

Clinical trial SUMMARY



Short study title

Study on the effects of trimetazidine in patients who have undergone PCI, an operation on the coronary arteries.

Full scientific title

The efficacy and safety of Trimetazidine in Patients with angina pectoris having been treated by percutaneous Coronary Intervention. ATPCI study.
An international, multicentre, randomised, double-blind, placebo-controlled study in patients treated for 2 to 4 years.

In this summary:

1. Why was this study done?
2. When and where did this study take place?
3. Who participated in the study?
4. Which treatments did patients receive?
5. How was the study done?
6. What were the side effects?
7. What were the study results?
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10. Further information

Therapeutic area:
Cardiology

Indication:
Angina pectoris

Study phase:
3

7th January 2021
Final version

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We would like to thank all the patients who participated in the study. As clinical study participants, they help researchers improve their knowledge and discover new medicines for the benefit of all patients.

This document is a summary of the study. It is written for a general audience.

Researchers need many studies to decide which medicines work the best and are the safest for patients. For medical science to progress, a lot of people are involved in many studies all around the world. This summary only shows the results from this one study. Other studies, evaluating the same drug, may find different results.

You should not change your current treatment based on the results of this single study. If you have any questions about this study, please speak to your doctor.

1 Why was this study done?

The aim of this study was to test the medicine, called trimetazidine in patients who had recently undergone Percutaneous Coronary Intervention (PCI). PCI is a cardiac operation consisting of the insertion of a small tube of metal mesh called a “stent” in a coronary artery (heart blood vessel).

PCI is carried out to widen heart blood vessels in patients with coronary artery disease (heart disease caused by narrowing of blood vessels transporting blood to the heart). PCI improves the blood flow to the heart and helps prevent chest pain. However, some patients may still have chest pain in the months following the operation.

Trimetazidine is widely used to help with chest pain due to coronary artery disease. It is not routinely used after a PCI.

This study is called a Phase 3 study. It had 2 main objectives.

- The main efficacy objective was to test if trimetazidine works better than a placebo in preventing some events after a PCI: cardiac death, hospitalisation for a cardiac problem and repetition or aggravation of chest pain. A placebo looks like a medicine but does not have any real medicine in it.
- The main safety objective was to further document the safety of trimetazidine for patients following PCI.

2 When and where did this study take place?

When was it performed?

- This study started in September 2014.
- It ended in December 2019.

Where did the study take place?

The study took place in the following countries:

Country	Number of patients
Russia	809
Poland	771
Ukraine	454
Serbia	322
Georgia	300
Romania	297
Czech Republic	295
Brazil	280
Spain	275
Italy	260
Argentina	244
Croatia	230
Republic of Korea	203
China	199
Slovakia	150
Bosnia-Herzegovina	120
Belarus	114
Turkey	110
Peru	110
Columbia	105
Portugal	80
Montenegro	74
Vietnam	69
Algeria	60
France	60
Greece	40
Austria	28

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3 Who participated in the study?

Which patients were included in the study?

Patients in the study had to meet specific criteria including:

- Be aged from 21 to 84 years old
- Have coronary artery disease.
- Have had a recent PCI. Recent meant within 30 days before starting the study.

How many patients participated in the study?

6059 patients participated in the study. About 3 patients out of 4 were men. About one patient out of 4 was a woman.

A total of 1304 patients did not complete the treatment, the majority due to consent withdrawal or other non-medical reasons.

How old were the patients?

The average age of the patients was 61 years. The youngest patient was 25 years old and the oldest patient was 84 years old.

4 Which treatments did patients receive?

The drug tested was called trimetazidine, provided in tablet form. Each tablet contained 35 mg of medicine. Trimetazidine was compared to a placebo. The placebo looked like the trimetazidine tablet but did not have any real medicine in it. Patients took 2 tablets per day: 1 tablet in the morning and 1 tablet in the evening.

Patients also continued to take other drugs that are usually given following a PCI.

5 How was the study done?

The study was a “randomised” study. It means that patients were put by chance into one of 2 groups:

- One group took trimetazidine.
- The other group took placebo.

The study was also a “double-blind” study. This means that neither patients nor doctors knew who was given which treatment. Therefore, there was no influence of patients and doctors on the study results

The planned duration of the study was 3 to 5 years, depending on the time at which the patient joined the study. Most of the patients took the treatment for at least 3 years.

