



A study to find out if a new blood test (microRNA) can be used to monitor people after surgery for seminoma or dysgerminoma cancer.

PARTICIPANT INFORMATION SHEET

PART A – Parent and Guardian (for participants under 16)

Version 1.1 Date 25/11/2025

We are inviting your child to take part in a research study called OTIS-S

- Whether or not your child joins the study is entirely up to you.
- This information sheet explains why the study is being done and what would be involved if you agree for your child to take part.
- Your child's hospital team will talk through this information with you and your child. They will help you decide whether or not you would be happy for your child to take part and answer any questions you may have.
- Please feel free to talk to others about the study if you wish.
- Do ask your hospital team if there is anything that is not clear or if you would like more information. They can be contacted using the details below.
- If you do agree for your child to take part in the study, it may be helpful to keep this information sheet for future reference.

[Note to sites: this information sheet can be provided in separate sections to enable layered information giving tailored to potential participants' needs. This cover sheet should be provided with each separate section. If providing sections separately, please delete the contents table from the cover sheet beforehand. Always delete this highlighted note]

How to contact your OTIS study team

If you have any questions about this study, at any time, please talk to your hospital team:

<local name and contact number>

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1. SUMMARY

Why is the OTIS-S study being done?

We want to find out if a new blood test can be used to check whether the cancer is returning for people who have had surgery to remove an early stage testicular (seminoma) cancer or a similar type of cancer (dysgerminoma) that occurs in the ovaries or sometimes other parts of the body. This could reduce or avoid the need for scans which are currently used for this purpose. The study will be conducted in two parts (A and B) and this information sheet is for PART A of the study.

What is being tested?

People who join the OTIS-S study in PART A will have the new blood test alongside the normal monitoring, which involves check-ups, scans (CT, MRI and/or ultrasounds*) and blood tests. Everyone will have regular check-ups for 5 years to check if the cancer is returning.

* You can find more information on these scans in section 19. Information about scans.

Who can join the study?

We are inviting people to join the study who are about to begin monitoring after having surgery to remove the cancer and don't have any further treatment planned.

Where is the study taking place?

The **OTIS-S study** is taking place at **NHS hospitals** across the **United Kingdom**.

How long will the study last?

We think that it will take **2.5 years** to enrol 260 participants in part A of OTIS-S; all participants will be followed up for 5 years after they were enrolled. The results from PART A of the study will be used to develop the next part (PART B) of the study.

Confidentiality

In this research study, we will use information from your child, their medical records and their GP. We will only use information that we need for the research study. We will let very few people know your child's name or contact details, and only if they really need it for this study. Everyone involved in this study will keep your child's data safe and secure. We will also follow all privacy rules.

At the end of the study, we will save some of the data in case we need to check it and for future research if you have agreed to this. We will make sure no-one can work out who your child is from the reports we write.

The information pack tells you more about this.

2. Why are we doing this study?

OTIS-S is looking at a new blood test measuring a substance called microRNA (or **miRNA**). We want to see whether this test can be used to check whether the cancer is returning as part of monitoring for people who have had surgery to remove an early stage testicular (seminoma) cancer or a similar type of cancer (dysgerminoma) that occurs in the ovaries or sometimes other parts of the body. Monitoring normally involves check-ups, scans (CT, MRI and/or ultrasound) and blood tests. OTIS-S will look to see if testing levels of miRNA can be used as part of monitoring. Previous research suggests this might detect a returning cancer earlier and/or reduce the need for scans.

Approximately 260 patients will take part in this study from a number of hospitals all around the UK, including up to 10 to 15 people with dysgerminoma as it is less common than seminoma.

3. What is miRNA?

miRNA is a substance produced by the cancer that can be measured in a sample of blood in a laboratory. Research suggests the amount of miRNA increases as the cancer grows, and it is possible to detect even small amounts.

