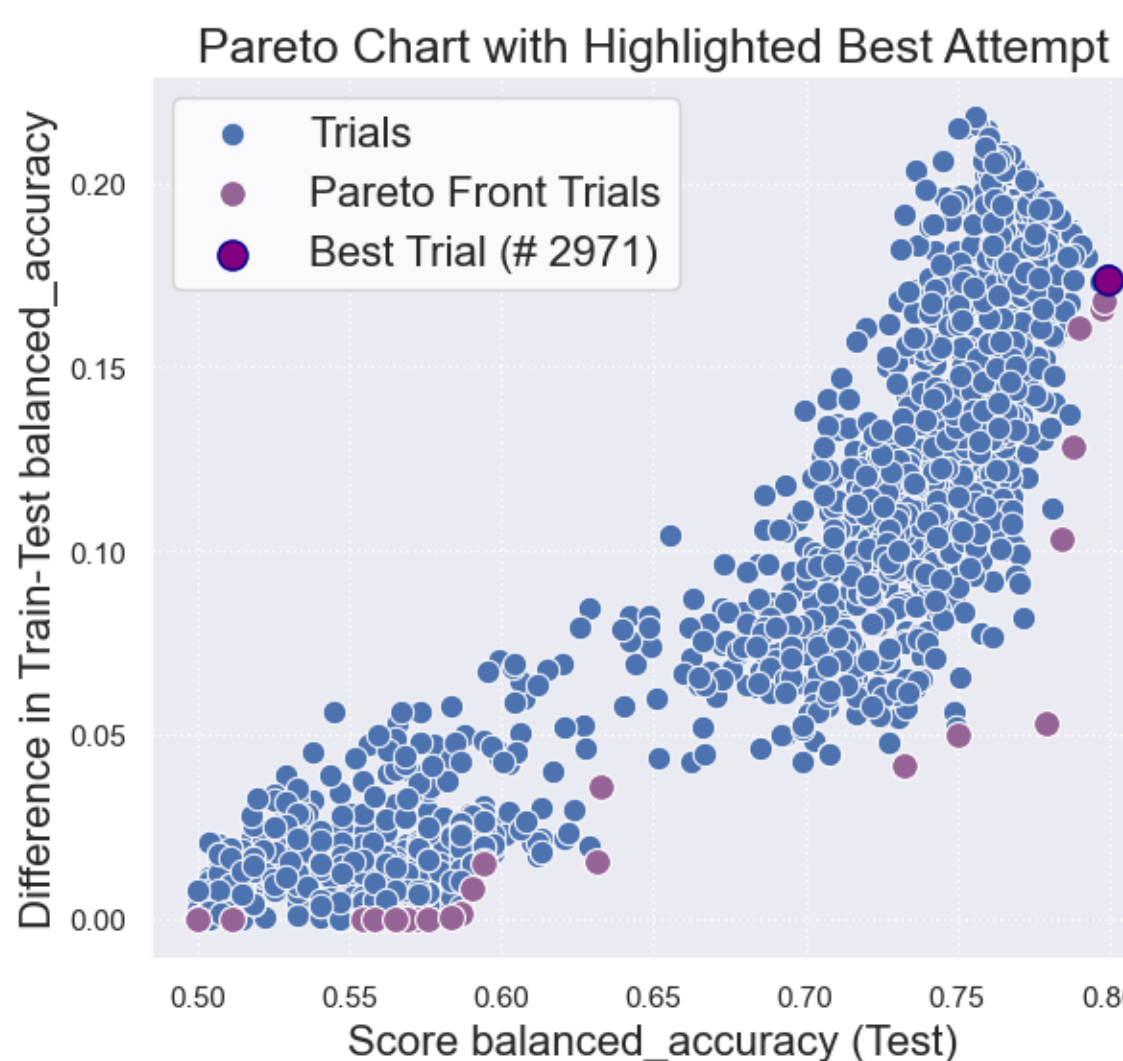
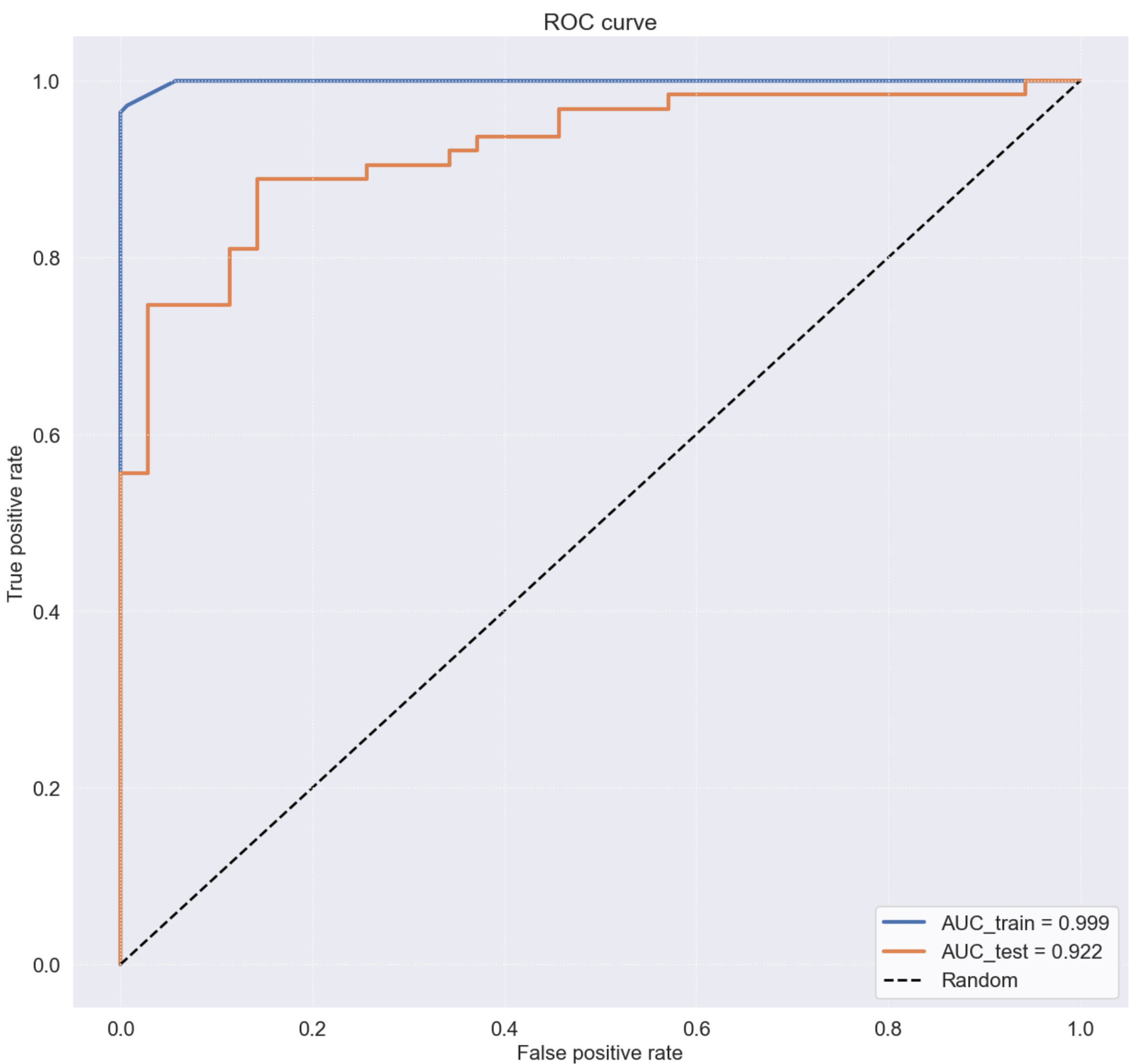
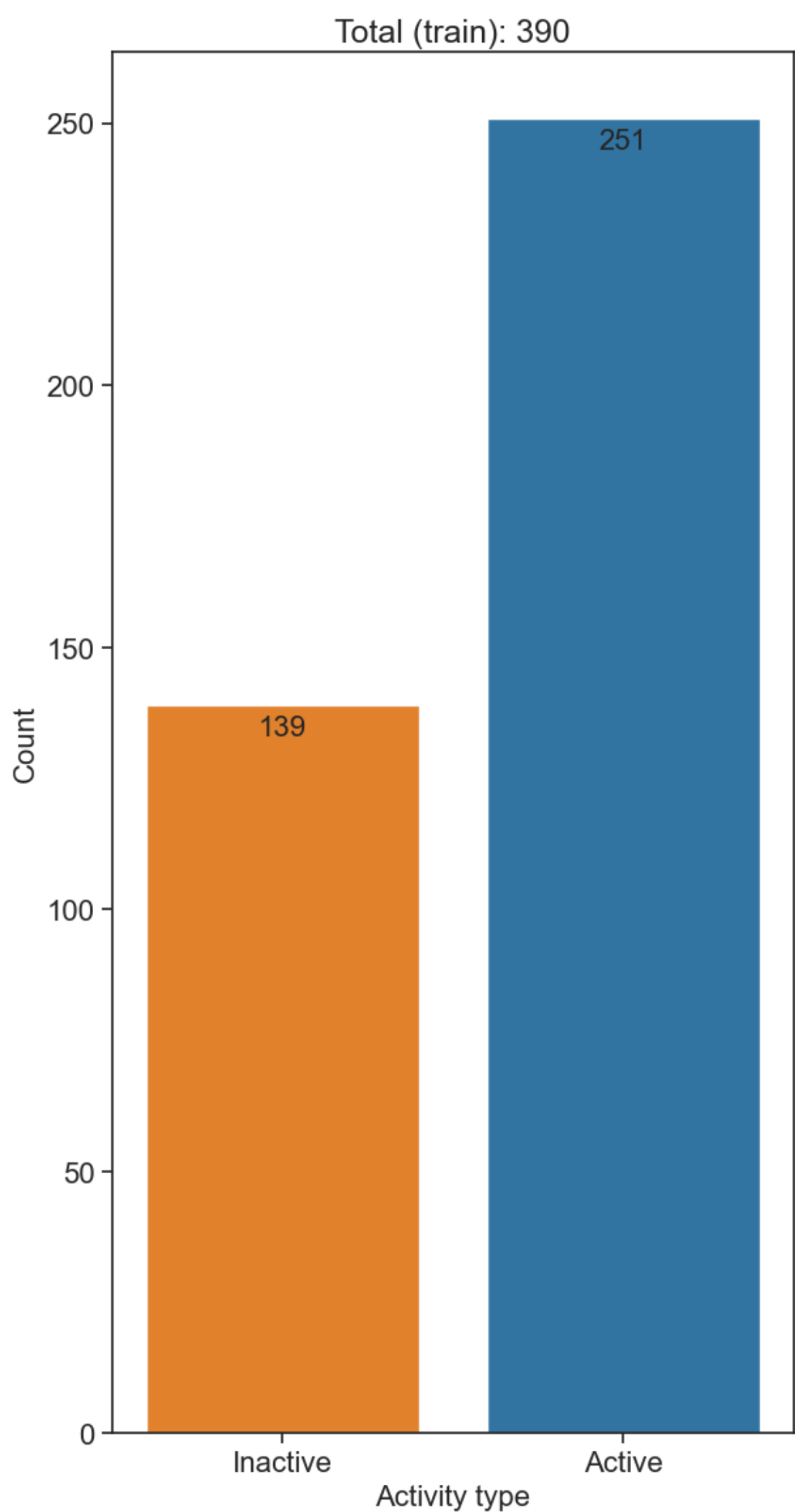
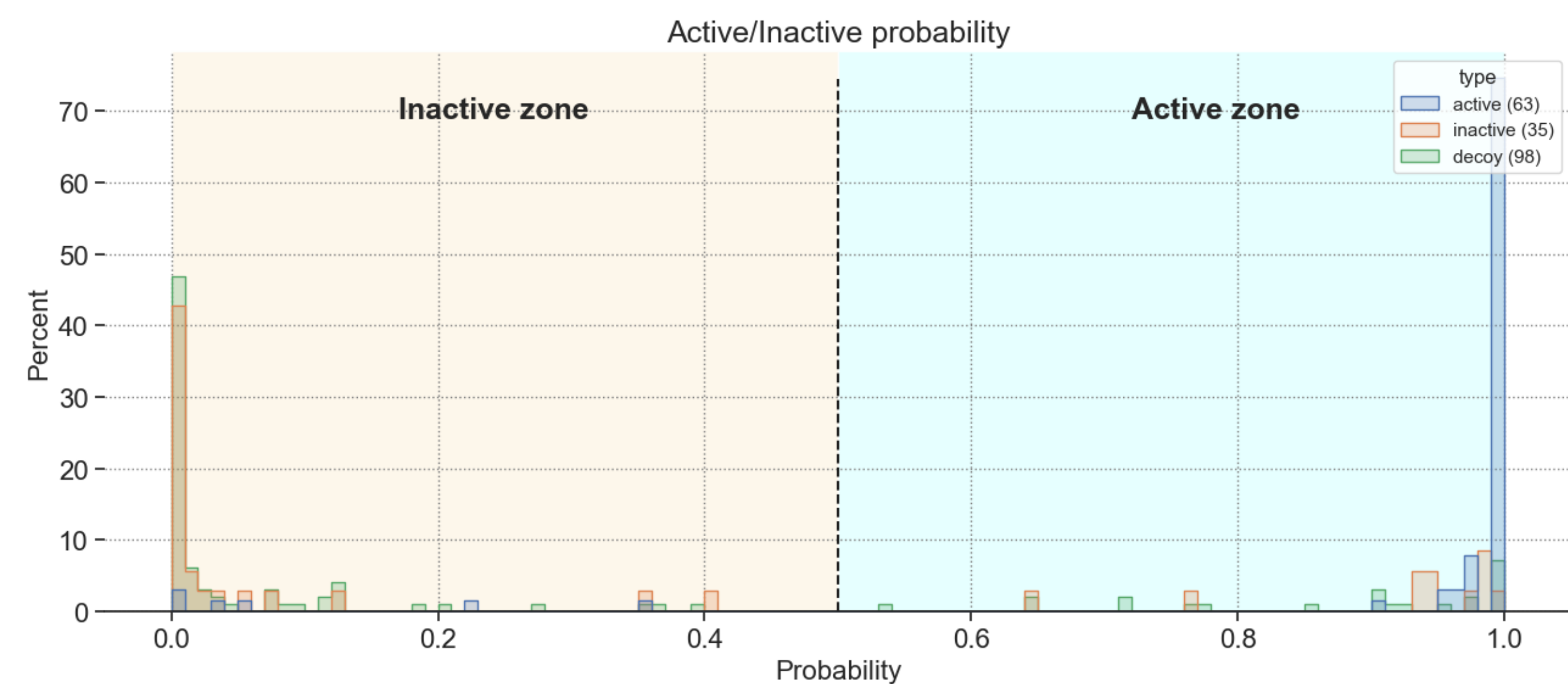
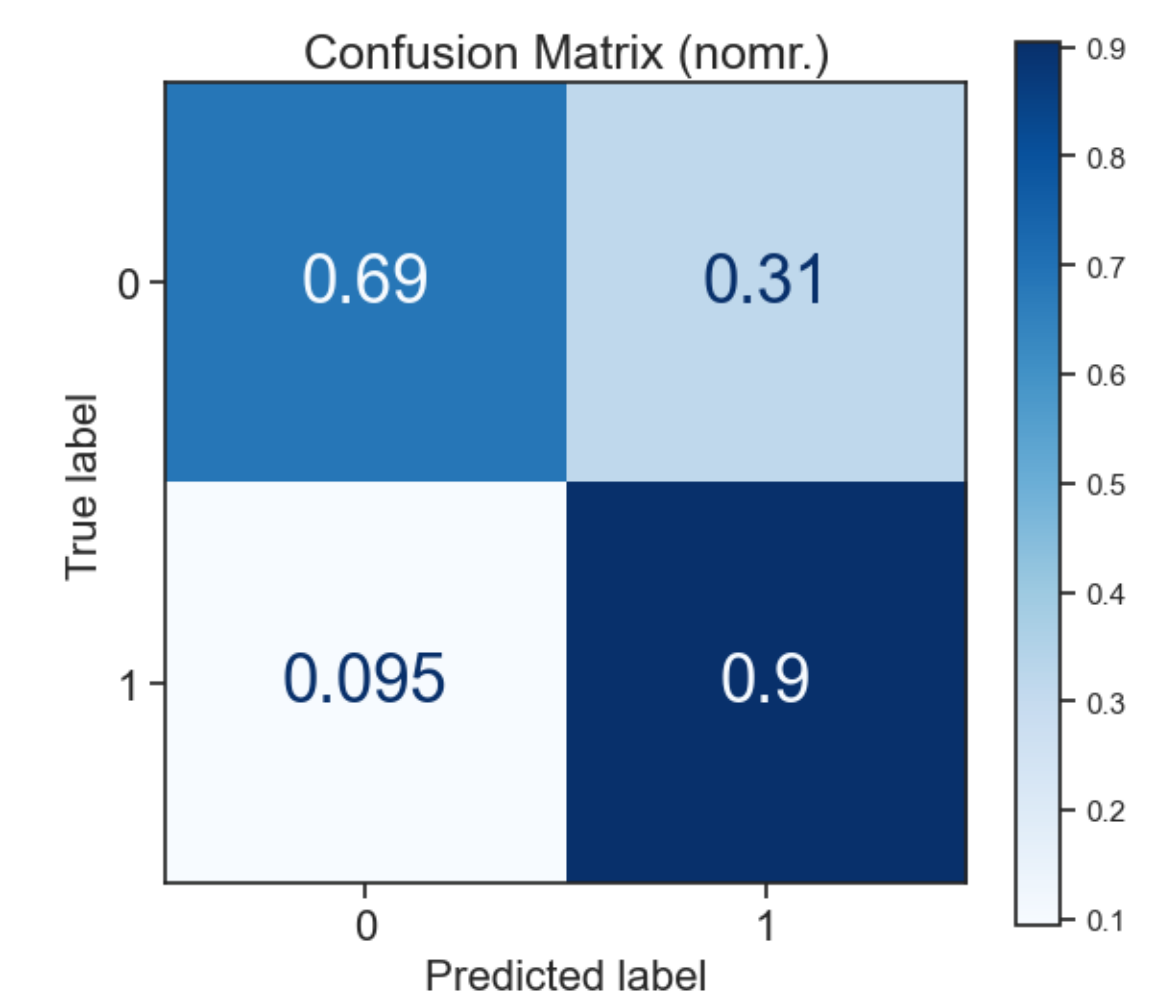
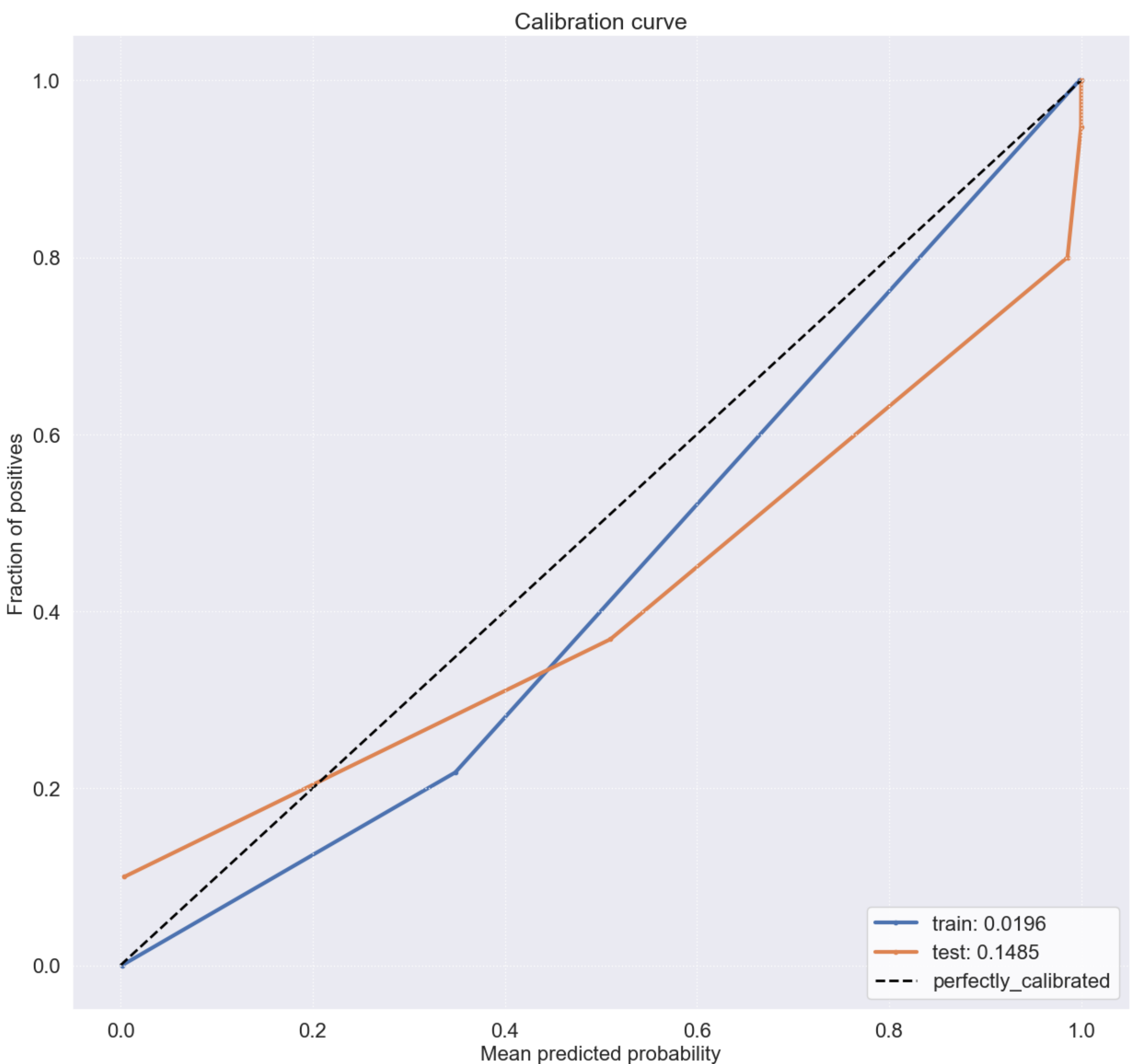
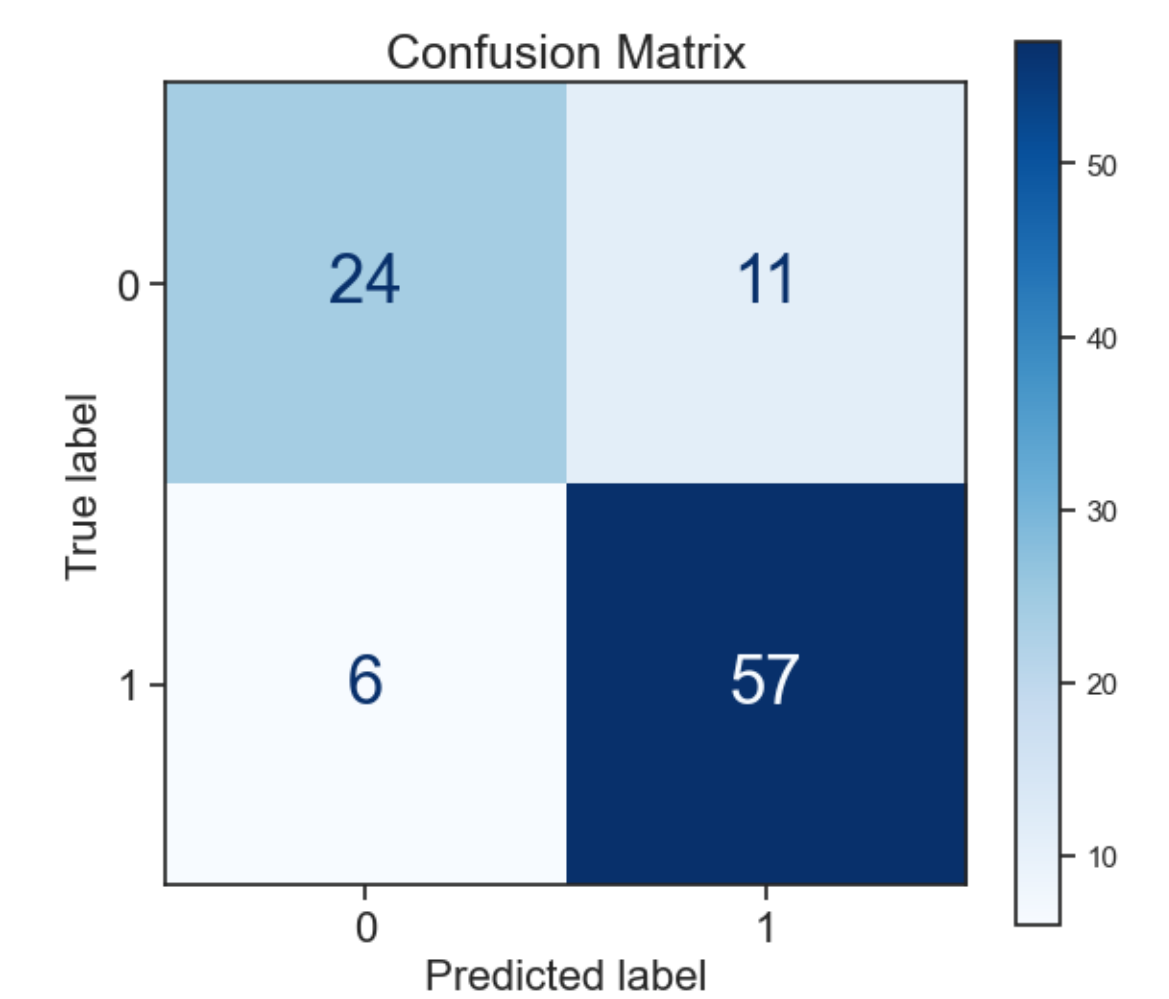


Protein: P12821 - metric: balanced\_accuracy



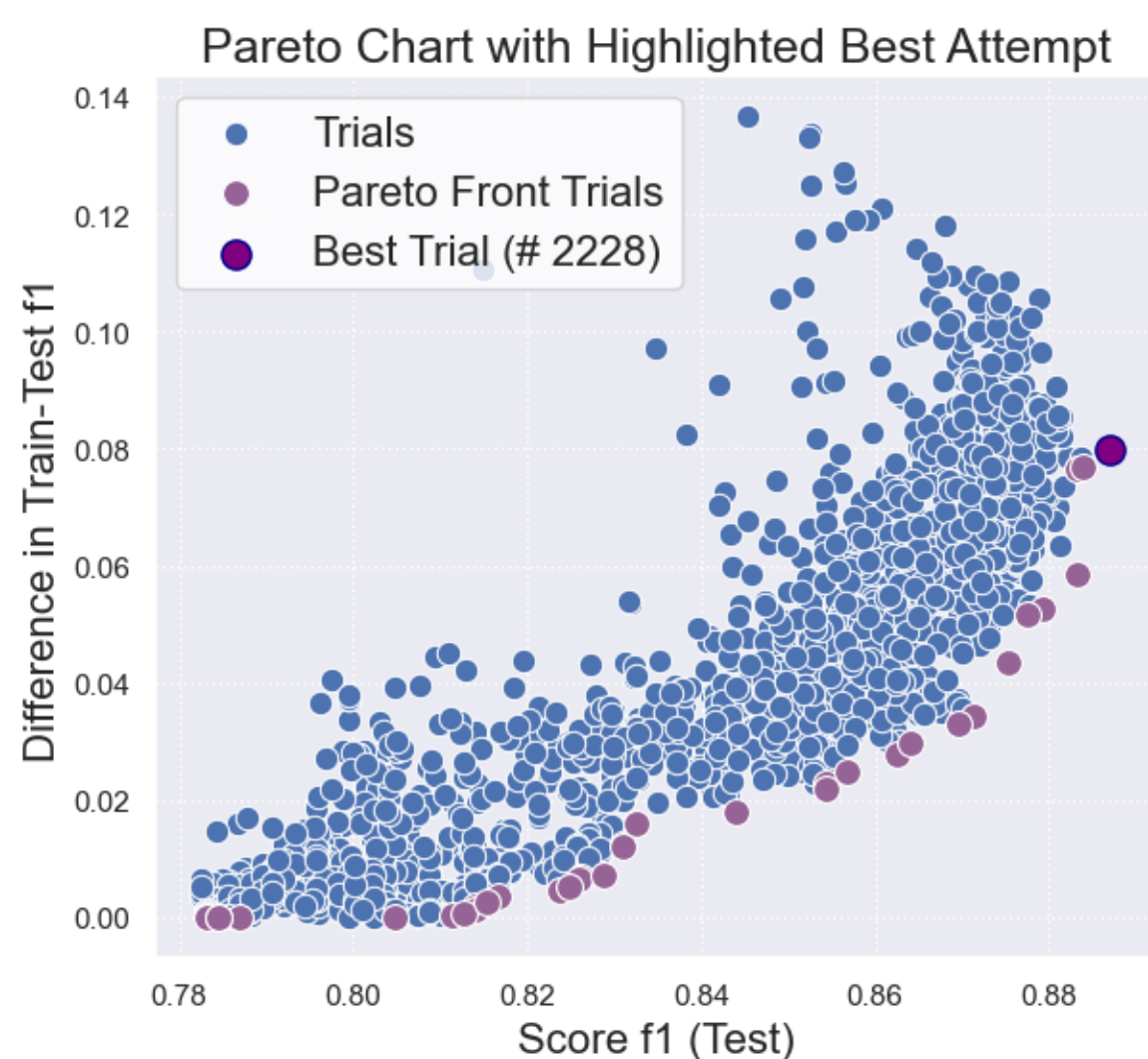
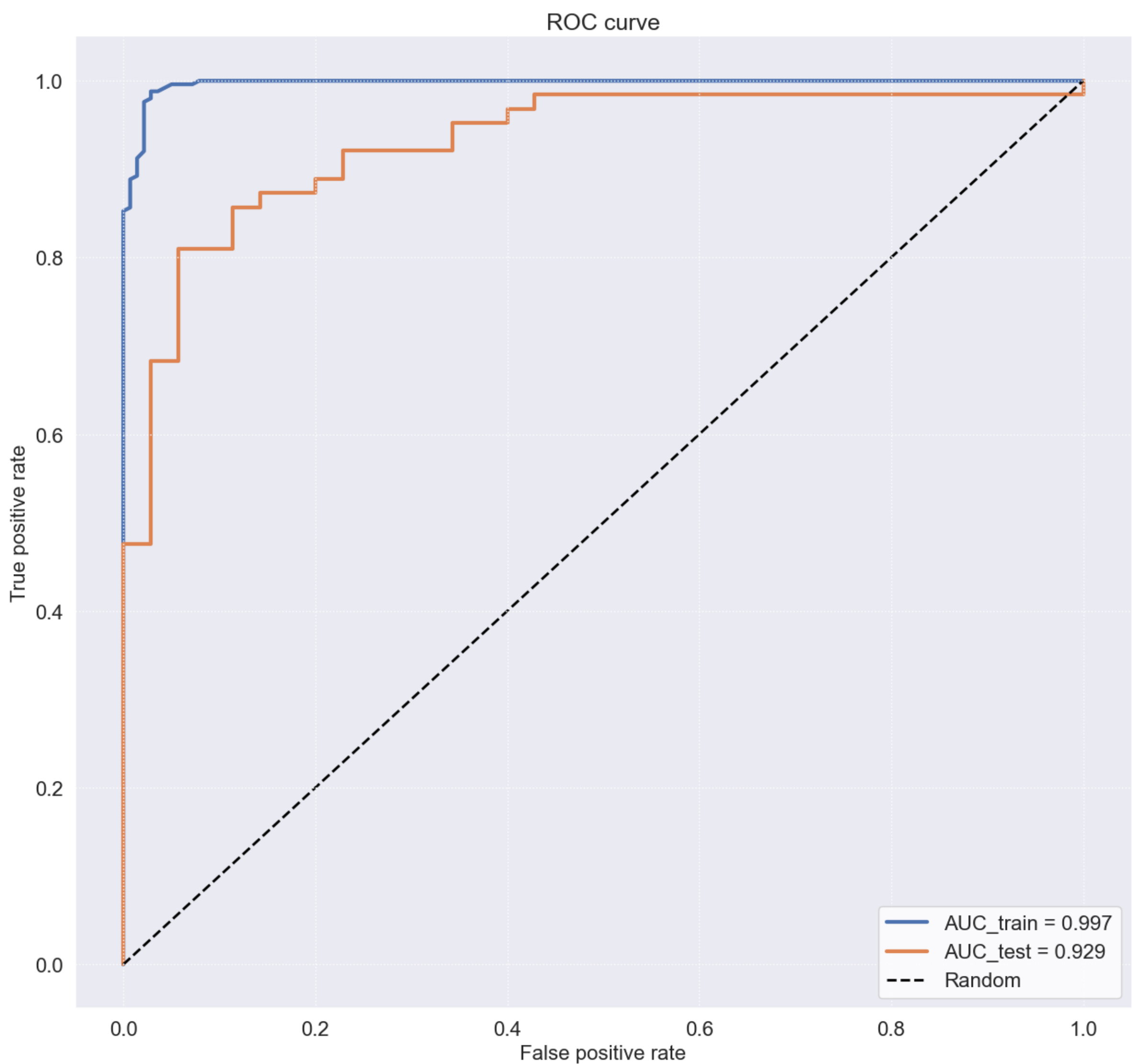
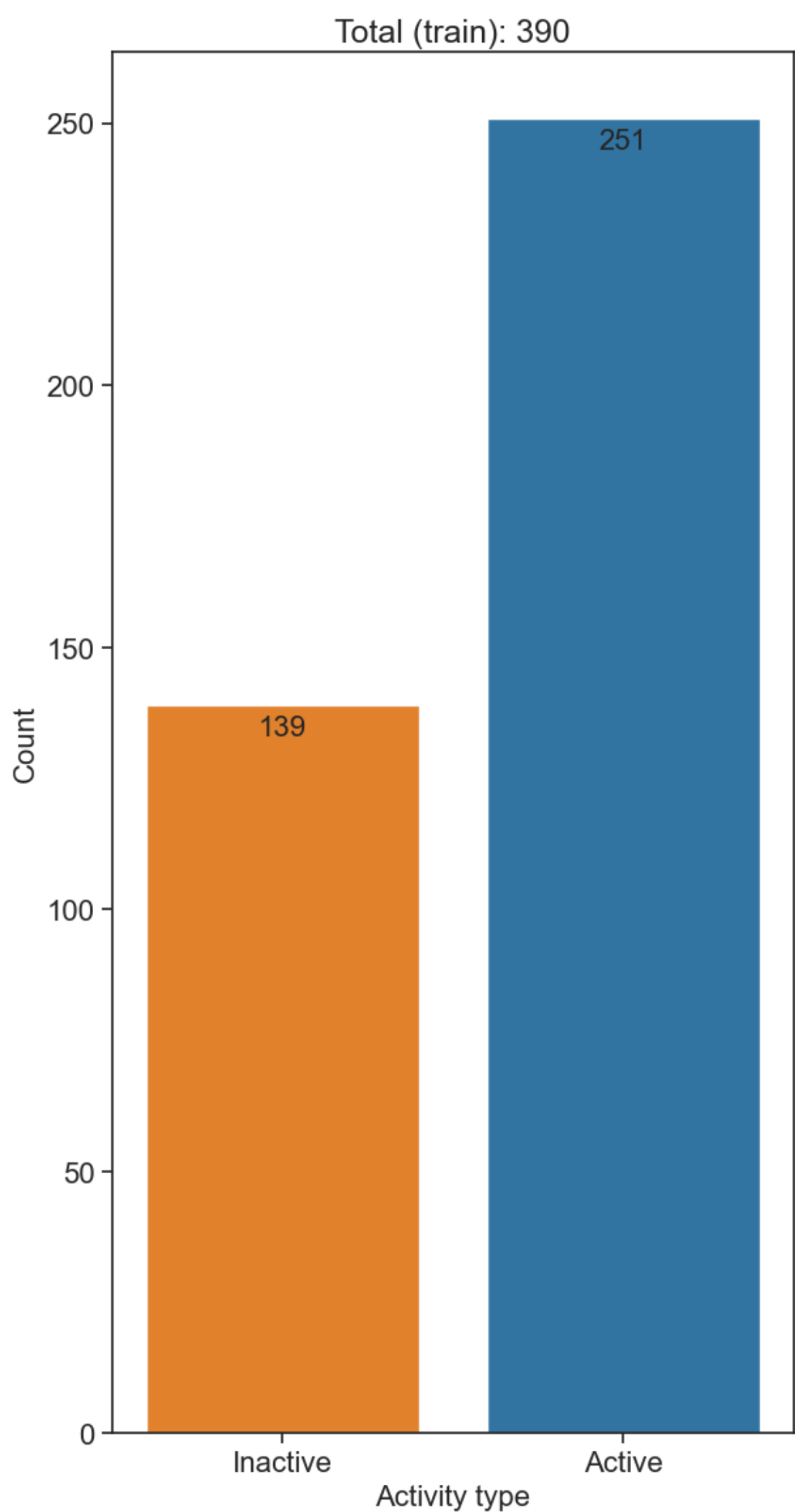
XGBoost Parameters	Value
alpha	2.9381
colsample_bytree	0.6595
gamma	0.2636
lambda	3.3876
learning_rate	0.8742
max_depth	7.0
min_child_weight	2.0
n_estimators	931.0
reg_alpha	0.0281
reg_lambda	0.3527
scale_pos_weight	25.4566
subsample	0.9174



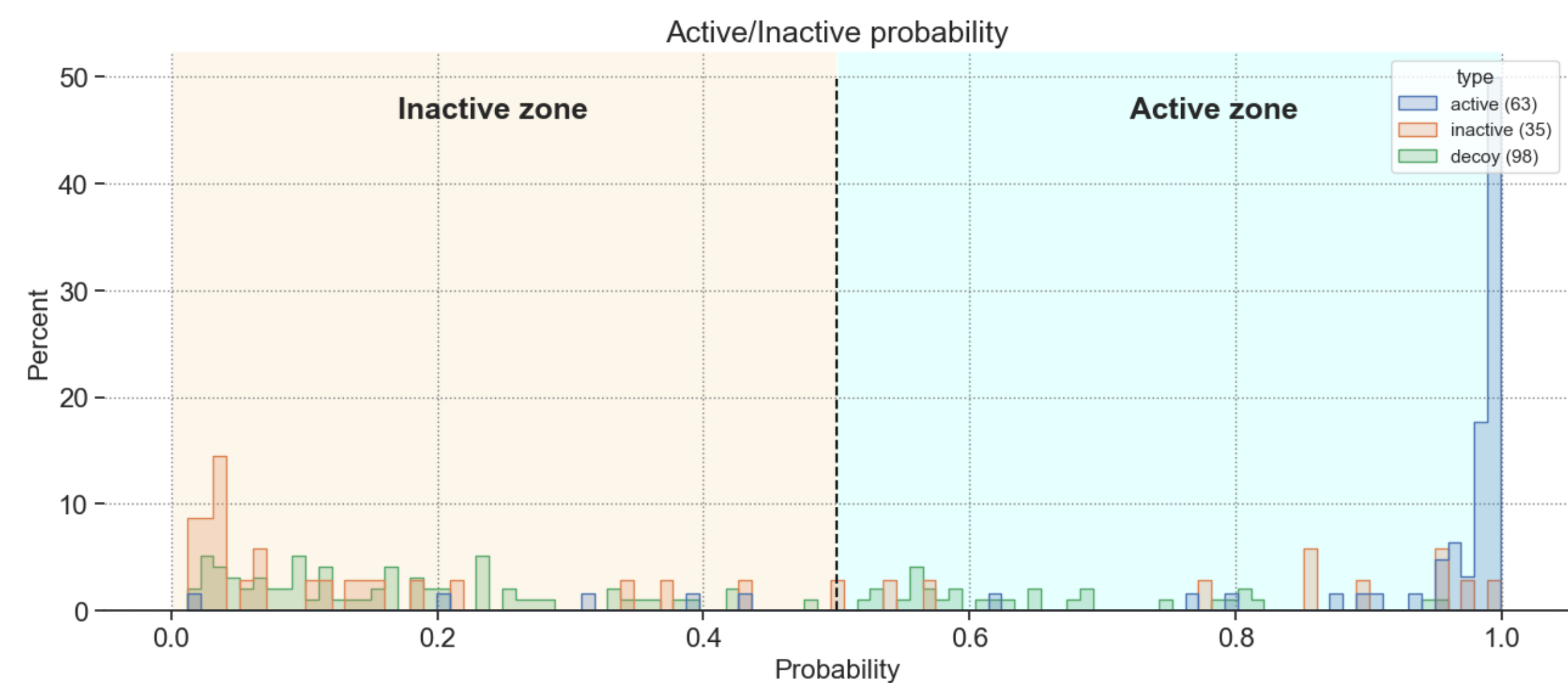
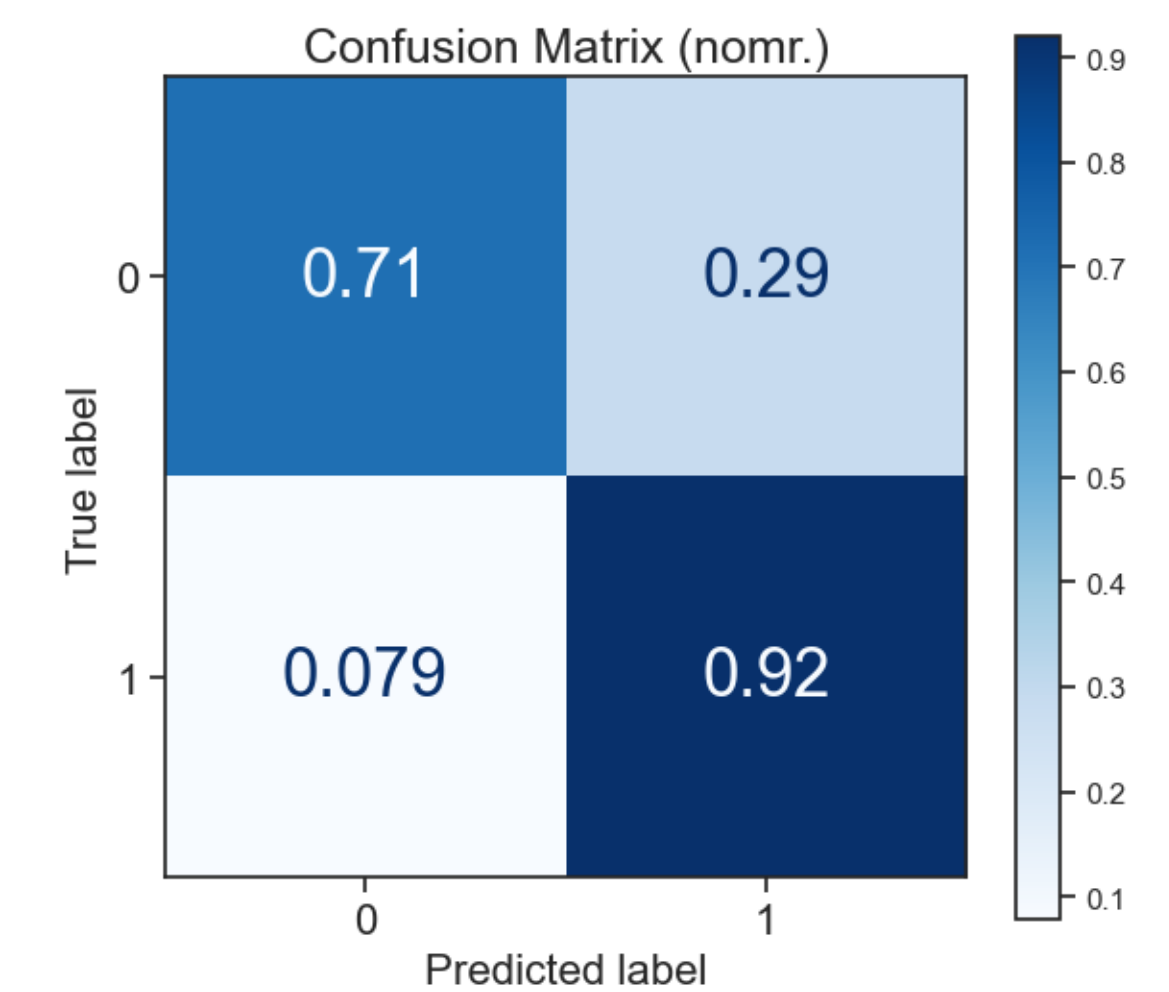
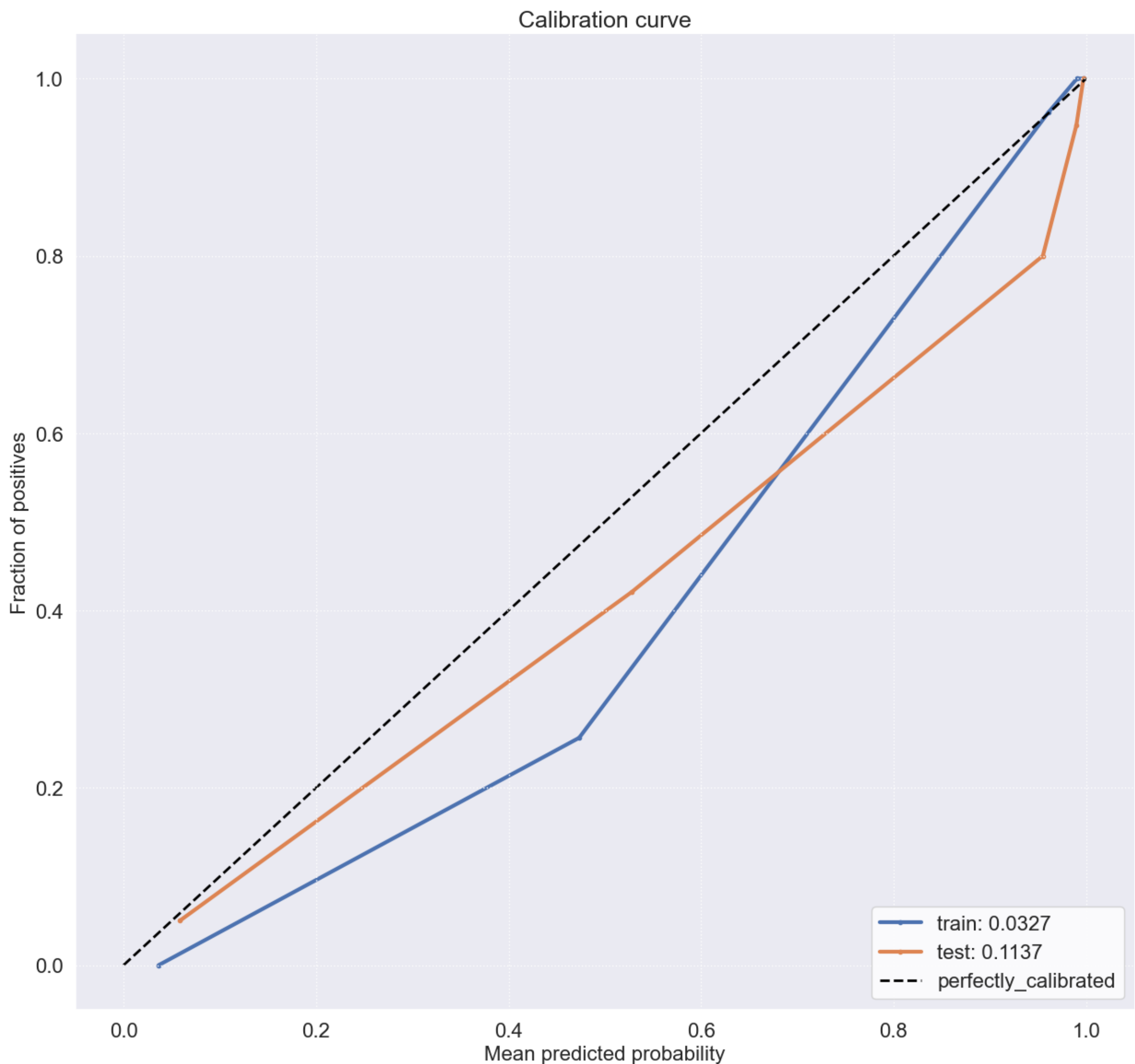
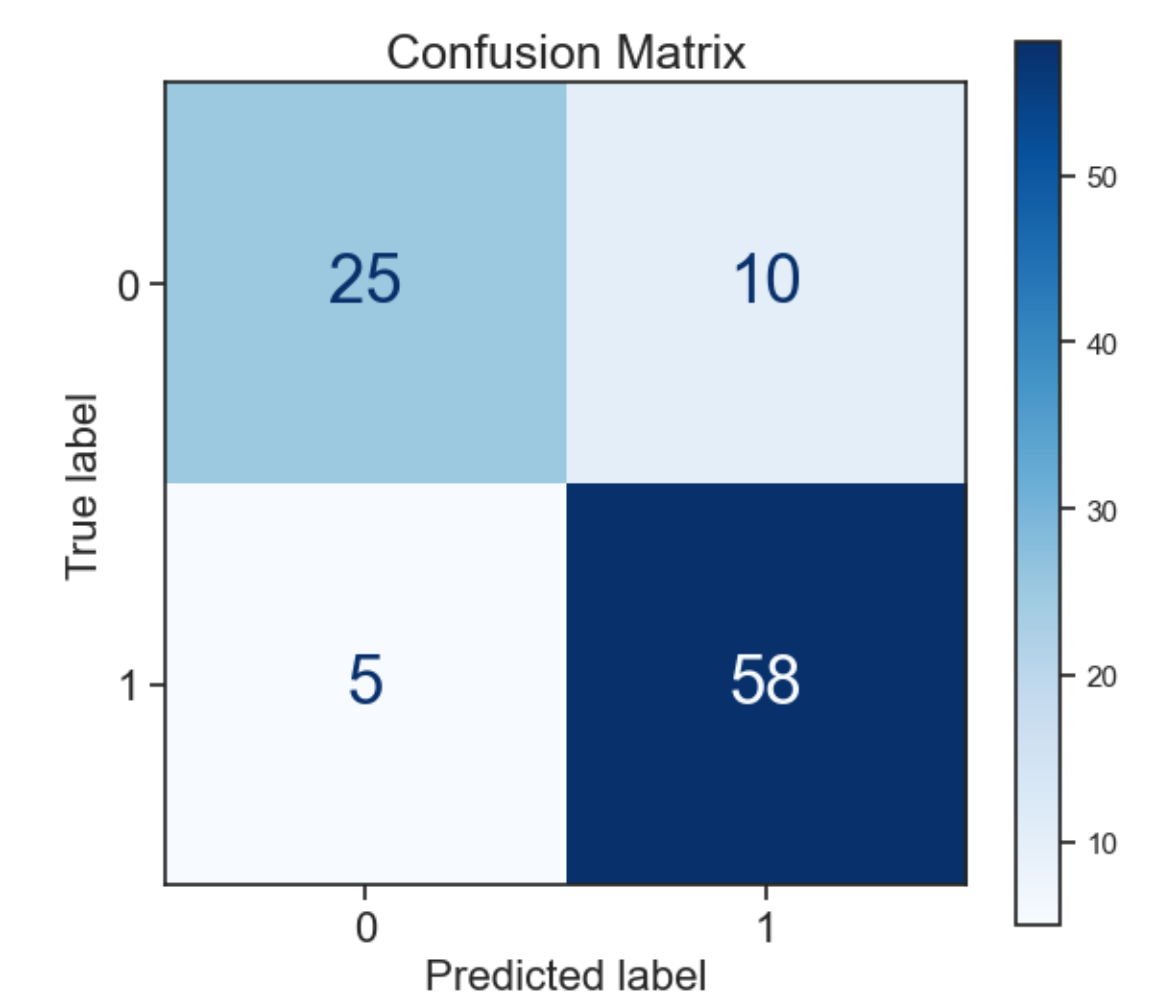
Metric	Train	Test
AUC	0.9991	0.922
accuracy	0.9795	0.8265
balanced accuracy	0.9712	0.7952
recall_(sens)	1.0	0.9048
specificity	0.9424	0.6857
precision	0.9691	0.8382
f1_score	0.9793	0.8232



Protein: P12821 - metric: f1



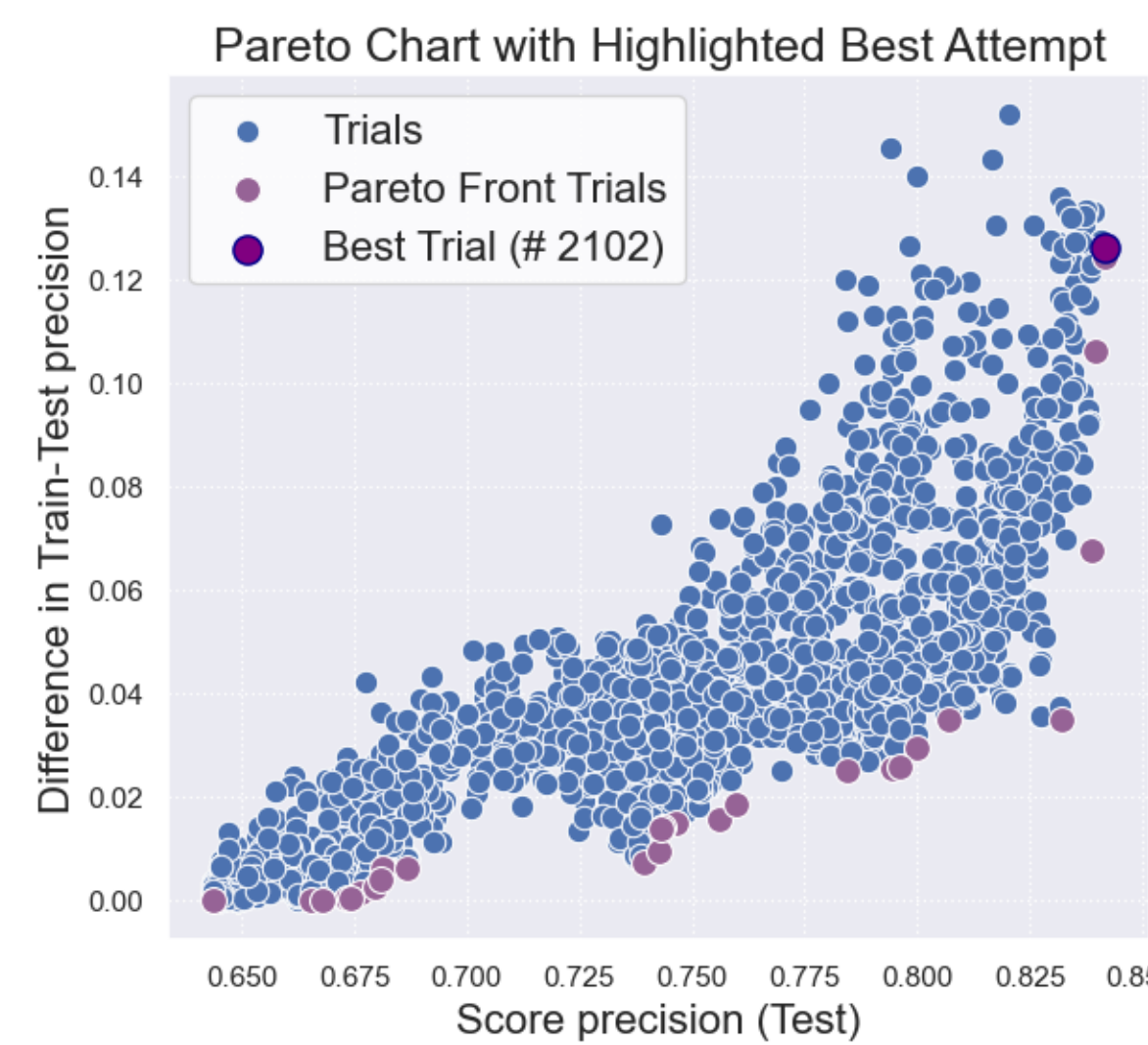
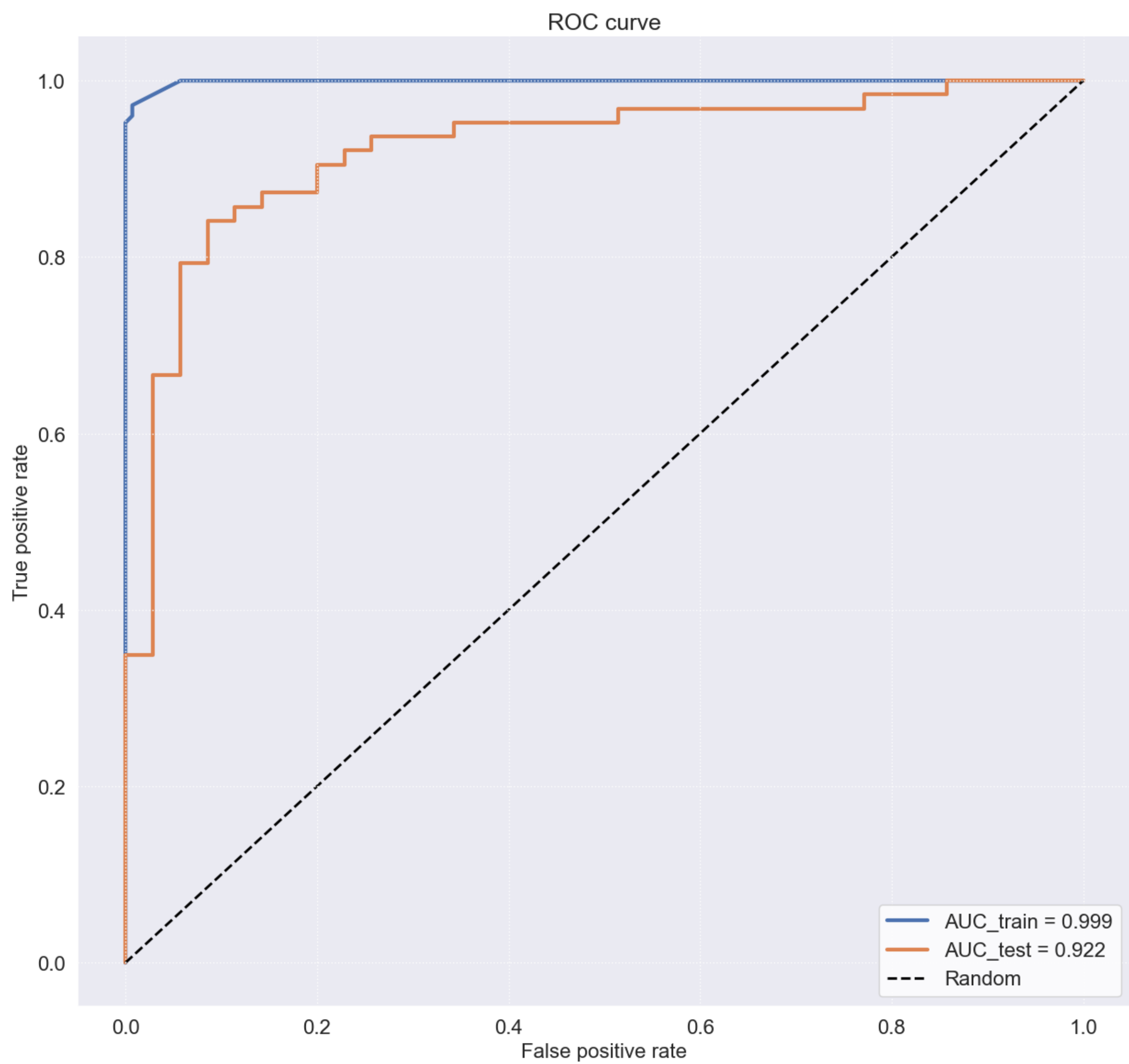
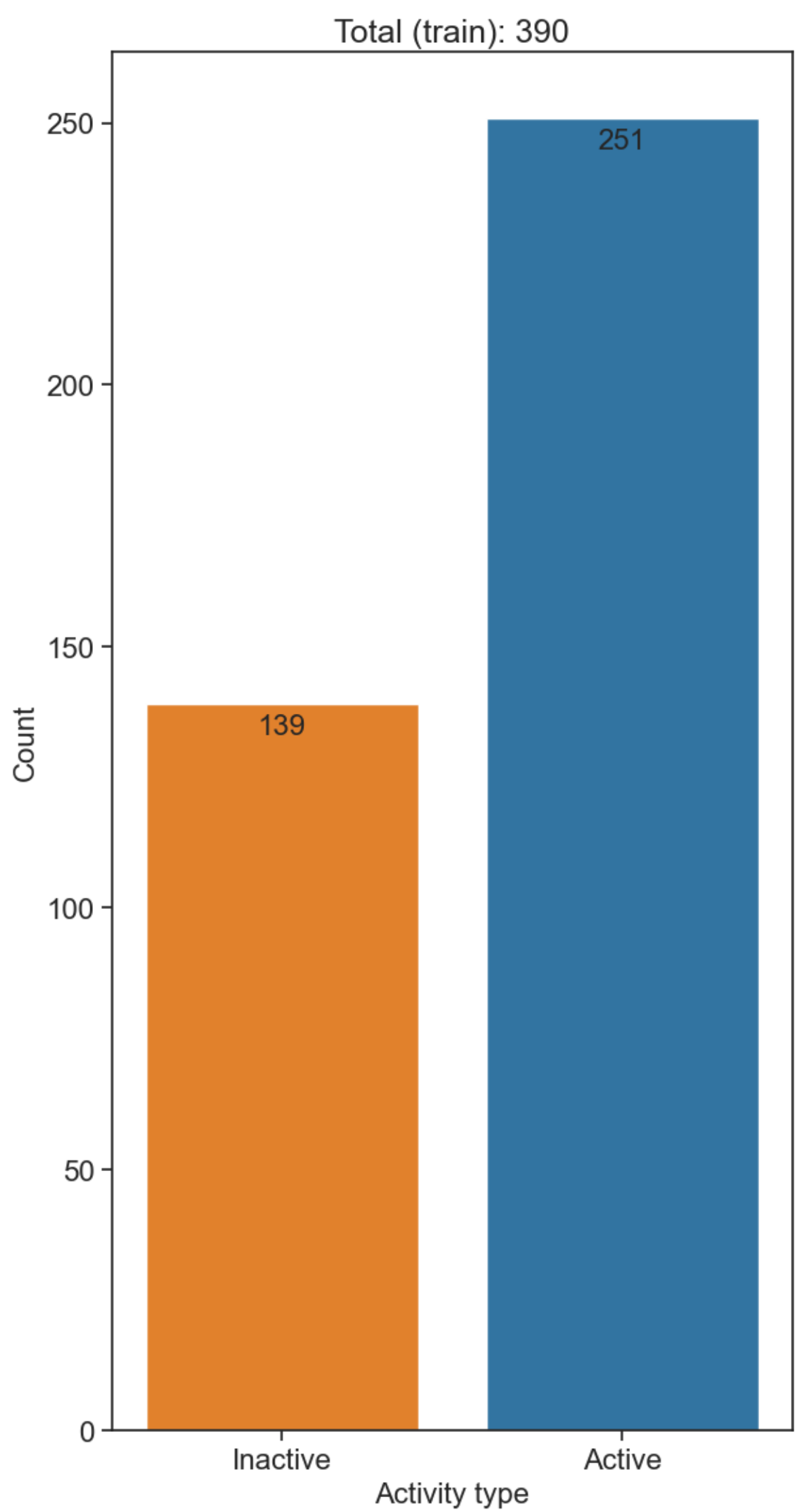
XGBoost Parameters	Value
alpha	3.3445
colsample_bytree	0.768
gamma	0.815
lambda	3.1744
learning_rate	0.048
max_depth	10.0
min_child_weight	1.0
n_estimators	932.0
reg_alpha	0.147
reg_lambda	0.6921
