarian, fallopian tube, and primary peritoneal cancer. The researchers wanted to see if atezolizumab, bevacizumab and chemotherapy could stop the cancer from growing or coming back for longer, or help people live longer, compared with bevacizumab and chemotherapy on its own. The people in this study did not take chemotherapy for their ovarian cancer before taking part in this study.

What were the medicines being studied?

This study looked at a combination of a new medicine (atezolizumab) with bevacizumab and existing chemotherapy medicines in 2 groups of people who had ovarian cancer:

- **Group A: atezolizumab** (new medicine) plus **bevacizumab** and **paclitaxel + carboplatin** (existing chemotherapy)
- **Group B: placebo** plus **bevacizumab** and **paclitaxel + carboplatin** (existing chemotherapy)

Atezolizumab is the medicine being studied here, in combination with bevacizumab and chemotherapy.

- Atezolizumab is a type of immunotherapy.
- The body's immune system fights diseases like cancer. However, cancer cells can block (stop) the immune system from attacking the cancer. Atezolizumab releases this blockage – meaning that the immune system is able to fight the cancer cells.
- When people take atezolizumab, their tumour (cancer) may get smaller.

Bevacizumab (known by its brand name, Avastin®) is another medicine used in this study.

- Bevacizumab works by starving a tumour of the blood it needs to grow (this is called 'anti-angiogenic' therapy).
- Bevacizumab is often given together with other cancer treatments to people with different types of cancer.

The existing chemotherapy medicines used in this study were:

- **Paclitaxel:**
 - Paclitaxel works by stopping cancer cells from dividing into new cells, so it stops the tumour from growing.
 - Paclitaxel can be taken on its own or with other chemotherapy drugs.
- **Carboplatin:**
 - This medicine is a platinum chemotherapy drug.
 - Carboplatin affects the genetic material (DNA) in cells, stopping the cancer cells from dividing into new cells and killing them.

Atezolizumab was compared to a **placebo**:

- The placebo looks the same as atezolizumab but does not contain any real medicine. This means that it does not have any medicine-related effects on the body.
- All of the people in the study were given bevacizumab and chemotherapy (paclitaxel and carboplatin). Some people got additional medicine (atezolizumab) and some did not (placebo), so researchers could see which benefits or side effects were caused by atezolizumab.

After the study treatment period had finished, people were given 'maintenance therapy' – treatment to stop the cancer from coming back.

What did researchers want to find out?

- Researchers did this study to see if adding atezolizumab to the usual treatment of bevacizumab and chemotherapy would work better to treat ovarian cancer (see section 4: “What were the results of the study?”).
- They also wanted to find out how safe the medicines were – by checking how many people had side effects in each study treatment group and seeing how serious they were (see section 5: “What were the side effects?”).

The main questions that researchers had were:

- In **Group A** and **Group B**, how much time was there between the start of study treatment and the cancer getting worse?
- In **Group A** and **Group B**, how long did people live after starting the study treatment?

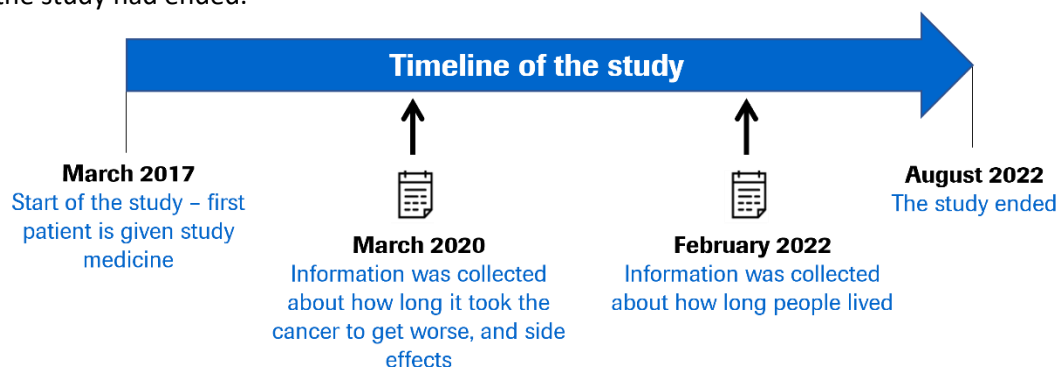
What kind of study was this?

