SPEAR
STI Prophylaxis and Emergence of Antimicrobial Resistance

UCL | University of Oxford | NHS Central and North West London NHS Foundation Trust

PARTICIPANT INFORMATION SHEET

SPEAR: STI Prophylaxis and Emergence of Antimicrobial Resistance

We'd like to invite you to take part in our research study. Before you decide, it is important that you understand why the research is being done and what it would involve for you. Please take time to read this information and discuss it with others if you wish. If anything is not clear, or if you *would like more information, please ask us.*

Summary

- We are conducting a study on the impact of using an antibiotic called doxycycline to prevent sexually transmitted infections (STIs), known as STI prophylaxis or 'DoxyPEP'.
- The study will investigate antibiotic resistance and the impact on normal bacteria (the microbiome) in the gut and throat of gay, bisexual, and other men who have sex with men (MSM).
- This will help us explain to people using or thinking about using DoxyPEP what the possible risks and benefits are and help us develop the tools to monitor antibiotic resistance.
- We are inviting MSM over the age of 18 to take part, who:
  - have used DoxyPEP in the last 3 months,
  - *or* been treated for an STI with doxycycline in the last 3 months,
  - *or* not had any antibiotics in the last 3 months.
- We are aiming to recruit 108 MSM in total.
- Participants will attend 3 study visit over 12 months.
- Participants will receive a £30 voucher for each study visit.
- At each visit, participants will complete a 15-minute questionnaire, have a throat swab taken, and provide a stool (poo) sample.
- Bacterial DNA in the samples will be analysed to identify the bacteria and look for antibiotic resistance.
- Participation in the study will be completely confidential.
- The study visits will take place at Central and North West London NHS Foundation Trust.
- This research is led by UCL, in collaboration with the University of Oxford.

1. What is the purpose of the study?

Some people take antibiotics around the time of sex to prevent sexually transmitted infections (STIs) caused by bacteria such as chlamydia, syphilis, and gonorrhoea. This is called 'STI prophylaxis', 'doxycycline prophylaxis', or 'DoxyPEP'. DoxyPEP is mainly used by gay, bisexual, and other men who have sex with men (MSM). Recent studies from America and France found that taking a single 200mg dose of an antibiotic called doxycycline within 24-72 hours of sex without a condom can prevent chlamydia, syphilis, and gonorrhoea.

Possible downsides of DoxyPEP include antibiotic resistance and changes in the bacteria normally present in our gut and throat – known as our microbiome. Antibiotic resistance occurs when bacteria evolve or swap genes (part of their DNA) making antibiotics less effective. We do not understand

these risks very well and more research is needed. We also need to figure out how best to monitor people using DoxyPEP.

This study aims to investigate the impact of DoxyPEP on antibiotic resistance and the gut and throat microbiomes, and help develop the tools to monitor this in the future. The study will collect throat swabs and stool (poo) samples over time and analyse the DNA of bacteria present.

This is an observational study. This means it does not provide DoxyPEP. Currently, individuals are self-sourcing DoxyPEP, and if appropriate NHS services may provide it as per local/national guidelines. Participating in the study does not impact your ability to access DoxyPEP, STI testing or STI treatment.

2. Why have I been invited?

We want to talk to men over the age of 18 who identify as gay or bisexual, or have sex with other men. We are inviting people to take part in the study if this applies, and they also fit into one of the following groups:

A. Have used DoxyPEP in the last 3 months.
B. Have been treated for an STI with doxycycline in the last 3 months.
C. Have not had any antibiotics in the last 3 months.

3. Do I have to take part?

No, it is completely up to you. If you understand what the study involves and agree to take part, we will ask you to sign a consent form. You are still free to withdraw at any time, without giving a reason. This would not affect the routine sexual health care and STI testing you receive. If you decide not to take part in the study today you may still take part in the future, if the study is still open.

4. What happens if I decide to take part?

Your participation in the study will last 1 year, and consists of three study visits:

Visit 1: Baseline visit (approximately 1 hour)

Visit 2: 4-6 month follow-up visit (approximately 30-60 minutes)

Visit 3: 10-12 month follow-up visit (approximately 30-60 minutes)

At or before visit 1, you will sign the consent form. You can choose to complete an electronic or paper consent form. At each visit you will be asked to complete a confidential electronic questionnaire. The questionnaire asks questions about your age, gender identity, sexual orientation, and ethnicity. We will also ask questions about how you feel about taking the types of samples collected in the study, your health, and recent use of antibiotics. Finally, we will ask questions about your sex life, STI testing, and DoxyPEP use. It will take about 15 minutes to complete the questionnaire.