4. Why is my child invited to take part?

Your child is being invited to take part because:

- Your child has been diagnosed with seminoma or dysgerminoma cancer and has recently had surgery to remove the cancer.
- Your child's scans have not shown any signs of their cancer, so they do not need any further treatment at this time.
- Your child's cancer does, however, have a (low) chance of returning and they need to be monitored for up to 5 years so that any recurrence is detected at an early stage.

5. Does my child have to take part?

No, they do not have to take part in the study; it is up to you to decide.

Taking part is entirely voluntary, and you will be given time to decide. If you wish for your child to take part they must be entered into the study a maximum of 8 to 10 weeks after their operation. The future care your child receives will not be affected by your decision about whether to take part. If your child does join the study, they are free to end their participation at any time without giving a reason by letting their medical team know.

6. What will happen if I agree for my child to take part?

If you decide you would like your child to take part in the OTIS-S study, we will give you this information leaflet to keep and you will need to sign a consent form to record your agreement for your child to participate. If you decide your child will take part in the study, they will be involved for up to 5 years.

If you move away, let your hospital team know. It will often be possible to make arrangements for your child to continue in the study if you would like to.

Check-up visits

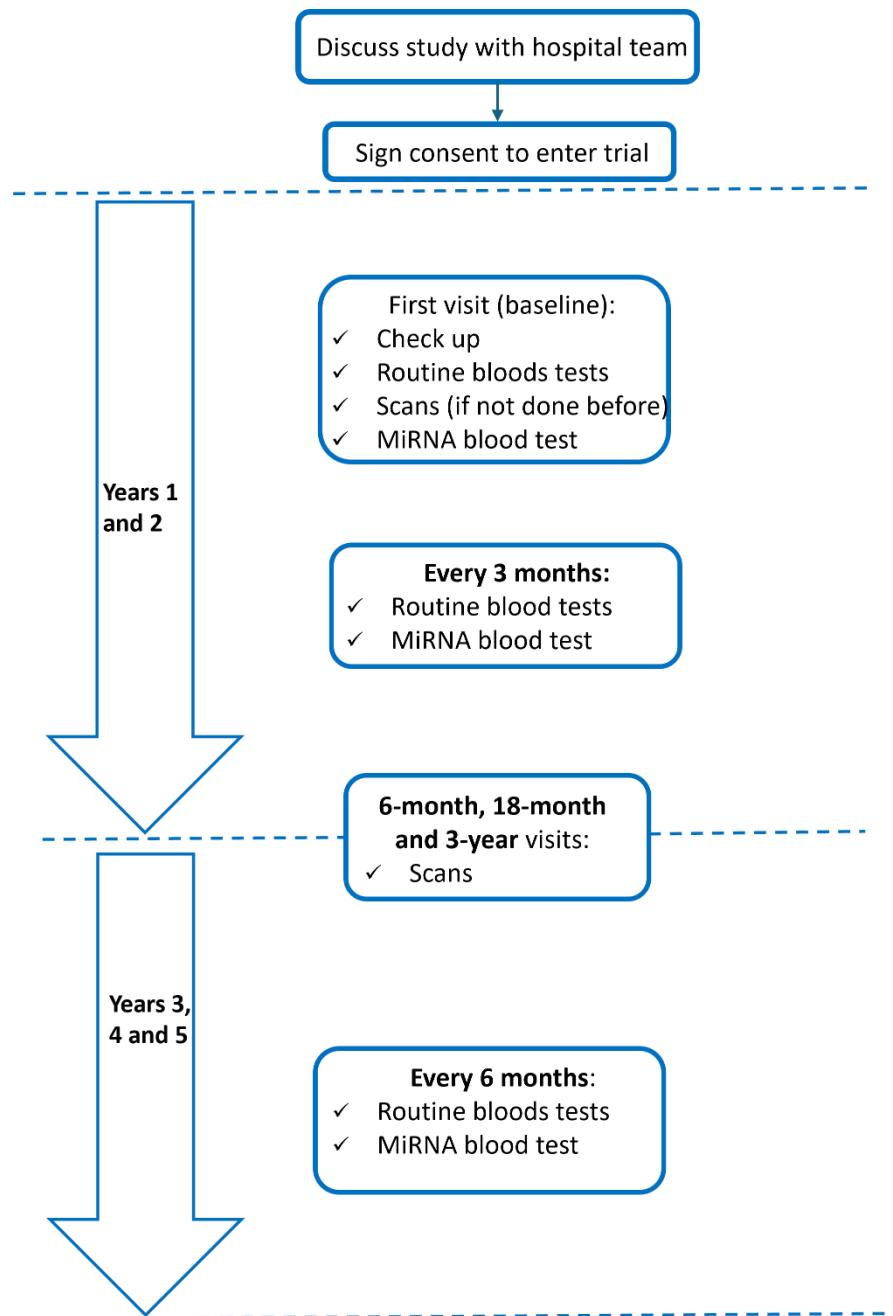
Before people join OTIS-S, they will have had surgery to remove their cancer, and their hospital team will have done some tests as part of the normal checks following surgery. This may include a scan to check if the cancer is anywhere else.

