



## Clinical trial results:

### An open label study to evaluate the efficacy and tolerability of erenumab in the management of persistent redness and flushing in rosacea

#### Summary

EudraCT number	2019-003971-20
Trial protocol	DK
Global end of trial date	11 May 2021

#### Results information

Result version number	v1 (current)
This version publication date	26 August 2022
First version publication date	26 August 2022

#### Trial information

##### Trial identification

Sponsor protocol code	ROS031019
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##### Additional study identifiers

ISRCTN number	-
ClinicalTrials.gov id (NCT number)	NCT04419259
WHO universal trial number (UTN)	-

Notes:

#### Sponsors

Sponsor organisation name	Rigshospitalet Glostrup
Sponsor organisation address	Valdemar Hansens Vej 5, Glostrup, Denmark, 2600
Public contact	Prof. Messoud Ashina, Danish Headache Center, messoud.ashina@regionh.dk
Scientific contact	Prof. Messoud Ashina, Danish Headache Center, messoud.ashina@regionh.dk

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	Interim
Date of interim/final analysis	10 May 2022
Is this the analysis of the primary completion data?	Yes
Primary completion date	11 May 2021
Global end of trial reached?	Yes
Global end of trial date	11 May 2021
Was the trial ended prematurely?	No

Notes:

## General information about the trial

Main objective of the trial:

Mean change in number of days with moderate, severe or extreme flushing (defined as a score of 4-10 on the Flushing Assessment Tool part II) from Baseline to week 12.

Protection of trial subjects:

The drug used in this trial, erenumab, has been approved for treatment of patients with migraine. It is generally safe, and all side effects are transient. Erenumab was administered via subcutaneous injection and patients were offered to lie down during injections. They were also prompted to stay for 30 minutes following the first injection to ensure that they didn't have any reaction to the medication. Furthermore, all patients were provided with a direct number to the subinvestigator for any questions.

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	09 June 2020
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	Denmark: 30
Worldwide total number of subjects	30
EEA total number of subjects	30

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)	30
From 65 to 84 years	0
85 years and over	0

## Subject disposition

### Recruitment

Recruitment details:

This was a single-center trial, and all patients were recruited at the Danish Headache Center at Rigshospitalet Glostrup, Denmark.

Patients were recruited between 09.06.20 - 04.12.20

### Pre-assignment

Screening details:

Patients were not allowed to use any local or systemic treatment for rosacea for 5 half-lives or 28 days, whichever was longest, prior to enrollment.

### Period 1

Period 1 title	Overall trial (overall period)
Is this the baseline period?	Yes
Allocation method	Not applicable
Blinding used	Not blinded

Blinding implementation details:

Open label, no blinding

### Arms

Arm title	Treatment arm
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Arm description:

All patients receiving erenumab

Arm type	Experimental
Investigational medicinal product name	Aimovig
Investigational medicinal product code	
Other name	Erenumab
Pharmaceutical forms	Concentrate for solution for injection
Routes of administration	Subcutaneous use

Dosage and administration details:

Erenumab 140 mg in prefilled syringes containing 1 mL of 140 mg/mL erenumab formulated with 15 mM sodium acetate, 8.5% (w/v) sucrose, 0.010% (w/v) polysorbate 80, at pH 5. Erenumab was injected subcutaneously.

Number of subjects in period 1	Treatment arm
Started	30
Completed	27
Not completed	3
Personal reasons	2
Adverse event, non-fatal	1

## Baseline characteristics

### Reporting groups

Reporting group title

Overall trial

Reporting group description: -

Reporting group values	Overall trial	Total	
Number of subjects	30	30	
Age categorical			
Units: Subjects			
In utero		0	
Preterm newborn infants (gestational age < 37 wks)		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)		0	
From 65-84 years		0	
85 years and over		0	
Age continuous			
Units: years			
arithmetic mean	38.8		
standard deviation	± 13.1	-	
Gender categorical			
Units: Subjects			
Female	24	24	
Male	6	6	

## End points

### End points reporting groups

Reporting group title	Treatment arm
Reporting group description: All patients receiving erenumab	
Subject analysis set title	Safety follow up
Subject analysis set type	Safety analysis
Subject analysis set description: 12 weeks safety follow up post treatment	

