

Microbiology sub-study documents

1.1 Protocol: Service Evaluation Documents

1.2 Laboratory Standard Operating Procedure

DINOSAUR microbiology laboratory SOP for taking, processing and storage of samples

The collection of paediatric bone and joint samples for real time polymerase chain reaction (RT-PCR): SOP for sample handling and processing in the routine microbiology laboratories of participating sites

The DINOSAUR (Duration of INtravenous antiBiOtic therapy for Septic Arthritis or acute osteomyelitis in a paediatric population) microbiology sub study is collecting samples pragmatically from the routinely collected samples sent to microbiology, as well as additional throat swabs for batched multiplex PCR analysis.

Please ensure that measures are taken to prevent contamination of the sample in the routine laboratory, this will include the wearing of gloves and the use of safety cabinets where available while handling the sample.

Once routine culture and microscopy have taken place, please carry out the following for samples to be processed by RT-PCR: **(PLEASE LABEL ALL STORED SAMPLES WITH PRE-PRINTED STUDY LABELS)**.

a. Tissue and bone fragments

1. Using a clean petri dish and sterile scalpel and tweezers, remove the sample from the collection tube.
2. Place the sample on to the petri dish and remove between two and four 10mg sections of the sample using the scalpel and place them in a sterile, nuclease free 2 ml plastic tube (Sarstedt) and cap.
3. Place the Sarstedt in to a -80°C freezer for storage.
4. Replace the original sample back in to its collection tube and store according to the laboratory SOP.

b. Fluid samples

1. Vortex the sample in its original collection tube to homogenise.
2. Using a sterile pastette (or other plastic pipette), remove approx. 500 µl of sample and place in a sterile nuclease free Sarstedt and cap.
3. Place the Sarstedt at -80°C for storage.
4. The original sample can then be refrigerated according to the local SOP.

DINOSAUR microbiology laboratory SOP for taking, processing and storage of samples

c. Blood cultures in paediatric (or adult) blood culture bottles and joint washouts that have been placed in these bottles (if relevant for site, most sites place in universal containers as routine practice)

(Please collect both positive and negative samples that are from paediatric patients with OAI)

1. Place the blood culture bottle on to the processing machine.
2. The sample should then be removed after 19 hours incubation for sampling (unless the sample has already "flagged" positive). If this is not possible the aliquot should be taken when the sample flags positive, or when the sample is removed from the machine.
3. Clean the top of the bottle with an alcohol wipe.
4. Agitate the bottle to fully mix the contents and whilst wearing gloves, use a sterile needle and syringe to remove 1ml of the contents.
5. Replace the sample back on to the culture machine if further incubation is required.
6. Place this carefully in to a nuclease free sterile Sarstedt and freeze at -80°C.

d. Throat swabs

1. Remove the swab from its packaging and take the sample from the patient.
2. Remove the lid from the tube containing the STGG transport media and whilst wearing gloves and using a clean pair of scissors, cut the end of the swab off so that it falls in to the media.
3. Close the lid and agitate to mix.
4. Store at -80°C.

1.3 Patient information sheets and consent form

1.3.1 Patient information sheet and consent form Parents



To be presented on local headed paper

Centre Name and Number:

THE DINOSAUR STUDY (CHILDREN'S BONE AND JOINT INFECTION STUDY)

Parent Information and Consent Form
Version 1.4 Dated 21/10/2013
www.dinosaur-study.org.uk

We would like to invite your child to take part in our research study. Before you decide we would like you to understand why the research is being done and what it would involve for you and your child. One of our team will go through this information sheet with you and answer any questions you may have.

Why is this study needed?

Bone and joint infections are uncommon in children. It is not known exactly how many children are affected, but it is estimated at 5-10 per 100,000 children per year. Diagnosis and treatment of bone and joint infections varies in different countries, and within the UK.

Bone and joint infections in children are usually caused by bacteria (bugs) carried in the blood being deposited in bone or in the joint, and multiplying. The bacteria causing these infections vary and can be different depending on the age of the child. We would like to find out which bacteria are causing the infections and see if some children are more likely to suffer from infections than others. Your hospital is helping us to look at this.

Why has my child been chosen?

Your child has been asked to take part because they were admitted with a bone and/or joint infection.

What will happen to my child if we join the study?

