Clinical trial results:
Efficacy of Oscillococcinum® in the treatment of Influenza-like-illness symptoms: a national, multicentre, randomized, controlled trial

Summary

EudraCT number	2020-002972-11
Trial protocol	FR BE
Global end of trial date	29 June 2023

Results information

Result version number	v1 (current)
This version publication date	29 May 2025
First version publication date	29 May 2025
Summary attachment (see zip file)	CSR Gosci Summary V1.0 01/AUG/2024 (CSR Gosci Summary_V1.0_240801.pdf)

Trial information

Trial identification

Sponsor protocol code	BRN-C-2019-02

Additional study identifiers

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

Notes:

Sponsors

Sponsor organisation name	BOIRON
Sponsor organisation address	2 Av. de l'Ouest Lyonnais, Messimy, France, 69510
Public contact	Projects management desk , KAPPA SANTE, 33 01 44 82 74 74, gosci@kappasante.com
Scientific contact	Projects management desk , KAPPA SANTE, 33 01 44 82 74 74, gosci@kappasante.com

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	17 October 2023
Is this the analysis of the primary completion data?	Yes
Primary completion date	29 June 2023
Global end of trial reached?	Yes
Global end of trial date	29 June 2023
Was the trial ended prematurely?	No

Notes:

General information about the trial

Main objective of the trial:

To evaluate the efficacy of Oscillococcinum® in the alleviation of ILI symptoms within 72h following the beginning of the first intake of medication.

Protection of trial subjects:

Oscillococcinum® is a well-known and long-used medicine with no expected side effects.

Non inclusion criteria : (For France) Unaffiliated or non-beneficiary of a social security system patient as well as deprived of liberty (article L1121-6 of Code de la Santé Publique) or protected (article L1121-8) adults. (For Belgium) Adult patient deprived of liberty or incapable

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	05 November 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	Belgium: 5
Country: Number of subjects enrolled	France: 675
Worldwide total number of subjects	680
EEA total number of subjects	680

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)	649
From 65 to 84 years	30

85 years and over	1

Subject disposition

Recruitment

Recruitment details:

Investigators ensure all criteria for inclusion and non-inclusion are checked.
They inform each eligible patient in detail about the study, as required by the GCP guideline and specified in the patient information sheet (PIS).
Each patient is given the PIS and the opportunity to ask questions.
After study consent, the study procedures start.

Pre-assignment

Screening details:

Investigators (PIs) are invited to sensitise eligible patients to the study and to the monitoring of ILI symptoms occurrence.
Those patients are invited to quickly contact the PIs to be enrolled in the study within 12 hours after ILI symptoms start ideally and up to 24 hours.
Information is posted inmedical offices of PIs and through flyers.

Period 1

Period 1 title	Overall trial (overall period)
Is this the baseline period?	Yes
Allocation method	Randomised - controlled
Blinding used	Double blind
Roles blinded	Subject, Investigator, Monitor, Data analyst

Blinding implementation details:

The investigational drug blind was maintained using the IWRS.
The investigator used the IWRS to randomise the patient into the study. He/she provided the necessary patient-identifying information, including the patient number assigned at screening. The medication identification (ID) number of the investigational drug to be dispensed was assigned by the IWRS.

Arms

Are arms mutually exclusive?	Yes
Arm title	Placebo group

Arm description:

Placebo contained 0.85 g sucrose plus 0.15 g lactose; it was not possible to differentiate it from Oscillococcinum® by its appearance and taste.

Arm type	Placebo
Investigational medicinal product name	Placebo
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Pillules in single-dose container
Routes of administration	Sublingual use

Dosage and administration details:

Oscillococcinum® and placebo will be taken with 3 doses per day over 3 days. Each dose is to be taken orally. The entire content of a dose should be left melted under the tongue. The time of intake of the first dose during Initial Visit will be documented in the investigator CRF. From then onwards, the intake of each dose of study medication is to be documented in the diary as ‘taken dose’ or ‘missed dose’.

Patients will be instructed to take all 9 doses as scheduled even if they are free of symptoms.

Arm title	Oscillococcinum®

Arm description:

Oscillococcinum® will contain the extract from Anas barbariae, hepatis and cordis 200K plus 0.85 g sucrose plus 0.15 g lactose.

Arm type	Experimental

Investigational medicinal product name	Oscillococcinum
Investigational medicinal product code	PRD4449039
Other name	
Pharmaceutical forms	Pillules in single-dose container
Routes of administration	Sublingual use

Dosage and administration details:

The dosage of Oscillococcinum® in the study has been chosen based on the literature and on the approved dosage and notice used in countries participating to the study.

Oscillococcinum® and placebo will be taken with 3 doses per day over 3 days. Each dose is to be taken orally. The entire content of a dose should be left melted under the tongue. The time of intake of the first dose during Initial Visit will be documented in the investigator CRF. From then onwards, the intake of each dose of study medication is to be documented in the diary as 'taken dose' or 'missed dose'.

Patients will be instructed to take all 9 doses as scheduled even if they are free of symptoms.

The doses are to be taken 3 times each day, every 6 hours as compatible with the patient's daily routine. The suggested schedule for intake is:
- first dose in the morning defined as 12.01 am to 12pm
- second dose at noon defined as 12.01pm to 06pm
- third dose in the evening defined as 06.01pm to 12 am

Number of subjects in period 1	Placebo group	Oscillococcinum®
Started	338	342
Completed	331	333
Not completed	7	9
Protocol deviation	7	9

Baseline characteristics

Reporting groups	
Reporting group title	Placebo group
Reporting group description:	
Placebo contained 0.85 g sucrose plus 0.15 g lactose; it was not possible to differentiate it from Oscillococcinum® by its appearance and taste.	
Reporting group title	Oscillococcinum®
Reporting group description:	
Oscillococcinum® will contain the extract from Anas barbariae, hepatis and cordis 200K plus 0.85 g sucrose plus 0.15 g lactose.	

Reporting group values	Placebo group	Oscillococcinum®	Total
Number of subjects	338	342	680
Age categorical Units: Subjects			
Adults <30 years	107	107	214
Adults ≥30 years	231	235	466
Age continuous Units: years			
median	36.5	36.5	
inter-quartile range (Q1-Q3)	27 to 48	27 to 50	-
Gender categorical Units: Subjects			
Male	91	83	174
Female	247	259	506
BMI (kg/m²) (classes) Units: Subjects			
Underweight (<18.5)	19	14	33
Healthy weight [18.5-25[	167	186	353
Overweight [25-30[	84	94	178
Obesity ≥30	68	47	115
Missing	0	1	1
Seasonal influenza vaccination Units: Subjects			
Yes	36	38	74
No	302	304	606
SARS-CoV2 vaccination Units: Subjects			
Yes	200	205	405
No	64	56	120
Missing	74	81	155
BMI Units: kg/m²			
median	24.5	24	
inter-quartile range (Q1-Q3)	21.8 to 28	21.6 to 27.7	-
Height Units: meters			
median	1.67	1.67	

inter-quartile range (Q1-Q3)	1.61 to 1.73	1.61 to 1.73	-
Weight			
Units: kg			
median	70	68	
inter-quartile range (Q1-Q3)	60 to 82	60 to 78	-

Subject analysis sets

Subject analysis set title	Oscillococcinum® - SAF
Subject analysis set type	Safety analysis

Subject analysis set description:

All patients who received at least one dose of study medication. It would include any patient who accidently received study medication, but was not randomised in this study.

Subject analysis set title	Oscillococcinum® - FAS
Subject analysis set type	Full analysis

Subject analysis set description:

Defined according to the intention-to-treat principle, to consider all randomised patients who received at least one dose of study medication.
NB:
- The reason for exclusion from analyses will be reviewed and discussed during data review.
- Despite the exclusion of patients who took no study medication, all patients will be analysed in the group to which they were initially assigned; the decision of whether or not to begin treatment could not be influenced by knowledge of the assigned treatment.

Subject analysis set title	Oscillococcinum® - PP
Subject analysis set type	Per protocol

Subject analysis set description:

A subset of the full analysis set excluding patients with major protocol deviations*.

*The classification of major and minor protocol deviations and the resulting definition of analysis sets will be performed prior to unblinding and will be approved by the Sponsor at the data review meeting.

Subject analysis set title	Placebo - SAF
Subject analysis set type	Safety analysis

Subject analysis set description:

All patients who received at least one dose of study medication. It would include any patient who accidently received study medication, but was not randomised in this study.

Subject analysis set title	Placebo - FAS
Subject analysis set type	Full analysis

Subject analysis set description:

Defined according to the intention-to-treat principle, to consider all randomised patients who received at least one dose of study medication.
NB:
- The reason for exclusion from analyses will be reviewed and discussed during data review.
- Despite the exclusion of patients who took no study medication, all patients will be analysed in the group to which they were initially assigned; the decision of whether or not to begin treatment could not be influenced by knowledge of the assigned treatment.

Subject analysis set title	Placebo - PP
Subject analysis set type	Per protocol

Subject analysis set description:

A subset of the full analysis set excluding patients with major protocol deviations*.

*The classification of major and minor protocol deviations and the resulting definition of analysis sets will be performed prior to unblinding and will be approved by the Sponsor at the data review meeting.

Reporting group values	Oscillococcinum® - SAF	Oscillococcinum® - FAS	Oscillococcinum® - PP
Number of subjects	342	342	333
Age categorical Units: Subjects			
Adults <30 years	107	107	107
Adults ≥30 years	235	235	226
Age continuous Units: years			
median	36.5	36.5	36
inter-quartile range (Q1-Q3)	27 to 48	27 to 48	27 to 48
Gender categorical Units: Subjects			
Male	83	83	79
Female	259	259	254
BMI (kg/m²) (classes) Units: Subjects			
Underweight (<18.5)	14	14	14
Healthy weight [18.5-25[	186	186	181
Overweight [25-30[	94	94	90
Obesity ≥30	47	47	47
Missing	1	1	1
Seasonal influenza vaccination Units: Subjects			
Yes	38	38	36
No	304	304	297
SARS-CoV2 vaccination Units: Subjects			
Yes	205	205	203
No	56	56	56
Missing	81	81	74
BMI Units: kg/m²			
median	24	24	24
inter-quartile range (Q1-Q3)	21.6 to 27.7	21.6 to 27.7	21.5 to 27.7
Height Units: meters			
median	1.67	1.67	1.67
inter-quartile range (Q1-Q3)	1.61 to 1.73	1.61 to 1.73	1.61 to 1.73
Weight Units: kg			
median	68	68	68
inter-quartile range (Q1-Q3)	60 to 78	60 to 78	60 to 78

Reporting group values	Placebo - SAF	Placebo - FAS	Placebo - PP
Number of subjects	338	338	331
Age categorical Units: Subjects			
Adults <30 years	107	107	106
Adults ≥30 years	231	231	225

Age continuous Units: years			
median	36.5	36.5	36
inter-quartile range (Q1-Q3)	27 to 50	27 to 50	27 to 50
Gender categorical Units: Subjects			
Male	91	91	88
Female	247	247	243
BMI (kg/m²) (classes) Units: Subjects			
Underweight (<18.5)	19	19	19
Healthy weight [18.5-25[	167	167	164
Overweight [25-30[	84	84	83
Obesity ≥30	68	68	65
Missing	0	0	0
Seasonal influenza vaccination Units: Subjects			
Yes	36	36	34
No	302	302	297
SARS-CoV2 vaccination Units: Subjects			
Yes	200	200	198
No	64	64	64
Missing	74	74	69
BMI Units: kg/m²			
median	24.5	24.5	24.5
inter-quartile range (Q1-Q3)	21.8 to 28	21.8 to 28	21.7 to 27.9
Height Units: meters			
median	1.67	1.67	1.67
inter-quartile range (Q1-Q3)	1.61 to 1.73	1.61 to 1.73	1.61 to 1.73
Weight Units: kg			
median	70	70	70
inter-quartile range (Q1-Q3)	60 to 82	60 to 82	60 to 82