Once it is confirmed that your child is able to take part in the study, they will need to come to a clinic appointment for the following tests:

- ✓ A check-up including height, weight and blood pressure.
- ✓ Routine blood test to measure standard tumour markers (if not done in the previous 3 weeks)
- ✓ Scans: A CT, MRI or ultrasound of the abdomen/pelvis (if not done in the previous 6 weeks).
- ✓ Blood test to measure miRNA. Blood will be taken for this at the same time as for the routine blood test above.
- ✓ After this, your child will need to return to clinic every 3 months for the first 2 years and every 6 months for the next 3 years. These visits would be on a similar schedule if they weren't taking part in the study. At these visits, the following test will be performed:
 - Routine blood tests to measure standard tumour markers.
 - Blood test to measure miRNA. Blood for this will be taken at the same time as the routine blood tests above and only involves an additional teaspoon of blood (5ml).

- Your child will also have a scan (CT,MRI or ultrasound) at some visits. As a minimum these will be at the 6-, 18- and 36-month visits. Your child may have some additional scans if these are part of the local hospital normal care. Your child's doctors will discuss this with you if it applies to them.

The flow chart below shows the visit time points and what will happen as part of the OTIS-S study. Except for the extra blood for miRNA testing these would all be part of your child's normal monitoring



How will the miRNA test results be used?

After blood tests from the first visit and the check-ups at 3 months, 6 months, 12 months, 18 months, 2 years, 2.5 years, 3 years, 4 years and 5 years, your child's doctor will receive their miRNA test results and will discuss these with you. There are three possible results:

- **Negative results:** If the test does not show any suspicion of your child's cancer returning, they will continue to be monitored as explained above.
- **Positive results:** If the test result suggests your child's cancer could be returning, they will normally need to have one or two extra scans and blood tests to confirm whether this is the case.
- **Unclear result:** Sometimes, the result may be unclear, though this is rare. When this is the case, your child will be monitored more closely for a while. This might involve extra blood tests.

The bloods taken at the other check-ups visits (9 months, 15 months, 21 months, and 3.5 years) will be stored in the laboratory and only tested if your child's cancer returns. This will allow us to understand better exactly when the test is able to detect the cancer returning.

What happens if the cancer returns?

If the cancer returns, your child's hospital team will discuss options for further treatment with you. The type of treatments will depend on how advanced the cancer is. We would still like to collect information on how your child is doing and their treatment, if you agree for us to do so.

Data collection

Your child's hospital team will send information from your child's check-ups to the researchers at The Institute of Cancer Research who are running the OTIS-S study. The researchers will combine data about everyone taking part to find out if miRNA can be used to monitor patients with seminoma and dysgerminoma after surgery. The researchers may also use health information, which is held by the NHS in national databases, to make sure the information used to prepare the results is as complete as possible. All data will be kept safe and secure.

7. Will my child be asked to do anything else

Collection of optional samples

We will ask you if you are willing to donate a sample of your child's tumour tissue from their surgery. This will already be stored in the pathology department of the hospital where your child had their surgery and will not require any additional tissue to be taken from them. These will be used for future research studies. Further information about the storage and use of these samples is available in section 8 of this information sheet below.

Consent for collection of these samples to be stored for future research is optional and can be withdrawn at any time. It will not affect your child's participation in the OTIS-S study or your child's care.

8. What will happen to any samples my child donates?

The group of medical professionals overseeing the OTIS-S study will also oversee the sample collection. The routine and miRNA sample collection for the OTIS-S study is described in section 6 of the information sheet above.

Routine blood samples

The routine bloods will be analysed at your child's hospital and the results will be reviewed by their doctor as well as sent to the research team to the researchers at The Institute of Cancer Research who are running the OTIS-S study.

MiRNA blood samples

The blood samples taken for the miRNA testing will be labelled with your child's unique study ID, initials and date of birth and sent to the Coleman-Murray-Scarpini laboratory at the University of Cambridge or the NHS North Thames Genomics Laboratory Hub facilities for analysis and storage. When they arrive at the laboratory, they will be coded meaning that your child's personal details will be removed and replaced with a unique number. By doing this, your child's confidentiality will be maintained whilst still allowing biological information to be compared to results from scans and other routine tests. Results will be sent to the researchers at The Institute of Cancer Research who are running the OTIS-S study and to your child's doctor as described in section 6.

Optional tumour tissue samples

Your child's tumour tissue sample may be labelled with your Study ID, initials and hospital pathology number when they are sent to the research laboratory. When they arrive at the laboratory they will be coded as described above to maintain confidentiality. Any cancer samples will be stored at the Royal Marsden Hospital and/or The Institute of Cancer Research

laboratories indefinitely and in some cases returned to the local pathology laboratories once the study is complete depending on local practice.

Future research

We ask for your permission for possible future research using your child's donated blood and tissue samples. This is optional and you do not need to agree to this in order for your child participate in the study. If you agree to this, at the end of the study, the samples will be held in a licensed facility where they will be stored indefinitely. If you do not agree, at the end of the study, the blood samples will be destroyed and the tissue samples sent back to your child's hospital.

These samples may be used in the future for analysis that could include genetic analysis. Cancer can be caused by changes in our genes that occur after we are born. We can test for this type of change using the genetic material from cancer cells. This type of testing may be done on your child's samples if you agree to allow for these samples to be used for future research.

We would also like to be able to make your child's samples and any information necessary for their analysis available to other researchers for future medical research. This may involve researchers and organisations outside of the UK and European Economic Area (EEA). This could also include the genetic testing described above. It is possible that the future research will be carried out internationally.

Any future research using your child's samples must be approved by an independent Research Ethics Committee before it is allowed to go ahead. Any samples and information relating to them transferred to third parties will not contain your child's personal information, so researchers will not be able to identify your child from the information provided.

It will not be possible to release the results of these future tests to you or your child's research team and they will not form part of your child's medical records.

9. What are the possible advantages and disadvantages of taking part?

What are the possible advantages of taking part?

For the majority of patients, there are no direct benefits to taking part, but the information gained from this study will help improve treatment for other people with seminoma in the future. If your child's cancer returns, it's possible that the miRNA testing will help to pick it up earlier; but we don't yet know if this will be the case.

What are the possible disadvantages and risks of taking part?

If your child takes part in this study, they will have CT or MRI scans. They may also have a PET-CT scan and an x-ray. They would still have most, if not all, of these if they did not take part. CT scans, PET-CT scans and x-rays use ionising radiation to form images of the body, which provide your doctor with clinical information. Ionising radiation can cause cell damage that may, after many years or decades, turn cancerous. The chances of this happening to your child as a consequence of taking part in this study are 0.1%. There are no other anticipated disadvantages or risks involved in taking part in this study as your child will receive the usual care. More information on the risks from the scans used within OTIS-S are explained in section 19.

