**Supp. Table 2.** Comparisons the CNN models built from scratch and transfer learning.

|  |  |  |
| --- | --- | --- |
|  | **Transfer learning** | **Learning from scratch** |
| **Performance measures** | 3D-VGGNet | 3D-ResNet | 3D-VGGNet | 3D-ResNet |
| Training loss | 0.135 | 0.0275 | 0.1336 | - |
| Validation loss | 0.0961 | 0.1177 | 0.8907 | - |
| Validation accuracy | 0.97 | 0.95 | 0.759 | - |
| Validation AUC | 0.9942 | 0.9946 | 0.7401 | - |
| Epoch number | 50 | 80 | 100 | - |
| Batch size | 5 | 4 | 5 | 2 |
| Runtime per epoch (Avg.) | 123s | 475s | 788s | Out of memory |