

**Supplementary Table 5.** Performance of two deep learning networks before and after attribute selection

Variable	Deep learning neural network	
	Before attribute selection <sup>a)</sup>	After attribute selection <sup>b)</sup>
Overall correctness	96.51 ± 0.31 (96.29–96.73)	96.68 ± 0.17 (96.56–96.8)
Kappa	0.66 ± 0.03 (0.64–0.68)	0.68 ± 0.01 (0.67–0.69)
AUC-ROC	0.90 ± 0.01 (0.89–0.91)	0.93 ± 0.01 (0.92–0.93)
MCC	0.66 ± 0.03 (0.64–0.68)	0.68 ± 0.01 (0.67–0.69)
Sensitivity	0.73 ± 0.04 (0.70–0.75)	0.74 ± 0.04 (0.71–0.76)
Positive predictive value	0.64 ± 0.03 (0.61–0.66)	0.69 ± 0.09 (0.62–0.76)
PRC area	0.67 ± 0.03 (0.65–0.69)	0.73 ± 0.01 (0.72–0.74)
Specificity	0.95 ± 0.08 (0.89–1.01)	0.98 ± 0 (0.98–0.98)
Negative predictive value	0.99 ± 0 (0.98–0.99)	0.99 ± 0 (0.98–0.99)
PRC area	0.99 ± 0 (0.99–0.99)	0.98 ± 0.02 (0.97–1.00)

AUC-ROC, area under the receiver operator curve; MCC, Matthews correlation coefficient; PRC, precision-recall.

<sup>a)</sup>Two dense layers with 30 neurons each. <sup>b)</sup>One dense layer with six neurons.