



Congratulations on the birth of your baby. We understand that this may be a difficult time for you. However, we think it is important for you to know about this particular study taking place in our neonatal unit. This leaflet has two parts:

Part 1 tells you the purpose of this study and what will happen and what it will involve.

Part 2 gives you more detailed information about how we will use your data.

One of our team members will go through the information sheet with you and answer any questions you have.

### **PART 1 (STUDY DETAILS)**

#### **What is hypoxic ischemic encephalopathy (HIE)?**

HIE is also known as 'birth asphyxia related brain injury'. It happens when the unborn baby's brain does not receive enough oxygen or blood flow around the time of birth. How well your baby recovers depend on how severe this brain injury is. By doing a careful clinical neurological assessment and recording of the brain wave activity of the baby, experienced doctors can categorise the babies with HIE into either mild or moderate/severe HIE.

#### **What is mild hypoxic ischemic encephalopathy (HIE)?**

Babies with mild HIE have transient problems with their breathing, feeding and often are very irritable, but have a normal brain wave activity. Most of these babies do require admission to a neonatal intensive care unit for few days but do recover rapidly and start breast or bottle feeding.

***Although these babies improve within few days and get discharged home, many have lower cognitive skills (thinking ability) at 2 years and over a third require special educational support at school.***

#### **Why are we doing this study?**

While we know that body temperature does influence brain injury, we do not know if babies nursed at normal body temperature (37°C) or at a lower body temperature (33.5°C) have better chance of recovery from brain injury after mild HIE.

The aim of this study is to find out if a lower body temperature for first three-four days (also known as cooling therapy / whole body hypothermia) is better than keeping a baby at normal body temperature (37°C, also known as targeted normothermia) for improving their cognitive ability (thinking skills) at 2 years of age.

While lower body temperature (33.5°C) does benefit babies with moderate or severe HIE and is used as standard treatment in the

NHS, we do not know if this treatment benefits babies with mild HIE.

Moreover, cooling therapy is not without adverse effects and can increase breathing difficulties, bleeding problems, heart activity, and liver function in babies.

### **Why is my baby suitable for this study?**

Neurological assessment and brain wave activity studies of your baby suggest your baby has mild HIE, and hence your baby will be eligible to participate in this study.

About 426 babies from neonatal units throughout the UK will be entered in the study. It is anticipated that it will take about 5 years in total to complete the study. Your baby's care team will be happy to provide further information regarding the stage of the study.

### **What is involved in participating in this study?**

If you agree to participate, we will ask you to sign a consent form before your baby is 6 hours old. Then, your baby's details will be entered into a computer programme that will randomly place your baby into one of the following two groups, within six hours of birth:

- 1) nursing at normal body temperature (37°C) for 3-4 days using incubators or servo-controlled warmers (Targeted normothermia).

- 2) nursing at low body temperature (33.5°C) for 3-4 days using a cooling blanket (cooling therapy / whole body hypothermia).

The rest of clinical care will be exactly the same in both groups, and all babies will require continuous monitoring of brain wave activity for 3-4 days in a specialist neonatal intensive care unit.

If your baby was born at a special care or local neonatal unit, your baby will be transported to the nearest specialist intensive care neonatal unit for continued care, irrespective of whether is being nursed at a normal or lower body temperature. With your permission, the video recording of the neurological examination of your baby will be also shared with neurology experts at Imperial College London.

As part of their routine clinical care, your baby may have an MRI scan before going home to see if they have any visible brain injury, so that we can make a prediction of the long-term implications on their health. Your baby's doctor will discuss the results of the MRI scan with you, including any incidental findings on the MRI.

We will collect the data from your baby's clinical records, and the results of other tests they may receive as a part of their routine

care. This may include an aEEG/EEG (brain activity recording), a brain ultrasound scan, and blood tests. We will also collect a total of 2.5 ml of blood (a third of a teaspoon) during the first four days after birth, to find out if the difference in body temperature changes the activity of genes. These results will not be available before the entire study is completed and will not change the care given to your baby but may influence the care given to similar babies in the future. Whenever possible, we will co-ordinate the time of these samples with your baby's routine clinical blood tests.

Following hospital discharge, a research nurse will maintain regular contact with you. We may also contact you via email and ask a few questions regarding your child's development, hospital admissions including visits to GP surgeries and any expenses you incurred for your child's care. This will not take more than 20 minutes of your time and will help us obtain your views about your child's progress. At around two years of age, your baby will have a neurological assessment to assess their cognitive (thinking) ability. The follow up visit will be scheduled in close consultation with you, either at your local hospital or at home. We will also collect information from the mother's medical notes at the time of birth, to find details of any antenatal medical problems and the results of any important tests. We will

also request your permission for another detailed assessment at school age, which will be subject to further funding.

### **What are the possible benefits of my baby taking part?**

All babies participating in this study will be closely monitored by experts in neonatal brain injury at a specialist centre, and detailed neurological assessment performed at 2 years of age.