### Primary: Mean change in number of days with moderate, severe, or extreme flushing (defined as a score between 4 – 10 on the Flushing assessment tool part II)

End point title	Mean change in number of days with moderate, severe, or extreme flushing (defined as a score between 4 – 10 on the Flushing assessment tool part II)
End point description: Measured by the Flushing Assessment Tool (FAST) part II	
End point type	Primary
End point timeframe: From Baseline (weeks -4 to 0) to weeks 9 - 12	

End point values	Treatment arm	Safety follow up		
Subject group type	Reporting group	Subject analysis set		
Number of subjects analysed	27	27		
Units: Days with moderate to extreme flushing	27	27		

### Statistical analyses

Statistical analysis title	Descriptive
Comparison groups	Treatment arm v Safety follow up
Number of subjects included in analysis	54
Analysis specification	Pre-specified
Analysis type	other
P-value	< 0.05
Method	Descriptive
Parameter estimate	Descriptive

## Adverse events

### Adverse events information

Timeframe for reporting adverse events:

From Baseline to Week 24

Adverse event reporting additional description:

Adverse events were collected at each study visit after administration of the study drug (at visits 2 - 5)

Assessment type	Systematic
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### Dictionary used

Dictionary name	Oxford
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Dictionary version	1
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### Reporting groups

Reporting group title	Gastrointestinal disorders
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Reporting group description:

Constipation, bloating

Reporting group title	Nervous system disorders
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Reporting group description:

Transient worsening of headache/migraine

Reporting group title	Vascular disorders
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Reporting group description:

Transient worsening of flushing

Reporting group title	Respiratory, thoracic and mediastinal disorders
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Reporting group description:

Upper respiratory tract infection

Reporting group title	Eye disorders
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Reporting group description:

Dry eyes

Reporting group title	General disorders and administration site conditions
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Reporting group description:

Transient fever

Reporting group title	Hepatobiliary disorders
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Reporting group description: -

Serious adverse events	Gastrointestinal disorders	Nervous system disorders	Vascular disorders
Total subjects affected by serious adverse events			
subjects affected / exposed	0 / 30 (0.00%)	0 / 30 (0.00%)	0 / 30 (0.00%)
number of deaths (all causes)	0	0	0
number of deaths resulting from adverse events			
Hepatobiliary disorders			
Gallbladder obstruction	Additional description: Started 3 weeks after the second dose of the drug, patient was admitted to the hospital for one night. Resolved without any surgical treatment. Possibly not related to the drug.		
subjects affected / exposed	0 / 30 (0.00%)	0 / 30 (0.00%)	0 / 30 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0

Serious adverse events	Respiratory, thoracic and mediastinal disorders	Eye disorders	General disorders and administration site conditions
Total subjects affected by serious adverse events			
subjects affected / exposed	0 / 30 (0.00%)	0 / 30 (0.00%)	0 / 30 (0.00%)
number of deaths (all causes)	0	0	0
number of deaths resulting from adverse events			
Hepatobiliary disorders			
Gallbladder obstruction	Additional description: Started 3 weeks after the second dose of the drug, patient was admitted to the hospital for one night. Resolved without any surgical treatment. Possibly not related to the drug.		
subjects affected / exposed	0 / 30 (0.00%)	0 / 30 (0.00%)	0 / 30 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0

Serious adverse events	Hepatobiliary disorders		
Total subjects affected by serious adverse events			
subjects affected / exposed	1 / 30 (3.33%)		
number of deaths (all causes)	0		
number of deaths resulting from adverse events			
Hepatobiliary disorders			
Gallbladder obstruction	Additional description: Started 3 weeks after the second dose of the drug, patient was admitted to the hospital for one night. Resolved without any surgical treatment. Possibly not related to the drug.		
subjects affected / exposed	1 / 30 (3.33%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		

