Clinical trial results:
Cytokines and Inflammatory Marker during Therapy in Major Depression with Celecoxib

Summary

EudraCT number	2009-011990-34
Trial protocol	DE AT
Global end of trial date	18 October 2013

Results information

Result version number	v1 (current)
This version publication date	19 February 2021
First version publication date	19 February 2021
Summary attachment (see zip file)	study and results summary for authority use only (summary_citicox_study.docx)

Trial information

Trial identification

Sponsor protocol code	AFX02

Additional study identifiers

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

Notes:

Sponsors

Sponsor organisation name	Clinic for Psychiatry and Psychotherapy of the Ludwig Maximilian University, AöR
Sponsor organisation address	Nussbaumstrasse, Munich, Germany,
Public contact	Studienzentrum Psychiatrie, Clinic for Psychiatry and Psychotherapy of the Ludwig Maximilian University, 0049 89440052769,
Scientific contact	Studienzentrum Psychiatrie, Clinic for Psychiatry and Psychotherapy of the Ludwig Maximilian University, 0049 89440052769,

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	06 January 2020
Is this the analysis of the primary completion data?	Yes
Primary completion date	18 October 2013
Global end of trial reached?	Yes
Global end of trial date	18 October 2013
Was the trial ended prematurely?	No

Notes:

General information about the trial

Main objective of the trial:

To prove or disapprove the hypothesis that an initially raised monocyte COX-2 (PGE-2) expression, the RNA monocyte signature expression, and the serum tryptophan/kynurenine ratio identify a subgroup of patients clinically responding better to add-on COX-2 inhibitor treatment in terms of improvement of the HamD-17 score.

Protection of trial subjects:

Before first Treatment with study medication patients undergo consultation by a cardiologist. In case of urgent safety issues throughout the trial, the sponsor can make changes to the protocol without approval.

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	13 May 2011
Long term follow-up planned	No
Independent data monitoring committee (IDMC) involvement?	Yes

Notes:

Population of trial subjects

Subjects enrolled per country

Country: Number of subjects enrolled	Germany: 57
Worldwide total number of subjects	57
EEA total number of subjects	57

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)	57
From 65 to 84 years	0
85 years and over	0

Subject disposition

Recruitment

Recruitment details: -

Pre-assignment

Screening details:

Patients enter a 3-day wash-out period prior to the start of study medication. 65 patients were assessed for eligibility.

Period 1

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

Arms

Are arms mutually exclusive?	Yes
Arm title	sertraline plus placebo

Arm description: -

Arm type	Placebo
Investigational medicinal product name	sertraline
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Tablet
Routes of administration	Oral use

Dosage and administration details:

50-100mg daily

Arm title	sertraline plus celecoxib

Arm description: -

Arm type	Experimental
Investigational medicinal product name	Celecoxib
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Capsule, hard
Routes of administration	Oral use

Dosage and administration details:

200mg twice daily

Number of subjects in period 1[1]	sertraline plus placebo	sertraline plus celecoxib
Started	24	27
Completed	23	20
Not completed	1	7
Adverse event, non-fatal	-	1
misdiagnosed	-	1

Lost to follow-up	-	2
Protocol deviation	1	1
Lack of efficacy	-	2

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: 57 patients were enrolled in the study. However, 1 Patient developed an exclusion criteria before randomization and 5 patients withdrew the informed consent before randomization. Therefore, 51 patients entered the treatment phase and study assessments.

Baseline characteristics

Reporting groups	
Reporting group title	sertraline plus placebo
Reporting group description: -	
Reporting group title	sertraline plus celecoxib
Reporting group description: -	

Reporting group values	sertraline plus placebo	sertraline plus celecoxib	Total
Number of subjects	24	27	51
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	39.29	41.41	
standard deviation	± 10.77	± 11.96	-
Gender categorical Units: Subjects			
Female	12	13	25
Male	12	14	26

End points

End points reporting groups	
Reporting group title	sertraline plus placebo
Reporting group description: -	
Reporting group title	sertraline plus celecoxib
Reporting group description: -	

Primary: MADRS score decrease	
End point title	MADRS score decrease
End point description:	
End point type	Primary
End point timeframe: week 6	

End point values	sertraline plus placebo	sertraline plus celecoxib		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	23	19		
Units: number of subjects				
responder	16	11		
non-responder	7	8		

Statistical analyses

Statistical analysis title	Difference of response rates
Comparison groups	sertraline plus placebo v sertraline plus celecoxib
Number of subjects included in analysis	42
Analysis specification	Pre-specified
Analysis type	superiority
P-value	≤ 0.05
Method	Chi-squared

Adverse events

Adverse events information

Timeframe for reporting adverse events:

Adverse events were assessed at each study visit: baseline, week 1, week 2, week 3, week 4, week 5, week 6, week 10.

Assessment type	Systematic

Dictionary used

Dictionary name	GCP
Dictionary version	2

Reporting groups

Reporting group title	sertraline plus placebo
Reporting group description: -	
Reporting group title	sertraline plus celecoxib

Reporting group description: -

Serious adverse events	sertraline plus placebo	sertraline plus celecoxib	
Total subjects affected by serious adverse events			
subjects affected / exposed	0 / 23 (0.00%)	0 / 27 (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: 5 %

Non-serious adverse events	sertraline plus placebo	sertraline plus celecoxib	
Total subjects affected by non-serious adverse events			
subjects affected / exposed	22 / 23 (95.65%)	11 / 27 (40.74%)	
Nervous system disorders			
Headache			
subjects affected / exposed	3 / 23 (13.04%)	2 / 27 (7.41%)	
occurrences (all)	3	2	
Gastrointestinal disorders			
Diarrhoea			
subjects affected / exposed	5 / 23 (21.74%)	3 / 27 (11.11%)	
occurrences (all)	5	3	
Nausea			
subjects affected / exposed	2 / 23 (8.70%)	1 / 27 (3.70%)	
occurrences (all)	2	1	

Nausea + dizziness			
subjects affected / exposed	2 / 23 (8.70%)	1 / 27 (3.70%)	
occurrences (all)	2	1	
Reproductive system and breast disorders			
Ejaculation disorder			
subjects affected / exposed	2 / 23 (8.70%)	0 / 27 (0.00%)	
occurrences (all)	2	0	
Psychiatric disorders			
Restlessness			
subjects affected / exposed	3 / 23 (13.04%)	1 / 27 (3.70%)	
occurrences (all)	3	1	
Endocrine disorders			
increased sweating			
subjects affected / exposed	3 / 23 (13.04%)	3 / 27 (11.11%)	
occurrences (all)	3	3	
Infections and infestations			
influenzal infection			
subjects affected / exposed	2 / 23 (8.70%)	0 / 27 (0.00%)	
occurrences (all)	2	0	

More information

Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? No

Interruptions (globally)

Were there any global interruptions to the trial? No

Limitations and caveats

None reported