

Participant information sheet

Thank you for your interest in helping us with research into early cancer detection.

You are receiving this information sheet because you contacted the trial team about taking part in the NHS-Galleri trial.

This information sheet gives you important information you will need to think about when deciding whether to take part in the trial. If you have any questions about the trial that are not answered in this sheet, you can find more information at www.nhs-galleri.org

You will also have an opportunity to ask questions when you attend your appointment. Remember that taking part in this trial is voluntary, and you can change your mind and leave the trial at any time.

Who is carrying out the study?

GRAIL Inc. is a company in the United States that developed the Galleri test. They have also set up a branch in the UK, GRAIL Bio UK Ltd. (GRAIL) who are the main funder and organiser of this trial.

The study is in partnership with the National Health Service (NHS) England and will be run by The Cancer Research UK & King's College London Cancer Prevention Trials Unit, a team of cancer researchers and trial managers at King's College London (King's).

Summary of the NHS-Galleri trial

What is the NHS-Galleri trial?

NHS-Galleri is a research trial that aims to see how well the new Galleri™ test works in the NHS. The aim is to see if using the Galleri test alongside standard cancer testing in the NHS can help to find cancers at an early stage when they are easier to treat.

What is the Galleri test?

The Galleri test is a new test that looks for potential signs of cancer in a blood sample. The test can find many different types of cancer but cannot find all cancers. The test is meant to be used alongside normal cancer screening. If the test finds a possible sign of cancer, it does not mean that a person *definitely* has cancer. It just means that they might have cancer, and that they will need to have some follow-up tests to check. For more information on the Galleri test, see the section below 'The Galleri test'.

Who is organising the trial?

The trial is being run in partnership between GRAIL Bio UK Ltd. (the UK branch of GRAIL, Inc., which developed the Galleri test), NHS England and King's College London. The Chief Investigators for the trial are Professor Richard Neal, a GP researcher who is interested in cancer screening, and Professor Charles Swanton, a cancer researcher at University College London and the Francis Crick Institute, and the Chief Clinician of Cancer Research UK.

Who can take part?

We hope that 140,000 people will take part. We need people aged 50-77 years, who have not been diagnosed with or treated for cancer in the last 3 years. Taking part is completely voluntary.

What is involved?

We will ask you to come to a mobile clinic (explained below) where we will confirm that you meet the trial requirements and ask if you agree to take part. We will ask you to give a blood sample,

fill in surveys and consent to share information about your health. We will take about one-and-a-half tablespoons (about 20 mL) of blood, just like a normal blood test. We will ask you to come to the mobile clinic a total of 3 times over about 2 years.

What will happen to my blood sample?

Half the people in the trial will be in the 'test group.' This means that their blood sample will be tested using the Galleri test. The other half will be in a 'control group' and their blood will be safely stored but not immediately tested with the Galleri test. The control group samples may be tested with the Galleri test in the future to see if there are any differences between people in the test group and the control group. You will not be told which group you were in even after the trial is finished. Everyone will be asked if their samples can be stored and tested at a later date to help with research to further improve the Galleri test, and to help develop other tests and see how well they work.

Will I get the results?

Everyone who gives a blood sample will receive a letter around 30 days after their appointment to confirm that the sample has been received. However, we will only give results to people who are in the test group that have had a cancer signal found using the Galleri test. No other results will be shared.

If we find a cancer signal, we will contact you and arrange for you to have follow-up tests at a local hospital to see if you actually have cancer. These follow-up tests will be carried out by the NHS and are not part of the trial.

What happens next?

Please read this sheet carefully and contact us if you have any questions. You will also be able to ask questions when you come for your blood sample appointment.

What is the purpose of the NHS-Galleri trial?

The Galleri test is a new blood test that can detect signs of many different types of cancer in a sample of a person's blood. If the Galleri test can find these signs earlier than other tests and before people have symptoms of cancer, it may mean that cancer can be treated more successfully.

However, we currently do not know how good the Galleri test is at detecting cancer early enough to make a health difference, when added to the approaches the NHS currently uses. This is why we need to run this trial.

What is a trial?