scale_pos_weight	3.9626
subsample	0.7743



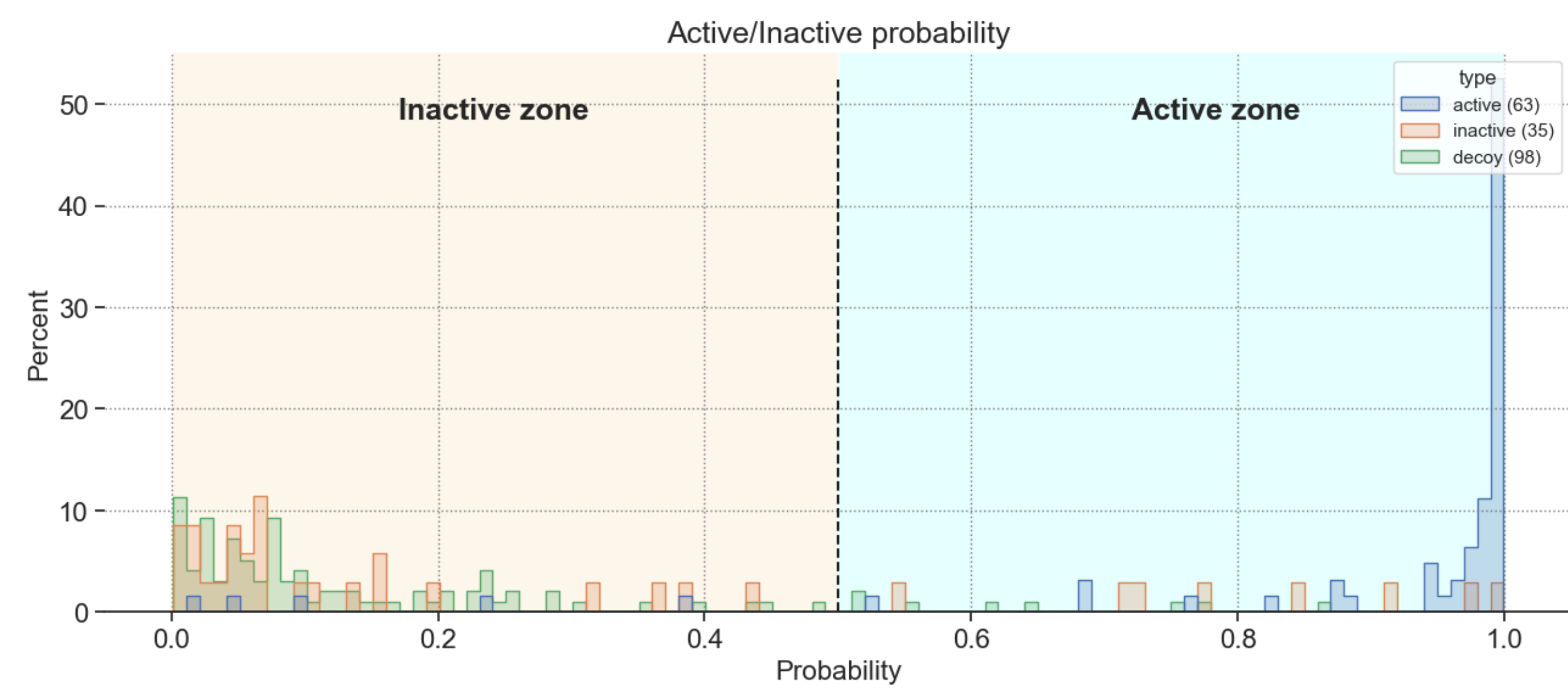
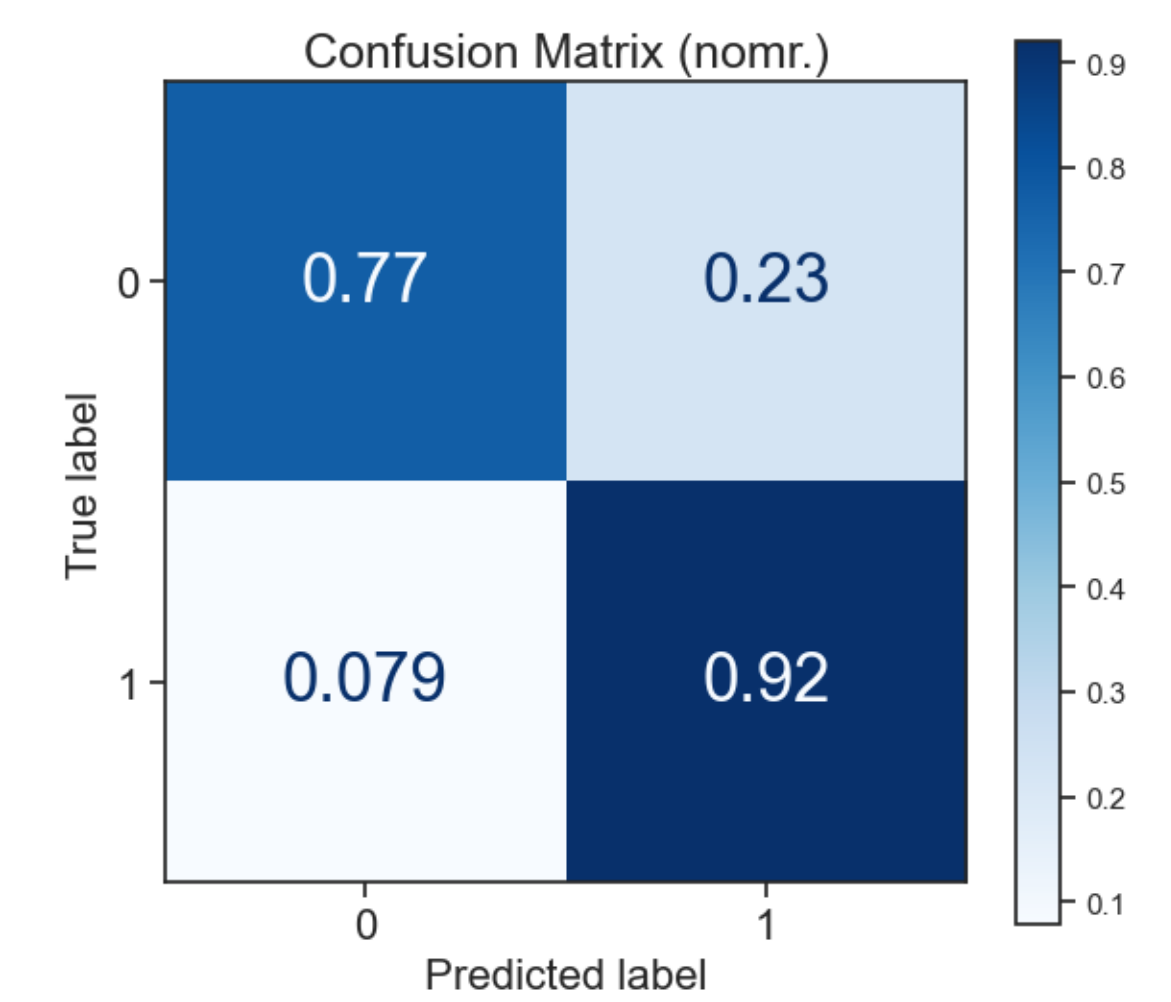
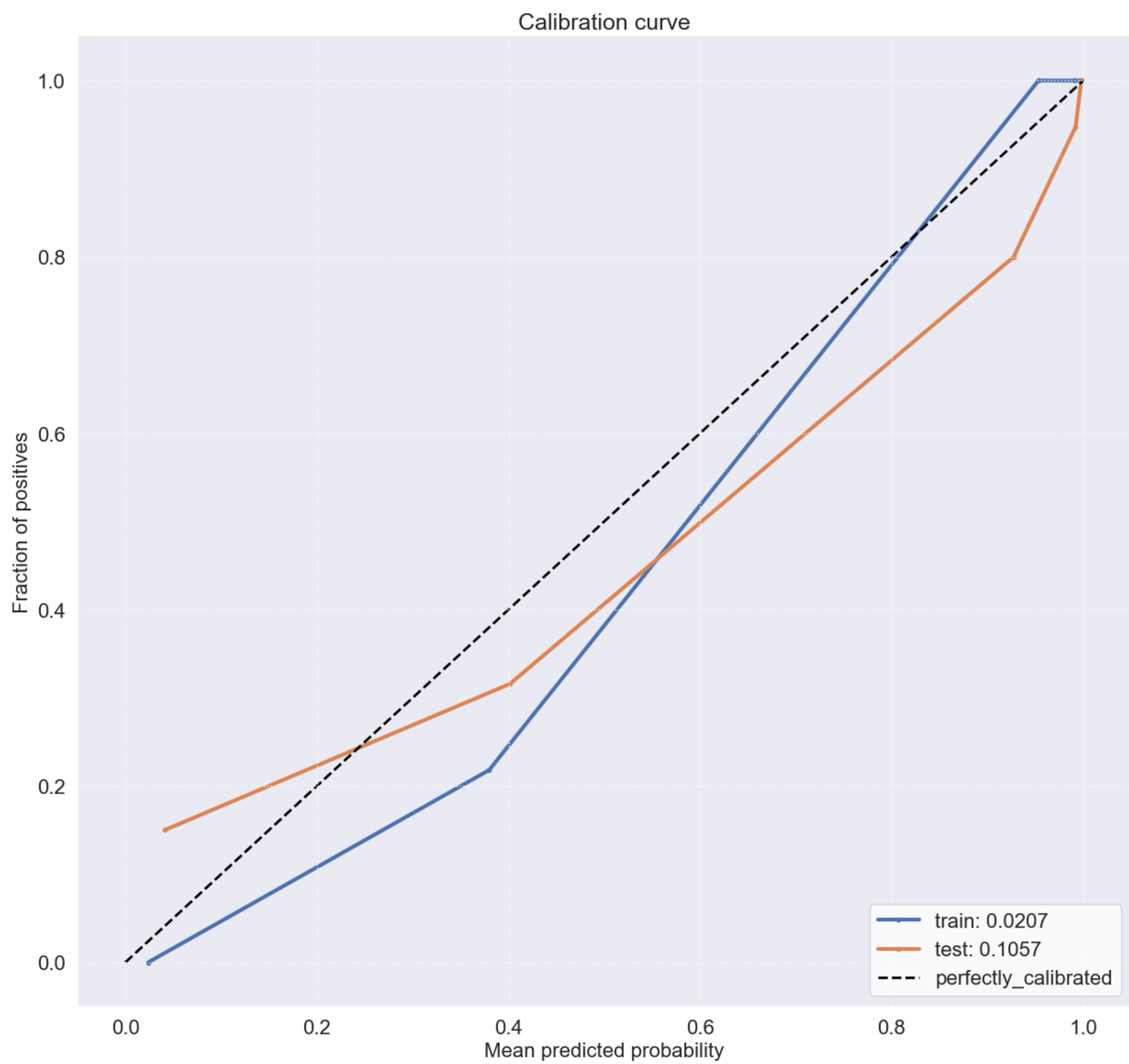
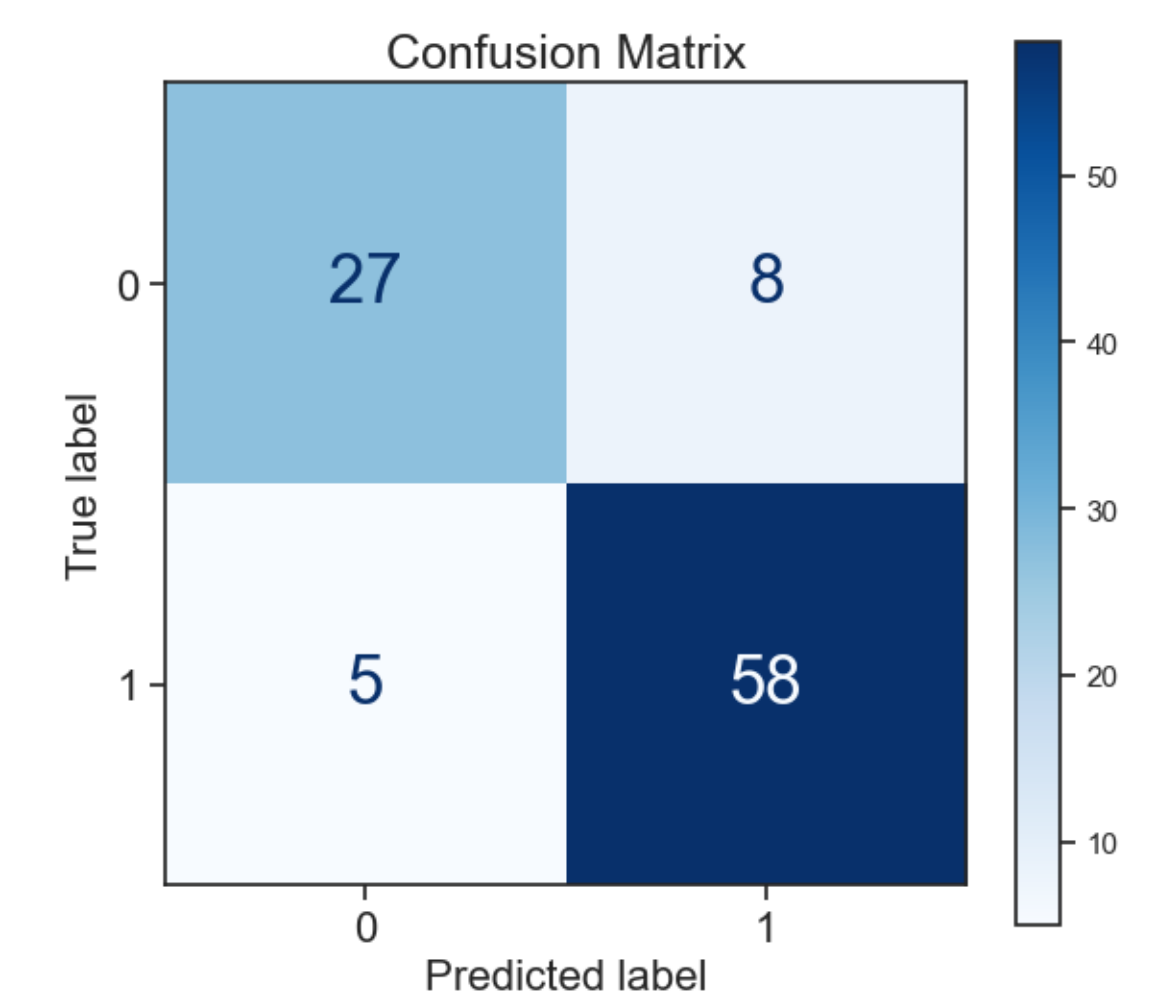
Metric	Train	Test
AUC	0.9971	0.9288
accuracy	0.9564	0.8469
balanced accuracy	0.9388	0.8175
recall_(sens)	1.0	0.9206
specificity	0.8777	0.7143