At each visit you will be asked to provide two study samples for testing as part of the research. Therefore, you will provide 6 samples over the whole study. Taking part in the study does not affect your normal NHS care. Additional swabs and urine samples may be taken by a member of the NHS team for routine sexual health screening.

Sample 1. Throat (oropharyngeal) swab: We will collect a swab from the back of your throat. This will be taken by a member of the research team and is similar to throat swabs done as part of a routine sexual health screen. The swab is sent to a laboratory at the University of Oxford for processing with your unique participant ID number and no identifiable information. The swab will be tested for the presence of bacterial DNA to identify the bacteria present and any antibiotic resistance genes.

Sample 2. Stool sample: You will be provided with a stool sample collection kit for use at home or in clinic. This will contain instructions. Stool samples can be collected at home before or after the study visit and returned to the clinic within 48 hours. At each visit, you will also be given the kits for the next study visit, so you can collect the samples at home and bring them back when you attend.

5. What should I consider?

You should not enter the study if you are not willing or unable to provide written informed consent, if you have taken any antibiotics other than doxycycline in the 3 months, or if you are aged under 18 years old.

Participation in the study does not affect routine NHS care. Once you have joined the study there is no restriction on use of antibiotics or DoxyPEP. Participants are free to choose to start or stop DoxyPEP over the course of the study. Antibiotics for treatment and/or prevention of infections should be taken as per NHS recommendations. Using HIV PrEP (pre-exposure prophylaxis) does not impact your participation in the study and should be taken as per NHS recommendations.

Please let one of the team know if there is anything about the study, the consent form or this information sheet you do not understand.

7. Are there any possible disadvantages or risks from taking part?

Participation in SPEAR has minimal disadvantages or risks. Participating in the study does not affect your routine sexual health care, however, the study requires additional in-person appointments and study visits will take approximately 30-60s minutes.

If you find that the questionnaire raises issues that you would like to discuss further, please ask the researcher to arrange for you to speak to one of the doctors or nurses. Additionally, there is a small chance you might feel upset by something asked in the survey. If this is the case, please let the researcher know.

Throat swabs can sometimes cause discomfort; however, this lasts only a short time. The research team members are trained to take the swab safely and carefully to minimise any discomfort.

You may not know how to collect a stool sample, however, the kits will include instructions and gloves for you to use when collecting the sample. The research team will also explain how to collect the stool sample safely and correctly.

8. What are the possible benefits of taking part?

There will be no direct health benefits to you in taking part. However, you will receive a £30 voucher for each study visit. The information and samples that you provide will help us better understand the risk of antibiotic resistance emergence and changes in gut and throat microbiomes with DoxyPEP. You will not receive individual results from the testing in this study as the data will be anonymised and analysed together.

When attending for study visits, the NHS team will be able to offer routine sexual health screening and will contact you with the results.

9. Will my General Practitioner/family doctor (GP) be informed of my participation?

Sexual health records at Central and North West London (CNWL) NHS Foundation Trust are not accessible to GPs or other NHS staff outside our service. CNWL does not routinely share information with GPs. Your participation in the study, information collected as part of the study, and information collected as part of routine sexual health care with CNWL will not be shared with your GP.

10. Will my taking part in the study be kept confidential?

All information that we collect will remain confidential. We need the information provided by you for this research project. Information about you will be handled in accordance with the requirements of the Data Protection Act 2018 and the UK General Data Protection Regulation (GDPR).

This information will include your:

- Name
- Age
- Gender
- Ethnicity
- Sexual orientation
- Medical Records held by Central and North West London NHS Foundation Trust

People who do not need to know who you are will not be able to see your name or contact details. Your data will have a code number (participant ID) instead. We will keep all information about you safe and secure.

Once we have finished the study, we will keep some of the data so we can check the results. This is explained in the 'What will happen to my data?' section. We will write our reports in a way that no-one can ever work out that you took part in the study.

Responsible members of the University College London and Central and North West London NHS Foundation trust sexual health services may be given access to data for monitoring and/or audit of the study to ensure that the research is complying with applicable regulations.

11. Will I be reimbursed for taking part?

You will receive a £30 voucher for each study visit. You will be given this at the end of each visit. Additionally, if you live outside London, you will be able to claim travel expenses for each study visit.

12. What will happen to the samples I give?

If you consent, you will have two samples collected at each study visit. Therefore, each participant will provide 6 samples over the whole study. Samples will be collected and stored at the study site before being transferred to the University of Oxford for processing. The bacterial DNA will be extracted from the sample. The stool sample and throat swabs will only be stored for the duration of the study, and will be destroyed at the end. The extracted bacterial DNA will be stored at -80^{o}C the University of Oxford before undergoing genome sequencing.

To help keep your information confidential, your sample and any information recorded about you in this study will be 'de-identified' and assigned an ID number.