A trial is a type of research study that aims to understand whether a new treatment or test works better than other approaches that are already being used. In this case, the NHS-Galleri trial aims to understand whether in people who do not have symptoms of cancer, the Galleri test can help to find cancers early when used alongside cancer screening programmes the NHS currently uses.

After the trial, we will have a much better understanding of how well the Galleri test works as a way of screening people for cancer. If it does work, then it could be used in the NHS in the future (like breast screening or bowel screening, but for many different types of cancer). If the Galleri test does not work well in this setting, then we will still have learned important information about what research needs to be done in the future to improve cancer screening, so that people's lives are less likely to be affected by cancer.

Why have I been invited to take part?

Why was I invited?

NHS Digital or your GP was asked by the NHS-Galleri trial to run an electronic search to find potential participants who meet certain requirements to invite them to take part.

Who can take part in the NHS-Galleri trial?

NHS Digital was asked by the NHS-Galleri trial to run an electronic search to find potential participants who meet certain requirements to join the study. We think the Galleri test is most likely to have benefits for people over the age of 50 years old, as they are at higher risk of some cancers. We are therefore inviting people between age 50 and 77, who live in a region of England where the trial is being run. We are not inviting people who have been diagnosed with or treated for cancer within the last 3 years, or those who are currently having tests (or waiting for tests) due to suspected cancer.

In the NHS-Galleri trial, we would like 140,000 people to volunteer to give blood samples and take part. We need a large number of people so that, at the end of the trial, we can be confident that we understand how well the Galleri test works.

Do I have to take part?

Taking part in this trial is entirely your choice. If you choose not to take part, or if you choose to leave the trial at any point, there are no consequences, and you do not need to give a reason why.

What organisations are involved?



GRAIL

GRAIL Bio UK Ltd. is the main funder and organiser of this trial. It is a branch of GRAIL, Inc. in the United States that developed the Galleri test.



NHS

NHS England is a partner and will provide follow-up and care related to the trial. The National Disease Registration Service will provide data for the trial.



King's College London

The Cancer Research UK & King's College London Cancer Prevention Trials Unit, a team of cancer researchers and trial managers at King's College London will coordinate this trial and analyse the results.

Who developed the Galleri test?

The Galleri test was developed by researchers at GRAIL in the US and aims to find cancer before people have symptoms. Over 100,000 people from the US, UK and Canada have so far taken part in trials using the Galleri test and early results suggest that the test can work well. The NHS now wants to do further work to understand whether the test works well enough to routinely offer it to people in the UK in the future.

Who is organising and funding this trial?

GRAIL is the main funder and organiser of this trial. They are partnering with NHS England who will provide any necessary follow-up tests that participants need (such as further blood tests or scans) and any treatments if they have a cancer diagnosed. The trial will be run by The Cancer Research UK & King's College London Cancer Prevention Trials Unit, a team of cancer researchers and trial managers at King's College London (King's).

Is anyone else involved?

We will use the services of a range of other organisations and companies in the UK and outside the UK to help run the trial. They may handle blood samples and health information about people who take part in the trial. They will be required to do this safely and securely.

Who has reviewed this trial to make sure it is being conducted safely and appropriately?

The trial has been reviewed by an NHS ethics committee. This ethics committee has the job of making sure that research trials are well designed and run so that people who take part in the trials are not at an unreasonable risk of harm. The committee has approved the trial and believes that it will be run safely and appropriately. The trial has also been approved by NHS England and NHS Improvement, as part of their work to improve cancer screening for people in England.

Potential benefits and risks of taking part

What are the possible benefits of taking part?

If you decide to take part, you will be contributing to important research that may benefit people in the future. The trial is looking to see if using the Galleri test alongside standard cancer testing in the NHS can help to find cancers early, when they are easier to treat. You may also enjoy taking part as a way to learn more about health research.

What are the possible risks of taking part?

We will do everything we can to make sure people who take part don't come to any harm or anxiety. However, there are some risks you need to be aware of. Because the Galleri test is a blood test, you will need to give blood samples. Although giving a blood sample is generally very safe, there are some possible risks including discomfort, lightheadedness or infection.

