Exploring human papillomavirus and microbial environment in transgender and non-binary individuals with neovaginas

Submission date	Recruitment status	[X] Prospectively registered
13/05/2024	No longer recruiting	☐ Protocol
Registration date	Overall study status	Statistical analysis plan
16/05/2024	Ongoing	Results
Last Edited	Condition category	Individual participant data
17/06/2025	Infections and Infestations	[X] Record updated in last year

Plain English summary of protocol

Background and study aims

There is a good understanding of the viruses and bacteria (microbes) that reside in the vaginas of cisgender women. However, there is less understanding of the microbial environment within the constructed vaginas of transgender women post-gender affirmation surgery. Human papillomavirus (HPV), a common genital infection in cis individuals, is notably less understood in trans women. This study aims to find out if transgender women are willing to participate in research to help us understand more about the microbes that can reside in neovaginas and assess what kind of swab can be used in neovaginas to provide a good sample for testing in the laboratory. This work will serve to understand and improve neovaginal health in this population.

Who can participate?

Transgender or non-binary people aged 18 years and older (no upper age limit) who have had a vaginal construction procedure

What does the study involve?

This is a single centre, observational feasibility pilot study of 1-year duration that is targeting the recruitment of 20 participants. Participants will be asked to complete a questionnaire and provide two swabs from their neovagina.

What are the possible benefits and risks of participating?

There are no direct benefits that the participants will receive however they will be adding to the scientific knowledge of this area and, in turn, helping transgender individuals in the future. In terms of risks – there is a risk that some participants may find the sampling procedure uncomfortable however, the swabs are soft-tipped and have been used to support microbiological testing in the past so this risk is low.

Where is the study run from? Royal Infirmary of Edinburgh, Scottish HPV Reference Laboratory When is the study starting and how long is it expected to run for? October 2023 to December 2025

Who is funding the study?

- 1. The Chief Scientist Office
- 2. The University of Glasgow

Who is the main contact?

Dr Kate Cuschieri, kate.cuschieri@nhslothian.scot.nhs.uk

Contact information

Type(s)

Public, Scientific, Principal Investigator

Contact name

Dr Kate Cuscheiri

ORCID ID

https://orcid.org/0000-0002-2604-3928

Contact details

Scottish HPV Reference Laboratory, Royal Infirmary of Edinburgh, 51 Little France Crescent Edinburgh
United Kingdom
EH16 4SA
+44 (0)1312426039
Kate.Cuschieri@nhslothian.scot.nhs.uk

Additional identifiers

EudraCT/CTIS number

Nil known

IRAS number

341484

ClinicalTrials.gov number

Nil known

Secondary identifying numbers

IRAS 341484, UMON ED-001

Study information

Scientific Title

Understanding the human papillomavirus and microbial environment in transgender and non-binary people with neovaginas; a feasibility study

Acronym

UMON

Study objectives

This is a feasibility/pilot study so not powered. The main hypothesis is whether it is feasible to recruit transgender women into a study designed to assess HPV and microbial diversity in neovaginas through a gender identity clinic.

Ethics approval required

Ethics approval required

Ethics approval(s)

Approved 12/06/2024, West Midlands - Solihull Research Ethics Committee (2 Redman Place, Stratford, London, E20 1JQ, United Kingdom; +44 (0)207 104 8191; solihull.rec@hra.nhs.uk), ref: 24/WM/0114

Submission pending

Study design

Single-centre feasibility pilot study

Primary study design

Observational

Secondary study design

Cross sectional study

Study setting(s)

GP practice, Laboratory, Medical and other records

Study type(s)

Other, Prevention

Participant information sheet

Not available in web format, please use contact details to request a participant information sheet

Health condition(s) or problem(s) studied

Prevention of microbial disease in transgender women with neovaginas

Interventions

This is a single centre, observational feasibility pilot study of 1-year duration that is targeting the recruitment of 20 participants. There is no randomisation, participants will be asked to complete a questionnaire and provide two swabs from their neovagina.