This study was a ‘**Phase 3**’ study. This means that before this study started, atezolizumab plus bevacizumab and chemotherapy had been tested in a smaller number of people with ovarian cancer. In this study, a larger number of people with newly diagnosed ovarian cancer took either atezolizumab plus bevacizumab and chemotherapy (**Group A**) or placebo plus bevacizumab and chemotherapy (**Group B**). This was to find out if adding atezolizumab to bevacizumab and chemotherapy helped to delay the cancer from getting worse and helped people live longer.

This study was a ‘**randomised controlled**’ study. This means that it was decided by chance which of the 2 study treatment groups (A or B) people in the study would be given, like tossing a coin. For every person who was put into **Group A**, 1 person was put into **Group B**. Deciding by chance which group people will be in makes it more likely that the types of people in both groups will be a similar mix (for example, similar ages, similar races). Other than the different medicines given in each group, all other care was the same.

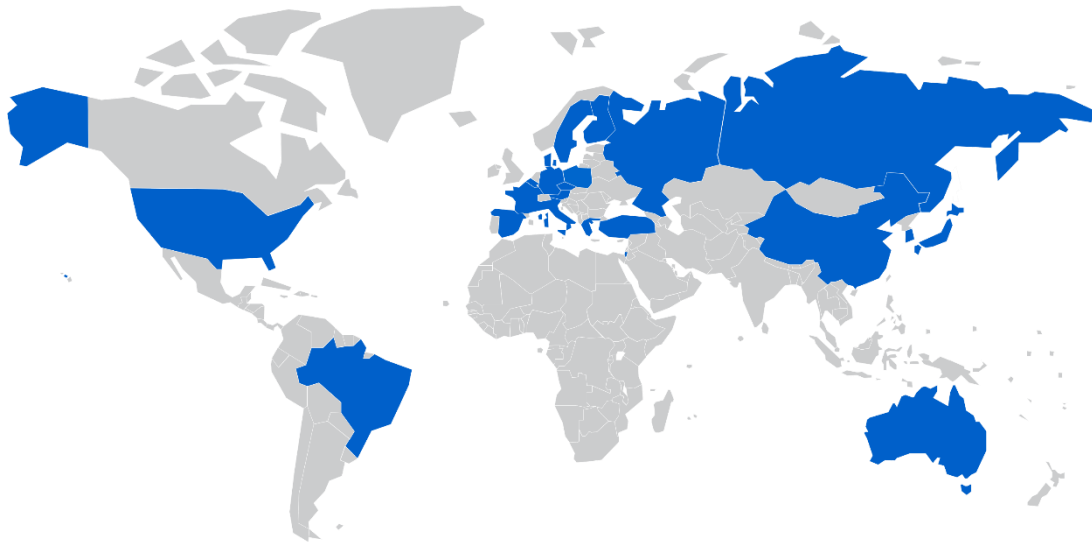
When and where did the study take place?

The study started in March 2017 and ended in August 2022. This summary was written after the study had ended.



The symbol on the timeline (📅) shows when the information shown in this summary was analysed.


The study took place at 262 hospitals and clinics in 22 countries in North and South America, Europe, Asia and Australia. This map shows the countries where this study took place.



- Australia
- Austria
- Belgium
- Brazil
- China
- Czechia
- Denmark
- Finland
- France
- Germany
- Greece
- Israel
- Italy
- Japan
- Norway
- Poland
- Russia
- South Korea
- Spain
- Sweden
- Turkey
- United States

2. Who took part in this study?

In this study, 1301 people with ovarian cancer took part. Here is more information about the people who took part in the study.



1301 people took part in this study

Average age: 57 years
Age range: 18 to 84 years old

People could take part in this study if they:

- Had newly diagnosed, advanced ovarian, fallopian tube, or peritoneal cancer – called ‘advanced’ because the cancer had spread from where it started to nearby cells or to other parts of the body.
- Had not been treated for their cancer.
- Had surgery to remove the cancer, or had planned to have surgery for their cancer.

People could NOT take part in this study if they had:

- Ovarian, fallopian tube, or peritoneal cancer that had come back after being treated with surgery only.
- Previously had chemotherapy for ovarian, fallopian tube, or primary peritoneal cancer.
- Known sensitivity to the medicines that were being studied (bevacizumab or atezolizumab).