Like all screening tests, the Galleri test is not perfect and can give a wrong result. This means that it is possible you could experience anxiety or distress because the Galleri test result is uncertain or turns out to be wrong. If the test detects a cancer signal and no cancer is found by the doctor, you may have had follow-up tests that were unnecessary. Those follow-up tests can have their own risks, such as radiation from scans, that you should discuss with your doctor before receiving them.

Some questions you might have

I'm worried about whether I have cancer or not. Should I take part in this trial to get an answer?

If you are worried you may have cancer due to symptoms, you should visit your GP as soon as possible and should not take part in this trial to get an answer.

You may not benefit directly from taking part in this trial as there is a 50% chance your blood sample will not be tested immediately.

Is taking part in the trial an alternative to attending my other cancer screening appointments?

No. It is very important that you keep attending your usual cancer screening appointments when you are invited to do so. You should also make an appointment to talk to your GP if you notice any symptoms that are new or unusual for you.

Will I be paid for taking part?

You will be offered a £10 gift voucher at each blood sample appointment. This is to say thank you for your time and involvement, and to cover any costs you might have had, such as transport to get to your appointment. We cannot offer any other payment for taking part.

The Galleri test

What is the Galleri test?

When a person has cancer, the cancer can release small pieces of DNA into the bloodstream. DNA is the genetic code (a sort of instruction manual) found in cells. Although the Galleri test does not look at the genetic code itself, it looks at the pattern of other markers on the DNA to flag a possible cancer signal. The Galleri test can pick up the signal for more than 50 different types of cancer, including many of the cancers for which there are no screening programmes, such as lung, pancreas or stomach cancers. However, the signal does not mean that a person *definitely* has cancer. It just means that they *might* have cancer, and that they will need to have some follow-up tests to check. The trial team at King's College London will help to organise your appointments.

If the Galleri test picks up the cancer signal in a person's blood, does that person definitely have cancer?

No. About half the people who have a cancer signal will be found to have cancer during the follow-up tests, and the other half will not.

If the Galleri test does not pick up a cancer signal in a person's blood, does that person definitely not have cancer?

No, if the Galleri test does not pick up a cancer signal this does not rule out cancer completely. You should still go to your usual cancer screening appointments and make an appointment to discuss any worrying symptoms with your GP. Remember, if you are in the test arm and no cancer signal is found in your blood sample, you will not be told.

Different experiences you might have in the NHS-Galleri trial



Trials have to be designed in a particular way for us to learn how well a new test or treatment works. The best way to learn this is to compare two groups of people: one group that did get the new test or treatment, and another that did not. We call these the "test" and "control" groups. During and after the trial, we will look to see whether cancers in the test group are found at an earlier stage compared to those in the control group.

We will also record additional information, about the kinds of cancer found, types of diagnostic tests and cancer treatments, and how successful the treatments are in those with a test result compared to those in the control group who do not have a test result.

Will I be in the test group and my blood will be tested? Or will I be in the control group and my blood won't be tested immediately?

A computer will randomly choose whether you will be in the test group or the control group. This will be like the computer flipping a coin: you have a 50% chance of being in the test group and a 50% chance of being in the control group. We get a computer to do the coin flip because we think this is fairest. There are no people making decisions about which participant is in which group. You also will not be told which group you are in. Again, this is how trials need to be run to make sure the results are reliable.

If I am put in the test group and the Galleri test says I do have a cancer signal in my blood, what will happen?

You will be contacted by phone by a research nurse from the trial team, who will let you know your result and what will happen next. Your GP will also be told about your result for their information. We will organise an NHS appointment for you at a regional hospital for follow-up tests to check whether you do have cancer. After we arrange this appointment, the hospital team will contact you to discuss the next steps to investigate the cancer signal result. The follow-up tests may include things like scans, scopes or further blood tests. Your follow-up tests will be booked as soon as possible depending on local timelines and availability. If you have not heard from the hospital within five working days of talking to the trial team, please contact us at 0800 030 9245 to check on the progress of the NHS appointment we will have organised for you.

