

# **Additional information on your partner's/family member's participation in medical scientific research**

## **A study on the effect of intravenous thrombolysis before intra-arterial treatment for an acute ischemic stroke**

*Official English title: MR CLEAN-NO IV: Intravenous treatment followed by intra-arterial treatment versus direct intra-arterial treatment for acute ischemic stroke caused by a proximal intracranial occlusion.*

### **Introduction**

Dear sir/madam,

You have received this letter because your partner/family member has suffered an ischemic stroke and unfortunately has passed away. First, we would like to offer our sincere condolences for your loss.

With this letter we wish to provide additional information about your partner's/family member's participation in medical scientific research. By now you will have been informed about this by the treating physician. Because it was in your partner's/family member's interest to be treated as quickly as possible, the medical ethical committee was asked to defer the consent procedure until after the treatment. As the risks of this study are small, the medical ethical committee gave permission to do so. This means that your partner/family member had already undergone the study treatment or the standard treatment. This was decided by randomization.

Unfortunately, your partner's/family member's medical condition deteriorated and he/she passed away before we were able to ask for consent to participate in the study. Your partner's/family member's medical information may be of great importance for future patients who experience a stroke. We will therefore add your partner's/family member's data to our analyses for the entire group of patients treated in this study. This letter of information explains what the study entails and what type of treatment and tests your partner/family member received.

Take the time to read this information thoroughly and ask any questions to the researcher. You can also consult the independent expert, who is named at the end of this letter, for additional information. Lastly, you can discuss the information with your friends or family.

### **1. General Information**

This study was initiated by the Academic Medical Center (AMC) in Amsterdam, The Netherlands, and is performed by doctors in several medical centers in Europe. The medical ethical committee of the Erasmus University Medical Center (EMC) in Rotterdam, the Netherlands approved this study. General information about obtaining approval for medical research can be found in the brochure "Medical scientific research" (appendix D).

### **2. Aim of this study**

The aim of this study is to determine whether it is still necessary to administer a powerful blood clot dissolvent (intravenous thrombolysis, IVT) in addition to the intra-arterial treatment with a catheter for acute ischemic stroke.

### **3. Background of the study**

Your partner/family member has been admitted to the hospital because he/she suffered an ischemic stroke. An ischemic stroke is caused by the blocking of an artery in the brain by a blood clot. Therefore, part of the brain did not receive blood and was damaged. The following symptoms can be caused by an ischemic stroke: paralysis, tingling sensation, problems with speaking and understanding speech and/or partial blindness. To improve the chance of recovery, patients are treated with a catheter treatment via the groin (intra-arterial treatment) if possible. With this intra-arterial treatment, the blood clot is removed from the artery. This treatment is only possible if it can be started within 6 hours from the start of symptoms. Approximately 1 in every 3 treated patients regains functional independence after a recovery period of 3 months. Even if the clot is removed from the artery successfully, not all patients recover well after intra-arterial treatment. Sometimes this may be caused by the development of a hemorrhage, worsening the symptoms. We think that the current standard treatment of IVT, administered before the intra-arterial treatment, may cause these hemorrhages. Not administering IVT could therefore lead to better outcomes. However, not giving IVT could possibly lead to impaired dissolving of small clots that stay behind after intra-arterial treatment. Thus, with this study we wish to determine whether it is better to omit IVT.

#### **4. What does participation involve?**

##### **Treatment**

As the treatment had to be initiated as soon as possible, your partner/family member was allocated to one of the following two groups:

Group 1: was directly treated with the intra-arterial treatment

Group 2: was treated with IVT before intra-arterial treatment (control group, standard treatment).

Treatment allocation and undergoing the treatment before asking consent has been approved by the medical ethical committee as we do not expect increased risk from withholding the standard treatment. Moreover, we expect less hemorrhages when we withhold the standard treatment. Additionally, it's important to inform you elaborately about this study. As ischemic strokes demand immediate treatment to save as much brain tissue as possible, providing this elaborate information before treatment is not possible, nor is it ethical.

To keep the distribution of patients over the two treatment groups as even as possible, we used randomization to decide to which group your partner/family member was allocated. More information about randomization can be found in the brochure "Medical Research" (Appendix D).

