Supplementary Table 4. Statistics of the Cox Ls and DL model on diabetes prediction by year

	AUC (time dependent)	Sensitivity	Specificity	Accuracy	PPV	NPV
Cox Ls						
1 yr	0.873 (0.787–0.959)	1.000 (1.000–1.000)	0.788 (0.785–0.791)	0.788 (0.788–0.788)	0.000 (0.000–0.001)	1.000 (1.000–1.000)
2 yr	0.861 (0.828–0.894)	0.773 (0.704–0.842)	0.843 (0.840–0.846)	0.843 (0.843–0.843)	0.010 (0.008–0.012)	0.999 (0.999–1.000)
3 yr	0.862 (0.846–0.878)	0.799 (0.767–0.832)	0.787 (0.784–0.790)	0.787 (0.787–0.787)	0.032 (0.029–0.035)	0.998 (0.997–0.998)
4 yr	0.845 (0.833–0.857)	0.757 (0.732–0.783)	0.791 (0.788–0.794)	0.791 (0.791–0.791)	0.057 (0.053–0.061)	0.995 (0.994–0.996)
5 yr	0.842 (0.832–0.852)	0.778 (0.758–0.798)	0.759 (0.755–0.762)	0.759 (0.759–0.759)	0.077 (0.073–0.081)	0.992 (0.992–0.993)
6 yr	0.836 (0.828–0.844)	0.761 (0.743–0.778)	0.761 (0.758–0.764)	0.761 (0.761–0.761)	0.102 (0.098–0.107)	0.989 (0.988–0.990)
7 yr	0.830 (0.822–0.837)	0.744 (0.729–0.760)	0.763 (0.760–0.766)	0.762 (0.762–0.762)	0.127 (0.122–0.132)	0.985 (0.984–0.986)
8 yr	0.822 (0.814–0.829)	0.722 (0.708–0.737)	0.767 (0.764–0.771)	0.765 (0.765–0.765)	0.153 (0.148–0.158)	0.979 (0.978–0.981)
9 yr	0.814 (0.808–0.821)	0.755 (0.742–0.767)	0.718 (0.715–0.722)	0.720 (0.720–0.720)	0.159 (0.154–0.164)	0.976 (0.975–0.978)
10 yr	0.807 (0.801–0.813)	0.739 (0.727–0.751)	0.722 (0.719–0.726)	0.723 (0.723–0.723)	0.180 (0.175–0.186)	0.971 (0.969–0.973)
DL						
1 yr	0.999 (0.999–1.000)	1.000 (1.000–1.000)	0.998 (0.997–0.998)	0.998 (0.997–0.998)	0.026 (0.001–0.051)	1.000 (1.000–1.000)
2 yr	0.971 (0.960–0.983)	0.901 (0.851–0.950)	0.939 (0.937–0.941)	0.939 (0.937–0.941)	0.030 (0.025–0.035)	1.000 (1.000–1.000)
3 yr	0.940 (0.933–0.947)	0.879 (0.853–0.906)	0.843 (0.840–0.846)	0.843 (0.840–0.846)	0.047 (0.043–0.051)	0.999 (0.998–0.999)
4 yr	0.905 (0.897–0.913)	0.815 (0.792–0.838)	0.829 (0.826–0.832)	0.829 (0.826–0.832)	0.074 (0.069–0.078)	0.996 (0.996–0.997)
5 yr	0.877 (0.869–0.885)	0.816 (0.798–0.834)	0.765 (0.762–0.768)	0.766 (0.763–0.770)	0.083 (0.079–0.087)	0.994 (0.993–0.994)
6 yr	0.866 (0.858–0.873)	0.768 (0.751–0.785)	0.798 (0.794–0.801)	0.797 (0.793–0.800)	0.120 (0.115–0.125)	0.990 (0.989–0.991)
7 yr	0.854 (0.848–0.861)	0.779 (0.764–0.794)	0.761 (0.758–0.764)	0.762 (0.758–0.765)	0.132 (0.127–0.136)	0.987 (0.986–0.988)
8 yr	0.844 (0.837–0.850)	0.772 (0.758–0.785)	0.752 (0.749–0.756)	0.753 (0.750–0.757)	0.153 (0.148–0.159)	0.983 (0.982–0.984)
9 yr	0.834 (0.828–0.840)	0.741 (0.728–0.754)	0.763 (0.759–0.766)	0.761 (0.758–0.764)	0.181 (0.175–0.187)	0.977 (0.975–0.978)
10 yr	0.827 (0.821–0.833)	0.751 (0.739–0.762)	0.740 (0.737–0.744)	0.741 (0.738–0.744)	0.193 (0.187–0.198)	0.973 (0.971–0.974)

Cox Ls, Cox longitudinal summary model; DL, deep learning; AUC, area under the curve; PPV, positive predictive value; NPV, negative predictive value.