3. What happened during the study?

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

The treatment groups were:

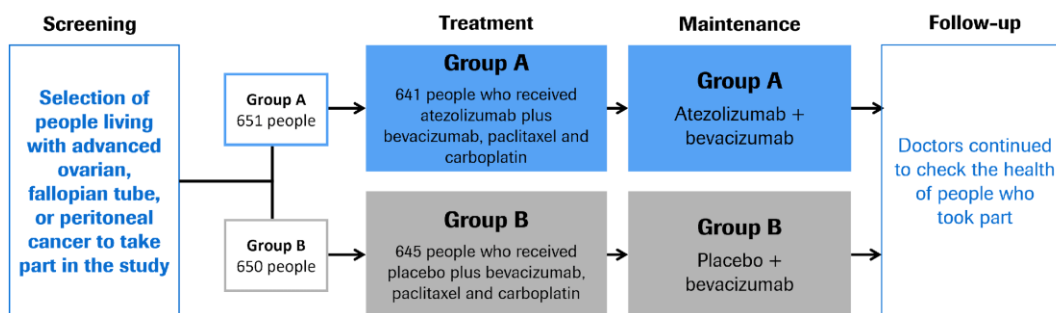
- **Group A:** atezolizumab (new medicine) plus bevacizumab and chemotherapy (paclitaxel + carboplatin)
- **Group B:** placebo plus bevacizumab and chemotherapy (paclitaxel + carboplatin)

After the treatment period had finished, people were given ‘maintenance therapy’ – treatment to stop the cancer from coming back.

This table shows the number of people who took each study treatment, and how often the drugs were taken.

	Group A Atezolizumab plus bevacizumab and chemotherapy	Group B Placebo plus bevacizumab and chemotherapy
Number of people in each group (chosen by computer)	651	650
Number of people who actually took the medicines	641	645
How the drugs were taken	Injected into a vein	Injected into a vein
When the drugs were taken in each 3-week treatment cycle (6 cycles total)	<p>Atezolizumab: day 1 Paclitaxel: day 1 Carboplatin: day 1 Bevacizumab: day 1 of second cycle (only for people who had already had surgery to remove the cancer)</p> <p>People who started taking the medicines before they had surgery were given bevacizumab for 4 treatment cycles only.</p>	<p>Placebo: day 1 Paclitaxel: day 1 Carboplatin: day 1 Bevacizumab: day 1 of second cycle (only for people who had already had surgery to remove the cancer)</p> <p>People who started taking the medicines before they had surgery were given bevacizumab for 4 treatment cycles only.</p>
Maintenance therapy given after the main treatment was completed (16 cycles total)	Atezolizumab + bevacizumab	Placebo + bevacizumab

The study has ended. This picture shows more information about what happened in the study and the different study periods.



When people in the study stopped taking treatment or completed the maintenance phase, they were asked to go back to their study centre for more visits or received phone calls to check their overall health. This is important to determine how long people in this study lived.

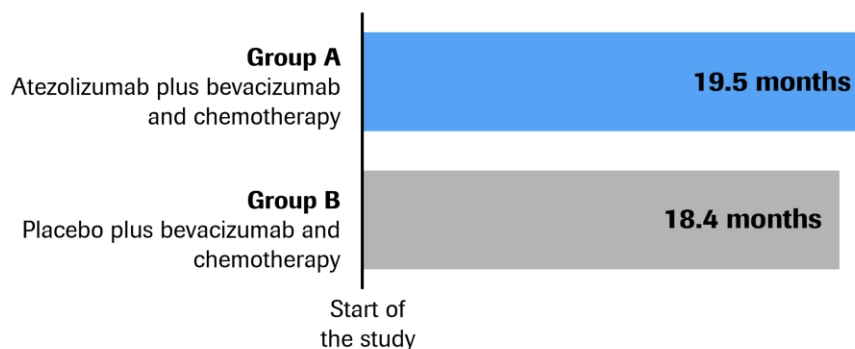
4. What were the results of the study?

Question 1: In **Group A** and **Group B**, how much time was there between the start of study treatment and the cancer getting worse?

Researchers looked at how much time there was before the cancer became worse (in other words, spread to another part of the body, spread further, or grew larger as shown by scans) in **Group A** and **Group B**.

- Half of the people in **Group A** were free of disease progression for 19.5 months after starting the drug.
- Half of the people in **Group B** were free of disease progression for 18.4 months after starting the drug.