In total during the whole study, extra blood was drawn an extra three times at maximum. Further, we want to ask permission to use any remaining samples for eventual use in further research. The blood clots taken from the artery will be stored in a biobank. They will be analyzed and studied under a microscope to determine whether certain characteristics of the clots are related to the cause of the infarct and to the eventual effect of the treatment.

If your partner/family member was randomized into group 1, he/she underwent the intra-arterial treatment without IVT administered beforehand. This means that he/she was moved to the intervention room almost immediately after undergoing the scan of his/her brain. In the intervention room a catheter was inserted in the artery in his/her groin, under local anesthesia, sedation or general anesthesia. While using X-ray imaging, this catheter was moved to the occluded artery in the head. There, the physician attempted to remove the clot occluding the artery using mechanical thrombectomy (using stents with or without suction). The intervention took approximately 1 hour.

If your partner/family member was randomized to group 2, the control group, he/she also received IVT before the intra-arterial treatment. This means that, after the scan of his/her brain was completed, we administered a very powerful blood clot dissolving drug. Afterwards, he/she was also brought to the intervention room, where he/she underwent intra-arterial treatment.

### Visits and tests

During your partner's/family member's stay in hospital, he/she underwent all or part of the following tests:

- Physical examination on the ER before the intra-arterial treatment and directly after the intra-arterial treatment on the stroke unit by the treating physician.
- CT-scan or MRI-scan with and without contrast administration on the ER.
- 3 blood drawings: within 1 hour before, and within 1 hour after the intra-arterial treatment, and after 24 hours. At every blood drawing, a maximum of 20 ml of blood was drawn to analyze biomarkers (including DNA and coagulation). These blood drawings are meant to assess at a later date the relation between coagulation and the severity, extent and origin of the infarct, and the relation with the effect of not giving the powerful clot dissolvent.
- Intra-arterial treatment with or without administration of IVT beforehand.
- Storage of the clot that has been removed during the intra-arterial treatment.
- A CT-scan with and without contrast or MRI-scan of the head of your partner/family member, 24 hours after treatment.

### Differences from standard care

Some tests are part of standard care. Additional tests specifically for this study are the CT-scan with and without contrast or MRI-scan after 24, the 3 blood drawings and the storage of the extracted clot.

## 5. Possible side-effects/complications or other unfavorable effects

It is known that IVT increases the risk of hemorrhages in patients with an ischemic stroke. Not giving IVT would therefore lower the risk of hemorrhage.

### Tests

Blood drawings can be painful or cause a hematoma. In total, a maximum of 40 ml was drawn (spread out over 3 drawings). This amount does not cause problems in adults. To compare: 500 ml of blood is drawn at time for a blood donation.

## 6. Possible advantages and disadvantages

Not administering IVT may positively affect recovery after an ischemic stroke, but this is not certain. No study has been performed yet that provides solid evidence on this matter. However, in previous studies, patients who weren't treated with IVT before intra-arterial treatment demonstrated a similar treatment effect from intra-arterial treatment to patients who did get IVT. Additionally, we think that in the group of patients who do not get IVT there will be less hemorrhagic complications, improving the outcome.

Potential disadvantages of participation are:

- Any adverse effects/discomforts of tests in the study
- A potential moderately higher risk of new infarction for patients in group 1
- A potential moderately smaller chance to dissolve the blood clot after an unsuccessful intra-arterial treatment for patients in group 1.

## 7. End of the study

The whole study is completed when all participants have completed the follow-up, or if the AMC, government or the judging medical ethical committee decides to stop the study.

After all data has been analyzed, the researcher will inform you about the most important results of the study. This will happen, at the latest, 4 years after enrollment of your partner/family member.

## 8. Use and storage of data

For this study, we need to collect your partner's/family member's medical and personal data. Every participating patient receives a code that is linked to the data. His/her name and other personal details are omitted.

### Your partner's/family member's data

All his/her data remains confidential. Only the researchers from the hospital of your partner/family member and the coordinating research team from the AMC know his/her code. The personal data of your partner/family member will only be used for the telephone call at 3 months. The key to the code will remain with the research team. In study reports only the code will be used.

Some people are permitted access to his/her medical and personal data. These people monitor whether the study is being performed well and is reliable.