End points

End points reporting groups

Reporting group title	Placebo group
Reporting group description:	
Placebo contained 0.85 g sucrose plus 0.15 g lactose; it was not possible to differentiate it from Oscillococcinum® by its appearance and taste.	
Reporting group title	Oscillococcinum®
Reporting group description:	
Oscillococcinum® will contain the extract from Anas barbariae, hepatis and cordis 200K plus 0.85 g sucrose plus 0.15 g lactose.	
Subject analysis set title	Oscillococcinum® - SAF
Subject analysis set type	Safety analysis
Subject analysis set description:	
All patients who received at least one dose of study medication. It would include any patient who accidently received study medication, but was not randomised in this study.	
Subject analysis set title	Oscillococcinum® - FAS
Subject analysis set type	Full analysis
Subject analysis set description:	
Defined according to the intention-to-treat principle, to consider all randomised patients who received at least one dose of study medication. NB: - The reason for exclusion from analyses will be reviewed and discussed during data review. - Despite the exclusion of patients who took no study medication, all patients will be analysed in the group to which they were initially assigned; the decision of whether or not to begin treatment could not be influenced by knowledge of the assigned treatment.	
Subject analysis set title	Oscillococcinum® - PP
Subject analysis set type	Per protocol
Subject analysis set description:	
A subset of the full analysis set excluding patients with major protocol deviations*. *The classification of major and minor protocol deviations and the resulting definition of analysis sets will be performed prior to unblinding and will be approved by the Sponsor at the data review meeting.	
Subject analysis set title	Placebo - SAF
Subject analysis set type	Safety analysis
Subject analysis set description:	
All patients who received at least one dose of study medication. It would include any patient who accidently received study medication, but was not randomised in this study.	
Subject analysis set title	Placebo - FAS
Subject analysis set type	Full analysis
Subject analysis set description:	
Defined according to the intention-to-treat principle, to consider all randomised patients who received at least one dose of study medication. NB: - The reason for exclusion from analyses will be reviewed and discussed during data review. - Despite the exclusion of patients who took no study medication, all patients will be analysed in the group to which they were initially assigned; the decision of whether or not to begin treatment could not be influenced by knowledge of the assigned treatment.	
Subject analysis set title	Placebo - PP
Subject analysis set type	Per protocol
Subject analysis set description:	
A subset of the full analysis set excluding patients with major protocol deviations*. *The classification of major and minor protocol deviations and the resulting definition of analysis sets will be performed prior to unblinding and will be approved by the Sponsor at the data review meeting.	

Primary: Alleviation of all symptoms at 72h - FAS	
End point title	Alleviation of all symptoms at 72h - FAS
End point description: *155 patients without PRO measurement at 72h.	
End point type	Primary
End point timeframe: Overall study	

End point values	Oscillococcinum® - FAS	Placebo - FAS		
Subject group type	Subject analysis set	Subject analysis set		
Number of subjects analysed	342	338		
Units: Subject				
Yes	93	77		
No	173	182		
Missing	76	79		

Statistical analyses

Statistical analysis title	Alleviation of all symptoms at 72h
Comparison groups	Placebo - FAS v Oscillococcinum® - FAS
Number of subjects included in analysis	680
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.1
Method	Chi-squared
Parameter estimate	Risk ratio (RR)
Point estimate	1.18
Confidence interval	
level	90 %
sides	2-sided
lower limit	0.95
upper limit	1.45

Primary: Alleviation of all symptoms at 72 - PP	
End point title	Alleviation of all symptoms at 72 - PP
End point description:	
End point type	Primary
End point timeframe: Overall study	

End point values	Oscillococcinum® - PP	Placebo - PP		
Subject group type	Subject analysis set	Subject analysis set		
Number of subjects analysed	333	331		
Units: Subject				
Yes	86	77		
No	171	176		
Missing	76	78		

Statistical analyses

Statistical analysis title	Efficacy endpoints in the PP population
Statistical analysis description:	
Mutivariable model adjusted for Global symptoms severity at baseline(Mild, Moderate, Severe), Use of paracetamol (Yes, No), Time of onser of ILI symptoms at inclusion (>12h, [12h - 24h]	
Comparison groups	Oscillococcinum® - PP v Placebo - PP
Number of subjects included in analysis	664
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.23
Method	Chi-squared
Parameter estimate	Risk ratio (RR)
Point estimate	1.1
Confidence interval	
level	90 %
sides	2-sided
lower limit	0.89
upper limit	1.36

Secondary: Time to alleviation of symptoms of ILI - FAS

End point title	Time to alleviation of symptoms of ILI - FAS
End point description:	
End point type	Secondary
End point timeframe:	
Overall study	

End point values	Oscillococcinum® - FAS	Placebo - FAS		
Subject group type	Subject analysis set	Subject analysis set		
Number of subjects analysed	317[1]	317[2]		
Units: days				
arithmetic mean (standard deviation)	7.7 (± 3)	7.5 (± 3.2)		

Notes:

[1] - 25 missing data

[2] - 21 missing data

Statistical analyses

Statistical analysis title	Survival analysis - Oscillococcinum® - FAS
Comparison groups	Oscillococcinum® - FAS v Placebo - FAS
Number of subjects included in analysis	634
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.31
Method	Logrank
Parameter estimate	Median survival
Point estimate	9.1
Confidence interval	
level	95 %
sides	2-sided
lower limit	9.1
upper limit	9.2

Statistical analysis title	Survival analysis - Placebo - FAS
Comparison groups	Placebo - FAS v Oscillococcinum® - FAS
Number of subjects included in analysis	634
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.31
Method	Logrank
Parameter estimate	Median survival
Point estimate	9.1
Confidence interval	
level	95 %
sides	2-sided
lower limit	9.1
upper limit	9.2

Secondary: Alleviation of all symptoms at 72h maintained over at least 24h - FAS

End point title	Alleviation of all symptoms at 72h maintained over at least 24h - FAS

End point description:

End point type	Secondary
End point timeframe:	
Overall study	

End point values	Oscillococcinum® - FAS	Placebo - FAS		
Subject group type	Subject analysis set	Subject analysis set		
Number of subjects analysed	342	338		
Units: Subject				
Yes	12	12		
No	81	65		
Missing	249	261		

Statistical analyses

Statistical analysis title	Alleviation of all symptoms at 72h maintained over
Comparison groups	Oscillococcinum® - FAS v Placebo - FAS
Number of subjects included in analysis	680
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.31
Method	Chi-squared
Parameter estimate	Risk ratio (RR)
Point estimate	0.83
Confidence interval	
level	90 %
sides	2-sided
lower limit	0.44
upper limit	1.54

Secondary: Alleviation of all symptoms at 48h - FAS

End point title	Alleviation of all symptoms at 48h - FAS
End point description:	

End point type	Secondary
End point timeframe:	
Overall study	

End point values	Oscillococcinum® - FAS	Placebo - FAS		
Subject group type	Subject analysis set	Subject analysis set		
Number of subjects analysed	342	338		
Units: Subject				
Yes	62	61		
No	206	216		
Missing	74	61		

Attachments (see zip file)	Result of multivariate logistic model/Figure 5 Result of

Statistical analyses

Statistical analysis title	Alleviation of all symptoms at 48h
Comparison groups	Oscillococcinum® - FAS v Placebo - FAS
Number of subjects included in analysis	680
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.38
Method	Chi-squared
Parameter estimate	Risk ratio (RR)
Point estimate	1.05
Confidence interval	
level	90 %
sides	2-sided
lower limit	0.81
upper limit	1.36

Secondary: Time to return to usual daily activities - FAS

End point title	Time to return to usual daily activities - FAS
End point description:	
End point type	Secondary
End point timeframe:	
Overall study	

End point values	Oscillococcinum® - FAS	Placebo - FAS		
Subject group type	Subject analysis set	Subject analysis set		
Number of subjects analysed	247[3]	249[4]		
Units: days				
arithmetic mean (standard deviation)	1.7 (± 3.8)	1.8 (± 1.9)		

Notes:
[3] - 95 missing data
[4] - 89 missing data

Statistical analyses

No statistical analyses for this end point

Secondary: Alleviation of global and each other symptom at 72h - Fatigue - FAS

End point title	Alleviation of global and each other symptom at 72h - Fatigue - FAS

End point description:

End point type	Secondary

End point timeframe:
Overall study

End point values	Oscillococcinum® - FAS	Placebo - FAS		
Subject group type	Subject analysis set	Subject analysis set		
Number of subjects analysed	342	338		
Units: Subbject				
Yes	153	158		
No	104	95		
Missing	85	85		

Statistical analyses

Statistical analysis title	Alleviation of fatigue at 72h
Comparison groups	Oscillococcinum® - FAS v Placebo - FAS
Number of subjects included in analysis	680
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.25
Method	Chi-squared
Parameter estimate	Risk ratio (RR)
Point estimate	0.95
Confidence interval	
level	90 %
sides	2-sided
lower limit	0.85
upper limit	1.07

