

**Supplemental Table S1.** Test Results of Five-Fold Validation (Data: Transverse View Images; Back-Bone Algorithm: ResNet50)

Fold	Accuracy	Specificity	Sensitivity	F1 score	AUC
1	0.786	0.899	0.516	0.587	0.771
2	0.771	0.890	0.500	0.571	0.762
3	0.786	0.862	0.586	0.602	0.776
4	0.780	0.883	0.491	0.540	0.746
5	0.775	0.923	0.463	0.569	0.758
Mean	0.780	0.891	0.511	0.574	0.763
SD	0.006	0.022	0.046	0.023	0.012

AUC, area under the curve; SD, standard deviation.

**Supplemental Table S4.** Test Results of Five-Fold Validation (Data: Longitudinal View Images; Back-Bone Algorithm: ResNet50)

Fold	Accuracy	Specificity	Sensitivity	F1 score	AUC
1	0.800	0.885	0.597	0.638	0.837
2	0.833	0.897	0.688	0.715	0.823
3	0.843	0.921	0.638	0.692	0.847
4	0.828	0.890	0.655	0.667	0.833
5	0.794	0.901	0.567	0.638	0.835
Mean	0.820	0.899	0.629	0.670	0.835
SD	0.021	0.0140	0.048	0.034	0.009

AUC, area under the curve; SD, standard deviation.

**Supplemental Table S2.** Test Results of Five-Fold Validation (Data: Transverse View Images; Back-Bone Algorithm: DenseNet201)

Fold	Accuracy	Specificity	Sensitivity	F1 score	AUC
1	0.786	0.899	0.516	0.587	0.805
2	0.767	0.856	0.563	0.595	0.760
3	0.800	0.875	0.603	0.625	0.806
4	0.794	0.890	0.527	0.574	0.767
5	0.785	0.852	0.642	0.657	0.829
Mean	0.786	0.874	0.570	0.608	0.793
SD	0.013	0.020	0.053	0.033	0.029

AUC, area under the curve; SD, standard deviation.

**Supplemental Table S5.** Test Results of Five-Fold Validation (Data: Longitudinal View Images; Back-Bone Algorithm: DenseNet201)

Fold	Accuracy	Specificity	Sensitivity	F1 score	AUC
1	0.862	0.939	0.677	0.743	0.915
2	0.795	0.884	0.594	0.639	0.808
3	0.810	0.921	0.517	0.600	0.847
4	0.871	0.935	0.691	0.738	0.864
5	0.794	0.909	0.552	0.633	0.838
Mean	0.826	0.918	0.606	0.671	0.854
SD	0.037	0.023	0.076	0.066	0.039

AUC, area under the curve; SD, standard deviation.

**Supplemental Table S3.** Test Results of Five-Fold Validation (Data: Transverse View Images; Back-Bone Algorithm: EfficientNet2v\_s)

Fold	Accuracy	Specificity	Sensitivity	F1 score	AUC
1	0.786	0.905	0.500	0.579	0.764
2	0.819	0.890	0.656	0.689	0.818
3	0.791	0.901	0.500	0.568	0.789
4	0.766	0.877	0.455	0.505	0.730
5	0.727	0.901	0.358	0.457	0.691
Mean	0.778	0.895	0.494	0.560	0.758
SD	0.034	0.012	0.108	0.087	0.050

AUC, area under the curve; SD, standard deviation.

**Supplemental Table S6.** Test Results of Five-Fold Validation (Data: Longitudinal View Images; Back-Bone Algorithm: EfficientNet2v\_s)

Fold	Accuracy	Specificity	Sensitivity	F1 score	AUC
1	0.805	0.851	0.694	0.677	0.840
2	0.795	0.884	0.594	0.639	0.807
3	0.819	0.915	0.569	0.635	0.856
4	0.828	0.909	0.600	0.647	0.816
5	0.813	0.873	0.687	0.702	0.849
Mean	0.812	0.886	0.629	0.660	0.834
SD	0.013	0.026	0.057	0.029	0.021

AUC, area under the curve; SD, standard deviation.