What happens if the Galleri test says I have a cancer signal, but my doctor doesn't find any cancer?

If the Galleri test finds a cancer signal, but no cancer is found by your specialist doctor, we ask that you continue to come back for study visits and have blood samples taken for the Galleri test at those visits.

If I am put in the test group and the Galleri test says I do not have the cancer signal in my blood, what will happen?

You will receive a letter saying that your sample has been received. We will not tell you that no cancer signal was found. This is for two reasons:

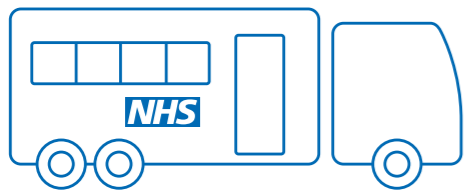
1. We do not yet know how well the Galleri test works in this situation, so we do not want to give people false reassurance
2. In trials, people often do not know which group they are in. This is important for getting reliable research results. If people know which group they are in, it could make the research results less clear or reliable.

If I am put in the control group, what happens to my blood samples? Will they ever be tested?

The control group samples may be tested with the Galleri test in the future to help us understand any differences between what happens to people in the test group and the control group. If you are in the control group you may still be diagnosed with cancer by the NHS, but you will not receive any results from the trial, not even after the trial is finished. You will also be asked if your samples can be stored and tested after the trial to help with other research to improve how well the test works.

Attending a mobile clinic to give your blood sample

We will be using large mobile units and smaller mobile vans as clinics, where we will see participants and take the blood samples we need for the Galleri test. There should be a mobile clinic that is convenient for you to get to. The clinics will mostly be located in supermarket car parks, where free parking is available. This should also make them accessible by public transport.



What will happen at the first appointment?

When you registered for the trial and booked your appointment, we asked you a few questions about your cancer history. We asked these questions to make sure you would most likely be suitable for the trial. When you come for your first visit, we'll ask you some more detailed questions about your medical history to make sure the trial is suitable for you. We need to make sure all participants meet certain eligibility criteria to ensure that it is safe for you to take part and to make sure that the results of the trial are reliable. It is possible that we will find out that you are not suitable to take part in the trial at this first visit. If this happens, we will explain why you cannot take part. We will not take any blood samples if you are not eligible.

If you are suitable for the trial, we will ask you to watch a short video about the trial and give you a chance to ask any questions you may have. If you are happy to proceed, we will ask you to complete the consent form to confirm that you wish to take part.

Because the Galleri test is a blood test, we need you to give a small blood sample. This will be like having a normal blood test and the blood sample will be taken by a trained blood-taking specialist (phlebotomist). In the rare case there

is a problem with your blood sample, such as if it gets lost in shipment, you may be asked to provide an additional blood sample.

During your first appointment, we will also ask you to fill in a survey. The survey will ask you about your personal details, health behaviours, and your medical history. We will also ask you if you agree to share information about your health from your medical records. This includes information such as cancer diagnoses and treatment received. Your first visit will last about 45 minutes.

What will happen during your visit

- Arrival:** We will check your booking information.
- Eligibility:** We will check that you are suitable for the trial.
- Video:** We will ask you to watch a short information video and answer any questions you may have.
- Consent:** We will ask you to complete the consent form.
- Blood sample:** We will ask you to give a small blood sample.
- Surveys:** We will ask you to fill in surveys about your health.
- Voucher:** We will give you a £10 voucher as a thank you for your time.

How many appointments will I have to attend?

We will invite participants to attend up to a total of three appointments over a period of two years. The two later appointments will be shorter, probably 15 minutes each time, and will also take place at the mobile clinics. We may also ask participants to complete additional

surveys so that we can learn important information about their experiences on the trial. We will make sure we are not asking you to fill out surveys too often. We may also invite you to talk about your experience at a later date, but this will be completely optional.

Will giving a blood sample be safe during the Covid-19 pandemic?

The staff at the clinics where blood samples are taken will follow all NHS guidelines for keeping you safe. Staff will wear face masks and follow social distancing guidelines. The only person who will be physically close to you during your appointment is the person taking your blood sample. You will need to wear a face mask to your appointment. **We will put all the appropriate safety measures in place.**

How soon after my appointment will I get my test result?