The most common risks relating to blood samples being taken are brief pain, a bruise and potential feeling of dizziness or fainting.

What if I have private medical insurance?

If you have private medical insurance, please check with your insurance provider that your medical insurance policy will not be affected before agreeing for your child to take part in OTIS-S.

Will my child be paid for taking part in OTIS-S?

No. Neither your child nor your doctor will be paid for taking part in the OTIS-S study.

10. What happens if my child doesn't want to carry on with OTIS-S or if I don't want them to carry on?

Your child's participation is entirely voluntary. If you agree for them to take part and then change your mind, they can stop taking part in OTIS-S at any time, without giving a reason. Your child's future treatment and care will not be affected by your decision.

If your child does stop or reduce their participation, we would like to continue to collect information on their progress that is routinely recorded in your child's medical records. This is so that the overall quality of the study is not affected, and enough information is collected to answer the main aim of the research.

If you decide for your child to stop participating and do not want any more information to be sent to the study team at The Institute of Cancer Research, data collected before your decision will still be processed together with other participants' data. However no new data about your child will be collected and you may request that all your child's samples are destroyed to prevent future analysis.

If you are concerned about any aspect of OTIS-S, please discuss your concerns with your hospital team, using the contact details on the front page of this information sheet.

11. Who is organising and funding the research?

The Chief Investigator and senior clinical coordinator are **Dr Alison Reid and Professor Robert Huddart of The Royal Marsden NHS Foundation Trust**. OTIS-S has been developed in collaboration with the lead investigators named above, who are oncologists, and Dr Fay Cafferty, a study design expert and statistician at the Institute of Cancer Research Clinical Trials and Statistics Unit (ICR-CTSU).

Researchers at the University of York, the University of Cambridge, the NHS North Thames Genomic Laboratory Hub, the Royal Marsden NHS Foundation Trust and the Leeds Teaching Hospital NHS Foundation trust are also involved in the study. These researchers will help analyse some of the data collected within the study. Patient representatives will also be involved in the conduct of the study.

OTIS-S is being carried out by teams at up to 20 NHS hospitals in the UK. **The study is sponsored and coordinated by The Institute of Cancer Research (ICR)**, which is a charity and a college of the University of London and **funded by Cancer Research UK**.

12. Confidentiality

How will we use information about your child?

We will need to use information from your child, from their hospital records and their GP for this research project.

This information will include your child's:

- Full name
- Initials
- Date of birth
- Hospital number
- NHS number or Community Health Index
- GP details
- Home address and postcode
- Email address (if available)

People will use this information to do the research or to check your child's records to make sure that the research is being done properly.

People who do not need to know who your child is will not be able to see their name or contact details. Your child's data will have a code number instead.

The Institute of Cancer Research (ICR) is the sponsor of this research.

The ICR is responsible for looking after your child's information. Our legal reason for using your child's information is to carryout scientific research which is in the public's interest. We will share your child's information related to this research project with the following types of organisations:

- research institutions including universities, hospitals and commercial laboratories involved in research into cancer and its treatment, where this sharing has been approved by the sponsor.

We will keep all information about your child safe and secure by:

- Using a unique study identifier number allocated to your child to link all the samples and data that your child provides.
- Storing all your child's information and samples securely.
- Treating your child's information and samples as strictly confidential and nothing that might identify them will be revealed to any third party.
- Using the minimum personally identifiable information possible.
- Limiting access to your child's information to only those who need to use it for research or regulatory reasons and regularly reviewing who has access to your child's information.
- Using strong encryption whenever we need to share your child's information.
- Ensuring everyone who has access to your child's information has been trained on how to use it in a safe way.
- Keeping our Data Protection Officer informed on how we use personal data so they can advise us on how to keep your child's information safe.