When your child has routine blood samples taken, or if samples taken from the bone or joint, a small amount will be sent for an extra test called PCR to try and find out what is causing the infection. This does NOT involve taking any extra blood, and using a PCR test may make it easier to detect which bacteria causing the problem. In addition, while blood tests are being done, an extra 5ml (1 teaspoon) of blood may also be taken if possible at this point to be stored for future testing to see if some children are more likely to get bone infections than others. This will not require any extra needles and will be done during the taking of the clinical tests your child needs.

Recent research from the United States has suggested that a throat swab may be useful to detect the bacteria causing bone and joint infections in children, and we would like to take a simple throat swab from your child to identify whether the bacteria detected by PCR are also present in the throat. The results will not be known until the treatment is complete, and so will not affect treatment.

Consent:

If you and your child are happy to take part, you will be asked to sign a consent form on behalf of your child before they take part. You will get a copy of the signed consent form and information sheet to keep. Your child will also be given information about the study in a format appropriate to their age group.

Are there any risks or benefits to my child if they join the study?

We cannot promise the study will help your child but the information we get might help treat children with bone and joint infections in the future. It will also help us to decide whether to carry out a study in the future comparing different lengths of courses of antibiotics for the treatment of bone and joint infections. There are no known risks to taking part.

Will anyone else know my child is taking part in this study?

Yes. Only people working on the study or working to ensure the study is run correctly will have access to the data. All information collected about your child during this study will be confidential and will be handled, stored and destroyed in accordance with the Data Protection Act 1998.

What will happen to the samples given by my child?

The PCR samples for the study will be analysed by the study team. The additional blood test will be the 5ml blood sample will be stored anonymously and used in future research into childrens' bone and joint infections and to compare with information from other serious infections.

What will happen to the results of the study?

We aim to publish the results of this study in medical literature. Your child's confidentiality will be maintained at all times and your child will not be identifiable in any publication. A short summary of the study will be provided on our website (www.dinosaur-study.org.uk).

What if there is a problem?

There are no risks to your child's health by participating in this study. If you or your child has any concerns about any aspect of this study, you should speak with the doctor and/or nurse who will do their best to answer your questions. If you remain unhappy and wish to complain formally, you can do this through the NHS Complaints Procedure. Details can be obtained from the hospital.

Who is doing this study?

This project was funded by the National Institute for Health Research Health Technology Assessment (NIHR HTA) Programme (project number 10/146/01) and will be published in full in Health Technology Assessment. The views and opinions expressed therein are those of the authors and do not necessarily reflect those of the HTA Programme, NIHR, NHS or the Department of Health.

It is being run in the hospital where your child is being treated, and is being organised by The University of Southampton, University Hospital Southampton NHS Foundation Trust and the University of Liverpool. This research has been approved by a research ethics committee, who are happy that the study is being conducted in an appropriate manner. This study is also supported by the Medicines for Children Research Network (www.mcrn.ac.uk).

Please ask us if there is anything that is not clear or if you would like more information.

Please Contact: < Insert Name and Title>
<Telephone Number>
Or Contact: < Insert Name and Title>
<Telephone Number>

**THANK YOU FOR READING THIS INFORMATION SHEET.
WE HOPE YOU HAVE FOUND THIS SHEET HELPFUL**



To be presented on local headed paper

Centre Name and Number:

THE DINOSAUR STUDY
(CHILDREN'S BONE AND JOINT INFECTION STUDY)

Parent Consent Form Version 1.4 21/10/2013

www.dinosaur-study.org.uk

	Please initial box
1. I confirm that I have read and understand the information sheet dated 21/10/2013 (version 1.4) for the above study. I have had the opportunity to consider the information, ask questions and have these answered satisfactorily.	
2. I understand that participation is voluntary and that I am free to withdraw my child at any time, without giving a reason, and without my child's care or legal rights being affected.	
3. I understand that relevant sections of any of my child's medical notes and data collected during the study may be looked at by responsible individuals from the research team, regulatory authorities, sponsor or from the NHS Trust, where it is relevant to my child taking part in this study. I give permission for these individuals to have access to my child's records.	
4. I understand that my child's medical data will be collected for this study and may be used to develop new research and that data protection regulations will be observed.	
5. I agree for my consent form and my child's details, which will include my child's name, to be passed to the Medicines for Children Research Network Clinical Trials Unit for the administration of the study.	
6. a/ I give permission for my child's extra blood test to be taken and used for this study, and to be transferred to research institutes in the UK. b/ I give permission for my child's extra blood test to be used for future research related to this study.	
7. a/ I give permission for my child's throat swab to be taken and used for this study, and to be transferred to research institutes in the UK. b/ I give permission for my child's throat swab to be used for future research related to this study.	
8. I agree to medical personnel, responsible for my child's welfare, being informed of my child's participation in the study.	
9. I agree to take part in the above study.	
Optional: I agree that I may be contacted in the future in relation to this study.	Yes <input type="checkbox"/> No <input type="checkbox"/>

