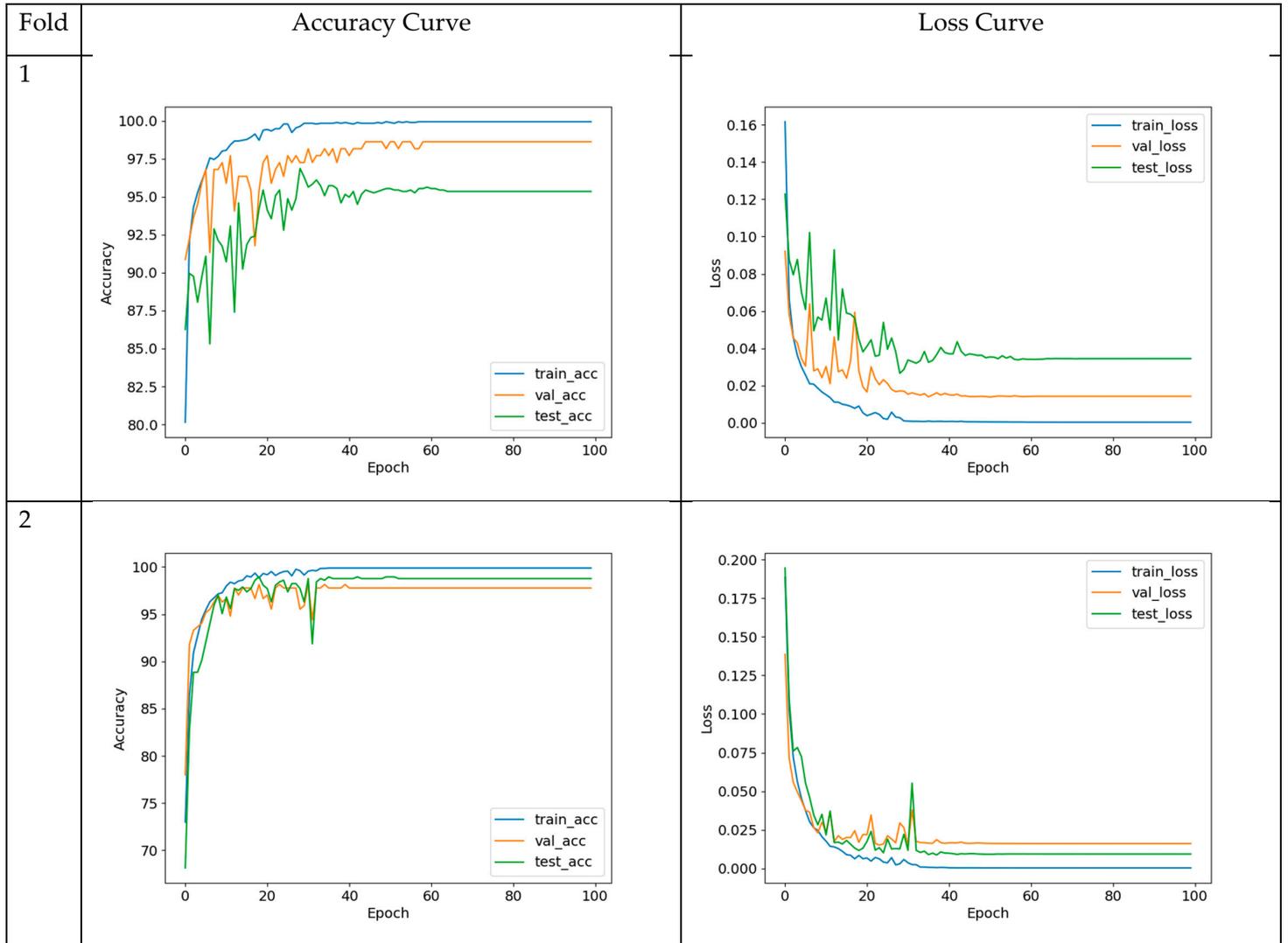


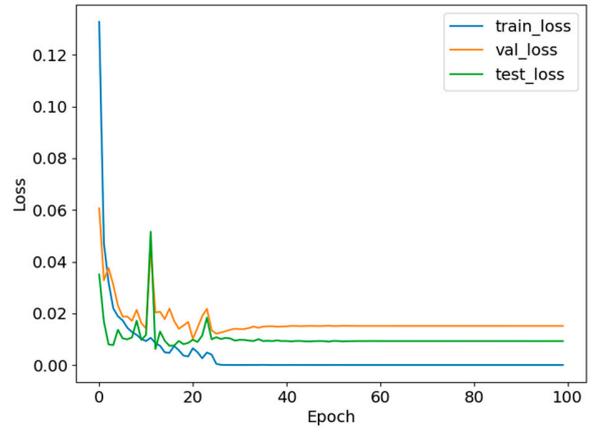
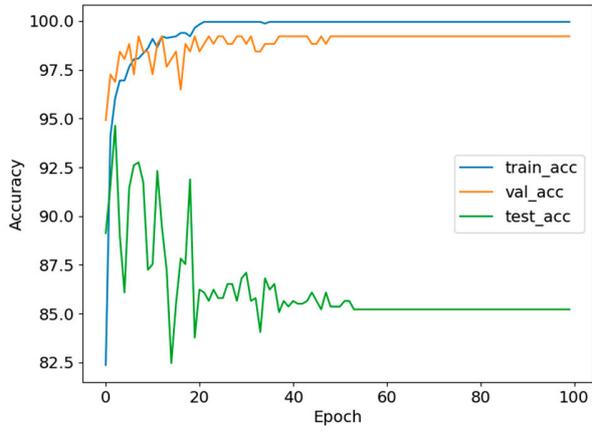
Supplementary Materials

Self-ResNet18_Q1 Model

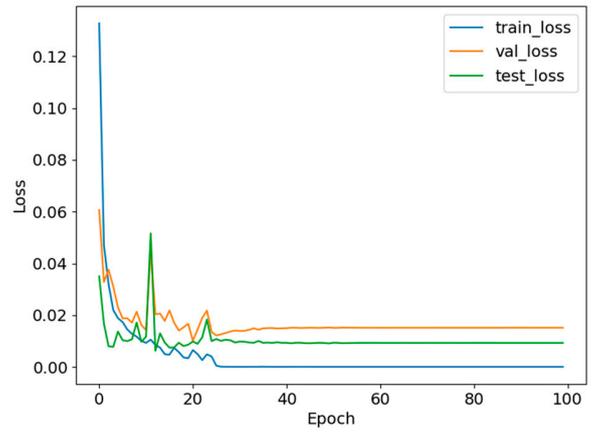
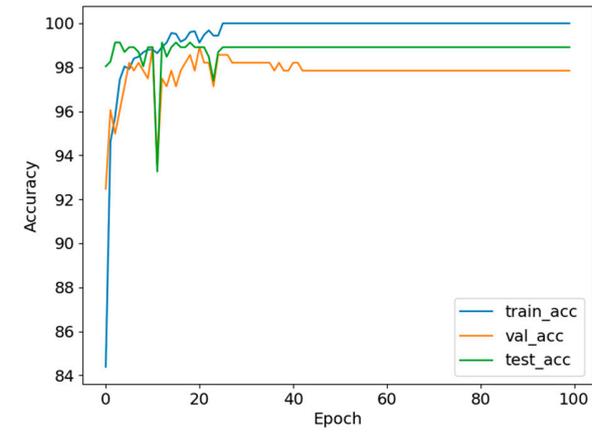
Table S1: Fold-wise learning curves of the Self-ResNet18_Q1 model



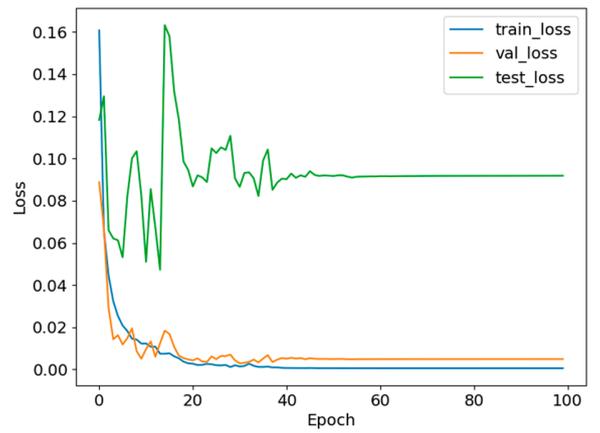
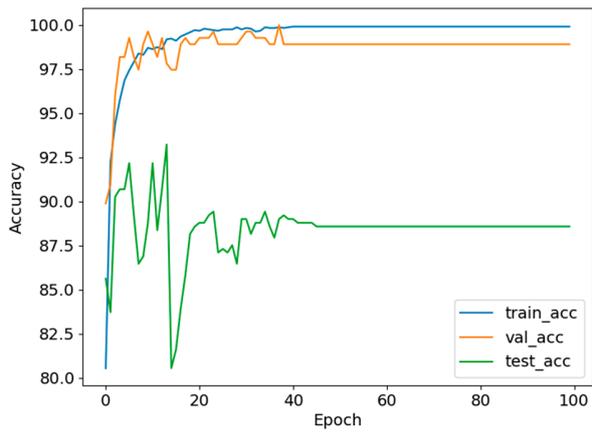
3



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The confusion matrix of Self-ResNet18_Q1 model is given in Figure 1.

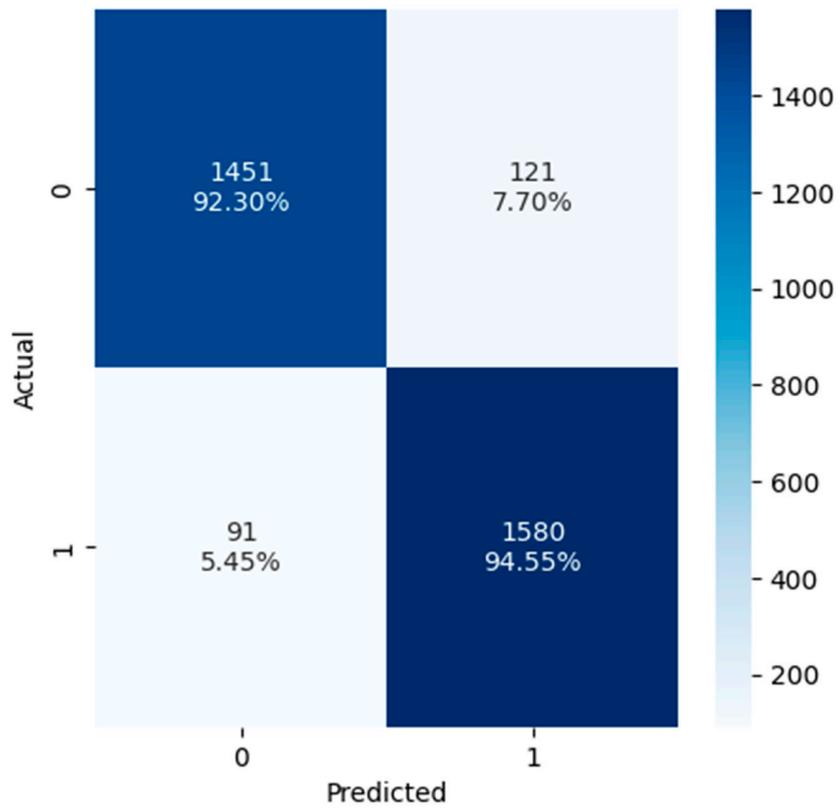


Figure S1: Confusion matrix for Self-ResNet18_Q1 model

The Receiver operator characteristics (ROC) curve of Self-ResNet18_Q1 model is given in Figure 2 below.

