Clinical trial results:
An Open-label Prospective Trial to Evaluate Functional Outcomes of OROS Methylphenidate in Children with ADHD (FOSCO)

Summary

EudraCT number	2015-001217-27
Trial protocol	Outside EU/EEA
Global end of trial date	07 August 2009

Results information

Result version number	v2 (current)
This version publication date	01 July 2016
First version publication date	05 August 2015
Version creation reason	• Correction of full data set Review of data

Trial information

Trial identification

Sponsor protocol code	CONCERTAATT4092

Additional study identifiers

ISRCTN number	-
ClinicalTrials.gov id (NCT number)	NCT01012622
WHO universal trial number (UTN)	-

Notes:

Sponsors

Sponsor organisation name	Janssen Research and Development
Sponsor organisation address	Archimedesweg 29, Leiden, Netherlands, 2333CM
Public contact	Clinical Registry Group-JB BV, Janssen Research and Development, ClinicalTrialsEU@its.jnj.com
Scientific contact	Clinical Registry Group-JB BV, Janssen Research and Development, ClinicalTrialsEU@its.jnj.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?	Yes

Notes:

Results analysis stage

Analysis stage	Final
Date of interim/final analysis	07 August 2009
Is this the analysis of the primary completion data?	No

Global end of trial reached?	Yes
Global end of trial date	07 August 2009
Was the trial ended prematurely?	No

Notes:

General information about the trial

Main objective of the trial:

The purpose of this study was to evaluate the safety and efficacy of Osmotic Release Oral System (OROS) methylphenidate in participants with Attention Deficit Hyperactivity Disorder (ADHD)."

Protection of trial subjects:

The safety assessments included the incidence and severity of Adverse events (AEs), Clinical laboratory assessments, vital signs, physical examinations and Adverse events were assessed throughout the study.

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	27 August 2008
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	Korea, Republic of: 136
Worldwide total number of subjects	136
EEA total number of subjects	0

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)	133
Adolescents (12-17 years)	3
Adults (18-64 years)	0
From 65 to 84 years	0
85 years and over	0

Subject disposition

Recruitment

Recruitment details: -

Pre-assignment

Screening details:

A total of 142 participants were enrolled in the study, out of which 136 participants receieved atleast one dose of study drug. Among them, 111 participants completed the study and 31 participants were withdrawn from the study.

Period 1

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

Arms

Arm title	Concerta

Arm description:

OROS methylphenidate hydrochloride (HCL) was given orally once daily at an initial dose of 18 milligram (mg) for participants below 30 Kilogram (kg) and 27 mg for those over 30 kg of body weight. The dose was increased by 9 mg or 18 mg every week for up to Week 8, followed by a maximum maintenance dose of 54 mg orally once daily up to Week 12 during which the dose can be decreased by 9 mg depending on tolerability.

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

Dosage and administration details:

Participants were administered Osmotic Release Oral System (OROS) methylphenidate hydrochloride (HCL) was given orally once daily at a maximum maintenance dose of 54 milligram (mg) orally once daily up to Week 12.

Number of subjects in period 1	Concerta
Started	136
Completed	111
Not completed	25
Consent withdrawn by subject	3
Adverse event, non-fatal	6
Other	2
Lost to follow-up	5
Protocol deviation	9

Baseline characteristics

Reporting groups	
Reporting group title	Concerta
Reporting group description:	
OROS methylphenidate hydrochloride (HCL) was given orally once daily at an initial dose of 18 milligram (mg) for participants below 30 Kilogram (kg) and 27 mg for those over 30 kg of body weight. The dose was increased by 9 mg or 18 mg every week for up to Week 8, followed by a maximum maintenance dose of 54 mg orally once daily up to Week 12 during which the dose can be decreased by 9 mg depending on tolerability.	

Reporting group values	Concerta	Total	
Number of subjects	136	136	
Title for AgeCategorical			
Units: subjects			
Children (2-11 years)	133	133	
Adolescents (12-17 years)	3	3	
Adults (18-64 years)	0	0	
From 65 to 84 years	0	0	
85 years and over	0	0	
Title for AgeContinuous			
Units: years			
arithmetic mean	8.4		
standard deviation	± 1.47	-	
Title for Gender			
Units: subjects			
Female	24	24	
Male	112	112	

End points

End points reporting groups

Reporting group title	Concerta

Reporting group description:

OROS methylphenidate hydrochloride (HCL) was given orally once daily at an initial dose of 18 milligram (mg) for participants below 30 Kilogram (kg) and 27 mg for those over 30 kg of body weight. The dose was increased by 9 mg or 18 mg every week for up to Week 8, followed by a maximum maintenance dose of 54 mg orally once daily up to Week 12 during which the dose can be decreased by 9 mg depending on tolerability.

