Clinical trial results:
Carriage of S. aureus and interaction with the nasal microbiome

Summary

EudraCT number	2018-002119-81
Trial protocol	NL
Global end of trial date	01 September 2020

Results information

Result version number	v1 (current)
This version publication date	20 November 2021
First version publication date	20 November 2021

Trial information

Trial identification

Sponsor protocol code	MEC-2018-091

Additional study identifiers

ISRCTN number	-
ClinicalTrials.gov id (NCT number)	-
WHO universal trial number (UTN)	-

Notes:

Sponsors

Sponsor organisation name	Erasmus MC
Sponsor organisation address	Dr. Molewaterplein 40, Rotterdam, Netherlands, 3015 GD
Public contact	Medisch Ethische Toetsings Commissie, Erasmus MC, 0031 107033625, metc@erasmusmc.nl
Scientific contact	Medisch Ethische Toetsings Commissie, Erasmus MC, 0031 107033625, metc@erasmusmc.nl

Notes:

Paediatric regulatory details

Is trial part of an agreed paediatric investigation plan (PIP)	No
Does article 45 of REGULATION (EC) No 1901/2006 apply to this trial?	No
Does article 46 of REGULATION (EC) No 1901/2006 apply to this trial?	No

Notes:

Results analysis stage

Analysis stage	Final
Date of interim/final analysis	01 September 2021
Is this the analysis of the primary completion data?	Yes
Primary completion date	01 September 2020
Global end of trial reached?	Yes
Global end of trial date	01 September 2020
Was the trial ended prematurely?	No

Notes:

General information about the trial

Main objective of the trial:

To identify nasal microbial communities associated with S. aureus carriage and to study the influence over time of S. aureus targeted decolonization treatment on these microbial communities.

Protection of trial subjects:

Monitoring of AEs and SAEs, as well as known hypersensitivity reactions and undesirable effects described in the SmPC of the intervention drugs

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	01 September 2018
Long term follow-up planned	No
Independent data monitoring committee (IDMC) involvement?	No

Notes:

Population of trial subjects

Subjects enrolled per country

Country: Number of subjects enrolled	Netherlands: 35
Worldwide total number of subjects	35
EEA total number of subjects	35

Notes:

Subjects enrolled per age group

In utero	0
Preterm newborn - gestational age < 37 wk	0
Newborns (0-27 days)	0
Infants and toddlers (28 days-23 months)	0
Children (2-11 years)	0
Adolescents (12-17 years)	0
Adults (18-64 years)	34
From 65 to 84 years	1
85 years and over	0

Subject disposition

Recruitment

Recruitment details:

Subjects were recruited from the Netherlands between february and june 2019

Pre-assignment

Screening details:

All subjects were screened for S. aureus carrier status. Max 35 carriers and 35 noncarriers could be included in their respective cohorts for the intervention study.
Inclusion: subjects must be over 18 years old
Exclusion: antimicrobial drug use, known allergy to the intervention drug, pregnant/breastfeeding women, chronic illness

Pre-assignment period milestones

Number of subjects started	35
Number of subjects completed	19

Pre-assignment subject non-completion reasons

Reason: Number of subjects	Consent withdrawn by subject: 4
Reason: Number of subjects	Not eligible after screening: 11
Reason: Number of subjects	Lost to follow-up: 1

Period 1

Period 1 title	Intervention period
Is this the baseline period?	Yes
Allocation method	Not applicable
Blinding used	Not blinded

Arms

Arm title	Intervention overall

Arm description: -

Arm type	Experimental
Investigational medicinal product name	Bactroban nasal ointment 2%
Investigational medicinal product code	RVG13761
Other name	
Pharmaceutical forms	Cutaneous/nasal ointment
Routes of administration	Cutaneous use, Intranasal use

Dosage and administration details:

Apply intranasally twice daily for 5 days

Investigational medicinal product name	Hibiscrub 4% w/v cutaneous solution
Investigational medicinal product code	RVG10156
Other name	
Pharmaceutical forms	Cutaneous solution, Cutaneous/oromucosal solution
Routes of administration	Cutaneous use

Dosage and administration details:

Apply on body and hair daily for 5 days

Number of subjects in period 1[1]	Intervention overall
Started	19
Completed	18
Not completed	1
Lost to follow-up	1

Notes:

[1] - The number of subjects reported to be in the baseline period are not the same as the worldwide number enrolled in the trial. It is expected that these numbers will be the same.
Justification: The intended target group showed little interest to participate in the study. We were unable to reached the expected number of participants as reported before

Period 2

Period 2 title	Follow-up period
Is this the baseline period?	No
Allocation method	Not applicable
Blinding used	Not blinded

