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A human controlled infection study to establish safety of infection with *Bordetella pertussis* with antibiotic therapy delayed for up to 6 weeks

Challenge Volunteer information sheet

We would like to invite you to take part in a research study. Before making a decision about whether or not to take part, please take the time to read this information sheet and discuss it with friends, relatives and your General Practitioner (GP) if you wish. Please contact the study team if you have any questions about the details provided in this information sheet.

The following pages contain detailed information about what this study involves including study procedures, time commitments, risks, benefits and compensation, which you should read and understand before making a decision about whether or not to take part.

In this study, we are trying to find out how we can best protect people against the disease **whooping cough**. To do this, we will be performing a deliberate controlled infection of the nose, so that the body is briefly infected with the agent that causes this disease.

You do NOT have to take part.

We will explain in the following pages exactly what this study entails, but **first we want to highlight key points** that we think you should know before making a decision. If you are still interested in joining our study, we'll then go into more detail.

The key points are:

- You will be given a small dose of live bacteria into your nose
- We will then take swabs and other samples from your nose, saliva samples and blood tests to monitor any infection and your immune response
- You may be treated with the antibiotic Azithromycin after 6 weeks, or sooner if required
- There is a possibility that these bacteria will spread to your partner or person you share a bedroom with (we refer to this person as your bedroom contact)
- We will need to know if this occurs, so we would like to monitor whether these bacteria have spread to your bedroom contact by taking nasal wash samples from them
- You and your bedroom contact will be required to follow infection control rules between inoculation (receiving the dose of bacteria) and completing antibiotic treatment or the end of the study. This will include abstaining from intimate contact with any other individual
- There is a small chance you and your bedroom contact will get the symptoms of whooping cough but we will closely monitor you and treat early if required
- In order to take part in this study, you must not have had any past problems with your immune system

What is *Bordetella pertussis*?

Whooping cough, also called pertussis, is a bacterial infection of the lungs and airways. It is caused by a bacterium called *Bordetella pertussis* (*B. pertussis*). Whooping cough can cause repeated coughing bouts that can last for three months or more. Young babies under six months of age are typically affected and are in the age group that is most vulnerable to serious complications. In older children and adults it tends to be less serious, although it can still be unpleasant and frustrating. In some adults who are infected there may be no symptoms at all, so that the infection passes unnoticed. *B. pertussis* is spread in the droplets produced when someone with the infection coughs or sneezes. Therefore you can catch whooping cough if you come into close contact with someone with the infection. The first symptoms are similar to those of a cold, such as a runny nose, red and watery eyes, a sore throat, and a slightly raised temperature. Intense coughing bouts typically start about a week later. Antibiotics will help stop the infection spreading to others, and usually (*but do not always*) reduce the symptoms. If antibiotics are given during the early phase of the infection, it is believed that the cough can be prevented, but there are exceptions to this rule and it is possible that people who are given antibiotics even during the early phase of illness may go on to develop the cough. Although a pertussis vaccine is offered to all babies in the UK, the vaccine does not offer lifelong protection. In fact, protection by the vaccine seems to be less nowadays in comparison to 15 years ago.

What is the purpose of this study?

This study is part of a project that aims to develop a better vaccine against whooping cough. To do this we need to know more about how the bacterium *B. pertussis* survives in people's noses without causing illness – this is called carriage or colonisation. We would like to look at carriage of *B. pertussis* over time and how different immune responses affect carriage. This study is designed to look at those particular questions by giving healthy volunteers nose drops containing *B. pertussis*, then monitoring carriage and their immune response over six weeks before giving them an antibiotic to clear *B. pertussis*.

There have been two previous studies in this research programme, both carried out in Southampton. The first (Phase A) established the best dose of *B. pertussis* to give in order to safely cause carriage and the immune response to it. 34 volunteers were inoculated with *B. pertussis* and then admitted to our research unit for 17 days to ensure there were no safety concerns. In Phase B, volunteers are inoculated in the same way, but followed up as outpatients with monitoring of close contacts to look for transmission. Phase B is ongoing – 44 volunteers have been inoculated to date, of a planned 66. In both Phase A and B, antibiotics are used to clear carriage after two weeks. In this study we will give the same dose of *B. pertussis* and then monitor carriage over six weeks. We will look to see how long it is carried for and how different immune responses impact that carriage. We will also recruit your spouse, partner or bedroom sharer (if applicable) to look for any transmission of *B. pertussis.*

Volunteers who have been inoculated with *B. pertussis* (challenge volunteers) and their bedroom contacts (contact volunteers) will be required to attend several visits to the National Institute for Health Research (NIHR) Southampton Clinical Research Facility (CRF) based at Southampton General Hospital over 6 weeks. If either challenge or bedroom contact are found to be carrying *B. pertussis* at 4 or 5 weeks, then both will receive antibiotics at 6 weeks. Any volunteers who do not receive antibiotics at that point but are then subsequently found to be carrying *B. pertussis* will be asked to return for antibiotic treatment.

Will the bacteria be transmitted from me to my friends and family?

B. pertussis is spread in the droplets produced when coughing or sneezing so can be transmitted from individuals to their close contacts, in particular to household members and those sharing a bedroom. There is a possibility that *B. pertussis* will be transmitted to bedroom sharers of volunteers in this study. We are therefore asking for your bedroom contacts' consent to be involved in this study to monitor this, if applicable. We need to ensure that you and your bedroom contact have no underlying vulnerability which might make this unsafe.

In Phase B, transmission to bedroom sharers has been monitored in the same way. 11 contact volunteers have been enrolled so far, with no transmission detected to date.

If either you or your bedroom contact develop any symptoms such as a cough or runny nose, we will review you and if we are concerned that these symptoms may be caused by *B. pertussis*, then both you and your bedroom contact would receive antibiotics.

In order to minimise the risk of transmission to other close contacts, we will not include volunteers who have regular close contact with people at higher risk. This includes people who have any problems with their immune system, unimmunised pregnant women, frail individuals, infants under 1 year old or unimmunised children. Both you, as a challenge volunteer, and your bedroom contact, will be required to agree to infection control measures (detailed on page 10 of this information sheet) to minimise the risk of transmission of *B. pertussis* to any other individuals. You will need to agree not to share a bedroom or have intimate or sexual contact with any other individual(s) during the study period (from Day 0 until the end of your participation in the study, or completion of antibiotic treatment).

Am I eligible to take part?

In order to be involved in this study as a challenge volunteer you must be:

- A healthy adult aged 18 to 55 years inclusive on the day of screening
- Fully conversant in the English language
- Able to communicate easily by mobile telephone, email and text messaging
- Able and willing to comply with all study requirements
- Able and willing to provide informed consent to participate in the trial
- Willing to take antibiotic eradication treatment if/when instructed to by the study team
- Willing to abide by infection control guidelines as detailed on p10
- Willing to attend the NIHR-CRF Southampton immediately if you become symptomatic
- Willing to have no bedroom contacts other than a declared and consented bedroom contact between inoculation and 6 weeks after inoculation
- Able to answer all questions on the pre-consent questionnaire correctly

Acceptable forms of contraception include:

- Established use of oral, injected or implanted hormonal methods of contraception
- Placement of an intrauterine device or intrauterine system
- Total abdominal hysterectomy
- Barrier methods of contraception (condom or occlusive cap with spermicide)
- Male sterilisation if the vasectomised partner is your only partner
- True abstinence when this is in line with your preferred and usual lifestyle

You would be unable to participate if:

- You live in the same household as:
    - unimmunised or partially immunised children and infants aged < 1 year
    - pregnant women >32 weeks who have not received pertussis vaccination at least a week prior to contact
    - immunosuppressed individuals
    - frail individuals
    - healthcare workers regularly working with vulnerable individuals as above
- You have inviolable commitments within the study period (from day 0 to week 6) to be in close contact with:
    - unimmunised or partially immunised children and infants aged < 1 year
    - pregnant women >32 weeks who have not received pertussis vaccination at least a week prior to contact
    - immunosuppressed individuals
    - frail individuals
- You live in a boarding school or dormitory during the study.
- *B. pertussis* is detected on a nasal wash taken from you prior to the day of inoculation (Day 0)
- You have a confirmed or suspected infection at the time of inoculation with *B. pertussis*
- You have participated in other interventional clinical trials in the last 12 weeks
- You have a history of receiving *B. pertussis* vaccination in the last 5 years
- You have previously participated in a *B. pertussis* human challenge study
- You have had a proven *B. pertussis* infection in the last 5 years
- You have never received a whole cell *B. pertussis* vaccine*
- You are a current smoker (defined as having had a cigarette/cigar in the last week, including vaping).