Frequency threshold for reporting non-serious adverse events: 5 %

Non-serious adverse events	Gastrointestinal disorders	Nervous system disorders	Vascular disorders
Total subjects affected by non-serious adverse events			
subjects affected / exposed	12 / 30 (40.00%)	3 / 30 (10.00%)	4 / 30 (13.33%)
Vascular disorders			
Flushing	Additional description: Transient worsening of flushing		
subjects affected / exposed	12 / 30 (40.00%)	3 / 30 (10.00%)	4 / 30 (13.33%)
occurrences (all)	12	3	4
Nervous system disorders			
Headache	Additional description: Transient worsening of headache/migraine		

subjects affected / exposed occurrences (all)	12 / 30 (40.00%) 12	3 / 30 (10.00%) 3	4 / 30 (13.33%) 4
General disorders and administration site conditions			
Hot flush	Additional description: Transient fever		
subjects affected / exposed occurrences (all)	12 / 30 (40.00%) 12	3 / 30 (10.00%) 3	4 / 30 (13.33%) 4
Eye disorders			
Dry eye			
subjects affected / exposed occurrences (all)	12 / 30 (40.00%) 12	3 / 30 (10.00%) 3	4 / 30 (13.33%) 4
Gastrointestinal disorders			
Constipation			
subjects affected / exposed occurrences (all)	12 / 30 (40.00%) 12	3 / 30 (10.00%) 3	4 / 30 (13.33%) 4
Bloating			
subjects affected / exposed occurrences (all)	12 / 30 (40.00%) 12	3 / 30 (10.00%) 3	4 / 30 (13.33%) 4
Respiratory, thoracic and mediastinal disorders			
Upper respiratory tract infection			
subjects affected / exposed occurrences (all)	12 / 30 (40.00%) 12	3 / 30 (10.00%) 3	4 / 30 (13.33%) 4

<b>Non-serious adverse events</b>	Respiratory, thoracic and mediastinal disorders	Eye disorders	General disorders and administration site conditions
Total subjects affected by non-serious adverse events			
subjects affected / exposed	3 / 30 (10.00%)	2 / 30 (6.67%)	2 / 30 (6.67%)
Vascular disorders			
Flushing	Additional description: Transient worsening of flushing		
subjects affected / exposed occurrences (all)	3 / 30 (10.00%) 3	2 / 30 (6.67%) 2	2 / 30 (6.67%) 2
Nervous system disorders			
Headache	Additional description: Transient worsening of headache/migraine		
subjects affected / exposed occurrences (all)	3 / 30 (10.00%) 3	2 / 30 (6.67%) 2	2 / 30 (6.67%) 2
General disorders and administration site conditions			
Hot flush	Additional description: Transient fever		



subjects affected / exposed occurrences (all)	3 / 30 (10.00%) 3	2 / 30 (6.67%) 2	2 / 30 (6.67%) 2
Eye disorders Dry eye subjects affected / exposed occurrences (all)	3 / 30 (10.00%) 3	2 / 30 (6.67%) 2	2 / 30 (6.67%) 2
Gastrointestinal disorders Constipation subjects affected / exposed occurrences (all)  Bloating subjects affected / exposed occurrences (all)	3 / 30 (10.00%) 3  3 / 30 (10.00%) 3	2 / 30 (6.67%) 2  2 / 30 (6.67%) 2	2 / 30 (6.67%) 2  2 / 30 (6.67%) 2
Respiratory, thoracic and mediastinal disorders Upper respiratory tract infection subjects affected / exposed occurrences (all)	3 / 30 (10.00%) 3	2 / 30 (6.67%) 2	2 / 30 (6.67%) 2

<b>Non-serious adverse events</b>	Hepatobiliary disorders		
Total subjects affected by non-serious adverse events subjects affected / exposed	0 / 30 (0.00%)		
Vascular disorders Flushing subjects affected / exposed occurrences (all)	Additional description: Transient worsening of flushing 0 / 30 (0.00%) 0		
Nervous system disorders Headache subjects affected / exposed occurrences (all)	Additional description: Transient worsening of headache/migraine 0 / 30 (0.00%) 0		
General disorders and administration site conditions Hot flush subjects affected / exposed occurrences (all)	Additional description: Transient fever 0 / 30 (0.00%) 0		
Eye disorders Dry eye subjects affected / exposed occurrences (all)	0 / 30 (0.00%) 0		

Gastrointestinal disorders Constipation subjects affected / exposed occurrences (all)  Bloating subjects affected / exposed occurrences (all)	0 / 30 (0.00%)  0  0 / 30 (0.00%)  0		
Respiratory, thoracic and mediastinal disorders Upper respiratory tract infection subjects affected / exposed occurrences (all)	0 / 30 (0.00%)  0		

## More information

### Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? No

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### 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.

This was an open label study.
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Notes: