

S1 Table. Performance of each model in terms of AUC ROC for CN baseline participants.

Data format is mean \pm standard error. LSM[†] is a standard linear ridge regression model that is an alternative implementation of LSM (Linear Single-year Model). NMM[†] is a slight modification of NMM (Nonlinear Multi-year Model), where the input time-to-follow-up (Δt) feature is encoded as the closest annual visit time. NSM: Nonlinear Single-year Model.

Follow-up year	CN baseline				
	LSM [†]	LSM	NSM	NMM	NMM [†]
1	80.66 \pm 0.72	83.88 \pm 0.68	88.73 \pm 0.45	90.4 \pm 0.32	89.94 \pm 0.33
2	78.45 \pm 0.47	79.41 \pm 0.50	84.32 \pm 0.47	86.28 \pm 0.34	86.37 \pm 0.33
3	80.83 \pm 0.41	81.99 \pm 0.38	85.24 \pm 0.34	85.78 \pm 0.35	85.72 \pm 0.35
4	77.39 \pm 0.49	78.66 \pm 0.42	81.07 \pm 0.38	81.98 \pm 0.39	82.08 \pm 0.38
5	80.84 \pm 0.43	81.22 \pm 0.42	82.10 \pm 0.39	84.08 \pm 0.38	84.23 \pm 0.37