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Trial record **1 of 1** for: CENA713DFR08

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A 24 Week, Multicenter, Open, Evaluation of the Clinical Effectiveness of the Once-daily 10 cm^2 Rivastigmine Patch Formulation in Patients With Probable Alzheimer's Disease (EXTRA) (EXTRA)

This study has been completed.

Sponsor:
Novartis

Information provided by:
Novartis

ClinicalTrials.gov Identifier:
NCT00622713

First received: February 14, 2008
Last updated: June 27, 2011
Last verified: June 2011
History of Changes

Full Text View | Tabular View | **Study Results** | Disclaimer | How to Read a Study Record

Results First Received: December 10, 2010

Study Type:	Interventional
Study Design:	Endpoint Classification: Safety/Efficacy Study; Intervention Model: Single Group Assignment; Masking: Open Label; Primary Purpose: Treatment
Condition:	Alzheimer's Disease
Intervention:	Drug: Rivastigmine transdermal patch

Participant Flow

Hide Participant Flow

Recruitment Details

Key information relevant to the recruitment process for the overall study, such as dates of the recruitment period and locations
No text entered.

Pre-Assignment Details

Significant events and approaches for the overall study following participant enrollment, but prior to group assignment
No text entered.

Reporting Groups

	Description
Rivastigmine Transdermal Patch	During the first 4 weeks of the study, patients applied a new rivastigmine 5 cm^2 patch once daily. At the end of the 4 weeks, if tolerability was satisfactory, the dosage was increased and patients applied rivastigmine 10 cm^2 patch once daily for an additional 4 weeks. Thereafter, and until the end of the study, patients remained at the maximum tolerated dose, either 5 or 10 cm^2.

Participant Flow: Overall Study

	Rivastigmine Transdermal Patch
STARTED	**228**
Exposed to Study Drug	**226**
Intent to Treat (ITT) Population	**218**
COMPLETED	**169**
NOT COMPLETED	**59**
Adverse Event	**35**
Administrative problems	**4**
Withdrawal by Subject	**11**
Lost to Follow-up	**5**
Death	**2**

Subject no longer required study drug	**1**
Did not meet eligibility criteria	**1**

Baseline Characteristics

Hide Baseline Characteristics

Population Description

Explanation of how the number of participants for analysis was determined. Includes whether analysis was per protocol, intention to treat, or another method. Also provides relevant details such as imputation technique, as appropriate.
No text entered.

Reporting Groups

	Description
Rivastigmine Transdermal Patch	During the first 4 weeks of the study, patients applied a new rivastigmine 5 cm^2 patch once daily. At the end of the 4 weeks, if tolerability was satisfactory, the dosage was increased and patients applied rivastigmine 10 cm^2 patch once daily for an additional 4 weeks. Thereafter, and until the end of the study, patients remained at the maximum tolerated dose, either 5 or 10 cm^2.

Baseline Measures

	Rivastigmine Transdermal Patch
Number of Participants **[units: participants]**	**218**
Age [1] **[units: years]** **Mean (Standard Deviation)**	**78.7 (6.59)**
Gender **[units: participants]**	
Female	**131**
Male	**87**

Region of Enrollment [units: participants]	
France	218

[1] Baseline Measures are provided for the ITT population.

Outcome Measures

Hide All Outcome Measures

1. Primary: Percentage of Patients Who Achieved and Maintained the Maximum Dose of 10 cm^2 Rivastigmine Patch for at Least 8 Weeks During 24 Weeks Study [Time Frame: 24 weeks]

Measure Type	Primary
Measure Title	Percentage of Patients Who Achieved and Maintained the Maximum Dose of 10 cm^2 Rivastigmine Patch for at Least 8 Weeks During 24 Weeks Study
Measure Description	The primary endpoint was the percentage of patients who were able to tolerate (and stay on for at least 8 weeks) rivastigmine target patch size 10 cm^2.
Time Frame	24 weeks
Safety Issue	No

Population Description

Explanation of how the number of participants for analysis was determined. Includes whether analysis was per protocol, intention to treat, or another method. Also provides relevant details such as imputation technique, as appropriate.
The Intent-to-Treat (ITT) population was defined as all patients who were administered at least one dose of study medication and were assessed for efficacy at least 1 time.

Reporting Groups

	Description
Rivastigmine Transdermal Patch	During the first 4 weeks of the study, patients applied a new rivastigmine 5 cm^2 patch once daily. At the end of the 4 weeks, if tolerability was satisfactory, the dosage was increased and patients applied rivastigmine 10 cm^2 patch once

	daily for an additional 4 weeks. Thereafter, and until the end of the study, patients remained at the maximum tolerated dose, either 5 or 10 cm^2.

Measured Values

	Rivastigmine Transdermal Patch
Number of Participants Analyzed **[units: participants]**	**218**
Percentage of Patients Who Achieved and Maintained the Maximum Dose of 10 cm^2 Rivastigmine Patch for at Least 8 Weeks During 24 Weeks Study **[units: Percentage of participants]**	**70.6**

No statistical analysis provided for Percentage of Patients Who Achieved and Maintained the Maximum Dose of 10 cm^2 Rivastigmine Patch for at Least 8 Weeks During 24 Weeks Study

2. Secondary: Clinical Global Impression of Change (CGI-C) by Physician [Time Frame: Baseline and week 24]

Measure Type	Secondary
Measure Title	Clinical Global Impression of Change (CGI-C) by Physician
Measure Description	The CGIC is an assessment tool used by a clinician to make a judgment of the severity or a change of a patient's condition. The clinician relies solely on information obtained from the patient at the Baseline visit as well as clinical information obtained throughout the study period. The CGIC is rated on the following seven-point scale:"very much improved", "much improved", "slightly improved", "unchanged", "slightly worsened", "much worsened" and "very much worsened".
Time Frame	Baseline and week 24
Safety Issue	No

Population Description

Explanation of how the number of participants for analysis was determined. Includes whether analysis was per protocol, intention to treat, or another method. Also provides relevant details such as imputation technique, as appropriate.
The Intent-to-Treat (ITT) population was defined as all patients who were administered at least one dose of study medication and were assessed for

efficacy at least 1 time. Last observation carried forward (LOCF) was used for missing values.

Reporting Groups

	Description
Rivastigmine Transdermal Patch	During the first 4 weeks of the study, patients applied a new rivastigmine 5 cm^2 patch once daily. At the end of the 4 weeks, if tolerability was satisfactory, the dosage was increased and patients applied rivastigmine 10 cm^2 patch once daily for an additional 4 weeks. Thereafter, and until the end of the study, patients remained at the maximum tolerated dose, either 5 or 10 cm^2.

Measured Values

	Rivastigmine Transdermal Patch
Number of Participants Analyzed **[units: participants]**	**208**
Clinical Global Impression of Change (CGI-C) by Physician **[units: Percentage of participants]**	
Very much improved	**4.3**
Much improved	**13.0**
Slightly improved	**23.1**
Unchanged	**32.2**
Slightly worsened	**19.2**
Much worsened	**5.8**
Very much worsened	**2.4**

No statistical analysis provided for Clinical Global Impression of Change (CGI-C) by Physician

3. Secondary: Mean Change From Baseline to Week 24 in the 4-item Instrumental Activities of Daily Living (4-IADL) Score [Time Frame: Baseline to week 24]

Measure Type	Secondary
Measure Title	Mean Change From Baseline to Week 24 in the 4-item Instrumental Activities of Daily Living (4-IADL) Score
Measure Description	The 4-IADL assesses the ability of a patient to autonomously perform 4 activities of daily living: Use the telephone, take medications, use public transport, and manage their own budget. Each activity is assessed by a series of questions and rated on a scale of 1 to 4. Scores on the 4 activities are combined for a total score ranging from 1 to 16. A lower score indicates a more self-sufficient individual. A positive change from baseline score indicates worsening.
Time Frame	Baseline to week 24
Safety Issue	No

Population Description

Explanation of how the number of participants for analysis was determined. Includes whether analysis was per protocol, intention to treat, or another method. Also provides relevant details such as imputation technique, as appropriate.
The Intent-to-Treat (ITT) population was defined as all patients who were administered at least one dose of study medication and were assessed for efficacy at least 1 time.

Reporting Groups

	Description
Rivastigmine Transdermal Patch	During the first 4 weeks of the study, patients applied a new rivastigmine 5 cm^2 patch once daily. At the end of the 4 weeks, if tolerability was satisfactory, the dosage was increased and patients applied rivastigmine 10 cm^2 patch once daily for an additional 4 weeks. Thereafter, and until the end of the study, patients remained at the maximum tolerated dose, either 5 or 10 cm^2.

Measured Values

	Rivastigmine Transdermal Patch
Number of Participants Analyzed **[units: participants]**	**218**
Mean Change From Baseline to Week 24 in the 4-item Instrumental Activities of Daily Living (4-IADL) Score **[units: scores on a scale]** **Mean (Standard Deviation)**	
Baseline (n= 198)	**3.2 (1.18)**

Week 24 (n= 181)	**3.2 (1.16)**
Change from Baseline to week 24 (n= 172)	**0.1 (0.74)**

No statistical analysis provided for Mean Change From Baseline to Week 24 in the 4-item Instrumental Activities of Daily Living (4-IADL) Score

4. Secondary: Mean Change From Baseline to Week 24 in the Mini-Mental State Examination (MMSE) Score [Time Frame: Baseline to week 24]

Measure Type	Secondary
Measure Title	Mean Change From Baseline to Week 24 in the Mini-Mental State Examination (MMSE) Score
Measure Description	The MMSE is a brief, practical screening test for cognitive dysfunction. The test consists of five sections (orientation, registration, attention-calculation, recall, and language) and results in a total possible score from 0 to 30, with higher scores indicating better function. A positive change score indicates improvement from baseline.
Time Frame	Baseline to week 24
Safety Issue	No

Population Description

Explanation of how the number of participants for analysis was determined. Includes whether analysis was per protocol, intention to treat, or another method. Also provides relevant details such as imputation technique, as appropriate.
The Intent-to-Treat (ITT) population was defined as all patients who were administered at least one dose of study medication and were assessed for efficacy at least 1 time.

Reporting Groups

	Description
Rivastigmine Transdermal Patch	During the first 4 weeks of the study, patients applied a new rivastigmine 5 cm^2 patch once daily. At the end of the 4 weeks, if tolerability was satisfactory, the dosage was increased and patients applied rivastigmine 10 cm^2 patch once daily for an additional 4 weeks. Thereafter, and until the end of the study, patients remained at the maximum tolerated dose, either 5 or 10 cm^2.

Measured Values

	Rivastigmine Transdermal Patch
Number of Participants Analyzed **[units: participants]**	**218**
Mean Change From Baseline to Week 24 in the Mini-Mental State Examination (MMSE) Score **[units: scores on a scale]** **Mean (Standard Deviation)**	
Baseline (n = 216)	**19.2 (4.11)**
Week 24 (n = 203)	**19.2 (5.19)**
Change from baseline to week 24 (n = 203)	**0.0 (3.18)**

No statistical analysis provided for Mean Change From Baseline to Week 24 in the Mini-Mental State Examination (MMSE) Score

5. Secondary: Mean Change From Baseline to Week 24 in the Mini-Zarit Inventory Score [Time Frame: Baseline to week 24]

Measure Type	Secondary
Measure Title	Mean Change From Baseline to Week 24 in the Mini-Zarit Inventory Score
Measure Description	The Mini-Zarit Inventory assesses the burden of a caregiver in caring for a patient. The inventory is composed of 5 questions which are rated according to the following answers: 0 = never, ½ = sometimes, 1 = often. The ratings on the 5 questions are added together resulting in a total score of 0 to 7 with a higher score indicating greater caregiver burden.
Time Frame	Baseline to week 24
Safety Issue	No

Population Description

Explanation of how the number of participants for analysis was determined. Includes whether analysis was per protocol, intention to treat, or another method. Also provides relevant details such as imputation technique, as appropriate.
The Intent-to-Treat (ITT) population was defined as all patients who were administered at least one dose of study medication and were assessed for efficacy at least 1 time.

Reporting Groups

	Description
Rivastigmine Transdermal Patch	During the first 4 weeks of the study, patients applied a new rivastigmine 5 cm^2 patch once daily. At the end of the 4 weeks, if tolerability was satisfactory, the dosage was increased and patients applied rivastigmine 10 cm^2 patch once daily for an additional 4 weeks. Thereafter, and until the end of the study, patients remained at the maximum tolerated dose, either 5 or 10 cm^2.

Measured Values

	Rivastigmine Transdermal Patch
Number of Participants Analyzed **[units: participants]**	**218**
Mean Change From Baseline to Week 24 in the Mini-Zarit Inventory Score **[units: Scores on a scale]** **Mean (Standard Deviation)**	
Baseline (n= 211)	**2.8 (1.76)**
Week 24 (n= 199)	**2.9 (1.85)**
Change from baseline to week 24 (n= 197)	**0.1 (1.35)**

No statistical analysis provided for Mean Change From Baseline to Week 24 in the Mini-Zarit Inventory Score

Serious Adverse Events

Hide Serious Adverse Events

Time Frame	No text entered.
Additional Description	Safety population.

Reporting Groups

	Description

Rivastigmine Transdermal Patch	During the first 4 weeks of the study, patients applied a new rivastigmine 5 cm^2 patch once daily. At the end of the 4 weeks, if tolerability was satisfactory, the dosage was increased and patients applied rivastigmine 10 cm^2 patch once daily for an additional 4 weeks. Thereafter, and until the end of the study, patients remained at the maximum tolerated dose, either 5 or 10 cm^2.

Serious Adverse Events

	Rivastigmine Transdermal Patch
Total, serious adverse events	
# participants affected / at risk	**21/218 (9.63%)**
Blood and lymphatic system disorders	
LYMPHADENOPATHY †1	
# participants affected / at risk	**1/218 (0.46%)**
Cardiac disorders	
ACUTE CORONARY SYNDROME †1	
# participants affected / at risk	**1/218 (0.46%)**
BRADYCARDIA †1	
# participants affected / at risk	**2/218 (0.92%)**
CARDIAC ARREST †1	
# participants affected / at risk	**1/218 (0.46%)**
Gastrointestinal disorders	
NAUSEA †1	
# participants affected / at risk	**1/218 (0.46%)**
SIGMOIDITIS †1	
# participants affected / at risk	**1/218 (0.46%)**
VOMITING †1	
# participants affected / at risk	**1/218 (0.46%)**
General disorders	
MALAISE †1	

# participants affected / at risk	1/218 (0.46%)
OEDEMA PERIPHERAL †1	
# participants affected / at risk	1/218 (0.46%)
Hepatobiliary disorders	
CHOLECYSTITIS †1	
# participants affected / at risk	1/218 (0.46%)
CHOLELITHIASIS †1	
# participants affected / at risk	1/218 (0.46%)
HEPATOMEGALY †1	
# participants affected / at risk	1/218 (0.46%)
Immune system disorders	
HYPERSENSITIVITY †1	
# participants affected / at risk	1/218 (0.46%)
Infections and infestations	
BRONCHITIS †1	
# participants affected / at risk	1/218 (0.46%)
LUNG INFECTION †1	
# participants affected / at risk	1/218 (0.46%)
VIRAL INFECTION †1	
# participants affected / at risk	1/218 (0.46%)
Injury, poisoning and procedural complications	
FALL †1	
# participants affected / at risk	5/218 (2.29%)
FEMORAL NECK FRACTURE †1	
# participants affected / at risk	1/218 (0.46%)
FOREARM FRACTURE †1	
# participants affected / at risk	1/218 (0.46%)
WRIST FRACTURE †1	

# participants affected / at risk	**1/218 (0.46%)**
Investigations	
BIOPSY PROSTATE †1	
# participants affected / at risk	**1/218 (0.46%)**
Metabolism and nutrition disorders	
DIABETES MELLITUS †1	
# participants affected / at risk	**1/218 (0.46%)**
Musculoskeletal and connective tissue disorders	
MUSCULOSKELETAL CHEST PAIN †1	
# participants affected / at risk	**1/218 (0.46%)**
Neoplasms benign, malignant and unspecified (incl cysts and polyps)	
METASTATIC NEOPLASM †1	
# participants affected / at risk	**1/218 (0.46%)**
PROSTATIC ADENOMA †1	
# participants affected / at risk	**1/218 (0.46%)**
SQUAMOUS CELL CARCINOMA †1	
# participants affected / at risk	**1/218 (0.46%)**
Nervous system disorders	
AUTONOMIC NERVOUS SYSTEM IMBALANCE †1	
# participants affected / at risk	**1/218 (0.46%)**
DYSSTASIA †1	
# participants affected / at risk	**1/218 (0.46%)**
EPILEPSY †1	
# participants affected / at risk	**1/218 (0.46%)**
Psychiatric disorders	
APATHY †1	
# participants affected / at risk	**1/218 (0.46%)**

Respiratory, thoracic and mediastinal disorders	
DYSPNOEA EXERTIONAL †1	
# participants affected / at risk	**1/218 (0.46%)**
PULMONARY EMBOLISM †1	
# participants affected / at risk	**1/218 (0.46%)**
Skin and subcutaneous tissue disorders	
DERMATITIS ALLERGIC †1	
# participants affected / at risk	**1/218 (0.46%)**
PRURITUS †1	
# participants affected / at risk	**1/218 (0.46%)**
RASH †1	
# participants affected / at risk	**1/218 (0.46%)**
Social circumstances	
SOCIAL STAY HOSPITALISATION †1	
# participants affected / at risk	**1/218 (0.46%)**
Surgical and medical procedures	
HIP ARTHROPLASTY †1	
# participants affected / at risk	**1/218 (0.46%)**
MALIGNANT TUMOUR EXCISION †1	
# participants affected / at risk	**1/218 (0.46%)**

† Events were collected by systematic assessment
1 Term from vocabulary, MedDRA

Other Adverse Events

Hide Other Adverse Events

Time Frame	No text entered.

Additional Description	Safety population.

Frequency Threshold

Threshold above which other adverse events are reported	5%

Reporting Groups

	Description
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Other Adverse Events

	Rivastigmine Transdermal Patch
Total, other (not including serious) adverse events	
# participants affected / at risk	**13/218 (5.96%)**
Skin and subcutaneous tissue disorders	
ERYTHEMA † 1	
# participants affected / at risk	**13/218 (5.96%)**

† Events were collected by systematic assessment
1 Term from vocabulary, MedDRA

Limitations and Caveats

Hide Limitations and Caveats

Limitations of the study, such as early termination leading to small numbers of participants analyzed and technical problems with measurement leading to unreliable or uninterpretable data
No text entered.

More Information

Hide More Information

Certain Agreements:

Principal Investigators are **NOT** employed by the organization sponsoring the study.
There **IS** an agreement between Principal Investigators and the Sponsor (or its agents) that restricts the PI's rights to discuss or publish trial results after the trial is completed.
The agreement is: ☐ The only disclosure restriction on the PI is that the sponsor can review results communications prior to public release and can embargo communications regarding trial results for a period that is **less than or equal to 60 days**. The sponsor cannot require changes to the communication and cannot extend the embargo. ☐ The only disclosure restriction on the PI is that the sponsor can review results communications prior to public release and can embargo communications regarding trial results for a period that is **more than 60 days but less than or equal to 180 days**. The sponsor cannot require changes to the communication and cannot extend the embargo. Other disclosure agreement that restricts the right of the PI to discuss or publish trial results after the trial is completed. ☑ **Restriction Description:** The terms and conditions of Novartis' agreements with its investigators may vary. However, Novartis does not prohibit any investigator from publishing. Any publications from a single-site are postponed until the publication of the pooled data (i.e., data from all sites) in the clinical trial.

Results Point of Contact:

Name/Title: Study Director
Organization: Novartis Pharmaceuticals
phone: 862-778-8300

No publications provided

Responsible Party:	External Affairs, Novartis
ClinicalTrials.gov Identifier:	NCT00622713 History of Changes
Other Study ID Numbers:	**CENA713DFR08** N° EudraCT : 2007-003405-27

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Health Authority:	France: Afssaps - Agence française de sécurité sanitaire des produits de santé (Saint-Denis)