Primary: Change From Baseline in Korean Version of the Attention-Deficit Hyperactivity Disorder (K-ADHD) Rating Scale (K-ARS) Total Score at Week 12

End point title	Change From Baseline in Korean Version of the Attention-Deficit Hyperactivity Disorder (K-ADHD) Rating Scale (K-ARS) Total Score at Week 12[1]

End point description:

K-ARS measures the 18 symptoms based on Diagnostic and Statistical Manual of Mental Disorders-forth edition (DSM-IV 1994). Individual item scores range from 0 (none/never or rarely) to 3 (severe/very often), whereas the rating of 2 points or more was regarded as abnormal. Total scores range from 0 (no symptoms) to 54 (highly symptomatic), higher score indicates worsening of condition. Intention-to-treat (ITT) population included participants who received the study drug at least once and had the primary efficacy endpoint data available.

End point type	Primary

End point timeframe:

Baseline and Week 12

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: Descriptive statistics were done, no inferential statistical analyses were performed

End point values	Concerta			
Subject group type	Reporting group			
Number of subjects analysed	134			
Units: units on a scale				
arithmetic mean (standard deviation)				
Baseline	33.37 (± 8.67)			
Change at Week 12	-20.43 (± 10.42)			

Statistical analyses

No statistical analyses for this end point

Primary: Number of Participants With Response Based on K-ARS Total Score at Week 12

End point title	Number of Participants With Response Based on K-ARS Total Score at Week 12[2]

End point description:

Response is defined as at least 25 percent (%) decrease in total score of K-ARS compared to baseline. K-ARS measures the 18 symptoms based on DSM-IV (1994). Individual item scores range from 0 (none/never or rarely) to 3 (severe/very often), whereas the rating of 2 points or more was regarded as abnormal. Total scores range from 0 (no symptoms) to 54 (highly symptomatic), higher score indicates worsening of condition. ITT population included participants who received the study drug at least once and had the primary efficacy endpoint data available. "N" (Number of Participants Analyzed) represents number of participants who were evaluable for this outcome measure.

End point type	Primary

End point timeframe:

Week 12

Notes:

[2] - 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: Descriptive statistics were done, no inferential statistical analyses were performed

End point values	Concerta			
Subject group type	Reporting group			
Number of subjects analysed	127			
Units: Participants	118			

Statistical analyses

No statistical analyses for this end point

Primary: Number of Participants With Remission Based on K-ARS Total Score and Clinical Global Impression – Improvement (CGI-I) Scale Score at Week 12

End point title	Number of Participants With Remission Based on K-ARS Total Score and Clinical Global Impression – Improvement (CGI-I) Scale Score at Week 12[3]

End point description:

Remission is defined by all of the following criteria; 1) K-ARS Total score of 18 or less. 2) "Very much improved" or "Much improved" in CGI-I. K-ARS total score ranges from 0 (no symptoms) to 54 (highly symptomatic), higher score indicates worsening of condition. CGI-I is a 7-point scale ranging from 1 to 7, where 1= very much improved; 2= much improved; 3 = minimally improved; 4 = no change; 5 = minimally worse; 6 = much worse; 7 = very much worse, higher score indicates worsening of condition. ITT population included participants who received the study drug at least once and had the primary efficacy endpoint data available. "N" (Number of Participants Analyzed) represents number of participants who were evaluable for this outcome measure.