People who are permitted access to his/her data are: the research team, the safety monitoring board, independent monitors and the inspection for healthcare. Also, with your permission his/her coded data can be used to investigate other scientific questions, for example by including them in international databases with data from other comparable studies to combine and analyze them. With your permission, companies that make medical devices or drugs can be given access to his/her coded data. Regulatory bodies such as the Food and Drug Administration (FDA) can also be permitted access the medical data. All aforementioned persons or institutions will keep the data confidential.

The researcher will store the data for at least 15 years.

### Request for data from the ambulance service

We will request the data collected by ambulance personnel about your partner's/family member's case at the ambulance services. These are data, for example, about the severity of his/her symptoms and the time interval between the start of symptoms and the arrival at the hospital. We would like to use these data to study the work flow process from the moment of symptom onset until treatment, and how this can be further improved in the future.

### Samples

The blood samples taken from you partner/family member, and the extracted blood clot will be stored in a coded manner in the Erasmus University Medical Center in Rotterdam. We will analyze the samples in the laboratory (for example by performing measures and looking at the sample under the microscope). The goals of these tests are to determine whether there is an association between the composition of the sample or blood clot and the effect of the treatment.

### Later use of data

We want to store the data and samples for at least 15 years. We might perform further research with this data. If you do not object you consent this practice.

## **9. Insurance for study participants**

We have acquired an insurance for all participants in this study. This insurance covers damages caused by the study. Not all damages are insured. More information the insurance policy can be found in appendix B. This appendix also states who to contact if you wish to report damages.

## **10. Informing your partner's/family member's general practitioner**

The treating physician will send the general practitioner a letter about the passing of your partner/family member. The general practitioner will also be informed about the the participation in this study.

## **11. No financial compensation for participation**

Participation in the study will not cost anything. There will be no payment for participation.

## **12. Do you have any questions?**

If you have any questions, please contact the research team. For objective council you can call the independent expert. He knows a lot about the study but is not involved in its execution.

If you have any complaints, the best thing to do is to contact the complaints department in your partner's/family member's own hospital.

All contact details can be found in appendix A: "contact details".

## **13. Appendices**

- A. Contact Details
- B. Information about the insurance
- C. Brochure 'Medical Research – General Information for Subjects' (version March 2016)

**Appendix A: contact details for HagaZiekenhuis**

Local principal investigators:

Dr. L.C. van Dijk, interventional radiologist

Dr. K.F. de Laat, neurologist

All to be reached via: 070 - 210 2381

Independent physician:

Prof. dr. B.C. Jacobs, neurologist Erasmus MC

Can be reached via: 010-7033780

Complaints:

Complaints committee HagaZiekenhuis

Can be reached via 070-210 2547 of 070-210 1814

## Appendix B: Information on insurance

The AMC has obtained an insurance for everybody who participates in this study. This insurance covers damages sustained during the study and within 4 years after the study ends. Damage has to be reported to the insurance company within those 4 years.

This insurance does not cover all damages. The damages that are not covered are briefly listed below.

These conditions are defined in the “Besluit verplichte verzekering bij medisch-wetenschappelijk onderzoek met mensen”. This document can be found on [www.ccmo.nl](http://www.ccmo.nl), the website of the Central Committee on Research Involving Human Subjects (see ‘Library’, and then ‘Legal Framework’).

In case of damage you can directly contact the insurance company.

The insurance company that insures this study is:

Name:	Centramed
Address:	Postbus 7374, 2701 AJ Zoetermeer
Tel. Nr.:	070 301 7070
E-mail:	
Policy number:	624.528.303
Contact:	

The insurance covers damages up to € 650.000 per participant, € 5.000.000 for the whole study and € 7.500.000 per year for all studies by the same initiator.

The insurance does **not** cover the following damages:

- Damages caused by a risk for which you were informed in the information letter. This does not apply if the risk manifests more severely than expected or if the risk was very unlikely to occur;
- Damage to your partner’s/family member’s health that would also have manifested had he/she not participated in the study;
- Damages sustained by not (completely) following instructions or recommendations;
- Damages sustained by your partner’s/family member’s offspring, as cause of a negative effect of the study on your partner/family member or his/her offspring;
- Damages by an existing treatment method in a study researching existing treatment methods.