Only people who have a cancer signal detected will be given their test result. If your test result shows a cancer signal in your blood, the trial team's research nurse will contact you by phone to let you know your result. Most results will be returned within 30 days, but occasionally, it may take a few days longer.

Remember, if you are in the test group and the Galleri test says you have no cancer signal in your blood, you will not be told this result.

If you are in the control group, your blood sample will not be tested immediately with the Galleri test, so you will not be told a result.

This means that most people on the trial will not be given a test result.

How your data will be used in the trial

If you decide to take part in this trial, we will add your personal information and health information into GRAIL Bio UK and King's College London's (King's) trial database. All of your trial data will be protected in accordance with the Data Protection Act (2018) and UK General Data Protection Regulation. Together, GRAIL Bio UK and King's will be the Data Controllers for your information, which means that they will make decisions about how your data can be used. You can read more about how your data will be used at:

www.nhs-galleri.org/PrivacyNotice

Only the members of the trial team who need to see your personal information will have access to it for the purposes of the trial. Your personal data will be accessed by GRAIL Bio UK and King's staff involved in your participation and approved third parties for the purposes of the trial and only where necessary for carrying out their parts of the trial. It will be stored by these organisations for up to 10 years after the trial finishes.

Some of your health information will be sent to GRAIL, Inc. in the United States, but it will be pseudonymised data, that is, information that could identify you, such as your name, date of birth, and NHS number will be removed and replaced with a code number. Once we have finished the trial, 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 trial. Researchers at GRAIL, Inc. in the US who processes or stores your information for the purposes of this trial must follow our rules about keeping your information safe.

What personal information will be collected about me?

We will need to use information about you, your healthcare records and information held about you by the NHS and other public bodies for this

How your data will be used in the trial

(continued)

research project. We may collect this information directly from you, for example by asking you to fill out a survey. We may also get information from medical records that your GP or the NHS holds. The information we collect during this trial may include your name, date of birth, NHS number, your address, your medical records and your survey responses.

How will information be used?

Your information will only be used in relation to you taking part in the trial or further research to which you have agreed. This may include the use of information for:

- Contacting you about the trial to schedule appointments, trial updates, and ask you about your health or your contact details. We may use the services of third-party organisations in the UK and outside the UK to help run the trial that may need your personal details for the purposes of processing and providing services like letter mailing and call centre services.
- Licensing work, study monitoring, auditing, safety reporting and quality assurance by designated individuals such as trial monitors, auditors, regulatory bodies and members of the research team.
- Accessing your health information from GPs, hospitals, and nationally held datasets in the UK. This may include information about you collected and managed by the NHS, the National Disease Registration Service (NDRS), and the Office of National Statistics (ONS). To do this, GRAIL Bio UK and King's will securely send your name, NHS number, date of birth and postcode to these bodies who will send back information held about you as it relates to your health and use of health services. We may do this for up to 10 years following your participation in the trial. You

are free to withdraw at any time from this data transfer.

- Receiving your updated contact details from NHS Digital or GP should your details change.

For more information about cancer registration including your rights to opt out, please go to <https://www.ndrs.nhs.uk/patient-leaflets/>

Will you share my information with my healthcare professionals, like my GP?

We will ask you to give permission for us to share and receive health information about you with the healthcare professionals who are involved in your care. This could include your GP. If the Galleri test finds the cancer signal in your blood, your GP will be told about this. However, you will hear directly from the trial team and your hospital about any appointments you need to attend for follow-up tests.

What are my choices about how my personal information is used?

You can stop being part of the trial at any time, for any reason, but we will keep information about you that we have already collected. If you choose to stop taking part in the trial, we would like to continue collecting information about your health from central NHS records, and your hospital and GP. If you do not want this to happen, tell us and we will stop. We need to manage your records in specific ways for the research to be reliable. This means that we will not be able to let you see or change the data we hold about you.

How will your blood sample be used?