Arms

Arm title	Follow-up overall
Arm description: -	
Arm type	No intervention
No investigational medicinal product assigned in this arm	

Number of subjects in period 2	Follow-up overall
Started	18
Completed	17
Not completed	1
Lost to follow-up	1

Baseline characteristics

Reporting groups	
Reporting group title	Intervention period

Reporting group description: -

Reporting group values	Intervention period	Total	
Number of subjects	19	19	
Age categorical Units: Subjects			
In utero	0	0	
Preterm newborn infants (gestational age < 37 wks)	0	0	
Newborns (0-27 days)	0	0	
Infants and toddlers (28 days-23 months)	0	0	
Children (2-11 years)	0	0	
Adolescents (12-17 years)	0	0	
Adults (18-64 years)	18	18	
From 65-84 years	1	1	
85 years and over	0	0	
Gender categorical Units: Subjects			
Female	13	13	
Male	6	6	

Subject analysis sets	
Subject analysis set title	Carrier cohort
Subject analysis set type	Sub-group analysis

Subject analysis set description:

Subjects that were defined S. aureus carriers during the screening period

Subject analysis set title	Noncarrier cohort
Subject analysis set type	Sub-group analysis

Subject analysis set description:

Subjects that were defined noncarriers during the screening period

Reporting group values	Carrier cohort	Noncarrier cohort	
Number of subjects	11	8	
Age categorical Units: Subjects			
In utero	0	0	
Preterm newborn infants (gestational age < 37 wks)	0	0	
Newborns (0-27 days)	0	0	
Infants and toddlers (28 days-23 months)	0	0	
Children (2-11 years)	0	0	
Adolescents (12-17 years)	0	0	
Adults (18-64 years)	10	8	

From 65-84 years	1	0	
85 years and over	0	0	

Gender categorical Units: Subjects			
Female	7	6	
Male	4	2	

End points

End points reporting groups

Reporting group title	Intervention overall
Reporting group description: -	
Reporting group title	Follow-up overall
Reporting group description: -	
Subject analysis set title	Carrier cohort
Subject analysis set type	Sub-group analysis
Subject analysis set description:	
Subjects that were defined S. aureus carriers during the screening period	
Subject analysis set title	Noncarrier cohort
Subject analysis set type	Sub-group analysis
Subject analysis set description:	
Subjects that were defined noncarriers during the screening period	

Primary: Microbiome composition of the nose

End point title	Microbiome composition of the nose[1]
End point description:	
Bacterial abundance counted as the number of bacterial species identified in the nasal microbiota of the subjects. Identified species: S. aureus, D. pigrum, M. nonliquefaciens, C. propinquum, C. accolens, C. pseudodiphtheriticum, C. macginleyi, S. epidermidis, C. acnes and others	
End point type	Primary
End point timeframe:	
Intervention and follow-up period	

Notes:

[1] - No statistical analyses have been specified for this primary end point. It is expected there is at least one statistical analysis for each primary end point.
Justification: Form is not suitable to describe our statistical analyses done for the microbiota composition of S. aureus carriers and noncarrier, before and after decolonisation treatment. All statistical analyses will be included in the manuscript, which is currently in preparation

End point values	Intervention overall	Follow-up overall	Carrier cohort	Noncarrier cohort
Subject group type	Reporting group	Reporting group	Subject analysis set	Subject analysis set
Number of subjects analysed	19	18	9	8
Units: Bacterial abundance	9	10	9	10

Attachments (see zip file)	Bacterial abundance in carriers and noncarriers/Fig3 Bacterial

Statistical analyses

No statistical analyses for this end point

Adverse events

Adverse events information[1]	
Timeframe for reporting adverse events: February 2019 until January 2020	
Assessment type	Non-systematic

Dictionary used	
Dictionary name	MedDRA
Dictionary version	6.1

Frequency threshold for reporting non-serious adverse events: 0 %

Notes:

[1] - There are no non-serious adverse events recorded for these results. It is expected that there will be at least one non-serious adverse event reported.
Justification: Due to the general good health of the subjects, method of self-reporting and low risk of the trial, no non-serious adverse events were reported

More information

Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? Yes

Date	Amendment
10 January 2019	Change in study protocol causing reducing the required samples by 50%
11 April 2019	Change to subject information regarding the option to inform their general practitioner about their participation
09 September 2019	Request to change the end date of the trial

Notes:

Interruptions (globally)

Were there any global interruptions to the trial? No

Limitations and caveats

Limitations of the trial such as small numbers of subjects analysed or technical problems leading to unreliable data.

Manuscript describing the results of this study is in preparation

Notes: