Average Accuracy, Loss, And F1 For Each Model During Training Process Across 8 Runs. Caption Only Without Pretraining F1 Score Caption Only Without Pretraining Loss **Caption Only Without Pretraining Accuracy** 8.0 80 8.0 75 0.75 0.75 70 0.7 Accuracy 0.65 65 0.65 0.6 60 0.6 0.55 55 0.55 0.45 0.5 45 0.4 500 1500 500 2000 500 1500 2000 0 1000 2000 0 1000 1500 0 1000 **Training Step Training Step Training Step** Caption Only With Pretraining Accuracy Caption Only With Pretraining Loss Caption Only With Pretraining F1 Score 1 100 8.0 0.7 0.9 90 0.6 8.0 80 F1 Score Accuracy 0.5 0.7 70 0.4 0.6 0.3 60 0.2 0.1 0.4 40 0 2000 500 1500 0 1000 2000 0 500 1500 0 500 1500 2000 1000 1000 **Training Step Training Step Training Step** E-MCT Without Pretraining Loss E-MCT Without Pretraining F1 Score **E-MCT** Without Pretraining Accuracy 0.9 0.8 80 8.0 70 F1 Score 0.7 Accuracy Loss 0.6 0.6 60 0.5 0.4 0.4 40 500 1000 1500 500 1500 2000 500 0 2000 0 0 1500 2000 1000 1000 **Training Step Training Step Training Step** E-MCT With Pretraining Loss E-MCT With Pretraining F1 Score E-MCT With Pretraining Accuracy 100 8.0 0.9 90 0.6 8.0 80 F1 Score Accuracy Loss 0.5 0.7 70 0.4 0.6 60 0.3 0.2 0.1 0.4 40 1500 2000 0 500 1000 500 1500 2000 500 1500 2000 1000 1000 0 0 **Training Step Training Step Training Step**

Loss