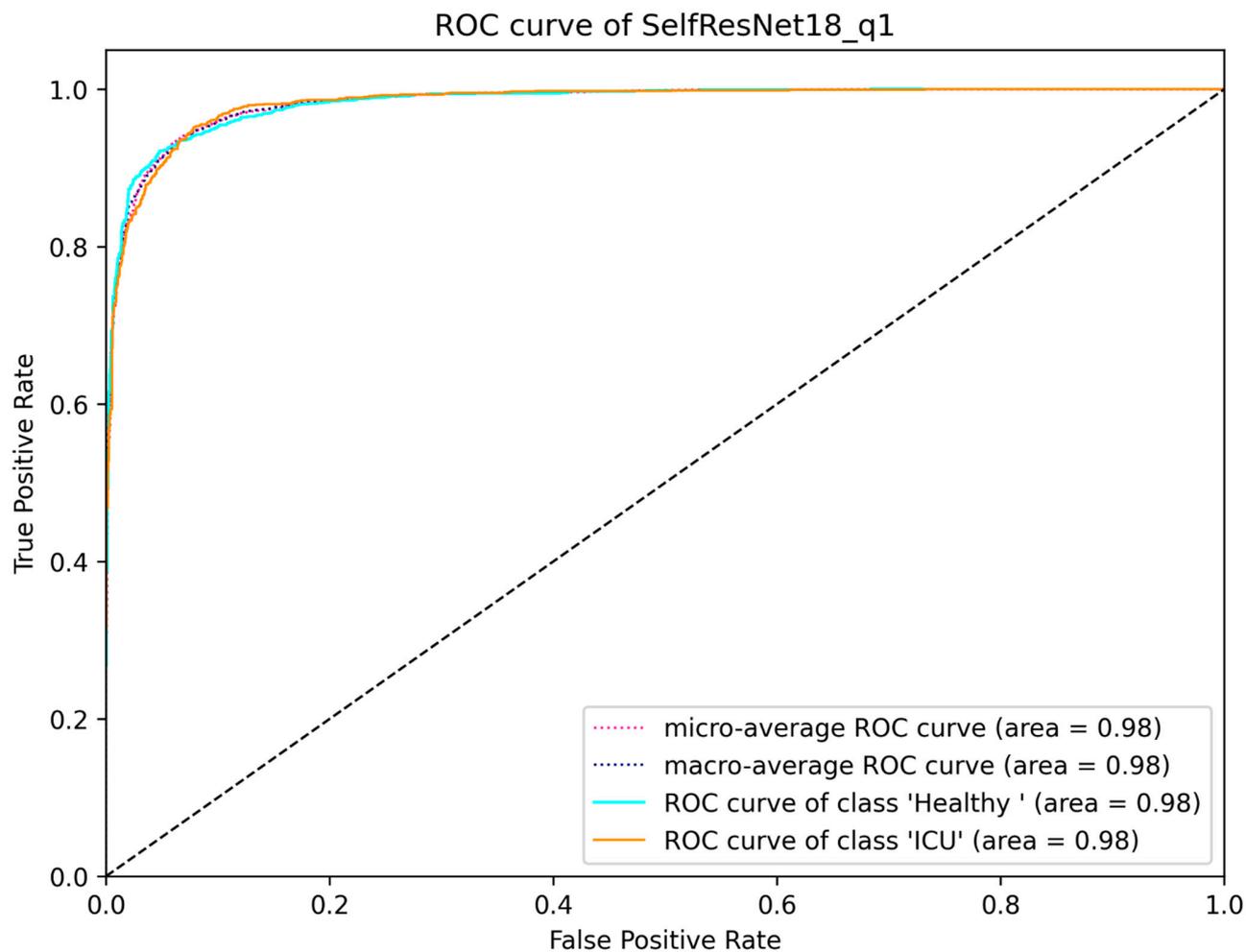
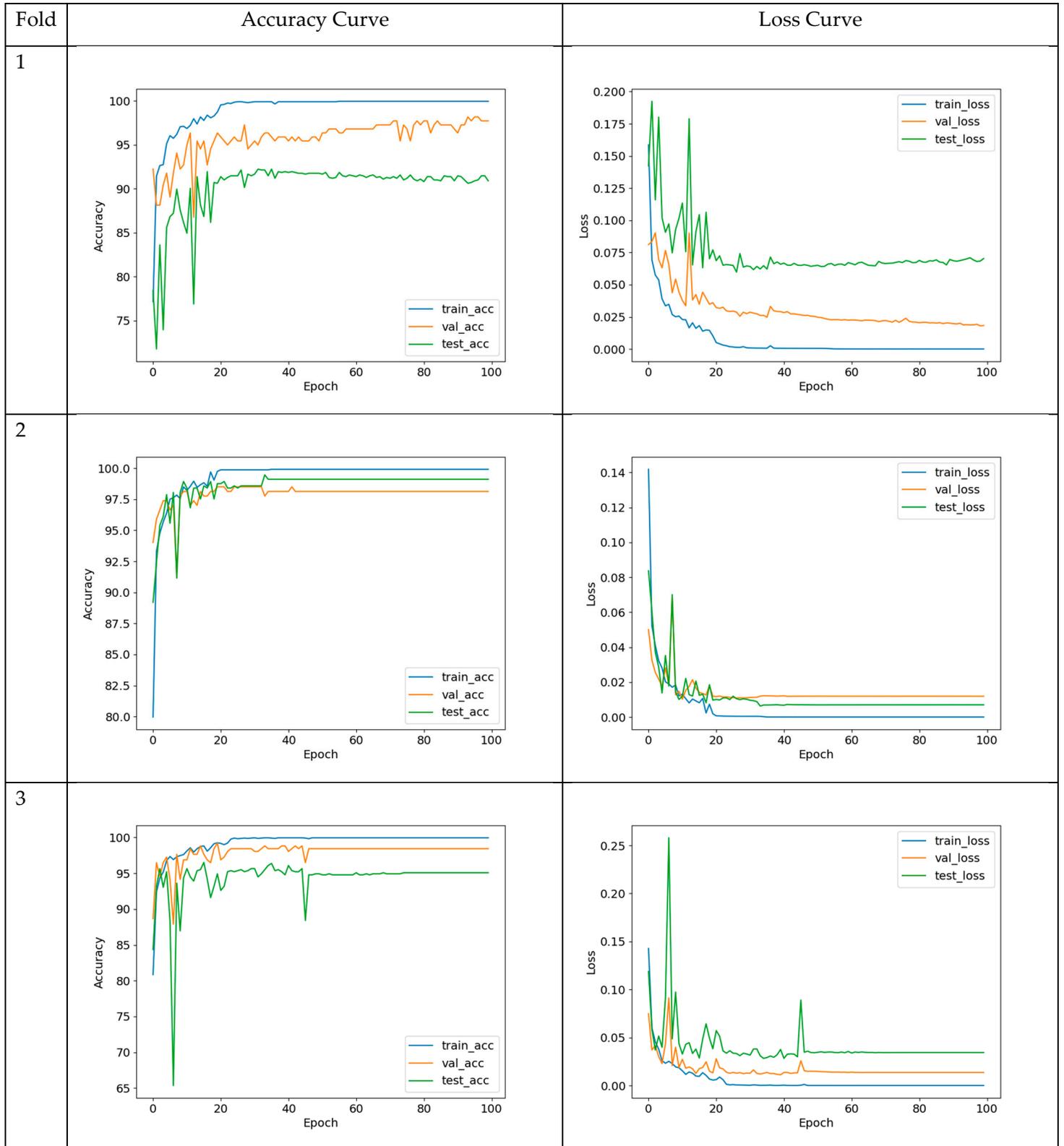


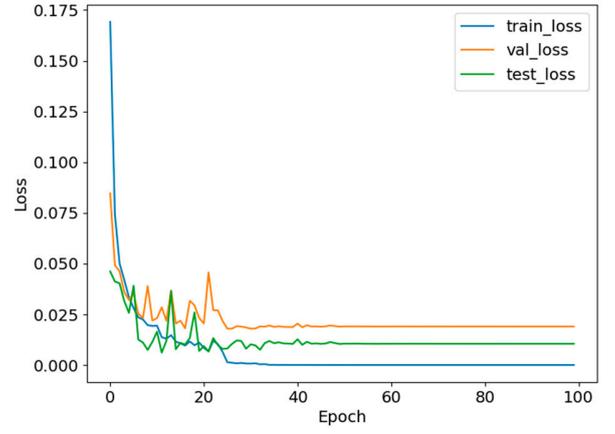
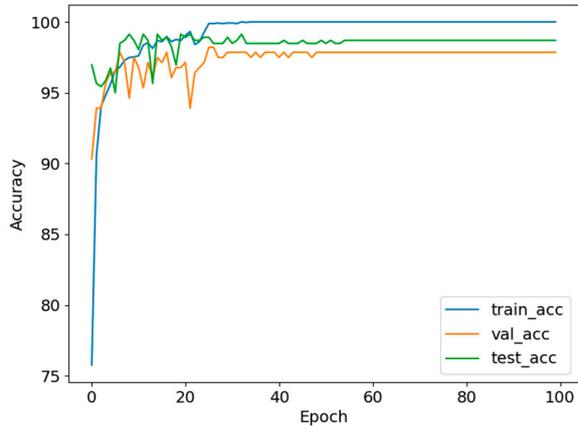
Figure S2: ROC curve of Self-ResNet18_Q1 model

Self-ResNet18_Q3 Model

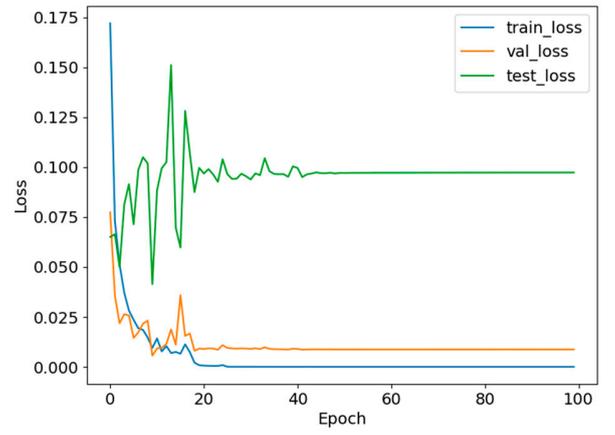
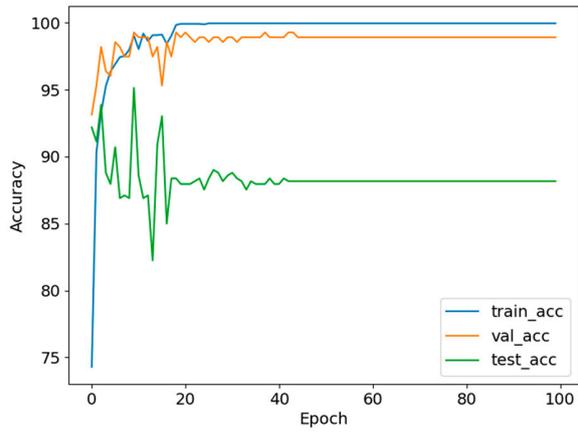
Table S2: Fold-wise learning curves of the Self-ResNet18_Q3 model



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The confusion matrix of Self-ResNet18_Q3 model is given in Figure 3.