Name of Patient

Name of Parent / Guardian

Signature

Date

Researcher

Signature

Date

When completed, 1 (original) to be kept in medical notes, 1 for parent/guardian, 1 for researcher site file; 1 for the MCRN CTU, University of Liverpool

1.3.2 Patient information sheet Children under 5 years



To be presented on local headed paper

Centre Name and Number:

THE DINOSAUR STUDY
(CHILDREN'S BONE AND JOINT INFECTION STUDY)

Information for under 5yrs
Version 1.3 24/05/2013
(www.dinosaur-study.org.uk)

Would you and your mummy or daddy or the grown up who looks after you be able to help us?



We are trying to find out the best way to look after children like you with poorly bones and joints.

We would like to ask for your help.

We are asking lots of other children to help us too.

If you want to help us

Your doctor or nurse will ask if you are happy for us to do some extra tests on the blood samples we take. We would also like to do a test called a throat swab to help us look at the bugs making you poorly.



Your mummy or daddy or the grown up who looks after you will need to say that this is okay.



This might help us help other children who have poorly bones and joints just like you.

Thank You

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1.3.3 Patient information sheet Children 6-10 years



To be presented on local headed paper

Centre Name and Number:

THE DINOSAUR STUDY **(CHILDREN'S BONE AND JOINT INFECTION STUDY)**

Children's Information and Assent Form
Version 1.3 Dated 24/05/2013
(www.dinosaur-study.org.uk)



What is a study? Why is this being done?

Research is what you do when you want to learn about something or find out something new.

This research looks at bone and joint infections and the best way to treat them.

We will be collecting samples from children at a number of different hospitals across the country.

Why have I been chosen?

You are being asked to take part in this study because you have a bone or joint infection.

Do I have to help?

Not if you and your mum or dad decide you do not want to.

What will happen to me if I say yes?

1. If you are able you will be asked to write your name on a form.

This is to say that you understand the study and what will happen. You will be given your own form to keep, as well as



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this leaflet. This is all you need to do. The doctors and nurses will take care of everything else.



2. We will do some extra tests on samples we take to check on your bone and joint infection. There are no extra blood tests but there is an extra test called a throat swab.

We will ask your mum and dad if we can do an extra test on your blood tests to use a new way to test the bugs that grow there. This would be done when you would have your normal tests anyway. We will also ask if we can take a throat swab and take some extra blood during your normal tests. There are NO extra needles in this study.

What good will happen if I take part?

We hope to find out how we can best treat children like you in the future, so you will be helping children with bone and joint infections in future to try to give them better treatments.

Will anything bad happen to me if I take part?

No, nothing bad will happen to you for choosing to help us.

What do I have to do now?

If you want to help, your mum and dad or the grown up looking after you will need to say it's okay.

What if I have questions?

If you have any questions, you can ask your mum or dad or the grown up looking after you to contact:

Please Contact: < Insert Name and Title >
< Telephone Number >

Or Contact: < Insert Name and Title >
< Telephone Number >



**Thank you for reading this information.
Please ask any questions if you need to.**

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To be presented on local headed paper

Centre Name and Number:

THE DINOSAUR STUDY
(CHILDREN'S BONE AND JOINT INFECTION STUDY)
Children's Information Sheet (Age 6-10 years) Assent Form
Version 1.3 24/05/2013
www.dinosaur-study.org.uk

Child (or if unable, parent on their behalf) to circle all they agree with:

- | | |
|--|----------|
| Has somebody explained this study to you? | Yes / No |
| Do you understand what this study is about? | Yes / No |
| Have you asked all the questions you want? | Yes / No |
| Have your questions been answered in a way you understand? | Yes / No |
| Do you understand it's OK to stop taking part at any time? | Yes / No |
| Are you happy to join in? | Yes / No |

If any answers are 'no' or you **don't** want to join in, **don't** sign your name!

If you do want to take part, please write your name and today's date

Your name _____ Date _____

Your parent or guardian must write their name here too if they are happy for you to do the study

Print Name Signature Date

The researcher who explained this study to you needs to sign too:

Researcher Signature Date

Thank you for your help.