- You have used systemic antibiotics within 30 days of or during the challenge
- You have a confirmed or suspected immunosuppressive or immune-deficient state, including HIV infection; asplenia; recurrent, severe infections and chronic (more than 14 days) immunosuppressant medication within the past 6 months (topical steroids are allowed)
- You have received immunoglobulins or blood products within 3 months prior to enrolment
- You have an allergic disease or reaction likely to be exacerbated by any component of the inoculum
- You are unable to take azithromycin or macrolide antibiotics
- You are pregnant, breast-feeding or planning to become pregnant during the study period
- You have any clinically significant abnormal finding on blood or urine tests or clinical examination
- You have any other significant disease, disorder, or finding which may significantly increase the risk of participation in the study, affect your ability to participate in the study or impair interpretation of the study data

*The whole cell *B. pertussis* vaccine was part of the UK standard vaccine schedule at 2, 3 and 4 months of age until September 2004, after which it was replaced with the acellular *B. pertussis* vaccine. This change from whole cell to acellular vaccine was made at different times in different countries.

If you were born before June 2004 and received a normal course of childhood immunisations in the UK then you will have received a whole cell *B. pertussis* vaccine. If you were born after June 2004 we will seek clarification of your vaccination records from your GP. People born in the UK after August 2004 are unlikely to have received a whole cell vaccine. If you lived in another country as a baby and were born after 1990 then we will check whether you were likely to have received a whole cell vaccine.

If you have private medical or travel insurance you are advised to contact your insurance company before participating in this study, because involvement in this study may affect the cover provided by private insurance.

What makes someone immunosuppressed?

Immunosuppressed individuals are people who have a reduced ability to fight off infections, which may be due to medication or to an underlying medical condition. Examples are given below but specific situations can be discussed further at your screening visit:

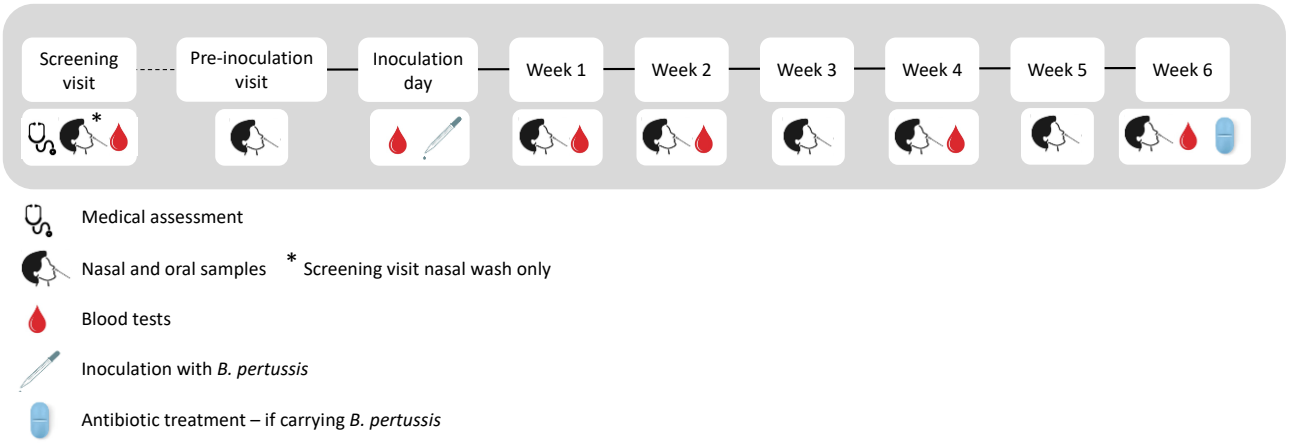
- Cancer
- Recurrent severe infections
- Asplenia – a person who does not have a working spleen
- HIV infection / AIDS (dependant on blood results)
- Use of immunosuppressant medication e.g. after an organ transplant or using long term steroid tablets used for asthma

Do I have to take part?