End point type	Primary

End point timeframe:

Week 12

Notes:

[3] - 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: Descriptive statistics were done, no inferential statistical analyses were performed

End point values	Concerta			
Subject group type	Reporting group			
Number of subjects analysed	127			
Units: Participants	99			

Statistical analyses

No statistical analyses for this end point

Secondary: Change From Baseline in Child Health and Illness Profile-Child Edition (CHIP) Total Score and 5 Sub-domains Score at Week 12

End point title	Change From Baseline in Child Health and Illness Profile-Child Edition (CHIP) Total Score and 5 Sub-domains Score at Week 12

End point description:

Child Health and Illness Profile-Child Edition (CHIP) was designed to assess the physical, psychological health conditions and functional well-being of children. The instrument has sub-domains such satisfaction (11 items) ranges from 0 to 44, stability (22 items) ranges from 0 to 88, elasticity (19 items) ranges from 0 to 76, risk aversion (14 items) ranges from 0 to 56, achievement (10 items) ranges from 0 to 40. Good health is in the range from 44 to 56 points for all sub-domains. A score of 43 or below indicates poor health in that domain. A score of 57 or higher indicates excellent health. The total score is an average of the scores for the 5 domains and ranges from 0 to 304. Higher total score indicates better health. ITT population included participants who took study drug at least once and had primary efficacy endpoint data available. Last Observation Carried Forward (LOCF) method was used. "n" signifies participants who were evaluated for each specified category.

End point type	Secondary

End point timeframe:

Baseline and Week 12

End point values	Concerta			
Subject group type	Reporting group			
Number of subjects analysed	134			
Units: units on a scale				
arithmetic mean (standard deviation)				
Total Score:Baseline (n=126)	207.85 (± 26.62)			
Total Score:Change at Week 12 (n=126)	18.08 (± 22.54)			
Satisfaction:Baseline (n=132)	26.17 (± 7.2)			
Satisfaction:Change at Week 12 (n=132)	2.27 (± 5.89)			
Stability:Baseline (n=129)	82.13 (± 11.18)			
Stability:Change at Week 12 (n=129)	4.47 (± 10.87)			
Elasticity:Baseline (n=132)	38.3 (± 8.22)			
Elasticity:Change at Week 12 (n=132	2.53 (± 7.1)			
Risk aversion:Baseline (n=132)	40.67 (± 7.91)			
Risk aversion:Change at Week 12 (n=132)	5.73 (± 7.27)			
Achievement:Baseline (n=133)	21 (± 6.16)			

Achievement:Change at Week 12 (n=133)	2.45 (± 5.07)			

Statistical analyses

No statistical analyses for this end point

Secondary: Change From Baseline in Visual Selective Attention Subtest of Comprehensive Attention Test (CAT) Total Score at Week 12

End point title	Change From Baseline in Visual Selective Attention Subtest of Comprehensive Attention Test (CAT) Total Score at Week 12

End point description:

CAT was developed to properly reflect brain function in childhood. It provided measurement of simple visual selective attention in terms of omission (number of missing response to target stimulus [0-150], higher score indicate greater omission), false alarm (number of response to non-target stimulus [0-150], higher score indicate greater false alarm), response mean (average time spent to response to target stimulus [200-1100, low score means faster response to target stimulus]), Response (consistency of response time to target stimulus [30-650, Low score means good consistency of response]). ITT population included participants who received the study drug at least once and had the primary efficacy endpoint data available. LOCF method was used. "N" (Number of Participants Analyzed) represents number of participants who were evaluable for this outcome measure.

End point type	Secondary

End point timeframe:

Baseline and Week 12

End point values	Concerta			
Subject group type	Reporting group			
Number of subjects analysed	118			
Units: units on a scale				
arithmetic mean (standard deviation)				
Omission:Baseline	8.79 (± 15.77)			
Omission:Change at Week 12	-4.53 (± 17.94)			
False alarm:Baseline	17.42 (± 18.48)			
False alarm:Change at Week 12	-5.03 (± 13.43)			
Response mean:Baseline	501.32 (± 130.8)			
Response mean:Change at Week 12	-37.41 (± 110.34)			
Response:Baseline	201.05 (± 105.78)			
Response:Change at Week 12	-48.36 (± 111.02)			

Statistical analyses

No statistical analyses for this end point

Secondary: Change From Baseline in Auditory Selective Attention Subtest of Comprehensive Attention Test (CAT) Total Score at Week 12

End point title	Change From Baseline in Auditory Selective Attention Subtest of Comprehensive Attention Test (CAT) Total Score at Week 12

End point description:

CAT was developed to properly reflect brain function in childhood. It provided measurement of simple auditory selective attention in terms of omission (number of missing response to target stimulus [0-150], higher score indicate greater omission), false alarm (number of response to non-target stimulus [0-150], higher score indicate greater false alarm), response mean (average time spent to response to target stimulus [200-1100, low score means faster response to target stimulus]), Response (consistency of response time to target stimulus [30-650, Low score means good consistency of response]). ITT population included participants who received the study drug at least once and had the primary efficacy endpoint data available. LOCF method was used. "N" (Number of Participants Analyzed) represents number of participants who were evaluable for this outcome measure.

End point type	Secondary

End point timeframe:

Baseline and Week 12

End point values	Concerta			
Subject group type	Reporting group			
Number of subjects analysed	118			
Units: units on a scale				
arithmetic mean (standard deviation)				
Omission:Baseline	10.31 (± 16.52)			
Omission:Change at Week 12	-6.27 (± 15.88)			
False alarm:Baseline	12.07 (± 14.41)			
False alarm:Change at Week 12	-3.61 (± 11.86)			
Response mean:Baseline	623.95 (± 188.38)			
Response mean:Change at Week 12	-55.34 (± 155.36)			
Response:Baseline	265.69 (± 108.76)			
Response:Change at Week 12	-63.76 (± 114.15)			

Statistical analyses

No statistical analyses for this end point

Secondary: Change From Baseline in Inhibition-Sustained Attention Subtest of Comprehensive Attention Test (CAT) Total Score at Week 12

End point title	Change From Baseline in Inhibition-Sustained Attention Subtest of Comprehensive Attention Test (CAT) Total Score at Week 12

End point description:

CAT was developed to properly reflect brain function in childhood. It provided measurement of simple inhibition-sustained attention in terms of omission(number of missing response to target stimulus [0-150], higher score indicate greater omission), false alarm(number of response to non-target stimulus [0-150], higher score indicate greater false alarm), response mean (average time spent to response to target stimulus [200-1100, low score means faster response to target stimulus]), Response (consistency of response time to target stimulus [30-650, Low score means good consistency of response]). ITT population included participants who received the study drug at least once and had the primary efficacy endpoint data available. LOCF method was used. "N" (Number of Participants Analyzed) represents number of participants who were evaluable for this outcome measure.

End point type	Secondary

End point timeframe:

Baseline and Week 12

End point values	Concerta			
Subject group type	Reporting group			
Number of subjects analysed	119			
Units: units on a scale				
arithmetic mean (standard deviation)				
Omission:Baseline	35.78 (± 46.91)			
Omission:Change at Week 12	-20.39 (± 45.4)			
False alarm:Baseline	27.73 (± 15.58)			
False alarm:Change at Week 12	-7.54 (± 14.19)			
Response mean:Baseline	576.55 (± 147.13)			
Response mean:Change at Week 12	-34.44 (± 140.43)			
Response:Baseline	273.78 (± 121.94)			
Response:Change at Week 12	-66.85 (± 127.13)			

Statistical analyses

No statistical analyses for this end point

Secondary: Change From Baseline in Interference-Selective Attention Subtest of Comprehensive Attention Test (CAT) Total Score at Week 12

End point title	Change From Baseline in Interference-Selective Attention Subtest of Comprehensive Attention Test (CAT) Total Score at Week 12

End point description:

CAT was developed to properly reflect brain function in childhood. It provided measurement of simple interference-selective attention in terms of omission(number of missing response to target stimulus[0-150], higher score indicate greater omission), false alarm(number of response to non-target stimulus[0-150], higher score indicate greater false alarm), response mean (average time spent to response to target stimulus [200-1100, low score means faster response to target stimulus]), Response (consistency of response time to target stimulus [30-650, Low score means good consistency of response]). ITT population included participants who received the study drug at least once and had the primary efficacy

endpoint data available. LOCF method was used. "N" (Number of Participants Analyzed) represents number of participants who were evaluable for this outcome measure.

End point type	Secondary

End point timeframe:

Baseline and Week 12

End point values	Concerta			
Subject group type	Reporting group			
Number of subjects analysed	119			
Units: units on a scale				
arithmetic mean (standard deviation)				
Omission:Baseline	20.39 (± 24.44)			
Omission:Change at Week 12	-10.83 (± 20.1)			
False alarm:Baseline	26.03 (± 18.3)			
False alarm:Change at Week 12	-6.14 (± 16.75)			
Response mean:Baseline	648.48 (± 171.84)			
Response mean:Change at Week 12	-54.35 (± 134.26)			
Response:Baseline	276.74 (± 156.7)			
Response:Change at Week 12	-72.18 (± 148.01)			

