

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

<b>Submission date</b> 13/05/2024	<b>Recruitment status</b> No longer recruiting	<input checked="" type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
<b>Registration date</b> 16/05/2024	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input type="checkbox"/> Results
<b>Last Edited</b> 03/12/2025	<b>Condition category</b> Infections and Infestations	<input type="checkbox"/> Individual participant data <input checked="" type="checkbox"/> 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 Cuschieri

**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

**Clinical Trials Information System (CTIS)**  
Nil known

**Integrated Research Application System (IRAS)**  
341484

**ClinicalTrials.gov (NCT)**  
Nil known

**Protocol serial number**  
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

**Study type(s)**

Other, Prevention

**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(s)**

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.

**Key secondary outcome(s))**

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

**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

**Healthy volunteers allowed**

No

**Age group**

Mixed

**Lower age limit**

18 years

**Upper age limit**

100 years

**Sex**

Female

**Total final enrolment**

16

**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**

United Kingdom

Scotland

**Study participating centre**

**Chalmers Sexual Health Centre**

2a Chalmers Street

Edinburgh

Lothian

Scotland

EH3 9ES

## **Sponsor information**

**Organisation**

University of Edinburgh

**ROR**

<https://ror.org/01nrxf90>

**Organisation**

NHS Lothian

**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

**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

**Study outputs**

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<a href="#">Participant information sheet</a>	Participant information sheet	11/11/2025	11/11/2025	No	Yes