When completed, 1 (original) to be kept in medical notes, 1 for parent/child, 1 for site file and 1 for MCRN CTU.

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1.3.4 Patient information sheet Children 11-15 years



To be presented on local headed paper

Centre Name and Number:

THE DINOSAUR STUDY **(CHILDREN'S BONE AND JOINT INFECTION STUDY)**

Young Persons Information and Assent Form
Version 1.3 Dated 24/05/2013
(www.dinosaur-study.org.uk)

What is the purpose of the study?

Bone and joint infections in children are usually caused by bacteria (bugs) carried in the blood being deposited in bone or in the joint, and multiplying. The bugs causing these infections vary and can be different depending on the age of the child. We would like to find out which bacteria are causing the infections and see if some children are more likely to suffer from infections than others. Your hospital is one of a number of hospitals across the country helping us to look at this.

We are inviting you to take part in our research study. Before you join in, it's important to understand why the research is being done and what it will mean for you. So please read this leaflet carefully. Talk about it with your family, friends, doctor or nurse if you want to.

Why have I been chosen?

You have been asked to take part because you have a bone and/or joint infection.

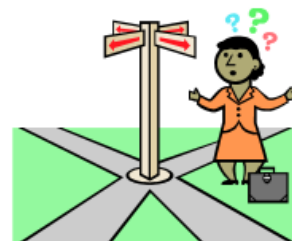
Do I have to take part?

No. You can stop taking part at any time if you want to, and this will not affect any of your medical treatment now or in the future.

What will happen if I take part?

1. You will write your name on a form.

If you agree to take part you will be asked to write your name on the form at the end of this leaflet. This is just to say that you understand the study and what will



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happen. You will be given a copy of the form to keep as well as this information leaflet.

Your mum or dad or guardian will need to sign a consent form to agree to you taking part. Your information will be kept confidential and in a safe place. Apart from this you will not need to do anything else. The doctors and nurses will do everything else.

2. We will do some extra tests on samples we take to check on your bone and joint infection. There are no extra blood tests but there is an extra test called a throat swab.

We will ask your mum and dad if we can do an extra test on your blood tests to use a new way to test the bugs that grow there. This would be done when you would have your normal tests anyway. We will also ask if we can take a throat swab and take some extra blood during your normal tests. There are NO extra needles in this study.

What will happen if I don't take part?

Nothing, you will still be looked after in the same way.



What are the benefits of taking part?

We cannot promise the study will help you but the information we get might help treat children with bone and joint infections in the future. It will also help us to decide whether to carry out a study in the future comparing different lengths of courses of antibiotics for the treatment of bone and joint infections.

What are the risks of taking part?

There are no known risks to taking part.

What if I have any questions?

If you have any questions, you can contact:

Please Contact: < Insert Name and Title >
< Telephone Number >

Or Contact: < Insert Name and Title >
< Telephone Number >



**THANK YOU FOR READING THIS INFORMATION SHEET.
WE HOPE YOU HAVE FOUND THIS SHEET HELPFUL**

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To be presented on local headed paper

Centre Name and Number:

THE DINOSAUR STUDY
(CHILDREN'S BONE AND JOINT INFECTION STUDY)

Young Persons Information and Assent Form

Version 1.3 Dated 24/05/2013

www.dinosaur-study.org.uk

TO BE COMPLETED BY THE CHILD AND THEIR PARENT/GUARDIAN

Child (or if unable, parent on their behalf) to circle all they agree

Please circle

- Have you read (or had read to you) information about this project. YES / NO
- Has somebody else explained this study to you? YES / NO
- Do you understand what this study is about? YES / NO
- Have you asked all the questions you want? YES / NO
- Have you had all your questions answered in a way you understand? YES / NO
- Do you understand it's ok to stop taking part at any time? YES / NO
- Are you happy to take part? YES / NO

If any answers are 'no' or you don't want to take part, **don't** sign your name!

If you do want to take part, please write your name and today's date

Your Name: _____ Date: _____

Your **parent or guardian** must write their name here too if they are happy for you to take part

Print Name **Sign** **Date**

The **doctor** who explained this project to you needs to sign too:

Researcher **Signature** **Date**

Thank you for your help

When completed, 3 copies need to be made, 1 for the participant, 1 for the investigator site file and the original must be kept in the medical notes.

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