

Supplementary Table. Summary of Studies Related to Prediction of Demographic Characteristics from OCT Images Using Deep Learning

Study	Application	Architecture (Base model)	Performance					Limitation
			Acc*	AUC*	MAE† (yr)	r†	R ² †	
Shigueoka et al, 2021	Age prediction	ResNet50	-	0.962‡	5.82	0.860	0.74	Highly variable results in each patient
Hassan et al, 2021	Age, sex prediction	3D ResNet50	0.76	0.85	4.2	-	0.74	Highly variable results in each patient
		3D BagNet33	0.78	0.86	4.0	-	0.77	
Munk et al, 2021	Age, sex prediction	ResNet152	0.76	0.84	5.625	-	-	Use of combination of methods (whereby the network outputs age bins that are normalized using a softmax activation w and multiplied by the bins lower edge d_x) for age prediction, which could cause overfitting and result in a DL model vulnerable to domain shift
			(BScan)	(BScan)	(BScan)			
			0.83	0.90	4.541			
			(CScan)	(CScan)	(CScan)			
Chueh et al, 2022	Age, sex prediction	ResNet18	0.856	-	5.78	-	-	No separation of test dataset when applying 10-fold cross-validation, which could exaggerate the DL model's performance

Acc, accuracy; AUC, area under the receiver operating characteristic curve; DL, deep learning; MAE, mean absolute error; OCT, optical coherence tomography; r , Pearson's correlation coefficient; R^2 , coefficient of determination.

*For sex prediction.

†For age prediction.

‡For discriminating the lowest and highest tertiles of age.