All blood samples will be sent to a laboratory in the UK for processing. If you are in the test group, your sample will then be sent to GRAIL Inc. in the US for testing with the Galleri test. You will only receive a result if a cancer signal is detected. If you are in the control group your sample will be safely stored in the UK and will be sent to the US at a later date to be tested as part of the trial. However, you will not receive any results, not even after the trial is finished.

Will my blood sample be used by GRAIL for any research other than this NHS-Galleri trial?

Everyone will be asked if their samples can be used for research to further improve the Galleri test, and to develop and improve other tests and see how well they work. Your sample will not be used for any other purpose and will not be shared with any other organisation. You will not receive any updates about your sample being used in future research, not even after the trial is finished.

If I consent for my blood sample to be used for future research, what sorts of genetic analyses might be done on it?

Your sample may be analysed in different ways to improve the way the Galleri test or other future new tests work. This is because there are different ways of doing this kind of early detection research and better ways are often being developed.

What we *can* say is that future research using your sample will not be allowed to involve two types of specific genetic analysis. These are called whole genome sequencing or exome sequencing. These genetic analyses are ones that result in a very detailed profile of you that can contain very sensitive or private information. For example, it can say a lot about your risk of developing particular health problems, or about your ancestry or ethnicity. It can also say a lot about people who are closely

related to you, since close relatives share a lot of the same genetic material. Even if you give permission for your sample to be used in future research, this particular type of genetic analysis will not be done on it.

Further information about the NHS-Galleri trial

What happens if I change my mind and do not carry on with the trial?

If you do take part and later change your mind, you are free to leave the trial at any time. You can leave the trial for any reason, but we will keep the information and samples from you that we already have collected. You will not be asked to come for more blood tests or complete any further surveys.

If you request it, we will not access any further health records about you from your GP or the NHS. We will stop receiving data about you from NHS and health information bodies if you let us know you would like us to stop. Your usual medical treatment would not be affected in any way if you leave the trial or decide not to take part.

What if something happened to me and I was unable to carry on with the trial?

In the event of loss of mental capacity, such as if something happened to you that meant you no longer fully understood what the trial was or why you were part of it, you may be removed from the trial. However, we would continue to use any samples or information that had already been collected about you until that point.

What if I want to make a complaint about the trial, or if something goes wrong?

In the event that you are harmed or injured by taking part, GRAIL has arrangements in place to provide financial compensation for harm arising from taking part in the trial. If you believe that the injury is due to taking part in the trial, you should discuss the issue

Further information about the NHS-Galleri trial (continued)

with the trial team. If you wish to complain about any aspect of the way in which you have been approached or treated during the course of this trial, you can contact Professor Richard Neal and Professor Charles Swanton, who are the Chief Investigators for the trial at chief_investigator@nhs-galleri.org or the trial team at participant_help@nhs-galleri.org

Please check the website for further details www.nhs-galleri.org

Will taking part affect my insurance?

If you have or are planning to purchase private health insurance, life insurance, or travel insurance, you should check with your provider to make sure that taking part in this trial will not affect your ability to make claims in the future.

If you are found to have cancer by taking part in the study, you may have to provide this information on an insurance application if you are asked for it.

How do I find out about the results of the trial?

It will take about 5 years before we can get the main results of the trial. Once we have recruited the planned 140,000 participants and have collected all the information about them, we will then analyse all that information. Once the information is analysed, it is checked by other researchers to make sure the results make sense. This is how high-quality research is done – it always needs to be checked thoroughly by other researchers. If everything is correct, then we can share the results of the trial publicly. Often this is in a science journal, press release, and on the trial website. Your identity will remain confidential if any results are published.

Who owns the results of this trial?

The researchers at King's College London and GRAIL will own any research results. You will not benefit financially if a product or test is successful because you have been involved in the trial.

What should I do when the trial finishes?

You should keep attending any cancer screening appointments that you are invited to and contact your GP about any new or concerning symptoms.

If I have questions or problems during the trial, who would I contact?

If you have any problems or questions while taking part in the trial, you should contact the trial team at participant_help@nhs-galleri.org. If you have questions that they cannot answer, they will try to refer you to someone who can help.