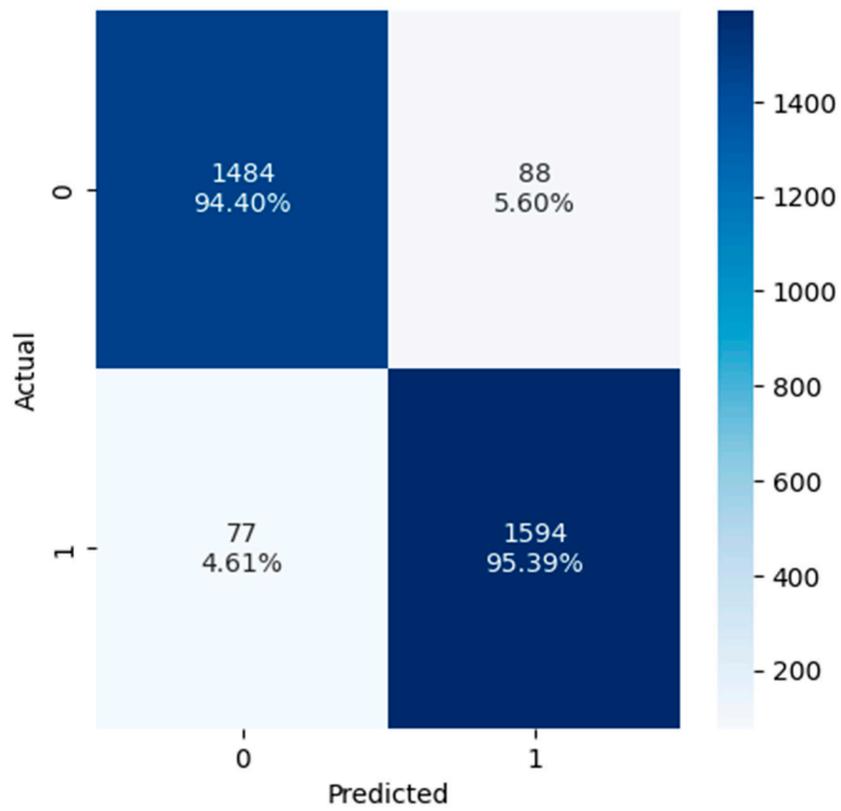


Figure S3: Confusion matrix for Self-ResNet18_Q3 model

The Receiver operator characteristics (ROC) curve of Self-ResNet18_Q3 model is given in Figure 4 below.

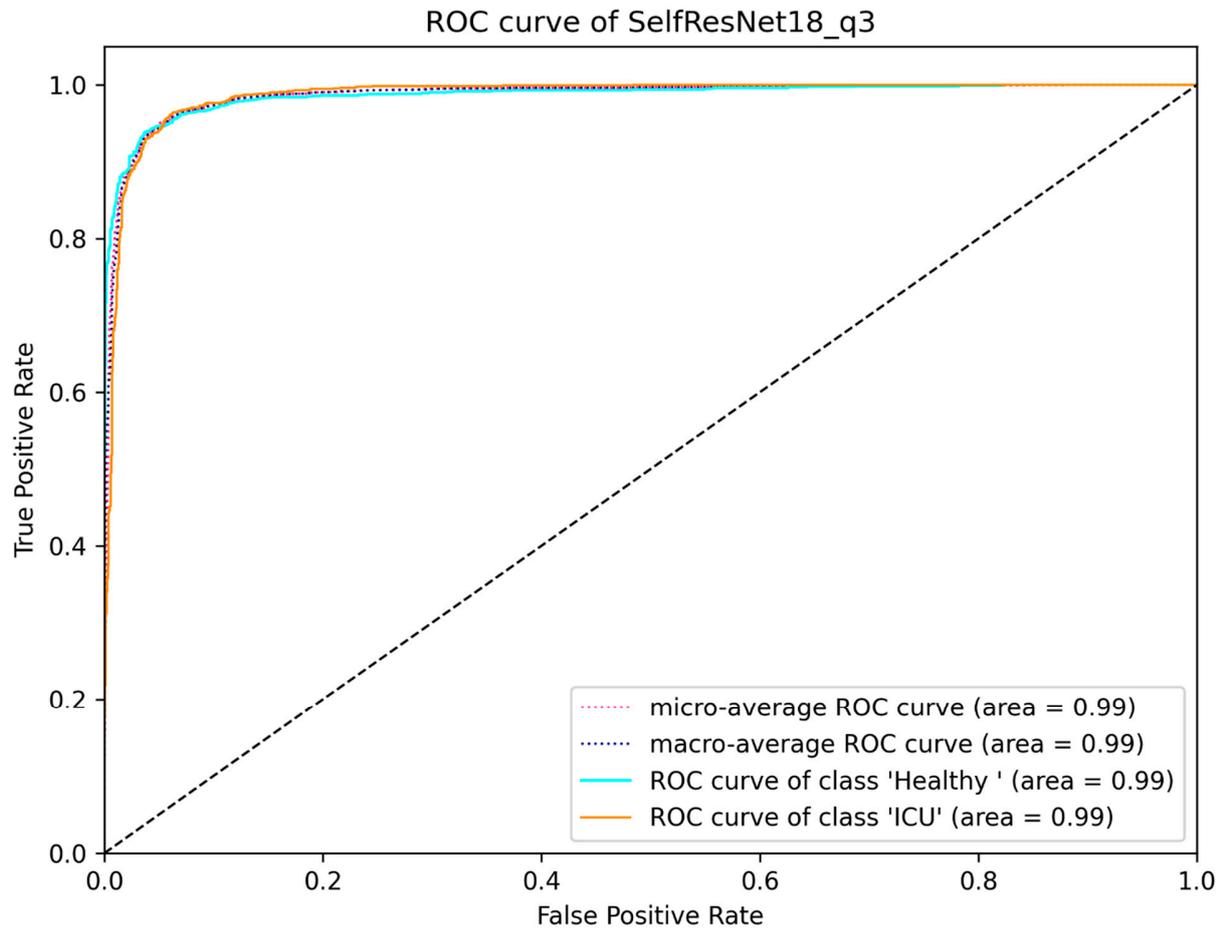
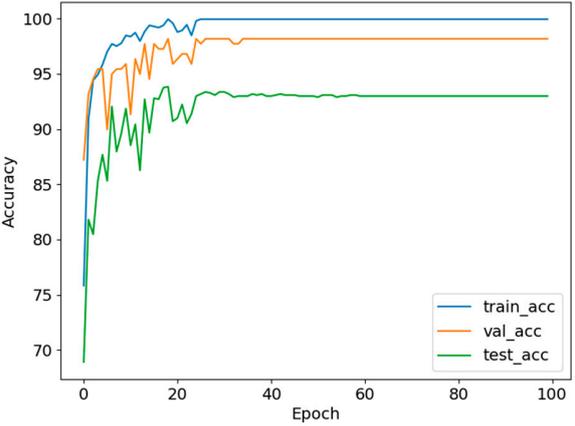
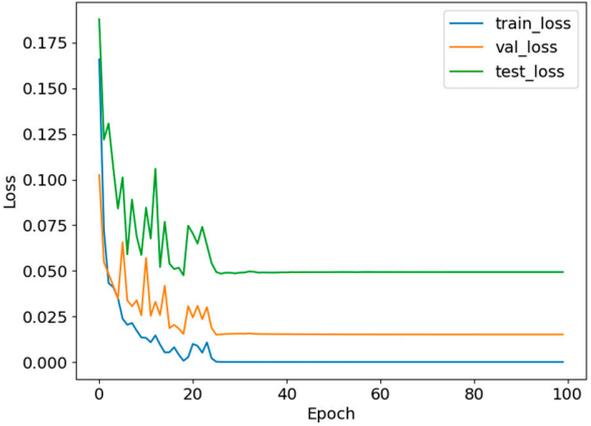
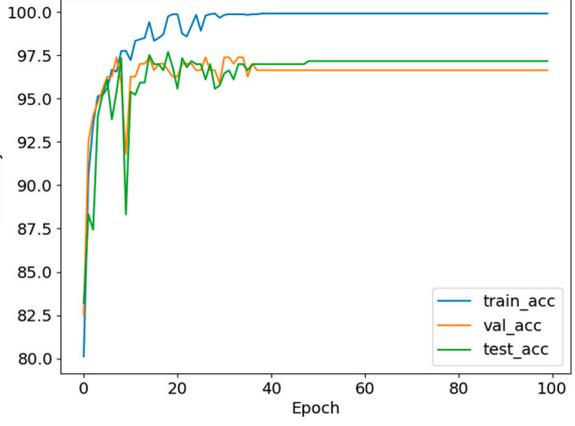
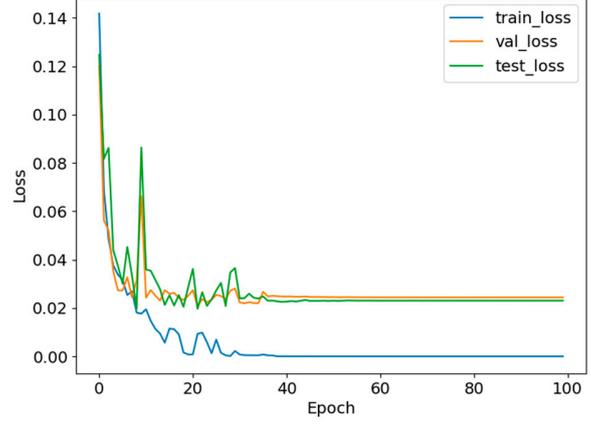
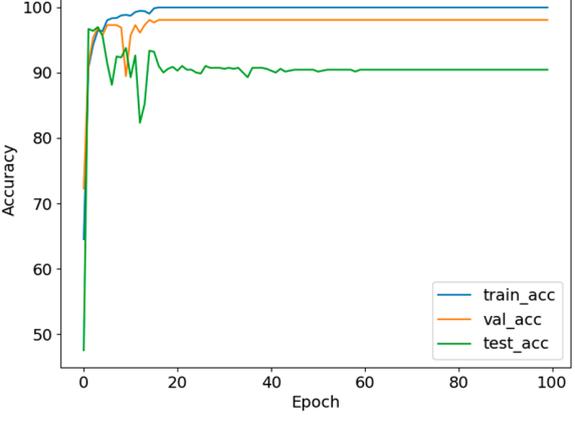
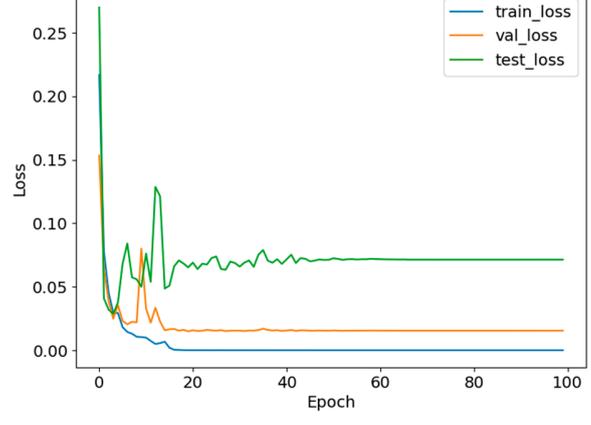


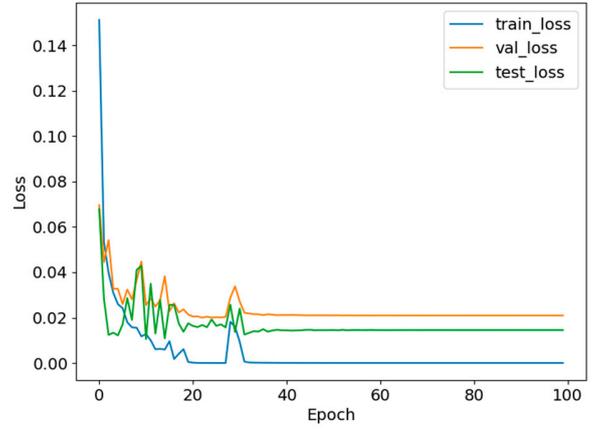
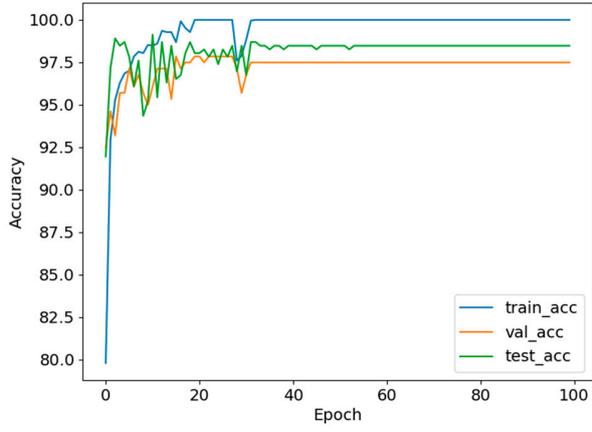
Figure S4: ROC curve of Self-ResNet18_Q3 model

Self-ResNet18_Q5 Model

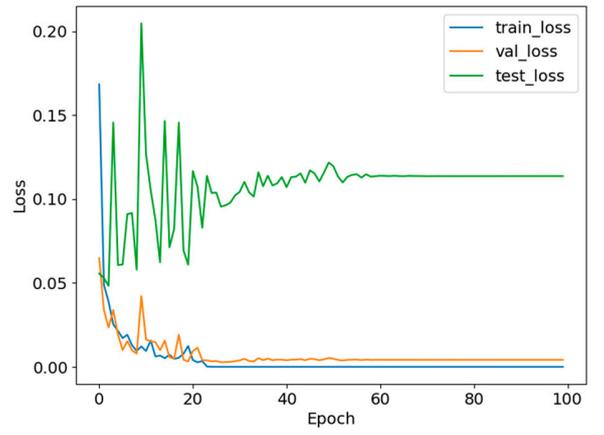
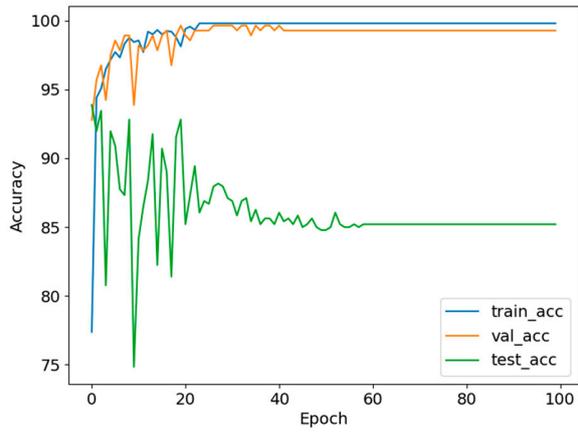
Table S3: Fold-wise learning curves of the Self-ResNet18_Q5 model

Fold	Accuracy Curve	Loss Curve
1	 <p>The Accuracy Curve for Fold 1 shows training accuracy (blue) rising to 100% by epoch 20, validation accuracy (orange) rising to ~98% by epoch 20, and test accuracy (green) rising to ~93% by epoch 20. All metrics stabilize after epoch 20.</p>	 <p>The Loss Curve for Fold 1 shows training loss (blue) dropping to 0.00 by epoch 20, validation loss (orange) dropping to ~0.015 by epoch 20, and test loss (green) dropping to ~0.05 by epoch 20. All losses stabilize after epoch 20.</p>
2	 <p>The Accuracy Curve for Fold 2 shows training accuracy (blue) rising to 100% by epoch 20, validation accuracy (orange) rising to ~96.5% by epoch 20, and test accuracy (green) rising to ~97% by epoch 20. All metrics stabilize after epoch 20.</p>	 <p>The Loss Curve for Fold 2 shows training loss (blue) dropping to 0.00 by epoch 20, validation loss (orange) dropping to ~0.025 by epoch 20, and test loss (green) dropping to ~0.025 by epoch 20. All losses stabilize after epoch 20.</p>
3	 <p>The Accuracy Curve for Fold 3 shows training accuracy (blue) rising to 100% by epoch 20, validation accuracy (orange) rising to ~99% by epoch 20, and test accuracy (green) rising to ~91% by epoch 20. All metrics stabilize after epoch 20.</p>	 <p>The Loss Curve for Fold 3 shows training loss (blue) dropping to 0.00 by epoch 20, validation loss (orange) dropping to ~0.015 by epoch 20, and test loss (green) dropping to ~0.07 by epoch 20. All losses stabilize after epoch 20.</p>

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The confusion matrix of Self-ResNet18_Q5 model is given in Figure 5.

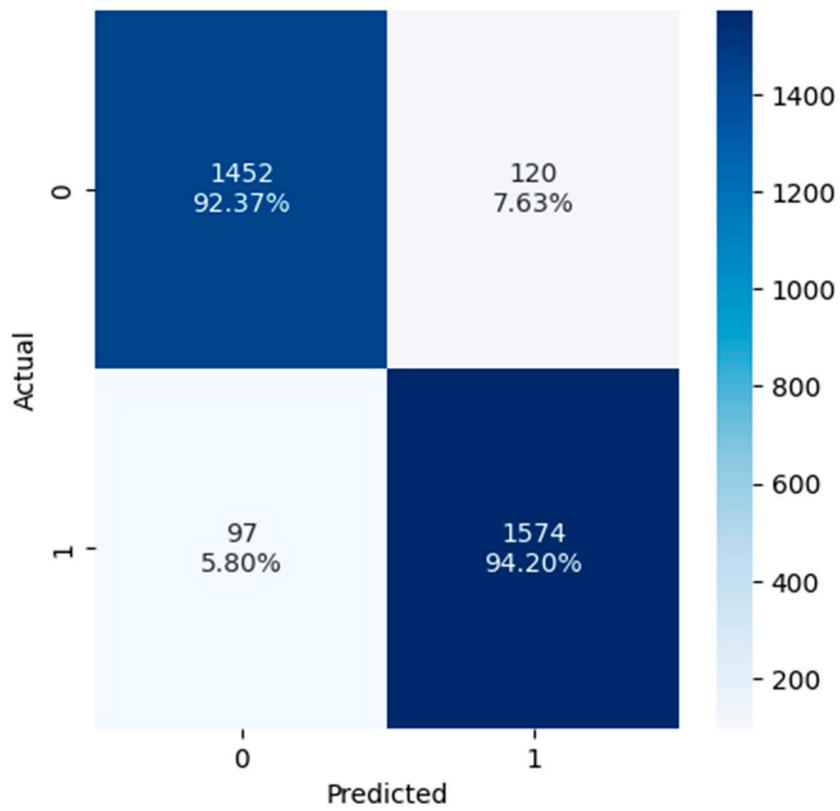


Figure S5: Confusion matrix of Self-ResNet18_Q5 model

The ROC curve of Self-ResNet18_Q5 model is given in Figure 6 below.

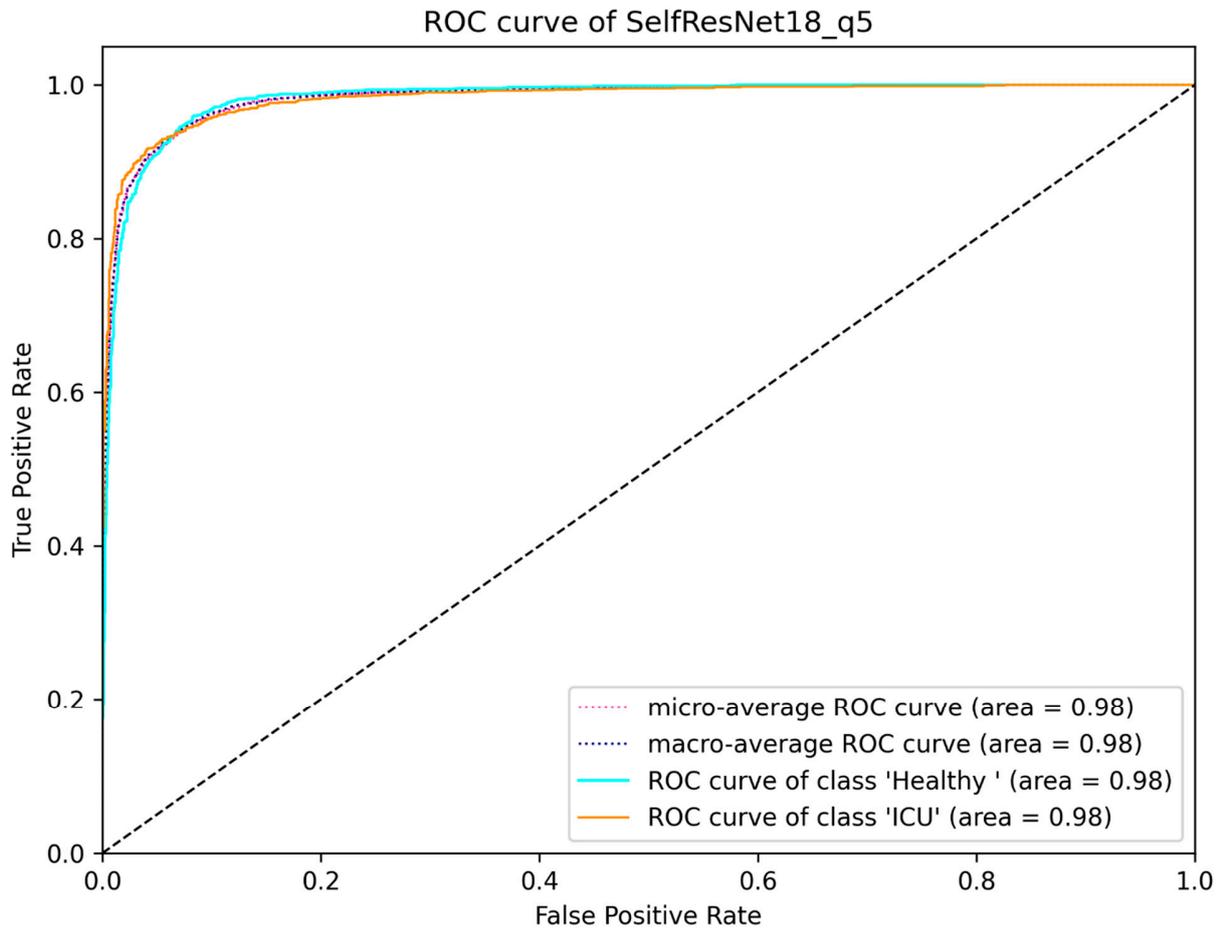
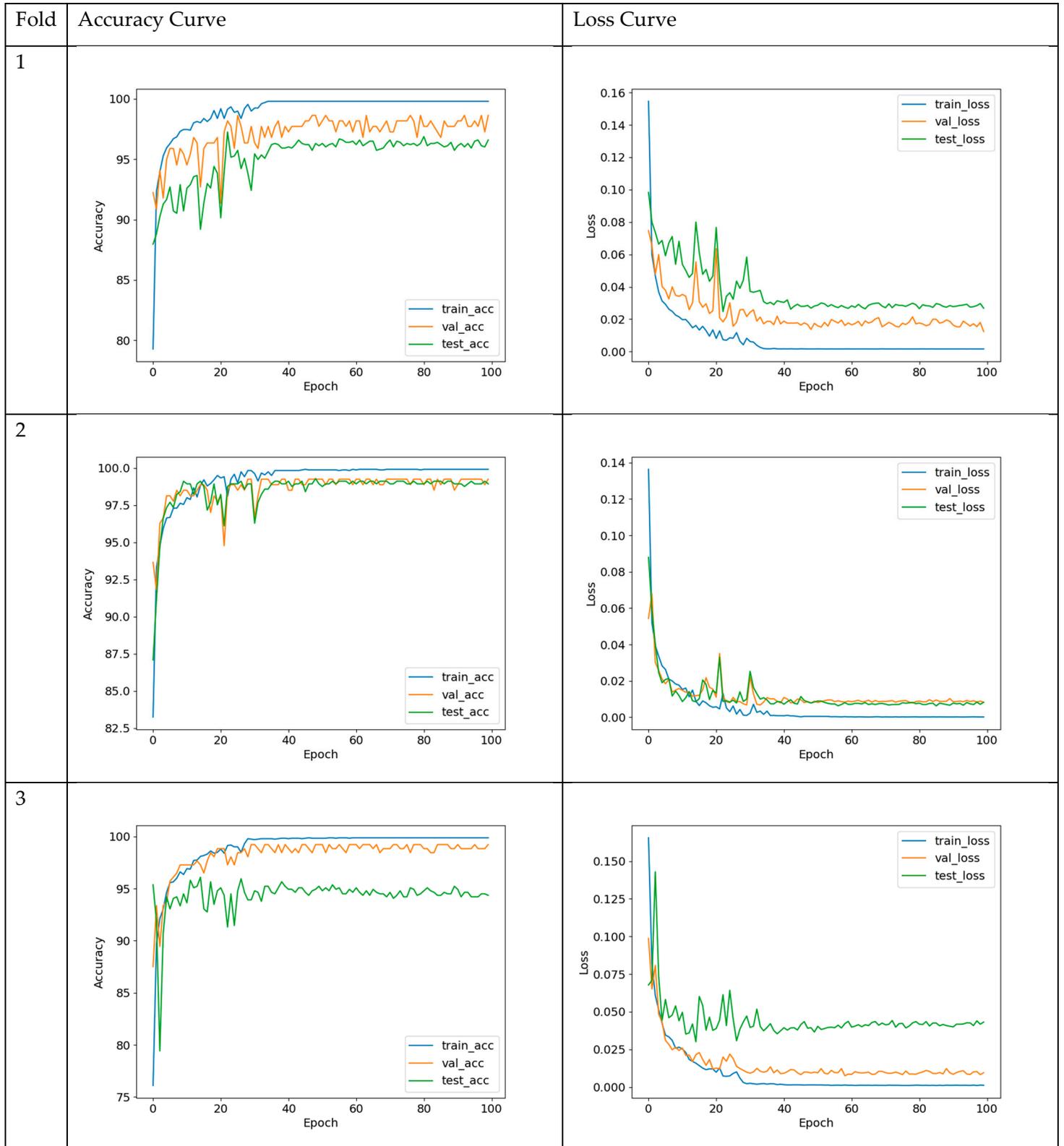