On average, how much time was there between the start of study treatment and the cancer getting worse?

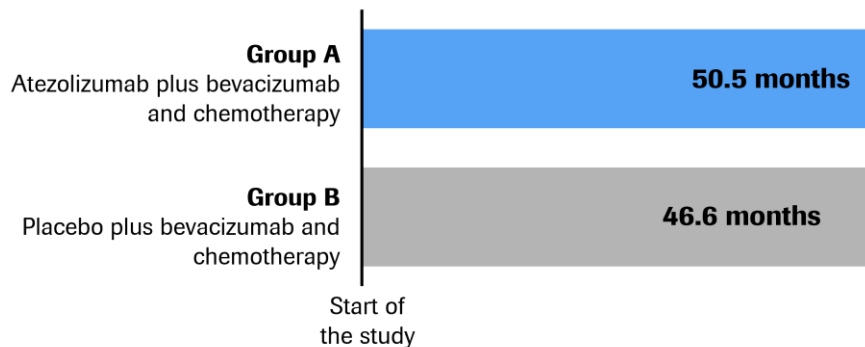


Question 2: In Group A and Group B, how long did people live after starting the study treatment?

Researchers also collected information about how long people in each group lived.

- Half of the people in **Group A** survived for 50.5 months after starting the drug.
- Half of the people in **Group B** survived for 46.6 months after starting the drug.

On average, how long did people live?



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?

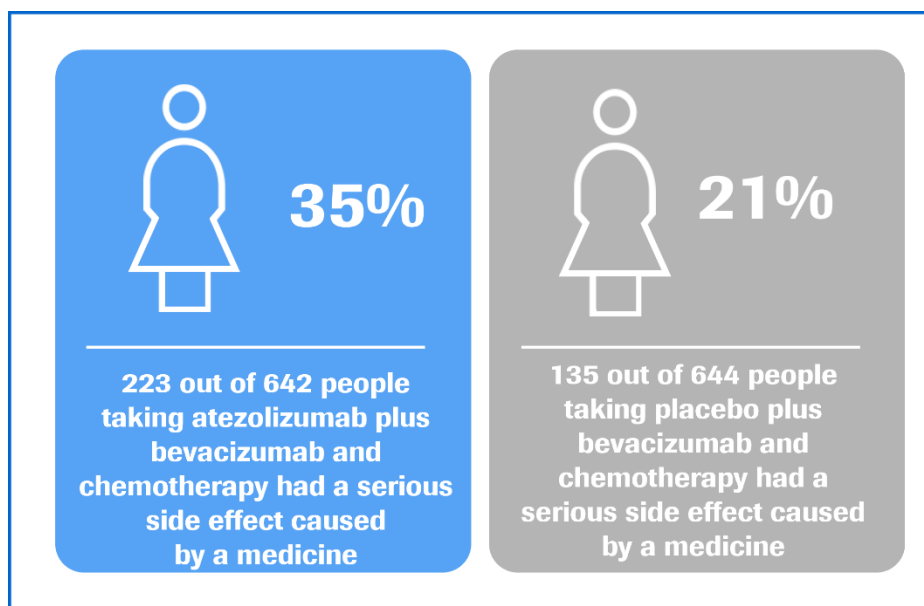
Side effects are medical problems (such as feeling dizzy) that may happen during the study.

- The side effects described in this summary are included because the study doctor believes they were related to the medicines in the study.
- Not all of the people in this study had all of the side effects.
- Side effects may be mild to severe.
- Side effects can be different from person to person.
- It is important to be aware that the side effects reported here are from this one study. Therefore, the side effects shown here may be different from those seen in other studies, or those that appear in the medicine leaflets.
- Serious and common side effects are listed in the next sections

Serious side effects

A side effect is considered 'serious' if it is life-threatening, needs hospital care, or needs treatment with medicine to prevent lasting problems.

During this study, 35 out of every 100 people (35%) had at least one serious side effect that was caused by the medicines being taken (atezolizumab, placebo, bevacizumab, paclitaxel and carboplatin). This picture shows the number of people in each group who had serious side effects caused by the medicines taken.