Secondary: Alleviation of global and each other symptom at 72h - Nasal congestion - FAS

End point title	Alleviation of global and each other symptom at 72h - Nasal congestion - FAS

End point description:

End point type	Secondary

End point timeframe:

Overall study

End point values	Oscillococcinum® - FAS	Placebo - FAS		
Subject group type	Subject analysis set	Subject analysis set		
Number of subjects analysed	342	338		
Units: Subject				
Yes	113	116		
No	143	137		
Missing	86	85		

Statistical analyses

Statistical analysis title	Alleviation of nasal congestion at 72h
Comparison groups	Oscillococcinum® - FAS v Placebo - FAS
Number of subjects included in analysis	680
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.35
Method	Chi-squared
Parameter estimate	Risk ratio (RR)
Point estimate	0.96
Confidence interval	
level	90 %
sides	2-sided
lower limit	0.82
upper limit	1.13

Secondary: Alleviation of global and each other symptom at 72h - Gastro-intestinal disturbances - FAS

End point title	Alleviation of global and each other symptom at 72h - Gastro-intestinal disturbances - FAS

End point description:

End point type	Secondary

End point timeframe:

Overall study

End point values	Oscillococcinum® - FAS	Placebo - FAS		
Subject group type	Subject analysis set	Subject analysis set		
Number of subjects analysed	342	338		
Units: Subject				
Yes	64	59		
No	191	194		
Missing	87	85		

Statistical analyses

Statistical analysis title	Alleviation of gastro-intestinal disturbances 72h
Comparison groups	Oscillococcinum® - FAS v Placebo - FAS
Number of subjects included in analysis	680
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.32
Method	Chi-squared
Parameter estimate	Risk ratio (RR)
Point estimate	1.08
Confidence interval	
level	90 %
sides	2-sided
lower limit	0.83
upper limit	1.39

Secondary: At least one secondary complication of ILI between D1 and D10 - FAS

End point title	At least one secondary complication of ILI between D1 and D10 - FAS

End point description:

End point type	Secondary

End point timeframe:

Overall study

End point values	Oscillococcinum® - FAS	Placebo - FAS		
Subject group type	Subject analysis set	Subject analysis set		
Number of subjects analysed	342	338		
Units: Subject				
Yes	17	12		
No	314	314		
Missing	11	12		

Statistical analyses

No statistical analyses for this end point

Secondary: Compliant regarding the use of treatment (according to Physician’s assessment) - FAS

End point title	Compliant regarding the use of treatment (according to Physician’s assessment) - FAS

End point description:

End point type	Secondary

End point timeframe:

Overall study

End point values	Oscillococcinum® - FAS	Placebo - FAS		
Subject group type	Subject analysis set	Subject analysis set		
Number of subjects analysed	342	338		
Units: Subject				
Yes	244	236		
No	42	53		
Missing	56	49		

Statistical analyses

No statistical analyses for this end point

Secondary: Satisfaction with the treatment according to patient - FAS

End point title	Satisfaction with the treatment according to patient - FAS

End point description:

End point type	Secondary

End point timeframe:

Overall study

End point values	Oscillococcinum® - FAS	Placebo - FAS		
Subject group type	Subject analysis set	Subject analysis set		
Number of subjects analysed	342	338		
Units: Subject				
Satisfied/very satisfied	175	171		
Fairly satisfied	34	39		
Unsatisfied	20	23		
Missing	113	105		

Statistical analyses

No statistical analyses for this end point

Secondary: Satisfaction with the treatment according to physician - FAS

End point title	Satisfaction with the treatment according to physician - FAS

End point description:

End point type	Secondary

End point timeframe:

Overall study

End point values	Oscillococcinum® - FAS	Placebo - FAS		
Subject group type	Subject analysis set	Subject analysis set		
Number of subjects analysed	342	338		
Units: Subject				
Satisfied/very satisfied	274	274		
Fairly satisfied	51	40		
Unsatisfied	6	12		
Missing	11	12		

Statistical analyses

No statistical analyses for this end point

Secondary: Change in sleep quality compared to baseline - FAS

End point title	Change in sleep quality compared to baseline - FAS

End point description:

End point type	Secondary

End point timeframe: Overall study

End point values	Oscillococcinum® - FAS	Placebo - FAS		
Subject group type	Subject analysis set	Subject analysis set		
Number of subjects analysed	234[5]	231[6]		
Units: VAS				
arithmetic mean (standard deviation)	3.2 (± 2.7)	3 (± 2.6)		

Notes:

[5] - 108 missing data

[6] - 107 missing data

Statistical analyses

Statistical analysis title	Sleep quality (MMRM) Oscillococcinum® vs Placebo
Comparison groups	Oscillococcinum® - FAS v Placebo - FAS
Number of subjects included in analysis	465
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.59
Method	Mixed models analysis
Parameter estimate	Mean difference (final values)
Point estimate	-0.069
Confidence interval	
level	95 %
sides	2-sided
lower limit	-0.32
upper limit	0.18
Variability estimate	Standard error of the mean
Dispersion value	0.13

Other pre-specified: Patients with at least one Adverse Event - SAF
End point title: Patients with at least one Adverse Event - SAF
End point description:

End point type	Other pre-specified
End point timeframe: Overall	

End point values	Oscillococcinum® - SAF	Placebo - SAF		
Subject group type	Subject analysis set	Subject analysis set		
Number of subjects analysed	342	338		
Units: Subject				
Yes	13	16		
No	329	322		

Statistical analyses

No statistical analyses for this end point

Other pre-specified: Patients with at least oneTreatment related AE (TRAE) - SAF

End point title	Patients with at least oneTreatment related AE (TRAE) - SAF
End point description: Yes = reasonable possibility	
End point type	Other pre-specified
End point timeframe: Overall study	

End point values	Oscillococcinum® - SAF	Placebo - SAF		
Subject group type	Subject analysis set	Subject analysis set		
Number of subjects analysed	342	338		
Units: Subject				
Yes	1	1		
No	341	337		

Statistical analyses

No statistical analyses for this end point

Other pre-specified: Patients with at least one: Serious Adverse Event (SAE)

End point title	Patients with at least one: Serious Adverse Event (SAE)
End point description:	
End point type	Other pre-specified
End point timeframe: Overall study	

End point values	Oscillococcinum® - SAF	Placebo - SAF		
Subject group type	Subject analysis set	Subject analysis set		
Number of subjects analysed	342	338		
Units: Subject				
Yes	0	0		
No	342	338		

Statistical analyses

No statistical analyses for this end point

Adverse events

Adverse events information	
Timeframe for reporting adverse events:	
Overall study	
Assessment type	Systematic

Dictionary used	
Dictionary name	MedDRA
Dictionary version	23.0

Reporting groups	
Reporting group title	Oscillococcinum®
Reporting group description: -	
Reporting group title	Placebo
Reporting group description: -	

Serious adverse events	Oscillococcinum®	Placebo	
Total subjects affected by serious adverse events			
subjects affected / exposed	0 / 342 (0.00%)	0 / 338 (0.00%)	
number of deaths (all causes)	0	0	
number of deaths resulting from adverse events	0	0	

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

Non-serious adverse events	Oscillococcinum®	Placebo	
Total subjects affected by non-serious adverse events			
subjects affected / exposed	13 / 342 (3.80%)	16 / 338 (4.73%)	
Nervous system disorders			
Myalgia			
subjects affected / exposed	0 / 342 (0.00%)	1 / 338 (0.30%)	
occurrences (all)	0	1	
Headache			
subjects affected / exposed	1 / 342 (0.29%)	1 / 338 (0.30%)	
occurrences (all)	1	1	
General disorders and administration site conditions			
Asthenia			
subjects affected / exposed	1 / 342 (0.29%)	1 / 338 (0.30%)	
occurrences (all)	1	1	