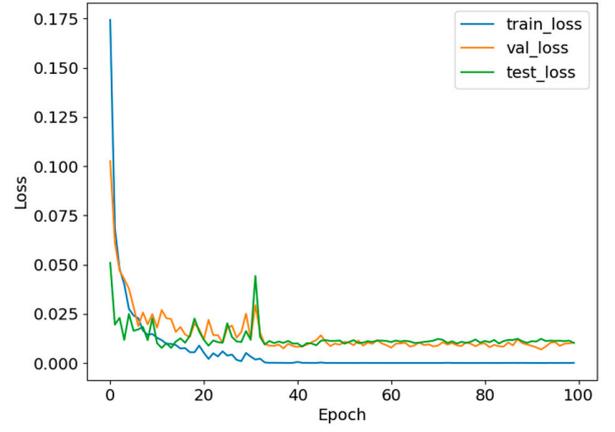
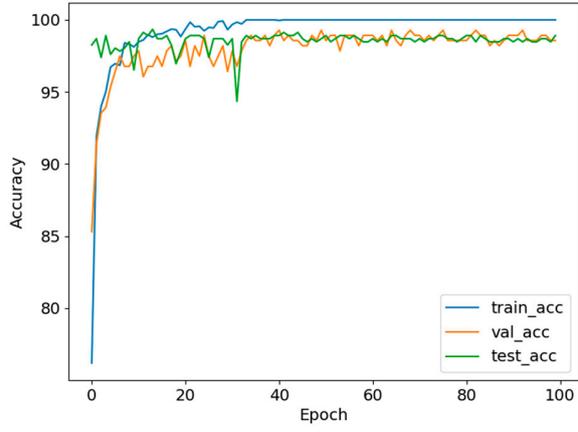
Figure S6: ROC curve of Self-ResNet18_Q5 model

Self-ResAttentionNet18_Q1 Model

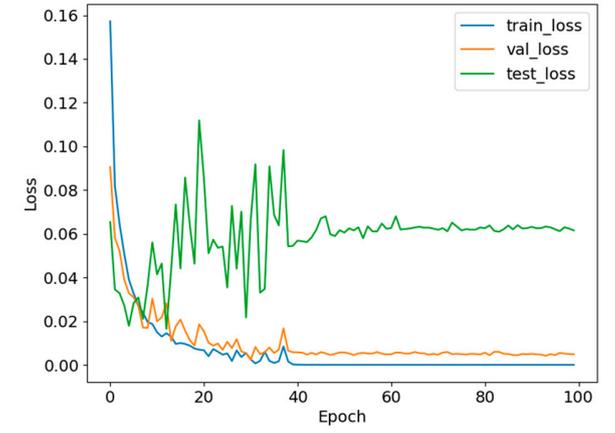
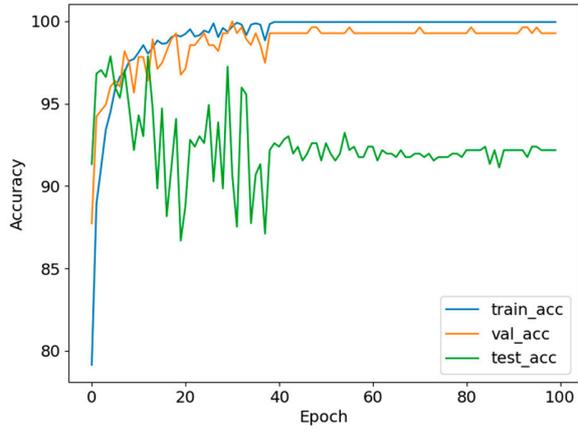
Table S4: Fold-wise learning curves of the Self-ResAttentionNet18_Q1 model



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The confusion matrix of Self-ResAttentioNet18_Q1 model is given in Figure 7.

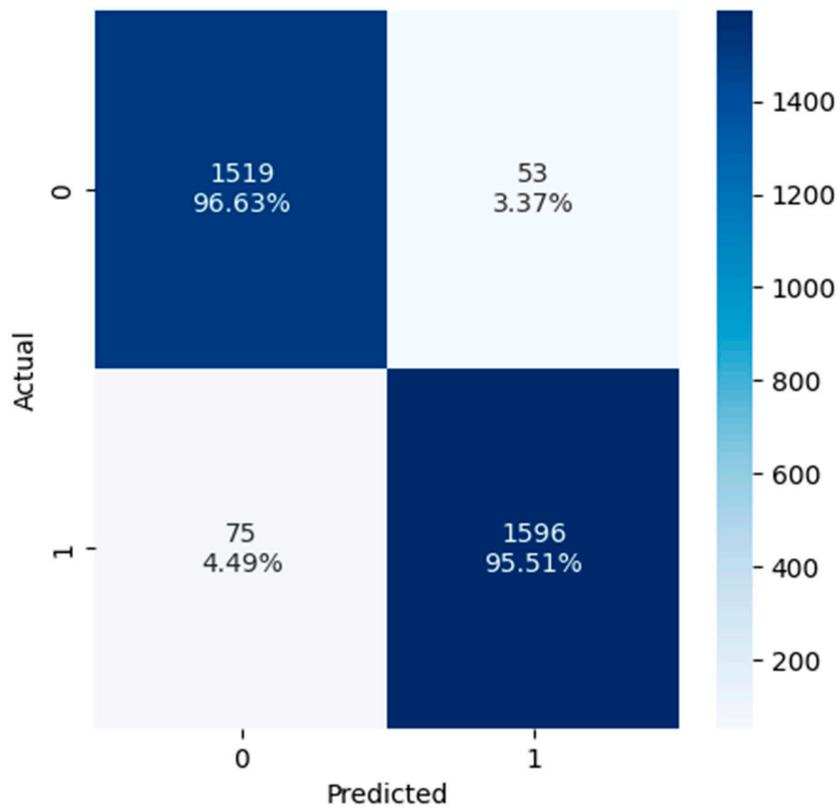


Figure S7: Confusion matrix of Self-ResAttentioNet18_Q1 model

The ROC curve of Self-ResAttentioNet18_Q1 model is given in Figure 8 below.