Participants will be asked to provide two vaginal swabs, one self-taken and one taken by the clinician. They will also be asked to complete a brief questionnaire on vaginal hygiene procedures. Vaginal swabs will be sent to a central laboratory for testing using a human papillomavirus (HPV) genotyping assay which detects up to 28 types and includes a cellularity control. In addition to the HPV assay swabs will be tested using a 16S Ribosomal RNA PCR. Results will be experimental only and not influence the standard of care treatment provision.

Intervention Type

Other

Primary outcome measure

The number of eligible individuals approached versus the number who consented measured using data collected in study records at the end of the recruitment period.

Secondary outcome measures

The following secondary outcome measures will be assessed at the end of the recruitment period:

- 1. The quality of self-taken and clinician-taken vaginal swabs to support HPV and microbial molecular testing measured using qualitative and quantitative assay (laboratory) outputs for microbial and housekeeping targets (PCR yes/no and Ct values)
- 2. Feasibility to collate information on vaginal hygiene procedures and acceptability of vaginal sampling in transgender and non-binary people with neovaginas (TGNBP) measured using the level of completion of the questionnaire
- 3. The proportion of TGNBP willing in principle to engage in a longitudinal study to assess the microbial environment of neovaginas (i.e. involving the collection of sequential samples) measured using the response in the questionnaire to the theoretical willingness to take part in a longer-term study

Overall study start date

20/10/2023

Completion date

31/12/2025

Eligibility

Key inclusion criteria

- 1. Transgender or non-binary person who has had a vaginal construction procedure
- 2. Ability to provide informed consent
- 3. Aged 18 years and older (no upper age limit)

Participant type(s)

Service user

Age group

Mixed

Lower age limit

18 Years

Upper age limit

100 Years

Sex

Female

Target number of participants

20

Key exclusion criteria

- 1. Inability to provide informed consent
- 2. Vaginal construction in the last 3 months
- 3. Participation in other interventional research project in the last 30 days

Date of first enrolment

03/06/2024

Date of final enrolment

03/06/2025

Locations

Countries of recruitment

Scotland

United Kingdom

Study participating centre Chalmers Sexual Health Centre

2a Chalmers Street Edinburgh Lothian United Kingdom EH3 9ES

Sponsor information

Organisation

University of Edinburgh

Sponsor details

The Queens Medical Research Institute, 47 Little France Crescent Edinburgh
Scotland
United Kingdom
EH16 4TJ
+44 (0)131 242 3330
resgov@accord.scot

Sponsor type

University/education

Website

https://www.accord.ed.ac.uk/

ROR

https://ror.org/01nrxwf90

Organisation

NHS Lothian

Sponsor details

The Queens Medical Research Institute, 47 Little France Crescent Edinburgh Scotland United Kingdom EH16 4TJ +44 (0)131 242 3330 accord@nhslothian.scot.nhs.uk

Sponsor type

Hospital/treatment centre

Website

https://www.accord.ed.ac.uk/

ROR

https://ror.org/03q82t418

Funder(s)

Funder type

University/education

Funder Name

University of Glasgow

Alternative Name(s)

Funding Body Type

Private sector organisation

Funding Body Subtype

Universities (academic only)

Location

United Kingdom

Funder Name

Chief Scientist Office

Results and Publications

Publication and dissemination plan

- 1. Planned publication of a short report in a peer-reviewed journal as a feasibility study
- 2. Presentation at Scottish HPV Investigators Network Meeting

Intention to publish date

03/12/2026

Individual participant data (IPD) sharing plan

The datasets generated during and/or analysed during the current study will be available upon request from Dr Kate Cuschieri, Kate.Cuschieri@nhslothian.scot.nhs.uk. No data containing any personally identifiable information will be made available to external researchers. Anonymised lab data will be made available as will aggregate data from the questionnaire.

IPD sharing plan summary

Available on request