Innate-like T cells in sepsis (ILTIS): Implications for early diagnosis and rescue of immune suppression– a feasibility study

PATIENT INFORMATION SHEET (RETROSPECTIVE)
Version 1.5

Why have I been given this leaflet?
You have been given this leaflet because you have been admitted to the Intensive Care Unit (ICU) suffering from a severe infection called sepsis.

We are studying people with severe infections, which we hope will lead eventually to the development of a new treatments and tests. At the time you came into hospital, you were too unwell for us to be able to ask for your consent to take part in the work; instead, we asked the advice of your friend or relative, who agreed that you would want to help. Now that you have recovered, we would like to ask you for your permission.

We appreciate that we have entered you into a study without your consent, and we hope that you are not offended by this; after full consideration, we have done this with the agreement of your friend or relative. If we were only able to study people who had given their consent in advance it would be impossible to carry out research into such a serious illness.

Before you decide whether or not to give your permission, we would like you to understand why this work is being done and what it involves. One of our team will go through this leaflet with you and answer your questions.

What is the purpose of the study?
Sepsis is a potentially life-threatening condition caused by a severe infection. When someone develops sepsis, inflammation occurs not just at the site of the infection but throughout the whole body. This widespread inflammation can be very harmful.

We are asking for consent to take samples from some patients with sepsis in the hope to study the way the body responds to severe infections. This includes patients that test positive for COVID-19.

We will be looking in detail at white blood cells that help to organise the reaction to infection. We will look at the hormones in the blood (called cytokines) to see if they can be used to predict what kind of infection is present. We will also add drugs to your immune cells after they are taken out of the body to see if we can improve their response to infection. This may lead to new treatments for patients.

Do I have to agree to take part?
It is up to you to decide whether or not to continue in the work. We will describe the study and go through this leaflet with you. If you agree to take part, we will then ask you to sign a consent form. However, you are free to withdraw at any time, without giving a reason. This will not affect your standard of care.

What does the study involve?
Whilst you were on the Intensive Care Unit, many blood tests were taken as part of your normal care. We also took some extra blood from you in order to see what effect the inflammatory reaction was having on your white blood cells

In total, we have taken **90 ml** (about 18 teaspoonfuls) of blood in addition to the blood tests that have been taken as part of your normal care (This usually comes to two pints or more during the course of a stay on the intensive care unit. The extra blood was taken out of one of the lines that you already had as part of your routine care – there were no extra needles. The blood tests were taken over the course of two weeks.

We also took two samples of mucus by adding and then suctioning out 20ml of a mild salt solution from the plastic tube that was already in your mouth. Taking this sample occurred when you were sedated, and so any discomfort would have been very mild and transient if any at all.

As part of this study we may carry out an analysis of your DNA. The types of analysis we will perform are for research purposes only and therefore we will not be able to provide any clinical feedback. The Cardiff University research team also needed access to your medical records for them to understand how your condition and the treatment you are receiving may affect the inflammatory reaction in your body.

The data obtained in this study are important and may be useful to other research studies. So that your data can be used anonymously for further research in the public interest, an NHS organisation will replace your identifying details with a unique anonymous code. This will enable your data to be linked to routinely collected data, including your health records, both now and in the future. The data can then be used for research in anonymous form in a secure environment.

Will it benefit me to take part in the study?
You have received the same care as you would have if you were not taking part in the study. We hope that by taking part you will help us to treat other people who become ill with severe infections in the future, but there will be no benefit to you as a result of having taken part. We are not able to pay you for taking part.

Have I been harmed as a result of taking part in the study?
We do not believe that you have come to any harm as a result of the study. It is inconceivable that the extra blood samples have caused any harm because the volume of blood taken is too small. The average adult has about 5 litres (nearly 10 pints) of blood; the amount involved in our samples was a total of **90** ml (or about **18** teaspoonfuls) over the course of two weeks, which is a tiny amount.

What if there is a problem?
If you have any complaints or concerns about the way you have been treated as a result of taking part in the study, these will be addressed in full. More details will be given below.

Will my confidentiality be protected?
Yes. All information will be handled in confidence. All information that is collected about you during the course of the research will be kept strictly confidential, and any information about you that leaves the hospital will have your name and address removed so that you cannot be identified.

What if I decide to withdraw from the study?
You can ask that we withdraw you from the study at any time without giving any reason. If this happens we will destroy any samples we have already taken, delete any data stored on computer and shred your paper records about t the study. You will continue to receive the same high standard of hospital.

What if I have a complaint about the conduct of the study?
If you are in any way unhappy about how the study has been conducted, you can discuss this with any of the research team, whose names and contact numbers are listed below. If this does not resolve the issue to your satisfaction, you can take up your concern with the Cardiff and the Vale NHS Trust (contact details are also given below). You can always raise any concerns with any of the doctors or nurses who are looking after you.

What will happen to the blood samples?
The samples will be stored anonymously in secure freezers at Cardiff University until they can be analysed for the chemicals we are interested in. Only members of the Cardiff University research team will have access to the samples. Your samples may be shared with other academic or commercial research teams in the UK or overseas. No patient identifiable information will be shared with the collaborating institutions. Any samples that have not been used within five years of the end of the study will be destroyed.

What will happen to the results of the study?
The results of the study will be published in the scientific press and presented at conferences and other scientific meetings. You will not be identified in any published material. We will also produce a report summarising our findings which will be made available to participants or their relatives. Please let a member of the research team know if you would like to receive a copy. We may also use the anonymised results in future research studies. Your anonymous research data will be retained for 15 years after the study has finished, in line with Cardiff University's record retention policy.

Who is organising and funding the research?
The research is being funded by The European Commission Horizon 2020 fund and organised jointly between Cardiff University and Cardiff and the Vale NHS Trust.

Summary

What is involved?

- We have taken 90 ml of blood from lines that were already in whilst you were in intensive care. No extra needles were used.
- This blood will be examined for immune cells and experiments done on it to develop new treatments and tests for patients in the future.
- We will also use relevant information from your medical record.
- Identifying details will be replaced with a unique anonymous code to enable their data to be linked to routinely collected data, including health records, both now and in the future.
- All information and samples will be kept strictly confidential.

What are the possible benefits of taking part?

- Participating in this research will not change your treatment in any way.
- Although it will not directly benefit you, it may help other patients in the future going though similar surgery to yourself.
- There are no financial benefits to taking part.

What are the possible disadvantages and risks of taking part?

- There are no specific risks.
- The average adult has about 5 litres (nearly 10 pints) of blood; the amount involved in our samples was a total of **90** ml (or about **18** teaspoonfuls) over the course of two weeks, which is tiny by comparison.

Further supporting information

What if something goes wrong?
For complaints or problems please contact Dr Matt Wise on 02920 747747 or mattwise@doctors.org.uk. He is the research lead for critical care who is external to the study team but who is familiar with the study.

What if there are serious medical findings from the genetic tests?
Only specific immune cells associated with infection will be assessed. We will not be able to make conclusions about broader aspects of health from these. There will be no implication for other members of your family.

How have patients and the public been involved in this study?
We have discussed this project with the patient and public representative and executive director of the UK Sepsis Trust for Wales. They have made a valuable contribution to how the study is designed and run.

Who has reviewed this study?
Both Cardiff University and the University Hospital of Wales have reviewed this study. It has been granted ethical approval by the Wales Research Ethics Committee 3.

Further information and contact details
For further details please contact Dr Matt PG Morgan on morganMP@cardiff.ac.uk or 029 20744193.

Thank you for taking the time to read this information leaflet.

For further information or complaints please contact:

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