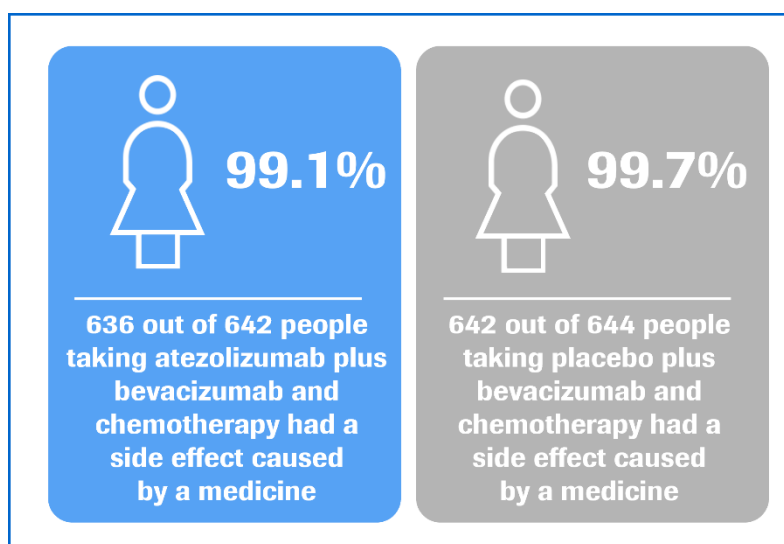


Some people in the study died from side effects which the study doctor believed were caused by one of the study medicines:

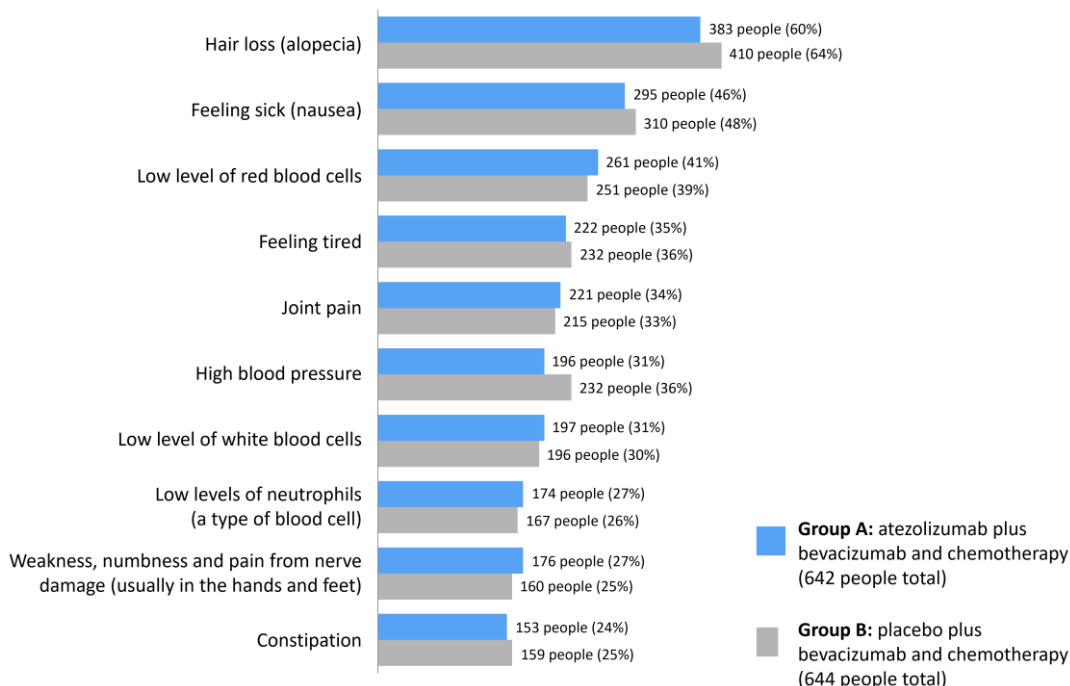
- 4 out of 642 people (1%) in **Group A**.
- 4 out of 644 people (1%) in **Group B**.