precision	0.9366	0.8529
f1_score	0.9557	0.844



Protein: P12821 - metric: precision



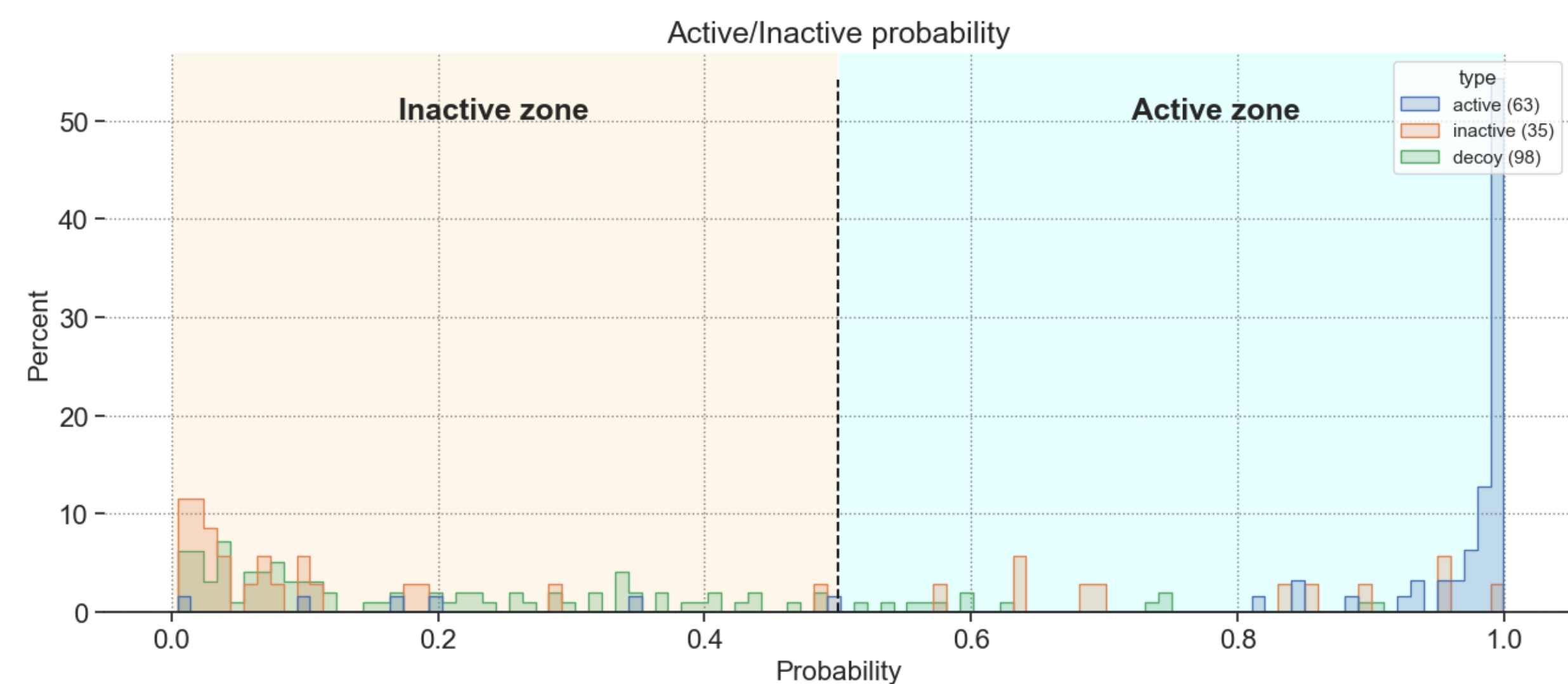
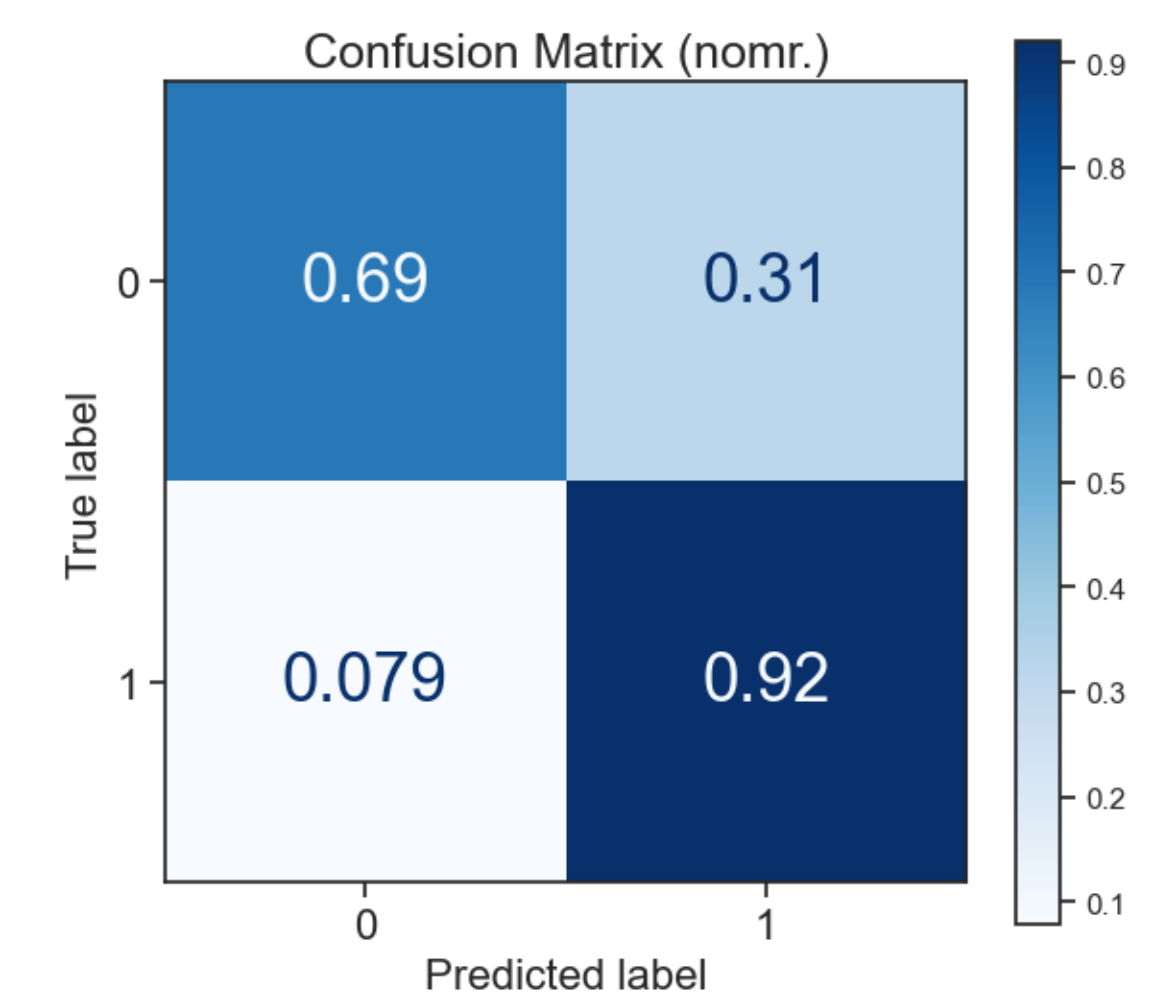
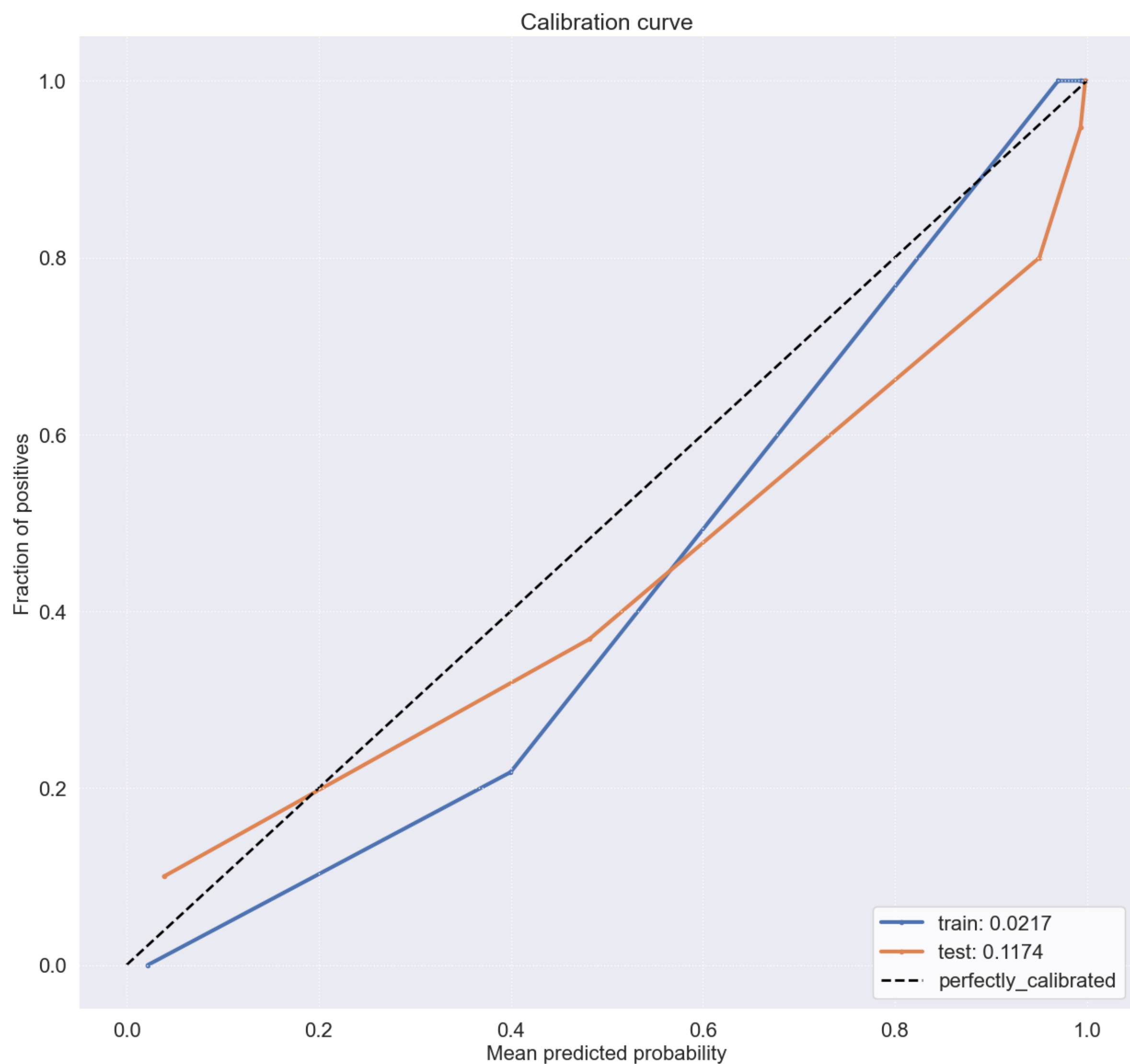
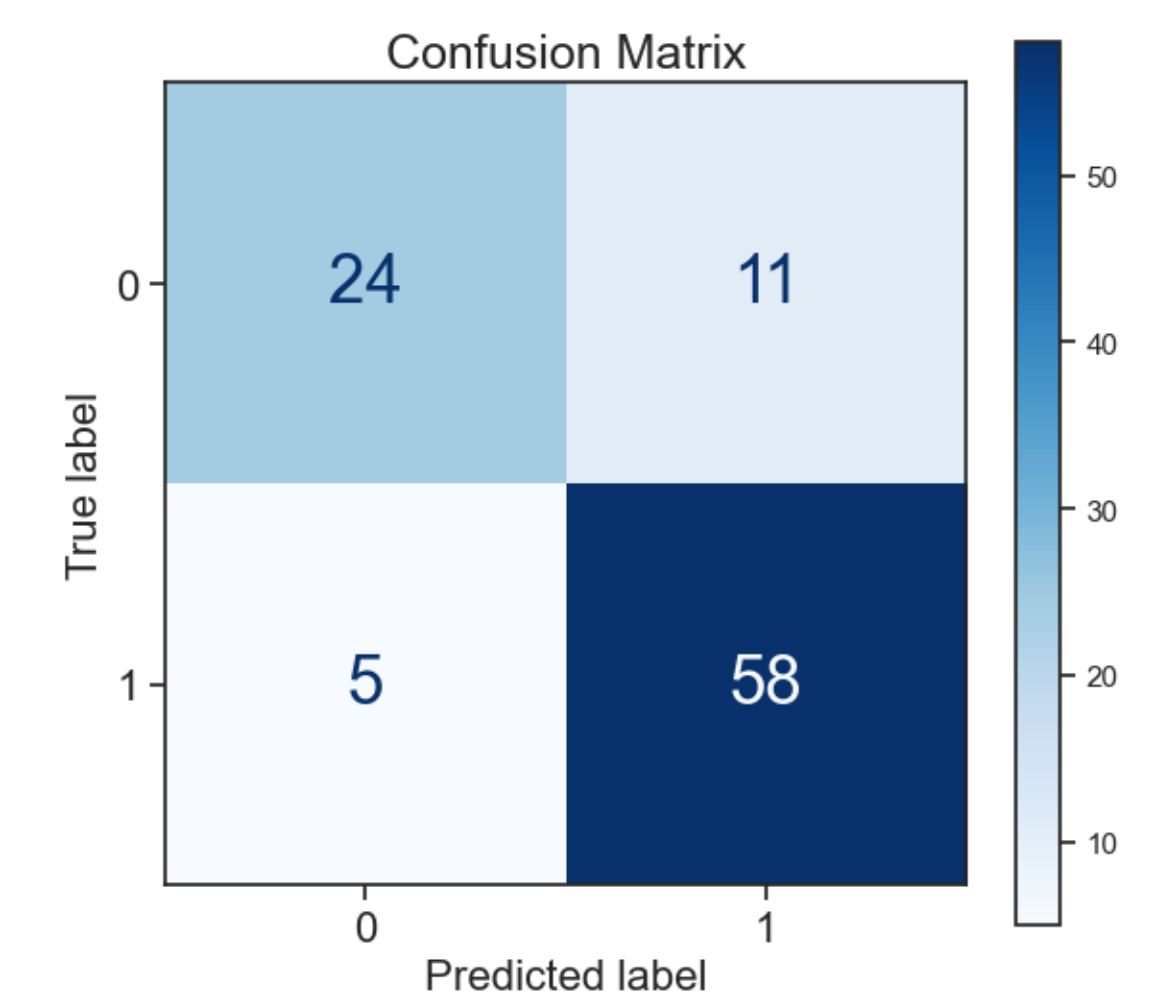
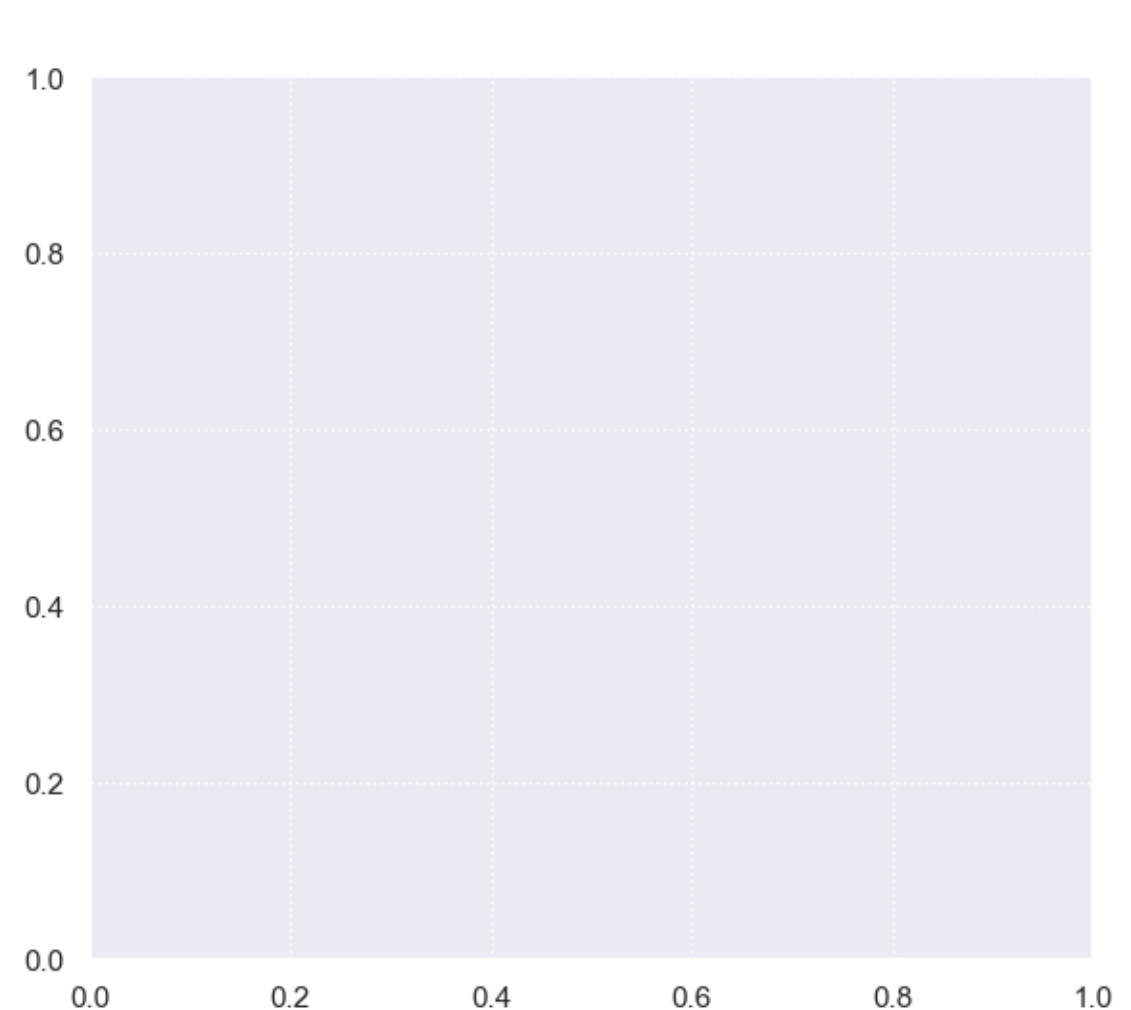
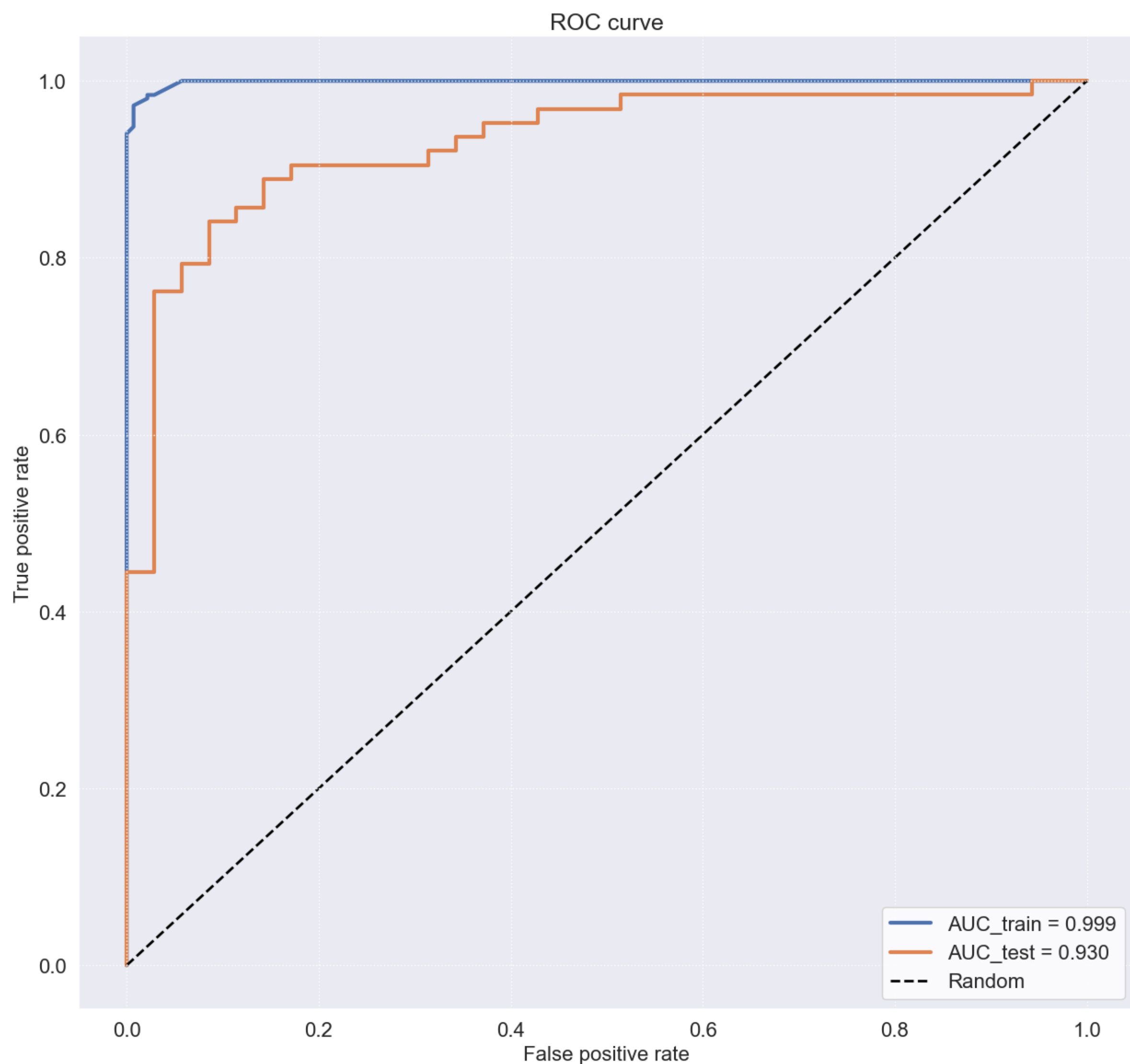
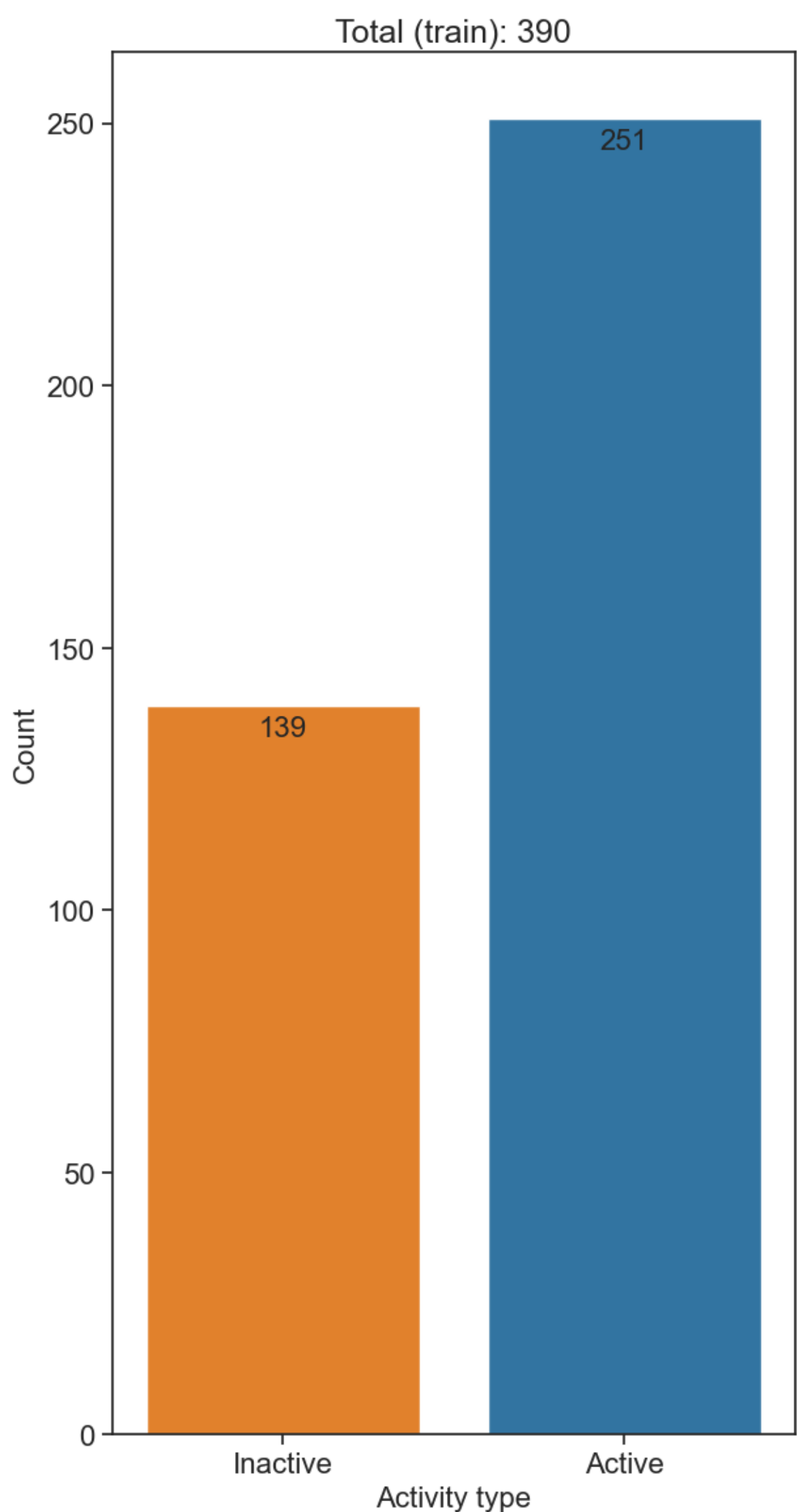
XGBoost Parameters	Value
alpha	0.7945
colsample_bytree	0.6258
gamma	0.0018
lambda	3.1348
learning_rate	0.0462
max_depth	8.0
min_child_weight	2.0
n_estimators	801.0
reg_alpha	0.2074
reg_lambda	0.3517
scale_pos_weight	2.2539
subsample	0.8254



Metric	Train	Test
AUC	0.999	0.922
accuracy	0.9769	0.8673
balanced accuracy	0.9676	0.846
recall_(sens)	1.0	0.9206
specificity	0.9353	0.7714
precision	0.9654	0.8788
f1_score	0.9767	0.8659



Protein: P12821 - metric: SoftVotingXGBoostEnsemble



Metric	Train	Test
AUC	0.9989	0.9297
accuracy	0.9795	0.8367
balanced accuracy	0.9712	0.8032
recall_(sens)	1.0	0.9206
specificity	0.9424	0.6857
precision	0.9691	0.8406
f1_score	0.9793	0.8328