**Table 1.** Summary of the performance results of brain age frameworks based on different prediction models in the training set (healthy individuals, N = 788) through 10 fold cross validation

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Predictor | MAE (years) | RMSE | Mean brain age gap (years) | R2 |
| SVR | 5.40 | 6.92 | 0 | 0.88 |
| Model 2 | ? | ? | ? | ? |
| Model 3 | ? | ? | ? | ? |
| Model 4 | ? | ? | ? | ? |
| Model 5 | ? | ? | ? | ? |
| Model 6 | ? | ? | ? | ? |
| Model 7 | ? | ? | ? | ? |
| Model 8 | ? | ? | ? | ? |

MAE, mean absolute error; RMSE, root mean square error; R2, coefficient of determination

**Table 2.** Summary of the performance results of brain age frameworks based on different prediction models in independent test set (healthy individuals, N = 88)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Metric | MAE (years) | RMSE | Mean brain age gap (years) | R2 |
| SVR | 5.15 | 6.54 | 0.30 | 0.87 |
| Model 2 | ? | ? | ? | ? |
| Model 3 | ? | ? | ? | ? |
| Model 4 | ? | ? | ? | ? |
| Model 5 | ? | ? | ? | ? |
| Model 6 | ? | ? | ? | ? |
| Model 7 | ? | ? | ? | ? |
| Model 8 | ? | ? | ? | ? |

MAE, mean absolute error; RMSE, root mean square error; R2, coefficient of determination

**Table 3.** Summary of the performance results of brain age frameworks based on different prediction models in independent test set (MCI, N = 70.)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Metric | MAE (years) | RMSE | Mean brain age gap (years) | R2 |
| SVR | 8.01 | 9.78 | 4.13 | 0.33 |
| Model 2 | ? | ? | ? | ? |
| Model 3 | ? | ? | ? | ? |
| Model 4 | ? | ? | ? | ? |
| Model 5 | ? | ? | ? | ? |
| Model 6 | ? | ? | ? | ? |
| Model 7 | ? | ? | ? | ? |
| Model 8 | ? | ? | ? | ? |

MAE, mean absolute error; RMSE, root mean square error; R2, coefficient of determination

**Table 4.** Summary of the performance results of brain age frameworks based on different prediction models in independent test set (AD, N = 30)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Metric | MAE (years) | RMSE | Mean brain age gap (years) | R2 |
| SVR | 10.93 | 12.76 | 10.40 | 0.23 |
| Model 2 | ? | ? | ? | ? |
| Model 3 | ? | ? | ? | ? |
| Model 4 | ? | ? | ? | ? |
| Model 5 | ? | ? | ? | ? |
| Model 6 | ? | ? | ? | ? |
| Model 7 | ? | ? | ? | ? |
| Model 8 | ? | ? | ? | ? |

MAE, mean absolute error; RMSE, root mean square error; R2, coefficient of determination