Most common side effects

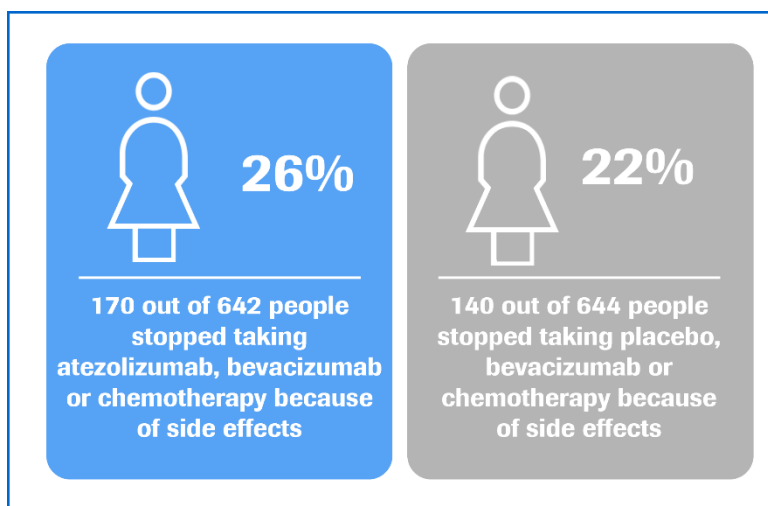
During this study, nearly every person (99.4%) had at least one side effect (serious or not). This picture shows the number of people in each group who had side effects caused by the medicines taken.



This picture shows the 10 most common side effects in both groups caused by the medicines taken. Some people had more than one side effect.



This picture shows the number of people who decided to stop taking their medicine because of side effects.



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 1301 people with advanced ovarian, fallopian tube, or primary peritoneal cancer. These results helped researchers learn more about how well atezolizumab plus bevacizumab and chemotherapy (paclitaxel and carboplatin) works to treat these types of cancer, and how safe the medicine is.

Overall, this study showed that adding atezolizumab to bevacizumab and chemotherapy (paclitaxel and carboplatin) did not change the time it took for the cancer to get worse or how long people lived, compared with bevacizumab and chemotherapy on its own.

People who were given atezolizumab plus bevacizumab and chemotherapy had more serious side effects due to the study medicine than the people who were only given placebo, bevacizumab and chemotherapy. The people in this study did not have any new side effects that had not been seen before in people who took these medicines in other studies.

7. Are there plans for other studies?

Other studies looking at the safety and effects of atezolizumab are happening. These studies are looking at the use of atezolizumab in different situations, for example:

- In other types of cancer that affect the female reproductive system.
- In ovarian cancer that has come back or not responded to other treatment.
- In other types of cancer, including breast and lung cancer.

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/NCT03038100>
- <https://www.clinicaltrialsregister.eu/ctr-search/search?query=2016-003472-52>
- <https://forpatients.roche.com/en/trials/cancer/oc/a-study-of-atezolizumab-versus-placebo-in-combination-with-pacli.html>

If you want to find out more about the results of this study, the full titles of the papers we described here are:

“Atezolizumab, bevacizumab, and chemotherapy for newly diagnosed stage III/IV ovarian cancer: placebo-controlled randomized phase III trial (IMagyn050/GOG 3015/ENGOT-OV39)”. The authors of the scientific paper are Kathleen Moore, Michael Bookman, Jalid Sehouli, Austin Miller, Charles Anderson, and others. The paper is published in the *Journal of Clinical Oncology*, 2021; DOI: 10.1200/JCO.21.00306.

“Overall survival and patient-reported outcome results from the placebo-controlled randomized phase III IMagyn050/GOG 3015/ENGOT-OV39 trial of atezolizumab for newly diagnosed stage III/IV ovarian cancer”. The authors of the scientific paper are Sandro Pignata, Michael Bookman, Jalid Sehouli, Austin Miller, Richard T. Penson, and others. The paper is published in *Gynecologic Oncology*, 2023; DOI: 10.1016/j.ygyno.2023.06.018.

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/oc/a-study-of-atezolizumab-versus-placebo-in-combination-with-pacli.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; their headquarters are in Basel, Switzerland.

Full title of the study and other identifying information

The full title of this study is: “A Phase III, Multicenter, Randomized, Study of Atezolizumab Versus Placebo Administered in Combination With Paclitaxel, Carboplatin, and Bevacizumab to Patients With Newly-Diagnosed Stage III or Stage IV Ovarian, Fallopian Tube, or Primary Peritoneal Cancer”.

The study is known as ‘IMagyn050’, ‘GOG 3015’ and ‘ENGOT-OV39’

- The protocol number for this study is: YO39523.
- The ClinicalTrials.gov identifier for this study is: NCT03038100.
- The EudraCT number for this study is: 2016-003472-52.