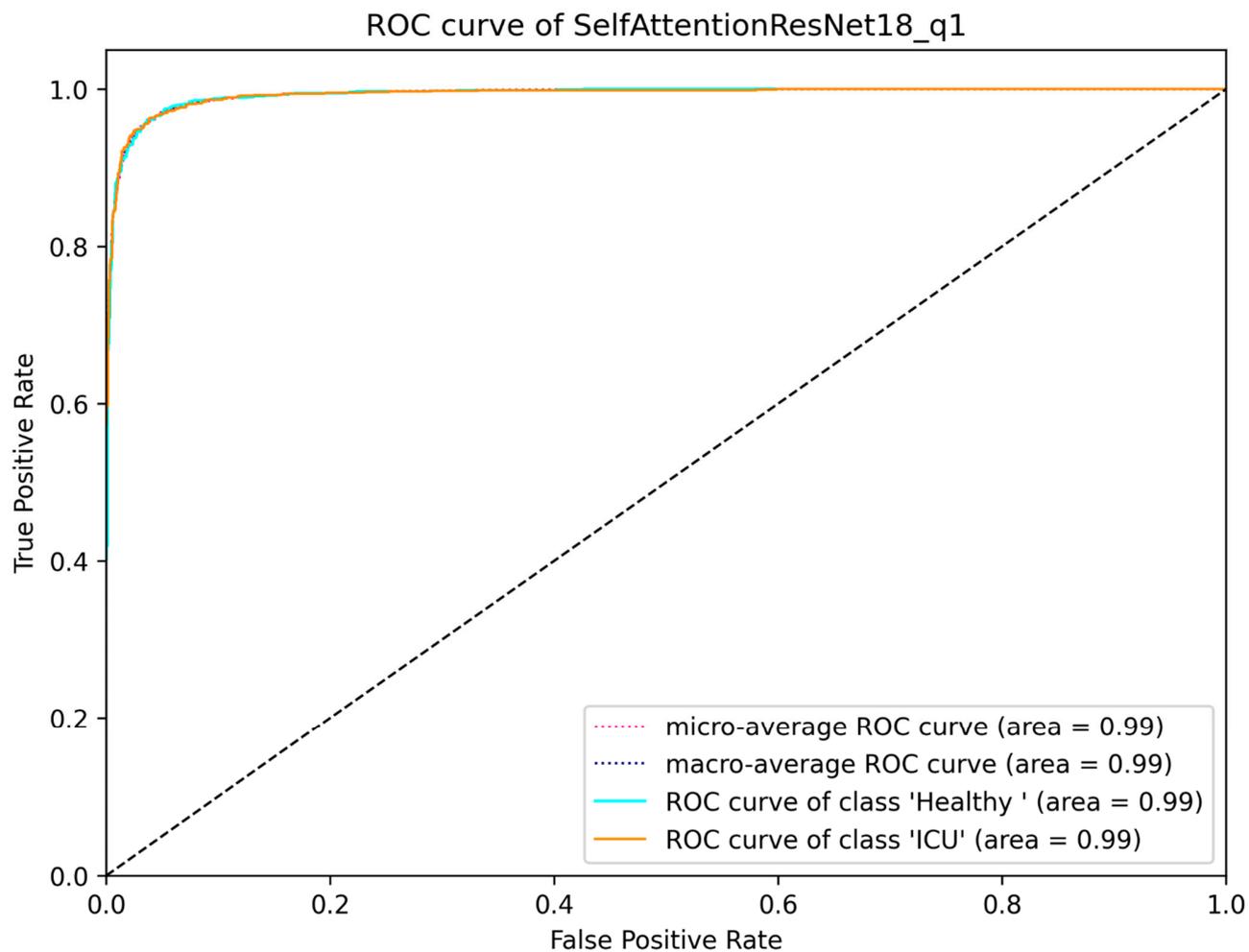
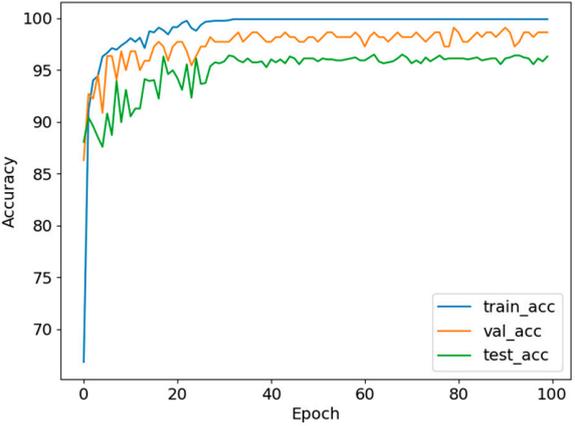
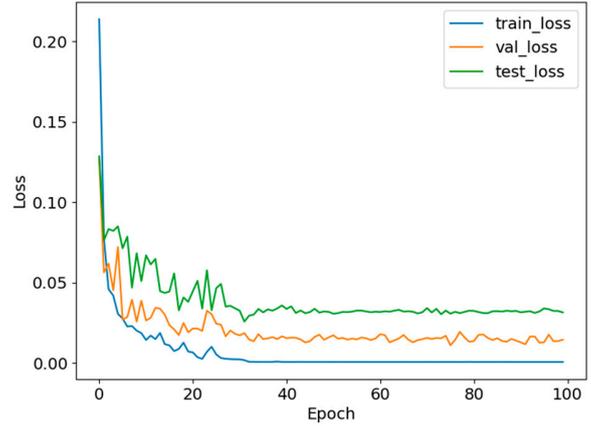
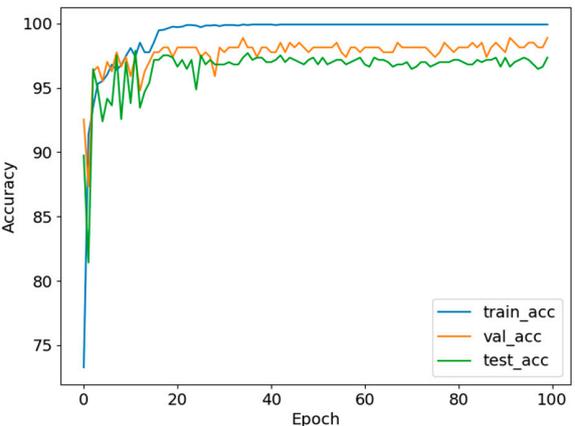
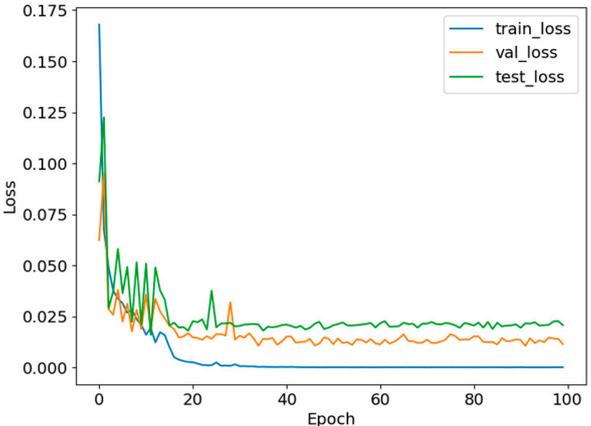
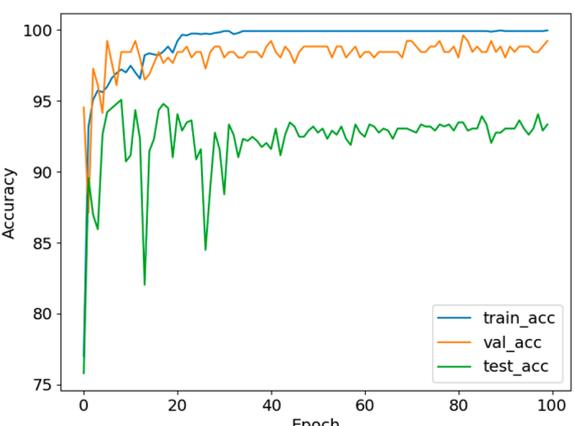
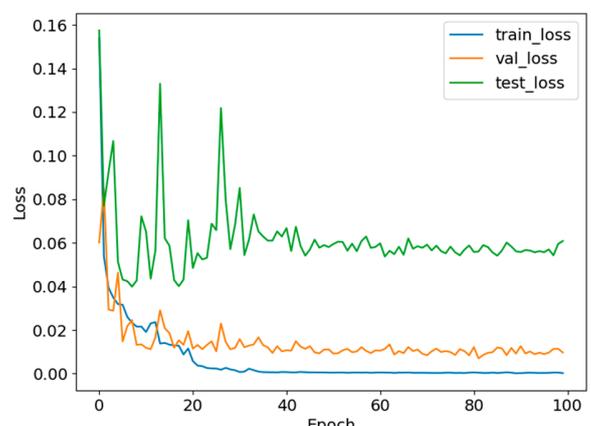


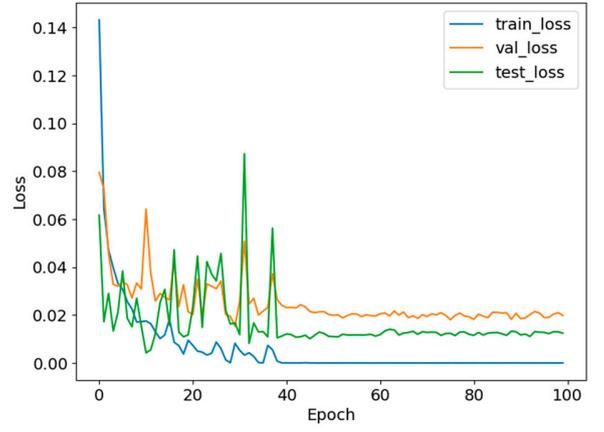
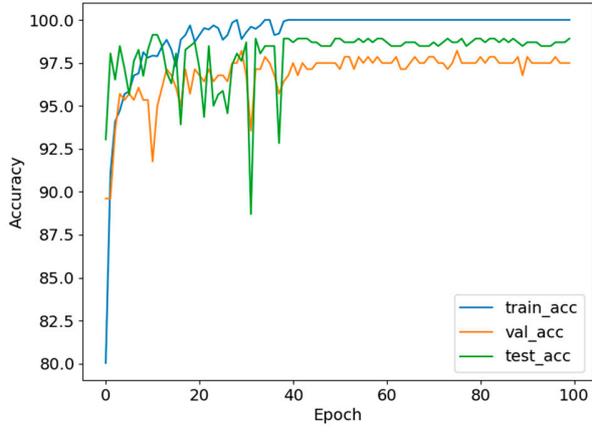
Figure S8: ROC curve of Self-ResAttentioNet18_Q1 model

Self-ResAttentionNet18_Q3 Model

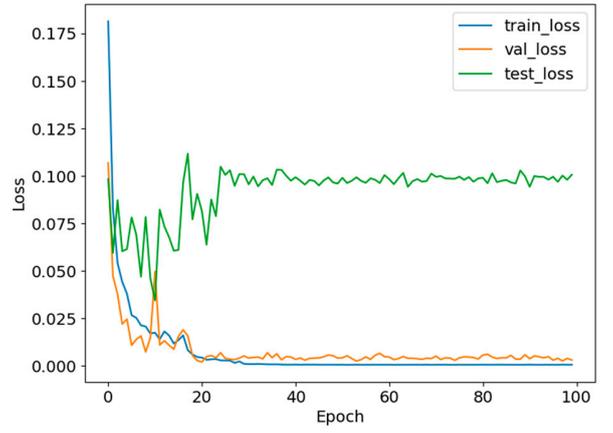
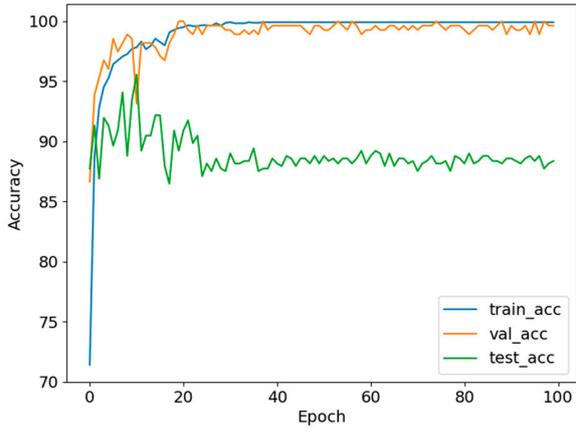
Table S5: Fold-wise learning curves of the Self-ResAttentionNet18_Q3 model

Fold	Accuracy Curve	Loss Curve
1	 <p>Accuracy Curve for Fold 1: The plot shows Accuracy (Y-axis, 70-100) versus Epoch (X-axis, 0-100). Three lines represent train_acc (blue), val_acc (orange), and test_acc (green). All three curves rise sharply from epoch 0 to 20, reaching approximately 95-100% accuracy, and then stabilize with minor fluctuations.</p>	 <p>Loss Curve for Fold 1: The plot shows Loss (Y-axis, 0.00-0.20) versus Epoch (X-axis, 0-100). Three lines represent train_loss (blue), val_loss (orange), and test_loss (green). All three curves decrease sharply from epoch 0 to 20, reaching approximately 0.01-0.04 loss, and then stabilize.</p>
2	 <p>Accuracy Curve for Fold 2: The plot shows Accuracy (Y-axis, 75-100) versus Epoch (X-axis, 0-100). Three lines represent train_acc (blue), val_acc (orange), and test_acc (green). All three curves rise sharply from epoch 0 to 20, reaching approximately 95-100% accuracy, and then stabilize with minor fluctuations.</p>	 <p>Loss Curve for Fold 2: The plot shows Loss (Y-axis, 0.000-0.175) versus Epoch (X-axis, 0-100). Three lines represent train_loss (blue), val_loss (orange), and test_loss (green). All three curves decrease sharply from epoch 0 to 20, reaching approximately 0.01-0.025 loss, and then stabilize.</p>
3	 <p>Accuracy Curve for Fold 3: The plot shows Accuracy (Y-axis, 75-100) versus Epoch (X-axis, 0-100). Three lines represent train_acc (blue), val_acc (orange), and test_acc (green). train_acc and val_acc rise sharply and stabilize near 100%. test_acc rises to about 95% but exhibits significant oscillations and a dip around epoch 25.</p>	 <p>Loss Curve for Fold 3: The plot shows Loss (Y-axis, 0.00-0.16) versus Epoch (X-axis, 0-100). Three lines represent train_loss (blue), val_loss (orange), and test_loss (green). train_loss and val_loss decrease and stabilize near 0.01. test_loss decreases to about 0.06 but exhibits significant oscillations throughout the training process.</p>

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The confusion matrix of Self-ResAttentioNet18_Q3 model is given in Figure 9.

