Synopsis of Study Results

Name of Sponsor /Company	Daiichi Sankyo Co., Ltd.
Name of Finished Product	MEMARY® TABLETS 5 mg, 10 mg, 20 mg
Name of Active Ingredient	Memantine hydrochloride
Title of Study	Phase III study of SUN Y7017 (memantine hydrochloride) in patients with moderately severe to severe dementia of the Alzheimer's type
Investigators	Takashi Asada　Total 75 investigators
Study Centre(s)	Tsukuba University Hospital　Total 74 centers
Publication (reference)	None
Studied Period (Date of first subject enrolled to date of last subject completed)	August 23, 2005 to September 12, 2008
Phase of Development	Phase III
Objectives	To examine the efficacy of 24-week treatment with oral SUN Y7017 (memantine hydrochloride) 20 mg once daily after breakfast in patients with moderately severe to severe dementia of the Alzheimer's type, using a placebo-controlled, double-blind, parallel-group design, and also to evaluate the safety.
Methodology	A double-blind, parallel-group study, comparing placebo (Group P) and memantine hydrochloride 20 mg (Group M)
Number of Patients (planned and analyzed)	Planned：200 patients per group, total 400 patients Analyzed： Safety analysis set: 432 patients (211 in Group P, 221 in Group M) Efficacy analysis set: 426 patients (208 in Group P, 218 in Group M)
Diagnosis and Main Criteria for Inclusion	Target disease：dementia of the Alzheimer's type Inclusion criteria： • patients diagnosed with dementia of the Alzheimer's type according to the DSM-IV criteria, and probable Alzheimer's Disease according to the NINCDS-ADRDA criteria. • patients diagnosed with dementia of the Alzheimer's type based on a brain CT or MRI scan. • patients fulfilling both the following requirements: MMSE score between 5 and 14; FAST stage between 6a and 7a. • patients aged 50 or over at the time of consent. Exclusion criteria： • patients with dementia of any other type than dementia of the Alzheimer's type. • patients with significant neurological disease or history of psychiatric disease not associated with AD. • patients who have taken memantine hydrochloride or any other investigational drug of memantine hydrochloride. • patients with a history of severe drug allergy. • patients with a history of alcoholism or drug abuse.
Test Product, Dose and Mode of Administration, Batch Number	Memantine hydrochloride 20 mg orally once daily Batch number：4Y19、4Y22、6606、6609
Duration of Treatment	24 weeks
Reference Therapy, Dose and Mode of Administration, Batch Number	Placebo orally once daily Batch number：4Y16、4Y17、6X22、6X23
Criteria for Evaluation	Primary efficacy endpoints SIB-J, Modified CIBIC plus-J Safety endpoints Adverse events, adverse drug reactions

Statistical Method	Efficacy The efficacy was analyzed using the Full Analysis Set (FAS). The primary analysis included only patients evaluated for efficacy at Week 24 of treatment (hereinafter, referred to as “the OC [observed cases] analysis”). The level of significance for statistical tests was 5% two-sided. SIB-J: In terms of the change in total score from the baseline of the double-blind period to Week 24 of treatment (change in total score), the superiority of Group M to Group P was investigated. Modified CIBIC plus-J: In terms of overall assessment at Week 24 of treatment (global change), the superiority of Group M to Group P was investigated. Safety In terms of the incidences of adverse events and adverse reactions, differences between the treatment groups were investigated.
Summary - Conclusion	Efficacy SIB-J: The change in the total score in the OC analysis was −5.18 ± 11.66（Mean±SD） in Group P and −0.65 ± 9.74 in Group M, with statistically significant difference between the two groups by the Wilcoxon test (p=0.0001). Modified CIBIC plus-J: The global change at Week 24 of treatment in the OC analysis was 4.58 ± 1.01（Mean±SD） in Group P and 4.47 ± 1.07 in Group M, with no significant difference between the two groups by the Mantel test but with the score better in Group M than in Group P (p=0.3189). Safety The incidences of neither adverse events nor adverse reactions differed between the two treatment groups.
Date of Report	Feb.14, 2011