**Supplementary Table 7. Parameters for ML**

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| Algorithm | Parameters |
| AdaBoost | 'algorithm': 'SAMME.R'  'base\_estimator': None  'learning\_rate': 1.0  'n\_estimators': 50  'random\_state': 0 |
| GBDT | 'ccp\_alpha': 0.0  'criterion': 'friedman\_mse'  'init': None  'learning\_rate': 0.1  'loss': 'deviance'  'max\_depth': 3  'max\_features': None  'max\_leaf\_nodes': None  'min\_impurity\_decrease': 0.0  'min\_impurity\_split': None  'min\_samples\_leaf': 1  'min\_samples\_split': 2  'min\_weight\_fraction\_leaf': 0.0  'n\_estimators': 100  'n\_iter\_no\_change': None  'presort': 'deprecated'  'random\_state': 0  'subsample': 1.0  'tol': 0.0001  'validation\_fraction': 0.1  'verbose': 0  'warm\_start': False |
| Xgboost | 'base\_score': 0.5  'booster': 'gbtree'  'colsample\_bylevel': 1  'colsample\_bynode': 1  'colsample\_bytree': 1  'gamma': 0  'learning\_rate': 0.1  'max\_delta\_step': 0  'max\_depth': 3  'min\_child\_weight': 1  'missing': None  'n\_estimators': 100  'n\_jobs': 1  'nthread': None  'objective': 'binary:logistic'  'random\_state': 0  'reg\_alpha': 0  'reg\_lambda': 1  'scale\_pos\_weight': 1  'seed': None  'silent': 0  'subsample': 1  'verbosity': 1  'eval\_metric': 'auc' |