Patients met their study doctor regularly. The doctor checked the condition of their heart and any symptoms patients may have presented.

6 What were the side effects?

What about side effects?

Like all medicines, the study drug can cause side effects although not everybody gets them. Side effects are unwanted events thought to be related to the treatments in the study.

The table below shows the number of patients who experienced side effects. Be aware that results may be presented differently elsewhere.

	Related to trimetazidine	Related to placebo
Patients who had side effect(s)	85 patients (2.8%)	98 patients (3.3%)
Patients who had serious* side effect(s)	27 patients (0.9%)	25 patients (0.8%)
Patients who stopped taking the treatment because of side effect(s)	52 patients (1.7%)	51 patients (1.7%)

*See definition below

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How many patients had serious side effects?

A side effect is serious when:

- The patient needs to be hospitalized.
- The patient's life is in danger.
- It causes permanent damage or death.
- Or it may put the patient at risk and requires a medical intervention to prevent the situations listed above.

The table below shows the serious side effects reported in the study. Only the most common (reported by more than 2 patients in the trimetazidine group) are presented.

	Related to trimetazidine	Related to placebo
Tremor	8 patients (0.3%)	3 patients (0.1%)
Tremor, stiffness and slowness of movement (Parkinsonism)	5 patients (0.2%)	1 patient (less than 0.1%)
Walking abnormality	5 patients (0.2%)	0 patient

For some of the serious side effects, patients stopped the treatment: 21 patients (0.7%) treated with trimetazidine and 14 patients (0.5%) treated with placebo.

Among the 291 patients who died during the study, one patient had a sudden cardiac death possibly related to the trimetazidine.

What were the other side effects?

The table below shows the other side effects reported in the study. Only the most common (reported by more than 2 patients in the trimetazidine group) are presented.

	Related to trimetazidine	Related to placebo
Dizziness	4 patients (0.1%)	5 patients (0.2%)
Skin rash	5 patients (0.2%)	2 patients (0.1%)
Indigestion	3 patients (0.1%)	3 patients (0.1%)
Vertigo	5 patients (0.2%)	1 patient (less than 0.1%)
Constipation	5 patients (0.2%)	0 patient
Kidney failure	4 patients (0.1%)	1 patient (less than 0.1%)
Inability of a patient to tolerate a drug because of side effect (Drug intolerance)	3 patients (0.1%)	1 patient (less than 0.1%)

7 What were the study results?

The study was completed as planned. The main results are presented below.

Main efficacy objective

To test if trimetazidine works better than placebo after a recent PCI, doctors recorded several events:

- Deaths due to a cardiac problem
- Hospitalisations for a cardiac problem and
- Repetition or aggravation of chest pain.

At the end of the study, at least one of those events happened in about 1 patient out of 4 in both groups: 23% of the patients treated with trimetazidine and 24% of the patients treated with the placebo.

The difference between the trimetazidine and the placebo groups was small. It means that in this study, trimetazidine does not significantly reduce these cardiac problems in patients who had a recent PCI.

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Main safety objective

The main safety objective was to further assess how safe trimetazidine is.

To answer this question, doctors counted the serious* unwanted events, whether they might be related to the study drug or not.

*the definition is in part 6 of this document.

At the end of the study, those serious unwanted events happened in about 2 patients out of 5 in both groups (41%).

The results showed no difference between the trimetazidine and placebo groups. It means that the use of trimetazidine did not show any serious safety concern.

Who did the study?

The company organizing and funding the research, called sponsor, is the Institut de Recherches Internationales Servier based in Suresnes, France

How can you contact the sponsor?

Contact us on Servier website (www.servier.com).

Where can you learn more about this study?

- The scientific summary is also available on the Servier Clinical Trial Data website. (www.clinicaltrials.servier.com)
- In this document, we translated medical terms into lay terms. You can find the corresponding medical terms in the [Servier glossary](#) on the Servier Clinical Trial Data website.

8 How has this study helped patients and researchers?

This study helped researchers to gather more information on the treatment of patients who had a recent PCI (cardiac operation to widen heart blood vessels).

Patients included in the study had regular appointments with cardiologists. This helped them to have additional and valuable care for their disease during many years.

9 Are there plans for further studies?

No other studies with trimetazidine 35 mg are foreseen to date.

10 Further information

What is the identification number of the clinical study?

- Protocol Number: CL3-06790-010
- EudraCT Number: 2010-022134-89.