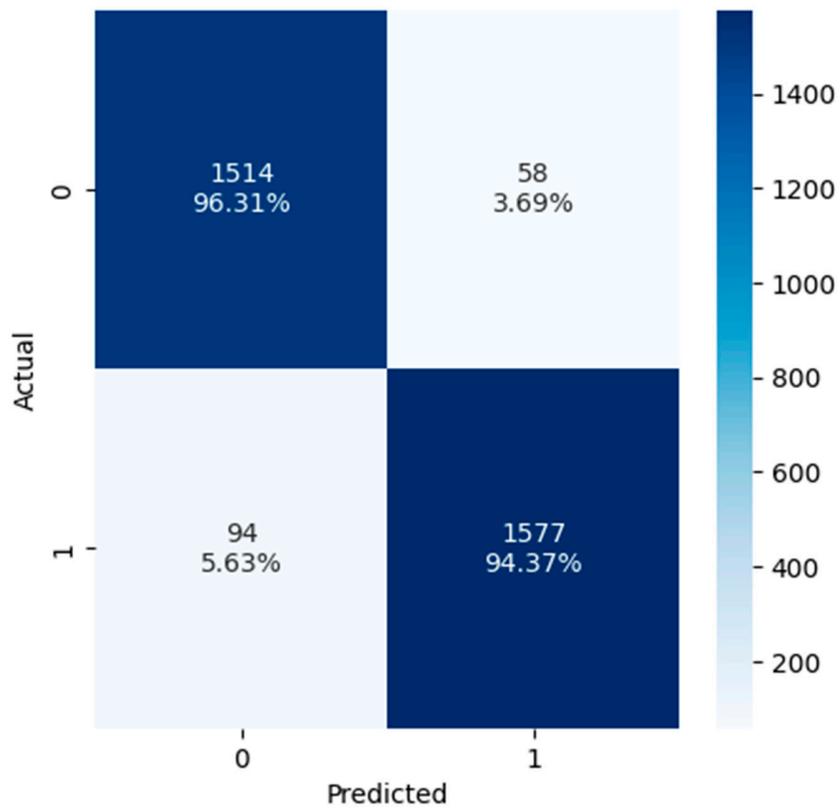


Figure S9: Confusion matrix of Self-ResAttentioNet18_Q3 model

The ROC curve of Self-ResAttentionNet18_Q3 model is given in Figure 10 below.

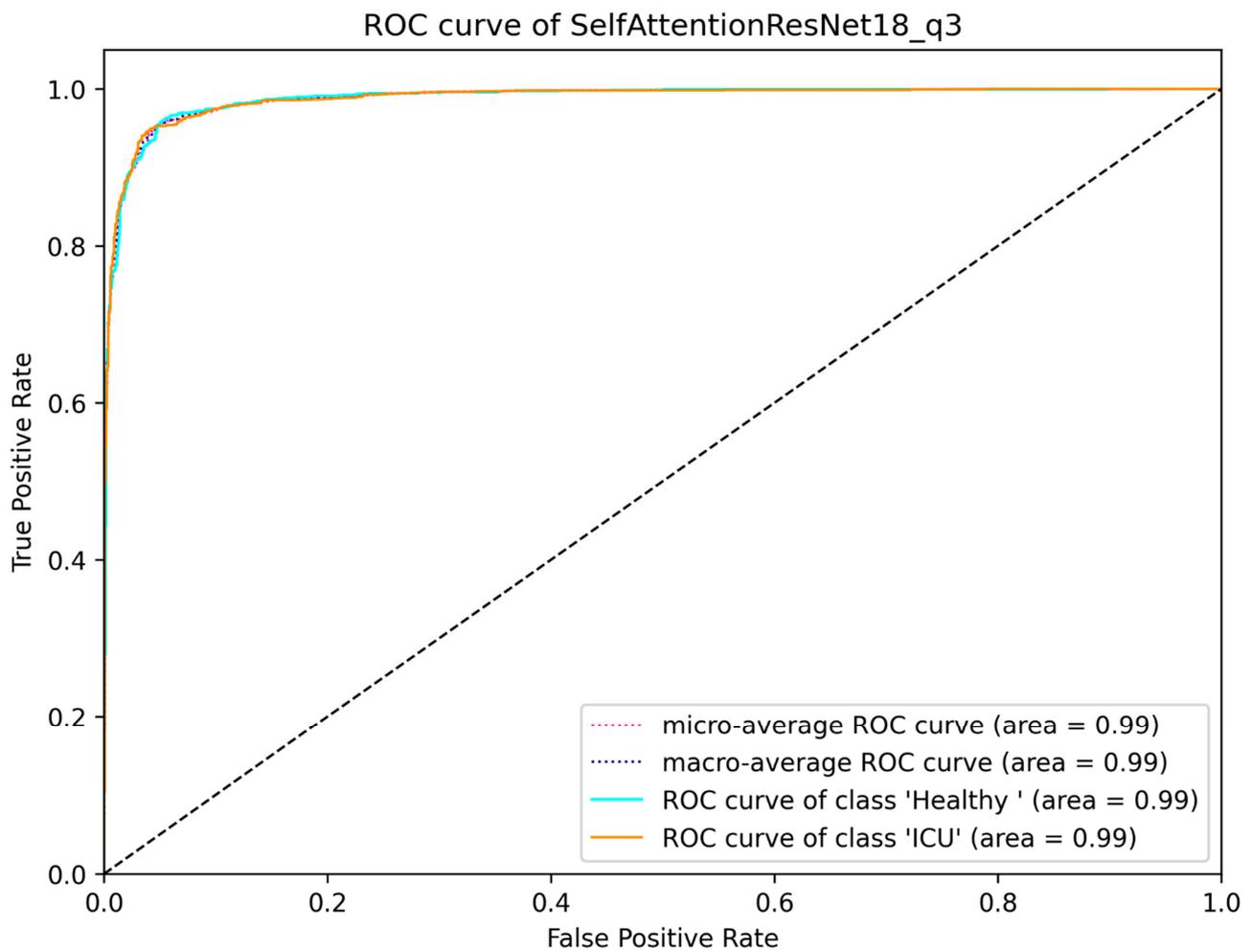
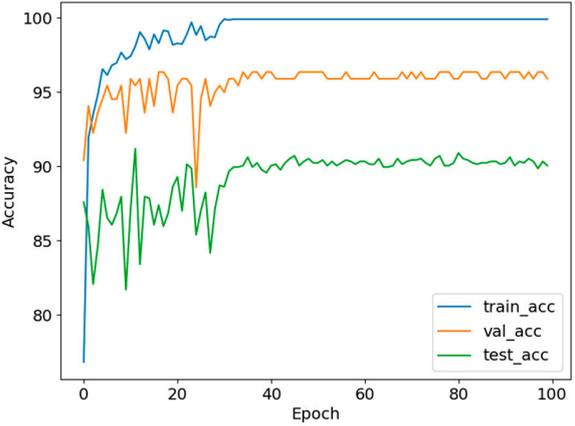
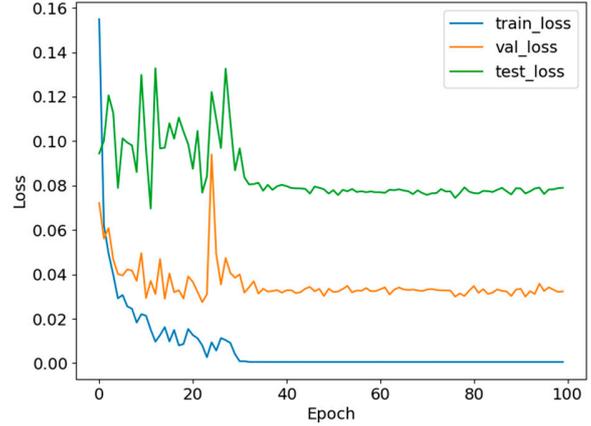
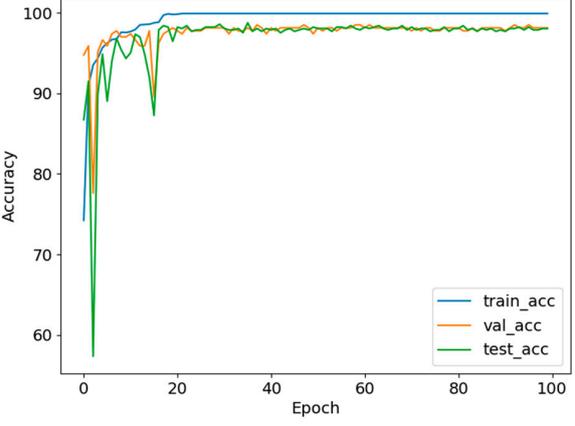
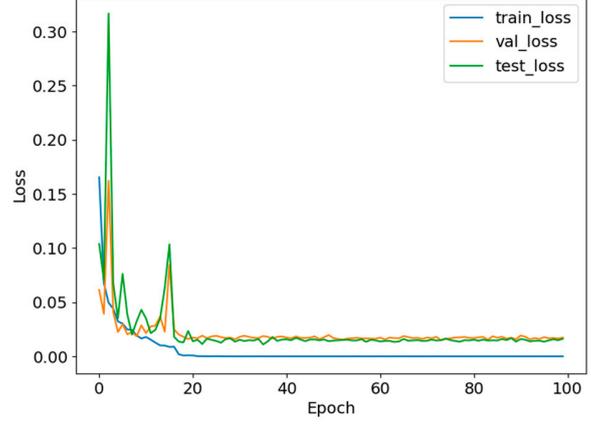
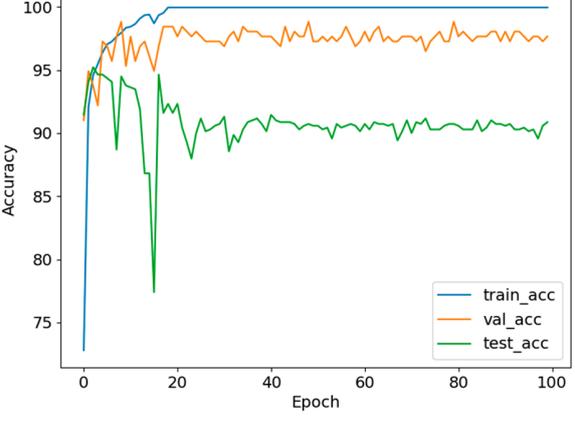
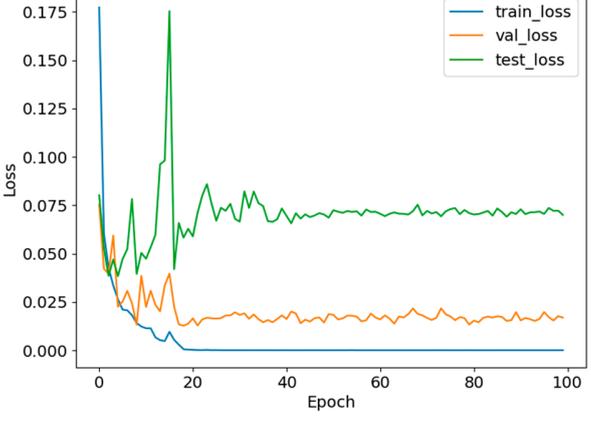


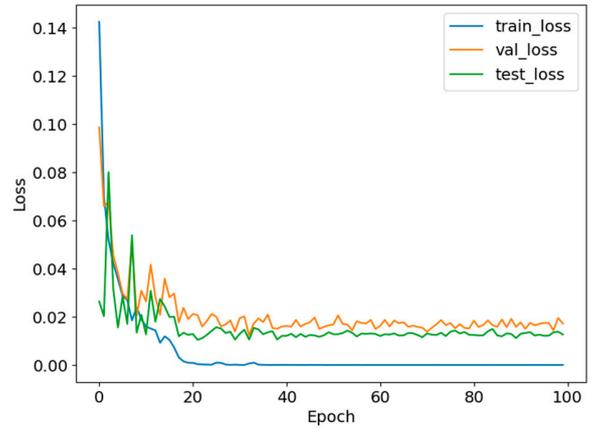
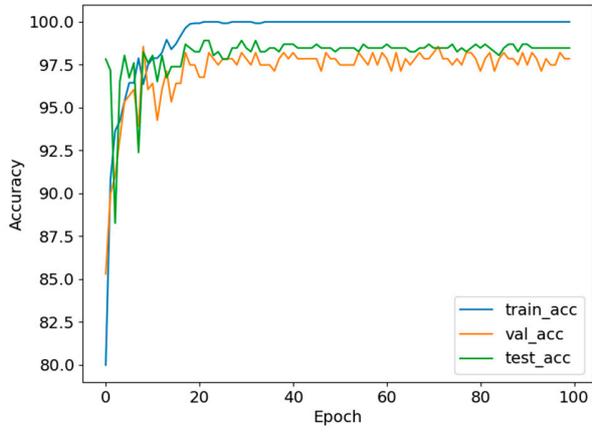
Figure S10: ROC curve of Self-ResAttentionNet18_Q3 model

Self-ResAttentionNet18_Q5 Model

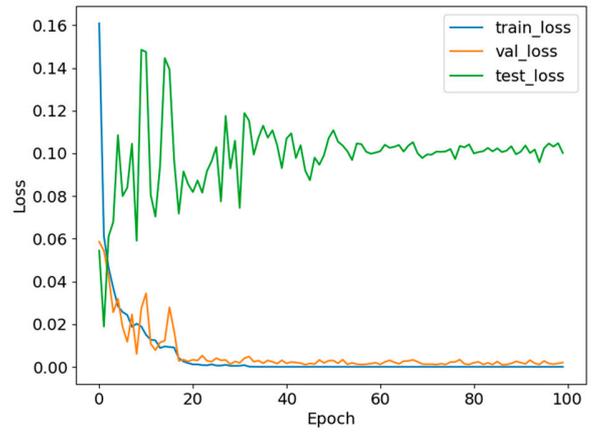
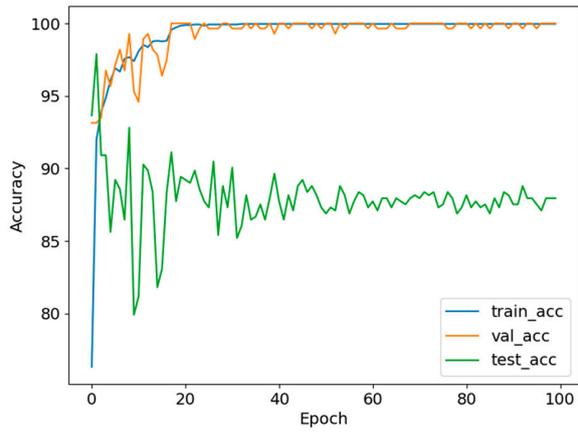
Table S6: Fold-wise learning curves of the Self-ResAttentionNet18_Q5 model

Fold	Accuracy Curve	Loss Curve
1	 <p>Accuracy Curve for Fold 1: The plot shows Accuracy (Y-axis, 80-100) versus Epoch (X-axis, 0-100). Three lines are plotted: train_acc (blue), val_acc (orange), and test_acc (green). train_acc rises quickly to ~98% by epoch 20 and stays there. val_acc rises to ~96% by epoch 20 and stays there. test_acc rises to ~90% by epoch 20 and stays there.</p>	 <p>Loss Curve for Fold 1: The plot shows Loss (Y-axis, 0.00-0.16) versus Epoch (X-axis, 0-100). Three lines are plotted: train_loss (blue), val_loss (orange), and test_loss (green). train_loss drops to ~0.00 by epoch 20. val_loss drops to ~0.03 by epoch 20. test_loss drops to ~0.08 by epoch 20.</p>
2	 <p>Accuracy Curve for Fold 2: The plot shows Accuracy (Y-axis, 60-100) versus Epoch (X-axis, 0-100). Three lines are plotted: train_acc (blue), val_acc (orange), and test_acc (green). All three lines rise quickly to ~98% by epoch 20 and stay there.</p>	 <p>Loss Curve for Fold 2: The plot shows Loss (Y-axis, 0.00-0.30) versus Epoch (X-axis, 0-100). Three lines are plotted: train_loss (blue), val_loss (orange), and test_loss (green). All three lines drop quickly to ~0.01 by epoch 20.</p>
3	 <p>Accuracy Curve for Fold 3: The plot shows Accuracy (Y-axis, 75-100) versus Epoch (X-axis, 0-100). Three lines are plotted: train_acc (blue), val_acc (orange), and test_acc (green). train_acc rises to ~98% by epoch 20. val_acc rises to ~96% by epoch 20. test_acc rises to ~90% by epoch 20.</p>	 <p>Loss Curve for Fold 3: The plot shows Loss (Y-axis, 0.000-0.175) versus Epoch (X-axis, 0-100). Three lines are plotted: train_loss (blue), val_loss (orange), and test_loss (green). train_loss drops to ~0.00 by epoch 20. val_loss drops to ~0.015 by epoch 20. test_loss drops to ~0.07 by epoch 20.</p>

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The confusion matrix of Self-ResAttentioNet18_Q5 model is given in Figure 11.

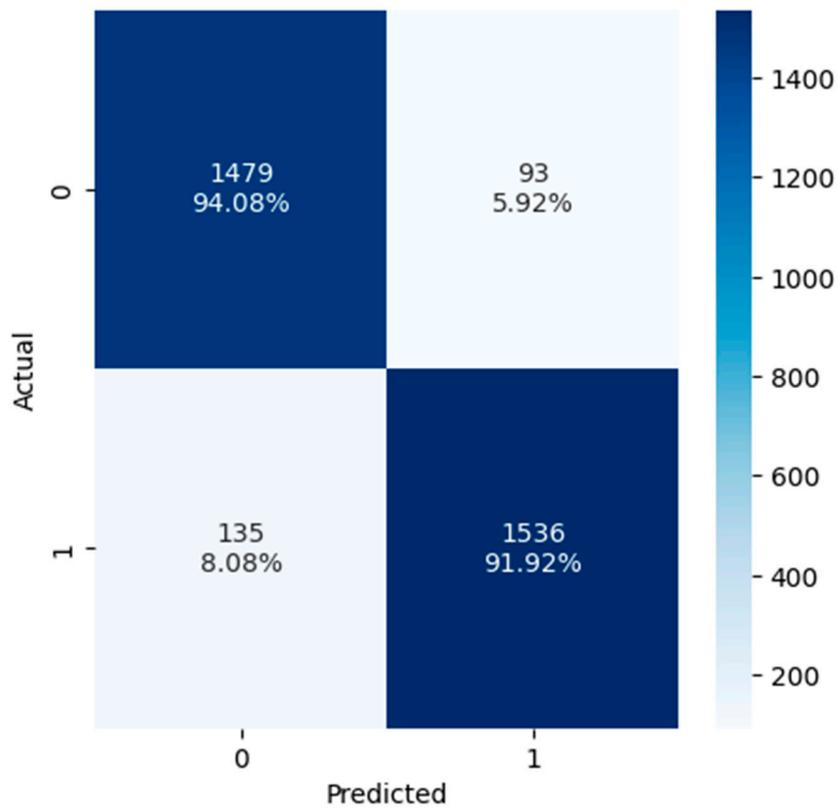


Figure S11: Confusion matrix of Self-ResAttentioNet18_Q5 model

The ROC curve of Self-ResAttentioNet18_Q5 model is given in Figure 12 below.

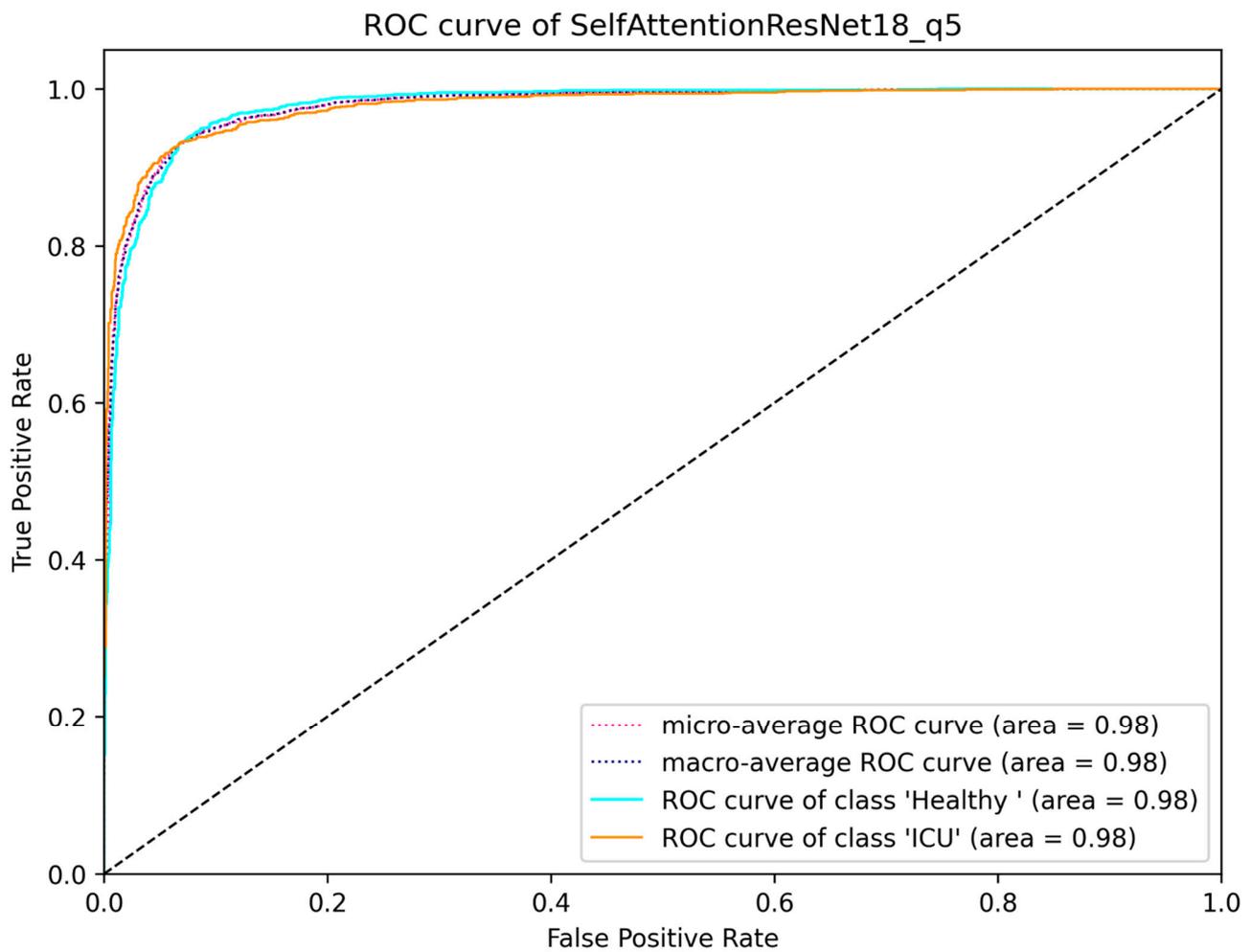


Figure S12: ROC curve of Self-ResAttentioNet18_Q5 model