Malaise			
subjects affected / exposed	0 / 342 (0.00%)	1 / 338 (0.30%)	
occurrences (all)	0	1	
Pain			
subjects affected / exposed	0 / 342 (0.00%)	1 / 338 (0.30%)	
occurrences (all)	0	1	
Pyrexia			
subjects affected / exposed	1 / 342 (0.29%)	0 / 338 (0.00%)	
occurrences (all)	1	0	
Gastrointestinal disorders			
Diarrhoea			
subjects affected / exposed	2 / 342 (0.58%)	2 / 338 (0.59%)	
occurrences (all)	2	2	
Abdominal pain upper			
subjects affected / exposed	1 / 342 (0.29%)	1 / 338 (0.30%)	
occurrences (all)	1	1	
Abdominal pain			
subjects affected / exposed	0 / 342 (0.00%)	1 / 338 (0.30%)	
occurrences (all)	0	1	
Vomiting			
subjects affected / exposed	0 / 342 (0.00%)	1 / 338 (0.30%)	
occurrences (all)	0	1	
Respiratory, thoracic and mediastinal disorders			
Cough			
subjects affected / exposed	2 / 342 (0.58%)	2 / 338 (0.59%)	
occurrences (all)	2	2	
Epistaxis			
subjects affected / exposed	0 / 342 (0.00%)	1 / 338 (0.30%)	
occurrences (all)	0	1	
Pharyngeal erythema			
subjects affected / exposed	1 / 342 (0.29%)	0 / 338 (0.00%)	
occurrences (all)	1	0	
Productive cough			
subjects affected / exposed	0 / 342 (0.00%)	1 / 338 (0.30%)	
occurrences (all)	0	1	
Skin and subcutaneous tissue disorders			

Urticaria			
subjects affected / exposed	0 / 342 (0.00%)	1 / 338 (0.30%)	
occurrences (all)	0	1	
Psychiatric disorders			
Sleep disorder			
subjects affected / exposed	0 / 342 (0.00%)	1 / 338 (0.30%)	
occurrences (all)	0	1	
Musculoskeletal and connective tissue disorders			
Arthralgia			
subjects affected / exposed	0 / 342 (0.00%)	1 / 338 (0.30%)	
occurrences (all)	0	1	
Infections and infestations			
Sinusitis			
subjects affected / exposed	3 / 342 (0.88%)	3 / 338 (0.89%)	
occurrences (all)	3	3	
Bronchitis			
subjects affected / exposed	2 / 342 (0.58%)	1 / 338 (0.30%)	
occurrences (all)	2	1	
Gastroenteritis			
subjects affected / exposed	1 / 342 (0.29%)	1 / 338 (0.30%)	
occurrences (all)	1	1	
Conjunctivitis			
subjects affected / exposed	0 / 342 (0.00%)	1 / 338 (0.30%)	
occurrences (all)	0	1	
COVID-19			
subjects affected / exposed	0 / 342 (0.00%)	1 / 338 (0.30%)	
occurrences (all)	0	1	
Nasopharyngitis			
subjects affected / exposed	1 / 342 (0.29%)	0 / 338 (0.00%)	
occurrences (all)	1	0	
Paronychia			
subjects affected / exposed	0 / 342 (0.00%)	1 / 338 (0.30%)	
occurrences (all)	0	1	
Pharyngitis			
subjects affected / exposed	0 / 342 (0.00%)	1 / 338 (0.30%)	
occurrences (all)	0	1	

Pyelonephritis subjects affected / exposed occurrences (all)	0 / 342 (0.00%) 0	1 / 338 (0.30%) 1	
Urinary tract infection subjects affected / exposed occurrences (all)	0 / 342 (0.00%) 0	1 / 338 (0.30%) 1	
Metabolism and nutrition disorders Decreased appetite subjects affected / exposed occurrences (all)	0 / 342 (0.00%) 0	1 / 338 (0.30%) 1	

More information

Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? Yes

Date	Amendment
05 February 2021	Clarification of the management of patients suspected of being infected with SARS-CoV-2.
08 July 2021	Study extended in Belgium + paper PRO (in addition to the original electronic format), mandatory email to patient, inclusion period extended to September 2022
23 July 2021	Minor update following feedback from the Belgian EC
21 June 2022	Inclusion period extended to december 2022 in France and Belgium
02 December 2022	Inclusion period extended to April 2023 only in France
05 April 2023	Amendment of §5.4 Study Rational + §11.1 Determination of Sample Size + §11.4.1 Primary Efficacy Endpoint

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.

Data collected from patients'diary: not reflect the reality of symptoms intensity + a significant number of missing data (about 23%).
Study during 3 winter seasons, several winter & epidemic diseses other than ILI occurs (especially Covid-19)

Notes: