SAS Code	Contents	Output Dataset
ADNI_DataOrigin.sas	(This code is automatically loaded with each code to import ADNI cohort data. Therefore, this code cannot be executed by itself)	-
JADNI_DataOrigin.sas	(This code is automatically loaded with each code to import J-ADNI cohort data. Therefore, this code cannot be executed by itself)	-
Demographics_for_ADNI.sas	Participant demographics of the ADNI cohort	demo_table_all_adni.sas7bdat
	Participant demographics of the ADNI cohort by Aβ and APOE ε4 status	demo_table_ab_or_apoe_adni.sas7bdat
	Follow-up period for each cognitive function test score in the Aβ-positive participants in the ADNI cohort	demo_table_follow_adni.sas7bdat
	Follow-up data for each cognitive test score by baseline diagnostic stage in the Aβ-positive participants in the ADNI cohort	MMSE_ADNI.png CDRSB_ADNI.png ADAS13_ADNI.png
Demographics_for_JADNI.sas	Participant demographics of the J-ADNI cohort	demo_table_all_jadni.sas7bdat
	Participant demographics of the J-ADNI cohort by Aβ and APOE e4 status	demo_table_ab_or_apoe_jadni.sas7bdat
	Follow-up period for each cognitive function test score in the Aβ-positive participants in the J-ADNI cohort	demo_table_follow_jadni.sas7bdat
	Follow-up data for each cognitive test score by baseline diagnostic stage in the Aβ-positive participants in the J-ADNI cohort	MMSE_JADNI.png CDRSB_JADNI.png ADAS13_JADNI.png
Method_ADNI_Beta.sas	Average estimated cognitive decline slope during the follow-up period in the Aβ-positive participants in the ADNI cohort	declineslope_adni.sas7bdat
	Average predictive error in the internal (cross) and external validations of the prediction model in the Aβ-positive participants in the ADNI cohort	prederror_cv_test_adni.sas7bdat prederror_ev_test_adni.sas7bdat
	Relationship between the estimated slopes and the average scores during the follow-up period in the Aβ-positive participants in the ADNI cohort	Decline_and_Mean_MMSE_ADNI.png Decline_and_Mean_CDRSB_ADNI.png Decline_and_Mean_ADAS13_ADNI.png
	Predicted trajectories of cognitive test score for moderate, intermediate, and rapid cognitive decline groups in the Aβ-positive participants in the ADNI cohort	Trajectory_MMSE_ADNI.png Trajectory_CDRSB_ADNI.png Trajectory_ADAS13_ADNI.png
Method_ADNI_Beta_CV.sas	(This code is automatically loaded in Code "Method_ADNI_Beta.sas" for internal validation of the proposed method. Therefore, this code cannot be executed by itself)	-
Method_ADNI_Beta_EV.sas	(This code is automatically loaded in Code "Method_ADNI_Beta.sas" for external valication of the proposed method. Therefore, this code cannot be executed by itself)	-
Method_JADNI_Beta.sas	Average estimated cognitive decline slope during the follow-up period in the Aβ-positive participants of the J-ADNI cohort	declineslope_jadni.sas7bdat
	Average predictive error in the internal and external validations of the prediction model in the Aβ-positive participants of the J-ADNI cohort	prederror_cv_test_jadni.sas7bdat prederror_ev_test_jadni.sas7bdat
	Relationship between the estimated slopes and the average scores during the follow-up period in the Aβ-positive participants in the J-ADNI cohort	Decline_and_Mean_MMSE_JADNI.png Decline_and_Mean_CDRSB_JADNI.png Decline_and_Mean_ADAS13_JADNI.png
	Predicted trajectories of cognitive test score for moderate, intermediate, and rapid cognitive decline groups in the Aβ-positive participants in the J-ADNI cohort	Trajectory_MMSE_JADNI.png Trajectory_CDRSB_JADNI.png Trajectory_ADAS13_JADNI.png
Method_JADNI_Beta_CV.sas	(This code is automatically loaded in Code "Method_JADNI_Beta.sas" for internal validation of the proposed method. Therefore, this code cannot be executed by itself)	-
Method_JADNI_Beta_EV.sas	(This code is automatically loaded in Code "Method_JADNI_Beta.sas" for external valication of the proposed method. Therefore, this code cannot be executed by itself)	-
App1_ADNI_Prog_CI.sas	Time to reach a milestone for a possible AD onset in the ADNI cohort between two Aβ-positive populations with and without APOE ε4, its 95% CI	adonset_adni.sas7bdat
	Predicted long-term trajectories of cognitive test score by APOE ε4 status in the Aβ-positive participants with MCI in the ADNI cohort.	Trajectory_APOE_MMSE_Onset_ADNI.png Trajectory_APOE_CDRSB_Onset_ADNI.png Trajectory_APOE_ADAS13_Onset_ADNI.png
	Predicted long-term trajectories of cognitive test score by APOE ε4 status in the Aβ-positive participants with AD in the ADNI cohort.	Trajectory_APOE_MMSE_Prog_ADNI.png Trajectory_APOE_CDRSB_Prog_ADNI.png Trajectory_APOE_ADAS13_Prog_ADNI.png
App1_ADNI_Prog_Test.sas	The statistical hypothesis testing for the difference of time to AD onset in the ADNI cohort between two Aβ-positive populations with and without APOE e4	pvalue_adni.sas7bdat
App2_RCTdesign.sas	Bias and RMSE of difference of change of CDR-SOB from baseline to time of the primary efficacy assessment (1.5 years) between the drug and placebo groups, power of statistical hypothesis testing based on MMRM	performance_rctdesign.sas7bdat
	Average number of screened patients to achieve the planned sample size of N = 320	number_of_screening.sas7bdat
App2_Plan_MCI.sas	(This code is automatically loaded into "App2_RCTdesign.sas" to predict long-term cognitive function transition for MCI patients. Therefore, this code cannot be executed by itself)	-
App2_Plan_AD.sas	(This code is automatically loaded into "App2_RCTdesign.sas" to predict long-term cognitive function transition for AD patients. Therefore, this code cannot be executed by itself)	-