A feasibility study to assess the acceptability of Staphylococcus aureus decolonisation to prevent skin and soft tissue infections

| Submission date | Recruitment status | [X] Prospectively registered |
|-------------------|-----------------------------|---------------------------------|
| 23/04/2024 | Recruiting | ☐ Protocol |
| Registration date | Overall study status | Statistical analysis plan |
| 31/01/2025 | Ongoing | Results |
| Last Edited | Condition category | Individual participant data |
| 01/07/2025 | Infections and Infestations | [X] Record updated in last year |

Plain English summary of protocol

Background and study aims

Skin and soft tissue infections (SSTIs), particularly those associated with the bacteria Staphylococcus aureus (S.aureus), are common in certain UK populations such as military, prison personnel, returning travellers, children and sport teams. Of concern is the ability of certain strains like Panton-Valentine Leukocidin S.aureus (PVL-SA) and methicillin-resistant S.aureus (MRSA) to cause outbreaks of boils and abscesses, impacting on the health of the individual and their household. Furthermore, SSTIs lead to hospital admissions and recurrent antibiotic use. Nasal carriage of S.aureus can increase a risk of infections following certain procedures: dialysis, cardiothoracic and orthopaedic surgery and so now it is routine to decolonise these patients using a body treatment (nasal ointment and skin wash). This feasibility study will assess the acceptability of routine decolonisation on S. aureus carriage and SSTIs using a high-risk military population at the Infantry Training Centre (ITC), Catterick.

Who can participate? Military recruits aged 16 - 35.5 years

What does the study involve?

Military recruits at ITC will be consented and then randomised to receive weekly decolonization therapy (mupirocin nasal ointment and Hibiscrub body wash/shampoo) or mupirocin and octenisan with 25 consented participants in each group. The feasibility study will assess the acceptability of decolonisation to the study participant and healthcare worker involved using an electronic database called OpenClinica. The study will assess the ability to collect study outcomes (SSTI rates, antimicrobial resistance of colonising bacteria, referral to secondary care, serious adverse events and use of point of care testing). The study will last for 12 weeks.

What are the possible benefits and risks of participating?

The participation of individuals will support the refinement of military clinical guidance and provide information for future research. There are potential minor adverse effects associated with certain elements of the study, such as discomfort from having a swab and this will be minimise by training and involving the participant in the sampling. There is the possibility of

intolerance or reactions to the decolonisation regimens and anyone with a known reaction will be excluded.

Where is the study run from? Infantry Training Centre, Catterick (UK) Imperial College London (UK)

When is the study starting and how long is it expected to run for? April 2024 to June 2026

Who is funding the study?
Defence Medical Services Research Strategy Group (UK)

Who is the main contact? lucylamb@nhs.net

Contact information

Type(s)

Scientific, Principal investigator

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Additional identifiers

Clinical Trials Information System (CTIS)

Nil known

ClinicalTrials.gov (NCT)

Nil known

Protocol serial number

24IC8767

Study information

Scientific Title

A feasibility study to assess the acceptability of Staphylococcus aureus decolonisation to prevent skin and soft tissue infections

Study objectives

The main aim of the feasibility project will be to assess the acceptability of weekly Staphylococcus aureus decolonisation using hibiscrub and bactroban or octenisan and bactroban to prevent against skin and soft tissue infections. The data from the feasibility study will inform future research and current guidance.

In order to meet the main aim the feasibility study will assess:

- the acceptability of decolonisation to the consented participant
- the willingness of individuals to adhere to the decolonisation and collection of samples
- the willingness of study participants and clinical teams to be involved
- the assessment of processes including monitoring of any serious adverse events, hospital admission rates and change in antimicrobial resistance rates of S.aureus carriage rates.

Ethics approval required

Ethics approval required

Ethics approval(s)

approved 25/07/2024, Ministry of Defence Research Ethics Committee (DSTL Portondown West, Fareham, PO17 6AD, United Kingdom; +44 (0)300 153 5372; DST-MODRECTeam@mod.gov.uk), ref: 2297/MOD/24

Study design

Interventional randomized controlled feasibility study

Primary study design

Interventional

Study type(s)

Safety

Health condition(s) or problem(s) studied

Acceptability of S.aureus decolonisation to prevent against skin and soft tissue infections in military recruits

Interventions

The feasibility study will assess the acceptability of S.aureus decolonisation to prevent skin and soft tissue infections. Prior to decolonisation individuals will be screen for S.aureus at 4 body sites. Individuals will be randomised to receive decolonisation therapy weekly either: chlorhexidine 4% body wash and shampoo with mupirocin 2% nasal ointment or octenisan body wash and shampoo with mupirocin 2% nasal ointment.

Intervention Type

Drug

Phase

Phase I

Drug/device/biological/vaccine name(s)

Bactroban 2% ointment (2% w/w mupirocin free acid) [Mupirocin 2%], Chlorhexidine 4% (Hibiscrub) [Chlorhexidine Gluconate 40 mg/ml (4.0% w/v).]

Primary outcome(s)

Incidence of skin and soft tissue infection at time frame 12 weeks recorded in each individual participants Defence Medical Information Capability programme (DMICP).

Key secondary outcome(s))

- 1. Admission to Primary care facility or secondary care recorded in each individual participants DMICP record. Time frame 12 weeks.
- 2. Serious adverse events measured using questionnaires at 1, 4 and 12 weeks.
- 3. Antimicrobial resistance rates of Staphylococcus aureus acquired from 4 body sites (nose, throat, axilla and groin) using bacterial swabs at 3 time points 1, 4 and 12 weeks.

Completion date

30/06/2026

Eligibility

Key inclusion criteria

- 1. Over the age of 16 years and below 35 years and 6 months
- 2. Military and deemed fit to attend phase 1 training

Participant type(s)

Healthy volunteer

Healthy volunteers allowed

No

Age group

Adult

Lower age limit

16 years

Upper age limit

35.5 years

Sex

All

Key exclusion criteria

A participant will be excluded from the study if deemed inappropriate by the IMO or ITC Medical Staff

Date of first enrolment

25/02/2025

Date of final enrolment

30/04/2026

Locations

Countries of recruitment

United Kingdom

England

Study participating centre Infantry Training Centre (ITC)

Catterick United Kingdom

Sponsor information

Organisation

Imperial College London

ROR

https://ror.org/041kmwe10

Funder(s)

Funder type

Government

Funder Name

Defence Medical Services Research Clinical Innovation

Results and Publications

Individual participant data (IPD) sharing plan

The datasets generated during and/or analysed during the current study are not expected to be made available due to confidentiality.

IPD sharing plan summary

Not expected to be made available