At present, we do not know if a lower body temperature (33.5°C) for first three days is better than normal body temperature (37°C) for improving their cognitive ability at 2 years of age for babies with mild encephalopathy. We are doing this study to find out which treatment is better to help doctors to take the right decisions about the care of babies with mild encephalopathy in the future.

### **What are the possible disadvantages and risks of my baby taking part?**

If your baby is in the lower temperature group, there is a chance that this may lower the platelet (blood clotting) levels in your baby's blood. We will monitor the platelet levels of all babies with neonatal encephalopathy and will administer platelet transfusions if required. Some babies may develop small bumps on their skin, which will eventually disappear without any consequence. Babies nursed under lower body temperature are likely to

require a longer hospital stay than those nursed under normal body temperature, by an additional day or two.

### **Does my baby have to take part?**

Your baby does not have to take part in this study if you do not want them to be involved. If you do agree for your baby to take part, you will be given this information sheet to keep and will be asked to sign a consent form. You will be given a copy of the signed consent form for your records.

Whether or not you agree for your baby to take part, this will not affect the standard of care you and your baby receive in any way. If you choose not to take part, the care usually received by babies at your hospital will vary depending upon their guidelines, and this may or may not include cooling. Depending on your hospital's policy, your baby may still have the MRI scan and neurological assessment at two years of age.

### **What happens when the research study ends?**

The final assessment for this study is at the time of the neurological examination when your baby is around 2 years of age. We are hoping to obtain further funding to perform a detailed neurological assessment of all babies at school age as well. We may contact you and your GP at a later stage, requesting

your permission to undertake these assessments.

### **What if relevant new information becomes available?**

It is possible that new information may become available during the course of the study (4-5 years). It is unlikely that this will affect your baby's involvement with this study. If the study is stopped early because of new information, you will be informed about this.

### **What will happen if I do not want to carry on with the study?**

Your baby's participation in this study is entirely voluntary. You are free to decline for your baby to enter or for your baby to withdraw from the study at any time without having to provide a reason. If you choose to do this, it will in no way affect your baby's future medical care. We may ask you for your consent to use the information already collected so far, or as a part of standard clinical care, for research purposes.

### **What if there is a problem?**

Imperial College London holds insurance policies which apply to this study. If you experience harm or injury as a result of taking part in this study, you will be eligible to claim compensation without having to prove that Imperial College London is at fault. This does

not affect your legal rights to seek compensation.

If you are harmed due to someone's negligence, then you may have grounds for legal action. Regardless of this, if you wish to complain, or have any concerns about any aspect of the way you have been treated during the course of this study then you should immediately inform the local Principal Investigator. The normal National Health Service complaints services are also available to you. If you are still not satisfied with the response, you may contact the Imperial *Imperial College, Research Governance and Integrity*

### **PART 2 (DATA GOVERNANCE)**

In this research study we will use information from yours and your baby's medical records. We will only use information that we need for the research study. We will let very few people know your name or contact details, and only if they really need it for this study. These will include Imperial research Team members and support staff.

Everyone involved in this study will keep your data safe and secure. Everyone involved in this study will keep the data collated as part of this study, including your personal data, safe and secure. We will also follow all privacy laws and legislation that are relevant to the specifics of the study.

At the end of the study, we will save some of the data in case we need to check it and/or for future research. We will make sure no-one can work out who you are from the reports we write.

### **HOW WILL WE USE INFORMATION ABOUT YOU?**

Imperial College London is the sponsor for this study and will act as the Data Controller for this study. This means that we are responsible for looking after your information and using it appropriately. Imperial College London will keep your personal data for:

- 10 years after the study has finished in relation to data subject consent forms.
- 10 years after the study has completed in relation to primary research data.

The study is expected to finish in May 2029.

For more information / confirmation regarding the end date please contact the study team, see '**WHERE CAN YOU FIND OUT MORE ABOUT HOW YOUR INFORMATION IS USED**' for contact information.

We will need to use information from your baby's medical record for this research project.

This information will include your initials, NHS number, name, contact details, test results and medical history.

People within the College and study team (see section sharing your information with others) will use this information to do the research or to check your records to make sure that research is being done properly and the information held (such as contact details) is accurate.

People who do not need to know who you are will not be able to see your name or contact details. Your data will have a code number instead. We will keep all information about you safe and secure.

Once we have finished the study, we will keep some of the data so we can check the results. We will write our reports in a way that no-one can work out that you took part in the study.

As a university we use personally-identifiable information to conduct research to improve health, care and services. As a publicly-funded organisation, we have to ensure that it is in the public interest when we use personally-identifiable information from people who have agreed to take part in research. This means that when you agree to take part in a research study, we will use your data in the ways needed to conduct and analyse the research study. Our legal basis for using your information under the General Data Protection Regulation (GDPR) and the Data Protection Act 2018, is as follows:

- Imperial College London – “performance of a task carried out in the public interest”);

Health and care research should serve the public interest, which means that we have to demonstrate that our research serves the interests of society as a whole. We do this by following the UK Policy Framework for Health and Social Care Research

Where special category personal information is involved (most commonly health data, biometric data and genetic data, racial and ethnic data etc.), Imperial College London relies on “scientific or historical research purposes or statistical purposes.