No, it is up to you to decide whether or not to agree to be involved as a challenge volunteer. However, if you have a bedroom contact, in order for you to participate in this study, they will also need to agree to participate as a contact volunteer and both of you will have to follow infection control guidelines. One of these guidelines is to not share a bedroom with any individual other than your declared and consented bedroom contact during the study period. Therefore, if your bedroom contact decides not to give their consent then you – the challenge volunteer - will be ineligible to take part in this study if you continue to share a bedroom or have intimate contact with your bedroom contact during the study period. You are free to withdraw from the study at any time without giving a reason, but you may be asked to take antibiotic treatment and come to a follow up visit for safety reasons.

What will happen if I take part?

If you do decide to take part you will be required to attend nine visits at the NIHR Southampton Clinical Reseach Facility (CRF) at University Hospital Southampton. These visits are outlined in the figure below and detailed on p8-9.



Screening visit

If you are interested in taking part in this study as a challenge volunteer, you will be invited to attend a screening appointment, which will last about two hours. This visit can be at the same time as your bedroom contact screening visit or at another mutually convenient time. The purpose of this visit is for us to discuss the study with you, answer any questions you might have, and for you to decide if you wish to participate. If you decide to participate you will be asked to complete a pre-consent questionnaire and then sign a consent form.

We will then check that you do not have any health conditions that affect your eligibility for the study or make the study unsafe for you. A doctor will ask you some medical questions and examine you. We will do an ECG (heart rhythm tracing), take a nasal wash sample and some blood and urine tests (including a pregnancy test for females). We will send a letter to your GP providing them with information about the study and inviting them to ask us questions or let us know if they have any concerns about you taking part.

Pre-inoculation visit (Day -7)

If you are eligible for the study, we will ask you to come for a pre-inoculation visit 7 days before inoculation to check that you are still not carrying natural *B. pertussis* and take some baseline samples from your mouth and nose (detailed on p9).

Inoculation day (Day 0)

The inoculation visit can take up to 2.5 hours. We will ask you not to eat or drink anything other than water for the hour prior to your inoculation. We will check that you are still happy to continue in the study and that nothing has changed with your medical history. Prior to the inoculation we will take some blood tests. Females will also have another pregnancy test.

You will then be given the inoculation of *B. pertussis*. You will be asked to lie on your back with your neck extended back and 0.5ml of fluid containing a carefully measured amount of bacteria will be dripped slowly into each nostril. You will be able to breathe through your mouth during this procedure. Following the inoculation you will be asked to remain lying down for 15 minutes. We will ask you to stay to be observed for a total of 30 minutes following inoculation.

Weekly follow up visits – week 1 to 6

After your day 0 visit you will be asked to return for 6 follow up visits at weekly intervals. At each of these visits we check you are well and we will take samples from your nose and mouth (detailed below) to look for colonisation with *B. pertussis* and your immune response to it. We will also take some blood to look at your immune response at some visits.

You may be asked to attend extra visits if medically required, for example if you develop any symptoms that could be caused by *B. pertussis.*

At the week 6 visit, additional nasal swabs and extra blood will be taken from approximately 3-5 volunteers. These additional samples will be used for further detailed immunological tests, and will only be taken from volunteers who are willing and able to provide these samples.

Nasal and oral samples

The following samples will be collected:

Nasal wash - we will ask you to lie down, and then instill warm salty water into your nose (approx. 10ml or 2 teaspoons into each nostril). We will then ask you to sit up and collect the water as it drains back out.

Nasal swabs - we will swab the back and inside of your nose. There will be 1-2 nasal swabs per visit, with 3 swabs at the week 6 visit for 3-5 volunteers who are willing and able to provide these samples.

Saliva sample – we will ask you to spit into a small tube, or use a special swab to collect saliva from the inside of your mouth

Nasal fluid (nasosorption) samples

Nasal fluid will be collected from both nostrils by holding a small plastic device in your nose for 2 minutes.

Additional COVID tests may be carried out on clinical samples taken for this study to minimise the risk of COVID transmission during the study.

Antibiotic eradication therapy

If either you, or your bedroom contact, are still carrying *B. pertussis* at the week 4, 5 or 6 visit, then you will both be given a course of Azithromycin. Azithromycin is a licensed antibiotic in the UK for the treatment of whooping cough, and the treatment consists of a 500 mg tablet once a day for 3 days. We will need to watch you take the first dose.

If either of you start to cough or have a runny nose between receiving the nose drops and the end of the study period then we would like you to let us know. We will review you and may do some additional tests, and if we are concerned that your symptoms may be due to the *B. pertussis* then we will start antibiotics. Following this we would like you to continue with the study visits and procedures as normal. We may also ask you to take the antibiotic eradication early if you or your bedroom

contact needs to withdraw or be withdrawn from the study early for any other reason.

Infection control rules

In order to minimise unwanted infection with *B. pertussis* you and your bedroom contact will be required to follow infection control measures for the duration of your involvement in the study (from Day 0 to completion of antibiotics, or to the week 6 visit if antibiotics are not required). These measures will be explained at the screening visit and again after inoculation and are detailed below. As part of the consent process you will be asked to sign to confirm your agreement to adhere to these rules.

- Volunteers must refrain from bedroom sharing with any individual other than their corresponding contact or challenge volunteer
- Volunteers must avoid heavily crowded social environments such as music festivals, crowded pubs and nightclubs
- Volunteers must not have any contact with high risk of transmission with any individuals other than their declared and consented bedroom contact/corresponding challenge volunteer – such contact includes:
    - Bed sharing
    - Intimate/sexual contact
    - Contact that may involve transfer of respiratory secretions e.g. kissing
    - Sharing cutlery or drinking vessels
- Volunteers must wash their hands before leaving their home
- Volunteers must be contactable by mobile phone, which has the study emergency phone number programmed in, and contact the clinical study team if they have any symptoms suggestive of early pertussis disease.
- Volunteers must be able to be return to the NIHR-CRF within 120 minutes
- Volunteers must avoid face to face contact (<2m) or staying overnight in the same accommodation as:
    - unimmunised or partially immunised children and infants aged < 1 year
    - pregnant women >32 weeks who have not received pertussis vaccination at least a week prior to contact
    - frail individuals
    - immunosuppressed individuals
    - healthcare workers regularly working with vulnerable individuals as above

What are the risks of taking part?

Clinical samples

Nasal swabs can be a little uncomfortable but this will resolve quickly and should not be painful or pose any risk to you. Nasal wash sampling may feel a little unusual or uncomfortable but you can breathe normally through your mouth throughout the entire process. Taking nasal fluid samples and saliva samples does not cause any discomfort.

The inoculation with fluid containing *B. pertussis* may cause some irritation of the nose that will disappear within a few seconds.

The maximum total volume of blood taken is up to 90 ml per visit and approximately 420 ml over the whole study, or up to 162 ml per visit and approximately 500ml over the whole study for 3-5 volunteers who are willing and able to provide additional blood at the week 6 visit. The volume of blood being taken should not cause any problems in healthy people. There may be some temporary mild discomfort, such as bruising and tenderness at the site where the blood tests are taken. You may experience faintness as a result of the blood test. We will give you a copy of your blood test results if you request them, and will only send the results to your GP if you wish us to and will not report them to anyone else without your permission.

Whooping cough

The aim of this study is to establish carriage of *B. pertussis*, but not to cause whooping cough disease, **although there is a possibility that whooping cough disease may occur as a result of the inoculation.**

Initial symptoms of whooping cough in adults include a runny nose, sneezing and 'flu like' symptoms, hoarseness, sinus pain, headaches and a persistent cough. If you have one or more of these symptoms we will review you immediately. If we are concerned that your symptoms might be caused by *B. pertussis* we will give you and your bedroom contact antibiotic treatment immediately after taking blood, nasal and saliva samples. We expect such early treatment to reduce the illness in comparison to natural infection where treatment is often delayed due to the typically mild and non-specific presentation. Of the 34 volunteers who participated in Phase A, and the 44 volunteers who have participated in Phase B to date, no one has developed a lengthy cough and no serious adverse events have occurred. Complaints of a cough or runny nose occurred equally between those volunteers who were colonised and those who remained uncolonised. One volunteer in Phase B received early antibiotics due to moderate cough and cold symptoms, but was subsequently found to not be colonised with *B. pertussis* and the symptoms resolved

within a few days. However, we cannot exclude the possibility that you may be left with a lengthy cough as a result of taking part in the project.

In adults who develop whooping cough, coughing episodes may disturb sleep or result in vomiting, and occasionally cause whooping. Adults can develop complications from pertussis, but they occur less frequently and are usually less severe than in children. Reported complications of pertussis disease include urinary incontinence (during the coughing bouts), rib fractures, collapsed lungs, inguinal hernias, aspiration, pneumonia, seizures and ear infections. These complications have only been reported in children, or in debilitated adults who suffer from other diseases or who are older than 65 years.

Antibiotic treatment

To eradicate carriage or treat possible whooping cough you may be given a course of Azithromycin.

Azithromycin is generally well tolerated, but may cause some side effects. The side effects include:
Common: Abdominal discomfort; diarrhoea; nausea; vomiting
Uncommon: Jaundice; liver dysfunction; rash
Rare: Antibiotic-associated colitis; heart rhythm problems; pancreatitis; Stevens-Johnson syndrome; toxic epidermal necrolysis (serious skin conditions)
Frequency not known: Reversible hearing loss (sometimes with tinnitus) can occur after large doses.

If you experience any of these symptoms you should contact a doctor immediately, and then inform us.

Are there any benefits to taking part?

It is unlikely that you will benefit directly from this study; however there is the possibility that taking part will result in you having a degree of immunity to whooping cough. We hope that the information gained from this study will help inform the development of vaccines to prevent pertussis and the associated serious complications in the future. You may gain some general information about your health as part of this study. If abnormal results or undiagnosed conditions are found in the course of the study these will be discussed with you and your GP will be informed. For example, a new diagnosis of anaemia or psychological disorder might be made. Any newly diagnosed conditions will be looked after by your GP within the NHS.

Will my taking part in this study be kept confidential?

Yes, all information that we collect about you will be coded with a study number and kept confidential. The information will be available to the study team, safety monitors, sponsor, government regulatory agencies and external monitors who can ask to audit or monitor the study. All study information will be held in paper form in a locked room in the NIHR Clinical Research Facility or in electronic form on a secure server. Any information that leaves the hospital will have your name removed so that you cannot be identified.

What will happen to my personal data after the study has finished?

All essential research data including personal data will be stored securely within University Hospital Southampton or the University of Southampton. It will be anonymised and identifiable by a unique participant ID. This study is likely to be linked to future research studies which may take place over several years. Access to this research data by authorised persons may be required in the future and so this data will be archived for a maximum of 15 years.

Who is organising and funding this study?

This research is being organised by the University of Southampton and funded by The Periscope project, which has received funding from the European Union Innovative Medicines Initiative. It is being sponsored by University of Southampton. There are no conflicts of interest for any of the research team working on this study.

Who has reviewed this study?

All research in the NHS is reviewed by an independent Research Ethics Committee to protect your interests. The study has been reviewed and approved by the Health Research Authority. Samples taken during the study may be used in future research only after this future research is ethically approved.

Data Protection Privacy Notice

The University of Southampton conducts research to the highest standards of research integrity. As a publicly-funded organisation, the University has to ensure that it is in the public interest when we use personally-identifiable information about people who have agreed to take part in research. This means that when you agree to take part in a research study, we will use information about you in the ways needed, and for the purposes specified, to conduct and complete the research project. Under data protection law, 'Personal data' means any information that relates to and is capable of identifying a living individual. The University's data protection policy governing the use of personal data by the University can be found on its website (https://www.southampton.ac.uk/legalservices/what-we-do/data-protection-and-foi.page).

This Volunteer Information Sheet tells you what data will be collected for this project and whether this includes any personal data. Please ask the research team if you have any questions or are unclear what data is being collected about you.

Our privacy notice for research participants provides more information on how the University of Southampton collects and uses your personal data when you take part in one of our research projects and can be found at http://www.southampton.ac.uk/assets/sharepoint/intranet/ls/Public/Research%20and%20Integrity%20Privacy%20Notice/Privacy%20Notice%20for%20Research%20Participants.pdf

Any personal data we collect in this study will be used only for the purposes of carrying out our research and will be handled according to the University's policies in line with data protection law. If any personal data is used from which you can be identified directly, it will not be disclosed to anyone else without your consent unless the University of Southampton is required by law to disclose it.

Data protection law requires us to have a valid legal reason ('lawful basis') to process and use your Personal data. The lawful basis for processing personal information in this research study is for the performance of a task carried out in the public interest. Personal data collected for research will not be used for any other purpose.

For the purposes of data protection law, the University of Southampton is the 'Data Controller' for this study, which means that we are responsible for looking after your information and using it properly. The University of Southampton will keep identifiable information about you for 15 years after the study has finished after which time any link between you and your information will be removed.