Statistical analyses

No statistical analyses for this end point

Secondary: Change From Baseline in Divided Attention Subtest of Comprehensive Attention Test (CAT) at Week 12

End point title	Change From Baseline in Divided Attention Subtest of Comprehensive Attention Test (CAT) at Week 12

End point description:

CAT was developed to properly reflect brain function in childhood. It provided measurement of simple divided attention in terms of omission(number of missing response to target stimulus[0-150], higher score indicate greater omission), false alarm(number of response to non-target stimulus[0-150], higher score indicate greater false alarm), response mean (average time spent to response to target stimulus [200-1100, low score means faster response to target stimulus]), Response (consistency of response time to target stimulus [30-650, Low score means good consistency of response]). ITT population included participants who received the study drug at least once and had the primary efficacy endpoint data available. LOCF method was used. "N" (Number of Participants Analyzed) represents number of participants who were evaluable for this outcome measure.

End point type	Secondary

End point timeframe:

Baseline and Week 12

End point values	Concerta			
Subject group type	Reporting group			
Number of subjects analysed	59			
Units: units on a scale				
arithmetic mean (standard deviation)				
Omission:Baseline	16.05 (± 9.69)			
Omission:Change at Week 12	-4.07 (± 10.18)			
False alarm:Baseline	16.03 (± 12.36)			
False alarm:Change at Week 12	-4.73 (± 9.44)			
Response mean:Baseline	749.01 (± 196.66)			
Response mean:Change at Week 12	-27.14 (± 186.7)			
Response:Baseline	349.6 (± 130.41)			
Response:Change at Week 12	-43.9 (± 118.84)			

Statistical analyses

No statistical analyses for this end point

Secondary: Change From Baseline in Working Memory Forward Subtest of Comprehensive Attention Test (CAT) at Week 12

End point title	Change From Baseline in Working Memory Forward Subtest of Comprehensive Attention Test (CAT) at Week 12

End point description:

CAT was developed to properly reflect brain function in childhood. The test battery provided a comprehensive measurement of simple visual auditory attention, interventional visual-auditory selective attention, divided attention, continuous attention, and operational memory. Working memory forward was measured in terms of width of space and number of correct responses ranging from 0 to 10. For width of space boxes were presented on the screen and participants remembered the order of presented box. Participants pressed the box using mouse in the forward order. Maximum number that participants correctly memorized box in the screen in the respective order was reported and overall number of times a participant responded correctly was also reported. ITT population included participants who received the study drug at least once and had the primary efficacy endpoint data available. LOCF method was used. "N" (Number of Participants Analyzed) represents number of participants were evaluable.

End point type	Secondary

End point timeframe:

Baseline and Week 12

End point values	Concerta			
Subject group type	Reporting group			
Number of subjects analysed	59			
Units: correct responses				
arithmetic mean (standard deviation)				
Baseline:Number of correct responses	5.76 (± 2.34)			
Change at Week 12:Number of correct responses	0.63 (± 2.56)			
Baseline:Width of space	4.46 (± 1.53)			
Change at Week 12:Width of space	0.25 (± 1.78)			

Statistical analyses

No statistical analyses for this end point

Secondary: Change From Baseline in Working Memory Backward Subtest of Comprehensive Attention Test (CAT) at Week 12

End point title	Change From Baseline in Working Memory Backward Subtest of Comprehensive Attention Test (CAT) at Week 12

End point description:

CAT was developed to properly reflect brain function in childhood. The test battery provided a comprehensive measurement of simple visual auditory attention, interventional visual-auditory selective attention, divided attention, continuous attention, and operational memory. Working memory forward was measured in terms of width of space and number of correct responses ranging from 0 to 10. For width of space boxes were presented on the screen and participants remembered the order of presented box. Participants pressed the box using mouse in the backward order. Maximum number that participants correctly memorized box in the screen in the respective order was reported and overall number of times a participant responded correctly was also reported. ITT population included participants who received the study drug at least once and had the primary efficacy endpoint data available. LOCF method was used. "N" (Number of Participants Analyzed) represents number of participants were evaluable.