## **INTERNATIONAL TRANSFERS**

There may be a requirement to transfer information to countries outside the United Kingdom (for example, to a research partner, either within the European Economic Area (EEA) or to other countries outside the EEA. Where this information contains your personal data, Imperial College London will ensure that it is transferred in accordance with data protection legislation. If the data is transferred to a country which is not subject to a UK adequacy decision in respect of its data protection standards, Imperial College London will enter into a data sharing agreement with the recipient research partner that incorporates UK approved standard contractual clauses or utilise another transfer mechanism that safeguards how your personal data is processed.

## **SHARING YOUR INFORMATION WITH OTHERS**

We will only share your personal data with certain third parties for the purposes referred to in this participant information sheet and by relying on the legal basis for processing your data as set out above.

- Other Imperial College London employees (including staff involved directly with the research study or as part of certain secondary activities which may include support functions, internal audits, ensuring accuracy of contact details etc.), Imperial College London agents, contractors and service providers (for example, suppliers of printing and mailing services, email communication services or web services, or suppliers who help us carry out any of the activities described above). Our third-party service providers are required to enter into data processing agreements with us. We only permit them to process your personal data for specified purposes and in accordance with our policies.

## **POTENTIAL USE OF STUDY DATA FOR FUTURE RESEARCH**

When you agree to take part in a research study, the information collected either as part of the study or in preparation for the study (such as contact details) may, if you consent, be provided to researchers running other research studies at Imperial College London

and in other organisations which may be universities or organisations involved in research in this country or abroad. Your information will only be used to conduct research in accordance with legislation including the GDPR and the UK Policy Framework for Health and Social Care Research.

This information will not identify you and will not be combined with other information in a way that could identify you, used against you or used to make decisions about you.

## **WHAT ARE YOUR CHOICES ABOUT HOW YOUR INFORMATION IS USED?**

You can stop being part of the study at any time, without giving a reason, but we will keep information about you that we already have because some research using your data may have already taken place and this cannot be undone.

- If you choose to stop taking part in the study, we would like to continue collecting information about your health from your hospital records and GP. If you do not want this to happen, tell us and we will stop. This will not affect any healthcare or support you may be receiving separately.
- We need to manage your records in specific ways for the research to be reliable. This means that we won't be able to let you see or change the data

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we hold about you if this could affect the wider study or the accuracy of data collected.

- If you agree to take part in this study, you will have the option to take part in future research using your data saved from this study.

### WHERE CAN YOU FIND OUT MORE ABOUT HOW YOUR INFORMATION IS USED

You can find out more about how we use your information:

- at [www.hra.nhs.uk/information-about-patients/](http://www.hra.nhs.uk/information-about-patients/)
- by asking one of the research team
- by sending an email to [COMET@imperial.ac.uk](mailto:COMET@imperial.ac.uk), or
- by ringing us on 020 3313 2473.

### COMPLAINT

If you wish to raise a complaint about how we have handled your personal data, please contact the research team first by sending an email to [COMET@imperial.ac.uk](mailto:COMET@imperial.ac.uk), or by ringing us on 0202 3313 2473. Following our response, if you are not satisfied please contact Imperial College London's Data Protection Officer via email at [dpo@imperial.ac.uk](mailto:dpo@imperial.ac.uk), via telephone on 020 7594 3502 and/or via post at Imperial College London, Data Protection Officer, Faculty Building Level 4, London SW7 2AZ.

If you remain unsatisfied with our response or believe we are processing your personal data in a way that is not lawful you can complain to the Information Commissioner's Office (ICO)- via [www.ico.org.uk](http://www.ico.org.uk). Please note the ICO does recommend that you seek to resolve matters with the data controller (us) first before involving them.

### WHAT WILL HAPPEN TO THE RESULTS OF THE RESEARCH STUDY?

The results of the study will be made available to doctors and nurses caring for babies like yours across the world. You and your baby will by no means be identified in any reports or publications about the study. We will send you a summary of the final study results at the end of study.

### WHO IS ORGANISING AND FUNDING THE RESEARCH?

The study will be run at several national sites. It is funded by the National Institute for Health Research. Imperial College London is the main sponsor. Doctors will not be paid for including you in the study, nor do participants receive payment.

### WHO HAS REVIEWED THE STUDY?

All research in the NHS is looked at by an independent group of people called a Research Ethics Committee, to protect your interests. This study has been reviewed and

approved by London - Bloomsbury Research Ethics Committee.

### CONTACTS

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**Thank you for reading this leaflet.  
and considering the study during this  
difficult time for you. If you would like to  
discuss this study and ask some  
questions, please ask the doctor or nurse  
looking after your baby.**