To safeguard your rights, we will use the minimum personal data necessary to achieve our research study objectives. Your data protection rights – such as to access, change, or transfer such information - may be limited, however, in order for the research output to be reliable and accurate. The University will not do anything with your personal data that you would not reasonably expect.

If you have any questions about how your personal data is used, or wish to exercise any of your rights, please consult the University's data protection webpage (https://www.southampton.ac.uk/legalservices/what-we-do/data-protection-and-foi.page) where you can make a request using our online form. If you need further assistance, please contact the University's Data Protection Officer (data.protection@soton.ac.uk).

Expenses and payments

Volunteers will be compensated for their time and for the inconvenience caused by procedures. Payments are as follows;
Screening - £20 compensation (plus up to £15 travel reimbursement)
Inoculation and follow up visits £60 compensation per visit (plus up to £15 travel reimbursement per visit).
Bonus payment for attending and completing all visits within the allocated window - £150
The maximum volunteers will be compensated is £785 and the minimum £20. If extra clinical visits are required then they will be paid at £60 compensation (plus up to £15 travel). Extra visits are defined as visits to the NIHR Southampton CRF which require clinical review with the study doctor or nurse.

Compensation will be paid via bank transfer, up to 6 weeks following the final visit and confirmation of volunteer payment details. Payment(s) may be delayed around bank holidays. If volunteers withdraw from the study prior to its completion they will be offered financial re-imbursement corresponding to the number of visits attended.

Volunteers are advised to keep all public transport travel receipts for reimbursement. Travel by car is calculated per mile from the participants home address.

What if there is a problem?

If you have any concerns or symptoms, you should inform a member of the study team immediately. Following inoculation you will be given contact details for the study team who are available 24 hours a day for emergencies.

The investigators recognise the important contribution that participants make to medical research, and will make every effort to ensure your safety and well-being. In the unlikely event of harm during the research study, the University of Southampton has appropriate insurance in place to cover its legal liabilities. While the University will co-operate with any claim, you may wish to seek independent legal advice to ensure that you are properly represented in pursuing any complaint. At any time during the study you will be entirely free to change your mind about taking part, and to withdraw from the study. This will not affect your subsequent medical care in any way. We may however, ask you to come in for a visit and/or arrange a telephone call to ensure your safety.

What if I wish to complain about the way the study was conducted?

If you have cause to complain about any aspect of the way in which you have been approached or treated during the course of this study, the normal National Health Service complaints mechanisms are available to you and you are not compromised in any way because you have taken part in a research study.
Contact details for the study team, the Sponsor and the independent Patient Support Service located within the hospital are at the end of this information sheet.

What will happen if I don't want to carry on with the study?

If you wish to withdraw from the study you are free to do so at any time, but you may be asked take a dose of antibiotic treatment to eradicate possible carriage with *B. pertussis* and have a telephone contact follow up for safety reasons. In such an event, we would continue to use any data we collected up to the point of your withdrawal. Your compensation would be paid as a proportion of the total compensation according to the length of your participation.

Prevention of 'Over Participating'

Participants participating in this study must not be concurrently receiving medications or vaccines in another study. In order to check this, you will be asked to provide your National Insurance or Passport number (if you do not have a NI number). This will be entered on to a national database, which helps prevent participants from taking part in too many clinical trials. More information can be found at www.tops.org.uk. Your national insurance or passport number is also required to allow processing of compensation payments.

Contact for further information

If you are interesting in taking part in this study, please contact the study team:

Email: crfstudyteam@uhs.nhs.uk Tel: 023 8120 3853

If you have any questions regarding this research study, please contact the Principal Investigator Dr. Diane Gbesemete

Email: d.gbesemete@soton.ac.uk
Tel: 023 8120 4989

If you are a volunteer participating in the study and you would like to contact us in case of an emergency we can be contacted 24 hours a day, 7 days a week on: 077 71674842

If you have a concern or complaint which you wish to discuss with the Sponsor, please contact the Research Governance Manager at the University of Southampton
Email: rgoinfo@soton.ac.uk
Tel: 023 8059 5058

In the event that you wish to discuss this project with an independent third party, please contact the hospital's Patient Support Service (available 9am to 4.30pm Monday to Friday)

Patient Support Service
C Level Centre Block, Mailpoint 81
Southampton General Hospital
Tremona Road
SO16 6YD, Southampton
Tel no. 023 81 20 6325
Email: PatientSupportService@uhs.nhs.uk