End point type	Secondary

End point timeframe:

Baseline and Week 12

End point values	Concerta			
Subject group type	Reporting group			
Number of subjects analysed	59			
Units: correct responses				
arithmetic mean (standard deviation)				
Baseline:Number of correct responses	4.22 (± 2.79)			
Change at Week 12:Number of correct responses	1.86 (± 3.02)			
Baseline:Spatial span	3.63 (± 2.06)			
Change at Week 12:Spatial span	1.24 (± 1.98)			

Statistical analyses

No statistical analyses for this end point

Secondary: Change From Baseline in Academic Performance Rating Scale (APRS) Score at Week 12

End point title	Change From Baseline in Academic Performance Rating Scale (APRS) Score at Week 12

End point description:

APRS scale measures four factors in elementary school children such as learning ability, academic performance, impulse control, and social withdrawal. In particular, it is excellent in assessing drug effect on the academic performance not measured by other scales. Score ranges from 19 to 95, higher score means better academic performance. ITT population included participants who received the study drug at least once and had the primary efficacy endpoint data available. LOCF method was used. "N" (Number of Participants Analyzed) represents number of participants who were evaluable for this outcome measure.

End point type	Secondary

End point timeframe:

Baseline and Week 12

End point values	Concerta			
Subject group type	Reporting group			
Number of subjects analysed	125			
Units: units on a scale				
arithmetic mean (standard deviation)				
Baseline	55.46 (± 12.77)			
Change at Week 12	7.4 (± 9.86)			

Statistical analyses

No statistical analyses for this end point

Secondary: Change From Baseline in Beck Depression Inventory (BDI) Score at Week 12

End point title	Change From Baseline in Beck Depression Inventory (BDI) Score at Week 12

End point description:

Beck Depression Inventory (BDI) consisted of 21 items for measuring the subjective severity of depression and emotional, cognitive, motivational, physiological symptoms of depression. Each question has a set of 4 possible answer choices, ranging in intensity, each answer being scored on a scale value of 0 (no symptom) to 3 (the most severe symptom). Accordingly, the total score ranges from 0 (no symptom) to 63 (the most severe symptom) for 21 questions. ITT population included participants who received the study drug at least once and had the primary efficacy endpoint data available. LOCF method was used. "N" (Number of Participants Analyzed) represents number of participants who were evaluable for this outcome measure.

End point type	Secondary

End point timeframe:

Baseline and Week 12

End point values	Concerta			
Subject group type	Reporting group			
Number of subjects analysed	127			
Units: units on a scale				
arithmetic mean (standard deviation)				
Baseline	11.69 (± 7.79)			
Change at Week 12	-1.89 (± 6.59)			

Statistical analyses

No statistical analyses for this end point

Secondary: Change From Baseline in Parenting Stress Index (PSI) Total Score at Week 12

End point title	Change From Baseline in Parenting Stress Index (PSI) Total Score at Week 12

End point description:

Parenting Stress Index (PSI) was designed to assess parent or guardian child-rearing stress index on a 5-rating scale from ”never” to “very truly”. Out of 30 items, 20 items are scored, being consisted of 8 child characteristics-related stress items; 9 parent-child interaction-related stress items; and 3 achievement expectation-related stress items. A possible total score ranges from 20 to 100; Increase in score indicates higher stress perceived by the parent. ITT population included participants who received the study drug at least once and had the primary efficacy endpoint data available. LOCF method was used. “N” (Number of Participants Analyzed) represents number of participants who were evaluable for this outcome measure.

End point type	Secondary

End point timeframe:

Baseline and Week 12

End point values	Concerta			
Subject group type	Reporting group			
Number of subjects analysed	123			
Units: units on a scale				
arithmetic mean (standard deviation)				
Baseline	58.2 (± 9.33)			
Change at Week 12	-5.25 (± 9.01)			

Statistical analyses

No statistical analyses for this end point

Secondary: Change From Baseline in Clinical Global Impression-severity (CGI-S)

Score at Week 12

End point title	Change From Baseline in Clinical Global Impression-severity (CGI-S) Score at Week 12

End point description:

The CGI-S rating scale is a 7 point global assessment that measures the clinician's impression of the severity of illness exhibited by a participant. A rating of 1 is equivalent to "Normal, not at all ill" and a rating of 7 is equivalent to "Among the most extremely ill participants". Higher change scores indicate worsening. ITT population included participants who received the study drug at least once and had the primary efficacy endpoint data available. LOCF method was used.

End point type	Secondary

End point timeframe:

Baseline and Week 12

End point values	Concerta			
Subject group type	Reporting group			
Number of subjects analysed	134			
Units: units on a scale				
arithmetic mean (standard deviation)				
Baseline	5.14 (± 0.9)			
Change at Week 12	-2.51 (± 1.36)			

Statistical analyses

No statistical analyses for this end point

Secondary: Clinical Global Impression - Improvement (CGI-I) Scale Score at Week 12

End point title	Clinical Global Impression - Improvement (CGI-I) Scale Score at Week 12

End point description:

The CGI-I is a 7-point scale that requires the clinician to assess how much the participant’s illness has improved or worsened relative to a baseline state at the beginning of the intervention and rated as: 1 = very much improved; 2 = much improved; 3 = minimally improved; 4 = no change; 5 = minimally worse; 6 = much worse; 7 = very much worse. Improved very much, Improved much and Improved a little are defined as improvement and No change, Aggravated a little, Aggravated much and Aggravated very much were defined as aggravation. ITT population included participants who received the study drug at least once and had the primary efficacy endpoint data available. “N” (Number of Participants Analyzed) represents number of participants who were evaluable for this outcome measure.

End point type	Secondary

End point timeframe:

Week 12

End point values	Concerta			
Subject group type	Reporting group			
Number of subjects analysed	129			
Units: Participants				
Improvement	122			
Aggravation	7			

Statistical analyses

No statistical analyses for this end point

Adverse events

Adverse events information

Timeframe for reporting adverse events:

From signing of informed consent form until 30 days from the completion of assessments after the administration of the last study medication (follow-up) or the point of time of dropout.

Adverse event reporting additional description:

Safety population included all participants who took at least one dose of study drug.

Assessment type	Non-systematic

Dictionary used

Dictionary name	MedDRA
Dictionary version	15.0

Reporting groups

Reporting group title	Concerta

Reporting group description:

OROS methylphenidate hydrochloride (HCL) was given orally once daily at an initial dose of 18 milligram (mg) for participants below 30 Kilogram (kg) and 27 mg for those over 30 kg of body weight. The dose was increased by 9 mg or 18 mg every week for up to Week 8, followed by a maximum maintenance dose of 54 mg orally once daily up to Week 12 during which the dose can be decreased by 9 mg depending on tolerability.

Serious adverse events	Concerta		
Total subjects affected by serious adverse events			
subjects affected / exposed	0 / 136 (0.00%)		
number of deaths (all causes)	0		
number of deaths resulting from adverse events			

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

Non-serious adverse events	Concerta		
Total subjects affected by non-serious adverse events			
subjects affected / exposed	106 / 136 (77.94%)		
Nervous system disorders			
Dizziness			
subjects affected / exposed	15 / 136 (11.03%)		
occurrences (all)	0		
Somnolence			
subjects affected / exposed	23 / 136 (16.91%)		
occurrences (all)	0		
Headache			

subjects affected / exposed	34 / 136 (25.00%)		
occurrences (all)	0		
Gastrointestinal disorders			
Abdominal Pain			
subjects affected / exposed	41 / 136 (30.15%)		
occurrences (all)	0		
Nausea			
subjects affected / exposed	17 / 136 (12.50%)		
occurrences (all)	0		
Psychiatric disorders			
Anxiety			
subjects affected / exposed	37 / 136 (27.21%)		
occurrences (all)	0		
Daydreaming			
subjects affected / exposed	21 / 136 (15.44%)		
occurrences (all)	0		
Communication Disorder			
subjects affected / exposed	21 / 136 (15.44%)		
occurrences (all)	0		
Insomnia			
subjects affected / exposed	59 / 136 (43.38%)		
occurrences (all)	0		
Decreased Interest			
subjects affected / exposed	30 / 136 (22.06%)		
occurrences (all)	0		
Nervousness			
subjects affected / exposed	8 / 136 (5.88%)		
occurrences (all)	0		
Nightmare			
subjects affected / exposed	15 / 136 (11.03%)		
occurrences (all)	0		
Onychophagia			
subjects affected / exposed	27 / 136 (19.85%)		
occurrences (all)	0		
Tic			

subjects affected / exposed occurrences (all)	11 / 136 (8.09%) 0		
Infections and infestations Nasopharyngitis subjects affected / exposed occurrences (all)	 9 / 136 (6.62%) 0		
Metabolism and nutrition disorders Decreased Appetite subjects affected / exposed occurrences (all)	 80 / 136 (58.82%) 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