



## Clinical trial results:

### An Open-label Extension Study to Evaluate the Safety and Tolerability of Perampanel (E2007) Administered as an Adjunctive Therapy in Epilepsy Subjects

#### Summary

EudraCT number	2016-004945-10
Trial protocol	Outside EU/EEA
Global end of trial date	21 September 2016

#### Results information

Result version number	v1 (current)
This version publication date	21 February 2018
First version publication date	21 February 2018

#### Trial information

##### Trial identification

Sponsor protocol code	E2007-J000-341
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##### Additional study identifiers

ISRCTN number	-
ClinicalTrials.gov id (NCT number)	NCT02427607
WHO universal trial number (UTN)	-

Notes:

#### Sponsors

Sponsor organisation name	Eisai Co., Ltd.
Sponsor organisation address	4-6-10 Koishikawa, Bunkyo-Ku, Tokyo, Japan,
Public contact	Customer Joy Department. EJ, Eisai Co., Ltd, 81-3 3817-5245, esi_medinfo@eisai.com
Scientific contact	Customer Joy Department. EJ, Eisai Co., Ltd, 81-3 3817-5245, esi_medinfo@eisai.com

Notes:

#### Paediatric regulatory details

Is trial part of an agreed paediatric investigation plan (PIP)	Yes
EMA paediatric investigation plan number(s)	EMA-000467-PIP01-08
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	09 November 2016
Is this the analysis of the primary completion data?	Yes
Primary completion date	21 September 2016
Global end of trial reached?	Yes
Global end of trial date	21 September 2016
Was the trial ended prematurely?	No

Notes:

## General information about the trial

Main objective of the trial:

To evaluate the safety and tolerability of perampanel given as an adjunctive therapy in participants with epilepsy. This study will be continued until perampanel is commercially available.

Protection of trial subjects:

This study was conducted in accordance with standard operating procedures (SOPs) of the sponsor (or designee), which are designed to ensure adherence to Good Clinical Practice (GCP) guidelines as required by the following:

- Principles of the World Medical Association Declaration of Helsinki (World Medical Association, 2008)
- International Council on Harmonisation (ICH) E6 Guideline for GCP (CPMP/ICH/135/95) of the European Agency for the Evaluation of Medicinal Products, Committee for Proprietary Medicinal Products, International Council for Harmonisation of Technical Requirements for Registration of Pharmaceuticals for Human Use
- Title 21 of the United States (US) Code of Federal Regulations (US 21 CFR) regarding clinical studies, including Part 50 and Part 56 concerning informed subject consent and Institutional Review Board (IRB) regulations and applicable sections of US 21 CFR Part 312
- European GCP Directive 2005/28/EC and Clinical Trial Directive 2001/20/EC for studies conducted within any European Union (EU) country. All suspected unexpected serious adverse reactions were reported, as required, to the Competent Authorities of all involved EU member states.
- Article 14, Paragraph 3, and Article 80-2 of the Pharmaceutical Affairs Law (Law No. 145, 1960) for studies conducted in Japan, in addition to Japan's GCP Subject Information and Informed Consent.

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	12 May 2015
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	Japan: 7
Worldwide total number of subjects	7
EEA total number of subjects	0

Notes:

### Subjects enrolled per age group

In utero	0
Preterm newborn - gestational age < 37	0

wk	
Newborns (0-27 days)	0
Infants and toddlers (28 days-23 months)	0
Children (2-11 years)	0
Adolescents (12-17 years)	1
Adults (18-64 years)	5
From 65 to 84 years	1
85 years and over	0

## Subject disposition

### Recruitment

Recruitment details: -

### Pre-assignment

Screening details:

This study was conducted at 8 centers in Japan during the period of 12 May 2015 to 21 Sep 2016. E2007-J000-341 is an open-label extension of E2007-G000-332.

### Period 1

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

### Arms

Arm title	Perampanel
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Arm description:

Participants started the study with the dose that they were receiving at the end of their participation in the previously participated Study E2007-G000-332 (Study 332) [NCT02307578]. Doses of perampanel were allowed to be adjusted based on clinical judgment. A minimum perampanel dose of 2 milligram (mg) per day was required to continue in the study. The maximum daily dose of perampanel permitted was 12 mg per day.

Arm type	Experimental
Investigational medicinal product name	Perampanel
Investigational medicinal product code	E2007
Other name	
Pharmaceutical forms	Tablet
Routes of administration	Oral use

Dosage and administration details:

A minimum perampanel dose of 2 mg per day was administered orally with the maximum daily dose of perampanel permitted was 12 mg per day. Doses of perampanel were allowed to be adjusted based on clinical judgment.

Number of subjects in period 1	Perampanel
Started	7
Completed	6
Not completed	1
Consent withdrawn by subject	1

## Baseline characteristics

### Reporting groups

Reporting group title	Overall Study
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Reporting group description: -

Reporting group values	Overall Study	Total	
Number of subjects	7	7	
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			
Safety analysis set included all participants who signed informed consent and received at least one dose of study drug, and had at least one post-dose safety assessment in Study 341.			
Units: years			
arithmetic mean	35.3		
standard deviation	± 19.20	-	
Gender categorical			
Units: Subjects			
Female	3	3	
Male	4	4	

## End points

### End points reporting groups

Reporting group title	Perampanel
Reporting group description:	
Participants started the study with the dose that they were receiving at the end of their participation in the previously participated Study E2007-G000-332 (Study 332) [NCT02307578]. Doses of perampanel were allowed to be adjusted based on clinical judgment. A minimum perampanel dose of 2 milligram (mg) per day was required to continue in the study. The maximum daily dose of perampanel permitted was 12 mg per day.	

### Primary: Number of Participants with Treatment-Emergent Adverse Events (TEAEs) and Serious Adverse Events (SAEs) as a Measure of Safety and Tolerability of Perampanel

End point title	Number of Participants with Treatment-Emergent Adverse Events (TEAEs) and Serious Adverse Events (SAEs) as a Measure of Safety and Tolerability of Perampanel <sup>[1]</sup>
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#### End point description:

Safety was assessed by monitoring adverse events (AEs), withdrawal from treatment, clinical laboratory tests (chemistry), vital signs, and weight. TEAEs were defined as AEs that emerged from the first dose of study drug to the last visit of Study 341 or on or after 30 days since the last dose of study drug in Study 341, whichever comes later, having been absent at pretreatment (Baseline of Study 332). A markedly abnormal clinical chemistry laboratory value was defined as a laboratory result that worsened in severity to meet modified National Cancer Institute (NCI) toxicity criteria of Grade 2 or higher on treatment. Treatment-related TEAEs were defined as AEs that were considered by the investigator to be possibly or probably related to study treatment. SAEs were defined as any untoward medical occurrence that at any dose; resulted in death, disability/incapacity, birth defect, required inpatient hospitalization or prolongation of existing hospitalization, or was life-threatening.

End point type	Primary
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#### End point timeframe:

From first dose of study drug until perampanel was commercially available, up to approximately 1 year 5 months

#### 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: Statistic analysis not performed

End point values	Perampanel			
Subject group type	Reporting group			
Number of subjects analysed	7			
Units: Participants				
number (not applicable)				
Non-Serious TEAEs	6			
Treatment-related TEAEs	0			
Severe TEAEs	0			
TEAEs leading to study drug dose adjustment	0			
Serious TEAE	0			

## Statistical analyses



## Adverse events

### Adverse events information

Timeframe for reporting adverse events:

From first dose of study drug until perampanel was commercially available, up to approximately 1 year 5 months

Adverse event reporting additional description:

Treatment-emergent adverse events (TEAEs) and serious adverse events were reported. The safety analysis set included all participants who signed informed consent and received at least one dose of study drug, and had at least one post-dose safety assessment in Study 341.

Assessment type	Systematic
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### Dictionary used

Dictionary name	MedDRA
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Dictionary version	19.0
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### Reporting groups

Reporting group title	Perampanel
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Reporting group description:

Participants started the study with the dose that they were receiving at the end of their participation in the previously participated Study E2007-G000-332 (Study 332) [NCT02307578]. Doses of perampanel were allowed to be adjusted based on clinical judgment. A minimum perampanel dose of 2 milligram (mg) per day was required to continue in the study. The maximum daily dose of perampanel permitted was 12 mg per day.

Serious adverse events	Perampanel		
Total subjects affected by serious adverse events			
subjects affected / exposed	0 / 7 (0.00%)		
number of deaths (all causes)	0		
number of deaths resulting from adverse events	0		

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

Non-serious adverse events	Perampanel		
Total subjects affected by non-serious adverse events			
subjects affected / exposed	6 / 7 (85.71%)		
Injury, poisoning and procedural complications			
Fall			
subjects affected / exposed	1 / 7 (14.29%)		
occurrences (all)	1		
Head injury			
subjects affected / exposed	1 / 7 (14.29%)		
occurrences (all)	1		



Humerus fracture subjects affected / exposed occurrences (all)	1 / 7 (14.29%) 1		
Infections and infestations Nasopharyngitis subjects affected / exposed occurrences (all)  Influenza subjects affected / exposed occurrences (all)	3 / 7 (42.86%) 4  1 / 7 (14.29%) 1		
Metabolism and nutrition disorders Diabetes mellitus subjects affected / exposed occurrences (all)  Hypercholesterolaemia subjects affected / exposed occurrences (all)  Hyperuricaemia subjects affected / exposed occurrences (all)	1 / 7 (14.29%) 1  1 / 7 (14.29%) 1  1 / 7 (14.29%) 1		

## **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**

None reported