13. What will happen to my data?

Data protection regulation requires that we state the legal basis for processing information about you. In the case of research, this is 'a task in the public interest.' University College London (UCL) is the sponsor for this study, based in the United Kingdom, is the data controller and is responsible for looking after your information and using it properly. All data held at UCL as part of the study will be 'de-identified' and assigned a study code.

We will be using information from you and your medical records at Central and North West London NHS Foundation Trust (CNWL) in order to undertake this study and will use the minimum personally identifiable information possible. Identifiable information will only be held by the study site (CNWL), this includes a study site log and any research documents with personal information, such as consent forms. We will keep identifiable information about you for a maximum of 6 months after the study has finished. The secure study site log (without identifiable information) will be held at CNWL for 20 years after the end of the study. Any research documents with personal information, such as consent forms, will be archived securely by the study site in line with local Trust policy for 20 years after the end of the study.

Data protection regulation provides you with control over your personal data and how it is used. When you agree to your information being used in research, however, some of those rights may be limited in order for the research to be reliable and accurate. Further information about your rights with respect to your personal data is available at https://www.ucl.ac.uk/legal-services/privacy/ucl-general-privacy-notice-participants-and-researchers-health-and-care-research-studies

You can find out more about how we use your information:

- At www.hra.nhs.uk/information-about-patients/
- Our leaflet available from Central and North West London NHS Foundation Trust
- By asking one of the research team
- By sending an email to cnwl.spear@nhs.net or manik.kohli@nhs.net
- By sending an email to data-protection@ucl.ac.uk

The data custodian for this study is Dr Manik Kohli (Chief Investigator)

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

Participation is voluntary and you can change your mind at a later stage. Withdrawal will not affect the care you receive. Although you can stop being part of the study at any time, without giving a reason, we will keep information about you that we already have. We also need to manage your records in specific ways for the research to be reliable. This means that we won't be able to let you see or change the data we hold about you.

If you were to lose capacity to consent during the course of the study, you will be withdrawn. This means you would not be invited to attend further study visits or asked to provide further samples. However, we will keep the information and samples that we already have.

15. What will happen to the results of this study?

Individual results from swabs and stool samples taken by the research team will not be sent to the participants as the data will be anonymised and analysed together. MSM attending CNWL's NHS sexual health services are offered sexual health screening, and participants will be able access to STI screening from CNWL when attending for study visits.

Participants will not be identifiable from any report or publication arising from the study. Reports will be published in scientific journals so that clinicians and policymakers can access and use the findings. If you would like a copy of any of our reports, please contact the study team (contact details below). We will also publish a summary of the results on the research team's website (https://www.ucl.ac.uk/global-health/igh-centre-list/centre-crish). We will also host an event to discuss the study findings and will invite all participants to attend this.

Data from the study will be retained for 20 years after publication of the findings in line with the UCL and CNWL's data protection policies.

16. What if there is a problem?

UCL, as Sponsor, has appropriate insurance in place in the unlikely event that you suffer any harm as a direct consequence of your participation in this study. NHS indemnity operates in respect of the clinical treatment which is provided.

If you wish to complain about any aspect of the way in which you have been approached or treated, or how your information is handled during the course of this study, you should contact the lead researcher, Dr Manik Kohli (manik.kohli@nhs.net).

The Patient Advisory Liaison Service (PALS) is a confidential NHS service that can provide you with support for any complaints or queries you may have regarding the care you receive as an NHS patient. PALS is unable to provide information about this research study. If you wish to contact the PALS team, please contact:

Patient Feedback and Complaints Service
Central and North West London NHS Foundation Trust
Tel: 0300 013 4799;
Email: feedback.cnwl@nhs.net

17. Who is organising and funding the study?

This study is led by University College London (UCL). The research is funded by the National Institute for Health and Care Research (NIHR), the British Infection Association (BIA), and the British HIV Association (BHIVA). The University of Oxford is a collaborator on the study and samples will be sent there for processing. Central and North West London (CNWL) NHS Foundation Trust is the study site.

18. Who has reviewed the study?

All research in the NHS is looked at by an independent group of people, called a Research Ethics Committee, to protect participants' interests. The study has undergone review by the funders (NIHR, BIA, and BHIVA). This study has been reviewed and given favourable opinion by the Proportionate Review Sub-committee of the East Midlands - Nottingham 1 Research Ethics Committee (REC

reference 24/EM/0282). This study has also been reviewed by CNWL Trust's Research and Development.

Further information and contact details:

Please contact the study team by e-mail on cnwl.spear@nhs.net or the lead study doctor Dr Manik Kohli on manik.kohli@nhs.net.

Thank you for considering taking part.