Sharing Data outside of the UK

We may share or provide access to data about your child outside the UK for research related purposes to

- research institutions including universities, hospitals and commercial laboratories involved in research into cancer and its treatment, where this sharing has been approved by the sponsor.

We will make sure your child's data is protected. Anyone who accesses your child's data outside the UK must do what we tell them so that their data has a similar level of protection as it does under UK law. We will make sure your child's data is safe outside the UK by doing the following:

- (some of) the countries your child's data will be shared with have an adequacy decision in place. This means that we know their laws offer a similar level of protection to data protection laws in the UK.
- We use specific contracts approved for use in the UK which give personal data the same level of protection it has in the UK. For further details [visit the Information Commissioner's Office \(ICO\) website](#).
- We do not allow those who access your child's data outside the UK to use it for anything other than what our written contract with them says.
- We need other organisations to have appropriate security measures to protect your child's data which are consistent with the data security and confidentiality obligations we have. This includes having appropriate measures to protect your child's data against accidental loss and unauthorised access, use, changes or sharing.
- We have procedures in place to deal with any suspected personal data breach. We will tell you and applicable regulators when there has been a breach of your child's personal data when we legally have to. For further details about UK breach reporting rules [visit the Information Commissioner's Office \(ICO\) website](#).

How will we use information about your child after the study ends?

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 your child took part in the study.

We will keep your child's study data for a maximum of 20 years from the end of study. The study data will then be fully anonymised and securely archived or destroyed.

What are your choices about how your child's information is used?

- Your child can stop being part of the study at any time, without giving a reason, but we will keep information about them that we already have.

- If you choose for your child to stop taking part in the study, we would like to continue collecting information about their health from central NHS records / their hospital / their GP. If you do not want this to happen, tell us and we will stop.
- You have the right to ask us to remove, change or delete data we hold about your child for the purposes of the study. We might not always be able to do this if it means we cannot use their data to do the research. If so, we will tell you why we cannot do this.
- If you agree for your child to take part in this study, you will have the option for their data saved from this study to be used in future research.

Where can you find out more about how your information is used?

You can find out more about how we use your child's information, including the specific mechanism used by us when transferring your child's personal data out of the UK:

- Our leaflet: www.hra.nhs.uk/patientdataandresearch
- Our privacy notice on our website: <https://www.icr.ac.uk/legal/privacy/research-privacy-notice>
- By sending an email to our Data Protection Officer: dataprotectionofficer@icr.ac.uk,
- By asking our team, or
- By ringing our Data Protection Officer on 020 3437 7327.

13. What if something goes wrong?

Every care will be taken during OTIS-S to make sure your child receives appropriate care. If you are not happy with the care your child receives, please speak to your doctor, who will try to resolve the problem. If you are still unhappy and wish to complain formally about the care received during OTIS-S, you may do so under the standard NHS complaints procedure, which is available to you at your child's hospital.

[Sites to update/delete next sections as applicable, depending on location]

[Sites in England] Concerns can also be raised by talking to your local Patient Advice and Liaison Service (PALS). You can contact the PALS team at **[insert Trust name]** on **[insert relevant contact details]**.

[Sites in Scotland] Concerns can also be raised by talking to the Patient Advice and Support Service (PASS). You can contact PASS via the National Citizens Advice Bureau on 0808800 9060 or through your local Citizens Advice Bureau (www.cas.org.uk/patientadvice).

[Sites in Wales] Concerns can also be raised by talking to the Patient Support and Advisory Service (PSAS). You can contact PSAS on 0300 0200 159 or by emailing hdhb.patientsupportservices@wales.nhs.uk.

[Sites in Northern Ireland] Concerns can also be raised by contacting the Patient and Client Council. You can contact the PCC on [0800 917 0222](tel:08009170222) or by emailing info@pcc-ni.net

Healthcare professionals working on clinical studies are covered by NHS Indemnity and if you are harmed by taking part in this study you may have grounds for a legal action, but you may have to pay for it. The Sponsor of this study holds a clinical trial insurance policy.

14. What if relevant information becomes available?

Sometimes we get new information about the approaches being studied, which may affect your willingness for your child to continue in the study. If this happens, your child's study doctor will tell you in a timely manner and discuss whether your child should continue in the study. If you decide your child should continue in the study, you may be asked to sign an updated informed consent form. If you decide to stop your child's participation, your study doctor will make arrangements for their future care.

If the study is stopped for any other reason, your child's doctor will tell you and arrange your child's continuing care.

15. What will happen to the results of OTIS-S?

From time to time, we would like to email you with short updates on how the trial is going if you agree for us to do so.

The results of this study are not likely to be available for at least 3 years after it starts. Independent experts will review the progress of the research, and the results will be published in a scientific journal as soon as there is enough information to be sure the results are reliable. The results will help to decide how to monitor seminoma and dysgerminoma cancers in the future. The results from this study may also contribute to reviews of worldwide evidence about these types of cancer. Your child will not be identified in any report or publication relating to this research.

We will also write-up the results in non-medical terms once they are available. We will contact you directly with these results if you give us permission to do so. Otherwise, these will be sent to your child's hospital. Your child's doctor will discuss these with you and ask if you would like a copy. You will also be able to access this on the study website [**<link tbc>**](#).

16. Who has reviewed OTIS-S

To protect patients' interests, all research in the NHS is looked at by an independent group of people, called a Research Ethics Committee. OTIS-S has been reviewed and given a favourable opinion by London – South East Research Ethics Committee.

OTIS-S has been reviewed and approved by the Health Research Authority (HRA) who are responsible for protecting the interests of patients and the public in health research.

OTIS-S has also been reviewed and approved by the Committee for Clinical Research. This is a joint committee between The Royal Marsden NHS Foundation Trust and the Institute of Cancer Research which oversees all clinical research sponsored by these organisations to make sure that it is high quality.

How have patients and the public been involved in the setting up of this study?

A group of people from across the UK with experience of testicular cancer have helped us design OTIS-S. These people told us that it is important to find better ways to monitor for the cancer returning after surgery as long as it does not change the risk of cancer returning. People with experience of testicular cancer have also helped to develop this patient information sheet.

17. What should I do now?

A member of your child's hospital team will discuss the trial with you, either during a hospital visit or over the phone, and you will have the chance to ask any questions that you have. You will be given time to think about the study and make your decision whether you would like your child to take part or not. You may wish to discuss it with your child, family, friends or GP. If you decide for your child to take part in OTIS-S, you will be asked to sign the consent form. Please keep this information sheet and a copy of your signed consent form. If, at any time, you have any questions about the research you should contact your child's hospital team using the contact details on the front page.

18. Helpful Resources

Who else can I contact for further information?

You have the right to ask questions about this study at any time and are encouraged to do so. You can call the study doctor or nurse if you have any questions or concerns about this study or your child's participation in OTIS-S using the information on the front page of this information sheet.

Cancer support

Macmillan Cancer Support is a registered charity providing information, emotional support and publications about all aspects of cancer for cancer patients and their families. You can contact one of their Cancer Information Nurse Specialists on the **Macmillan Support Line**: Freephone 0808 808 00 00 Monday to Friday 9:00am to 8:00pm. In addition to their nurses, the Macmillan Support Line also has other specialist teams that can provide advice and information relating to welfare benefits, financial issues and everyday practical concerns.

The Robin Cancer Trust

The Robin Cancer Trust is a charity dedicated to raising awareness of germ cells tumours, providing information to germ cells tumour patients and their families and connecting the patient's community.

Find out more on their website: <https://www.therobincancertrust.org>

Testicular Cancer Network

The Testicular Cancer Network (TCN) is a consortium of testicular cancer awareness, support & research charities raising awareness and providing information to testicular cancer patients and their families across the UK.

Find out more on their website: <https://www.testicularcancernetwork.co.uk/>

Ovacome Ovarian Cancer

Ovacome is a charity dedicated to providing individual support to ovarian cancer patients and their families

Find out more on their website <https://www.ovacome.org.uk/>

The **CAN-EMPOWER Emotional needs digital support tool** has been developed with people who have experience of cancer - patients, people who have had cancer in the past, friends, family and health professionals.

The site shares:

- experiences of the psychological and emotional challenges of living with cancer.

- coping tools and techniques that people have found helpful.

Find out more on their website: can-empower.org.uk/welcome

Financial support

The **NHS Healthcare Travel Costs Scheme** provides support to people receiving certain benefits. The scheme will refund reasonable travel costs to attend hospital for NHS treatment or tests for qualifying patients.

You can find out more about the scheme and whether you might qualify by calling the NHS Business Services Authority:

0300 330 1343 Monday to Friday, 8am to 6pm and Saturday, 9am to 3pm.

Or you can find out more on their website: nhs.uk/nhs-services/help-with-health-costs/healthcare-travel-costs-scheme-htcs/

Information about clinical trials

You can learn more about clinical trials by visiting the **Teenage and Young Adult Research** website:

<https://tyar.org/services/clinical-trials/>

Information is also available on the **Cancer Research UK** and **Be Part of Research** websites, or

<https://www.cancerresearchuk.org/about-cancer/find-a-clinical-study>

<https://bepartofresearch.nihr.ac.uk/>

The Institute of Cancer Research and clinical trials

You can find out more about the work of the **Clinical Trials and Statistics Unit at The Institute of Cancer Research (ICR-CTSU)** on our website: www.icr.ac.uk/ctsu

Thank you for your time and interest in our research.

19. Information about scans

- More information about the types of scans your child may receive as part of taking part in the OTIS-S study is provided below. Not everyone will have all of these scans, and this will depend on your hospital's usual practice. This can be discussed in more detail with your child's doctor or nurse.
- CT Scan:** CT stands for **computerised tomography** and this type of scan uses X-rays and a computer to create a detailed image of the inside of your child's body. Your child may have an injection of a dye before the scan. This helps some body tissues to show up more clearly and the injection is given through a small thin tube (cannula) in the arm. Before having the injection, your child's radiographer will ask you about any medical conditions or allergies your child has as some people can be allergic.
- MRI Scan:** MRI stands for **magnetic resonance imaging** and this type of scan uses magnetism and radio waves to build a picture of the inside of your child's body. When having an MRI scan, your child will be made as comfortable as possible before the scan starts. Your child will be asked to remain still during the entire procedure. People who are afraid of enclosed spaces may feel anxious or nervous while in the scanner. Some people may also find it hard or painful to hold one position for more than a few minutes. If you have any concerns about your child having this type of scan you should discuss these with your child's doctor or nurse.
- PET Scan:** PET stands for **positron emission tomography** and this type of scan produces a detailed 3-dimensional (3D) image of the inside of your child's body. PET scans are often combined with CT scans (PET/CT) to produce even more detailed images. A PET scan involves your child having a very small amount of radioactive material injected first. This amount of radiation does not make you feel unwell; it goes out of the body very quickly. Not everyone will need to have a PET/CT scan. These might be done if one of the other tests or scans shows a suspicious or unclear result.
- Ultrasound scan:** Ultrasound scans use sound waves to create real-time pictures or video of internal organs or other soft tissues, such as blood vessels. These sound waves, which are too high in frequency to be heard by humans, are sent into the body and bounce back, creating a picture of the internal structures.

More information about the different scans your child may have can be accessed from the QR codes below.

			
CT Scan	MRI Scan	PET/CT Scan	Ultrasound