

Fig. S1: Achieved ACC for the selected biomarker detection algorithms: LefSe, RegLRSD, t-Test, Exact-Test (edgeR), and MetaStats, respectively.

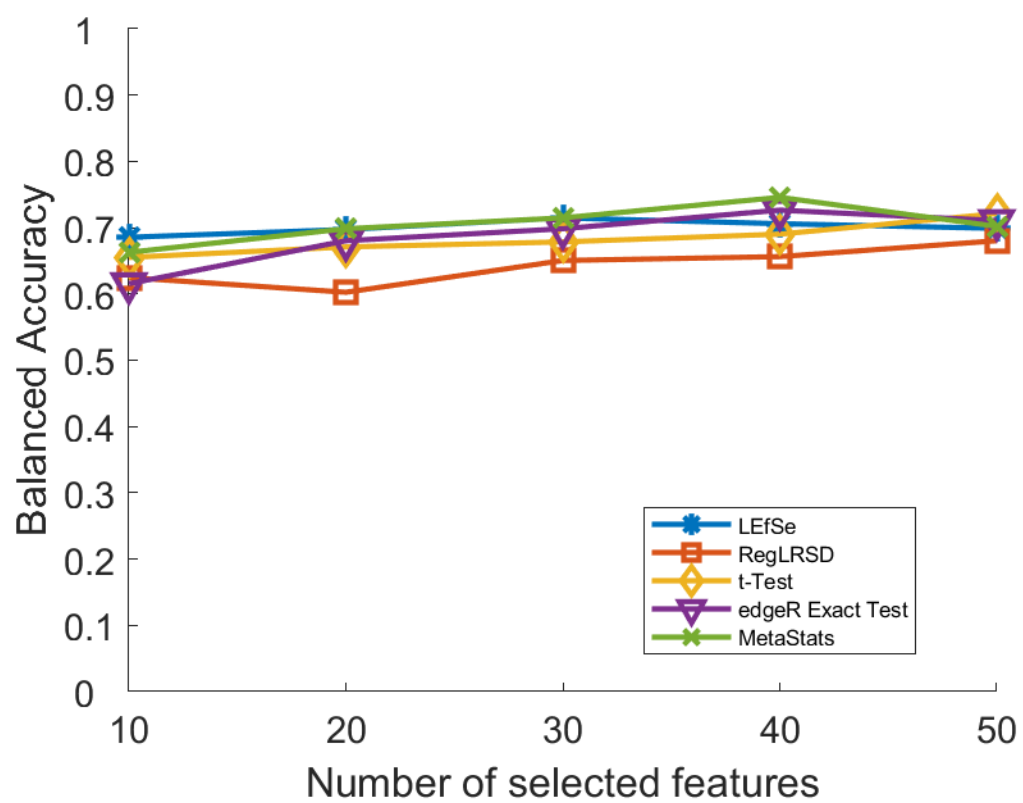


Fig. S2: Achieved BACC for the selected biomarker detection algorithms: LefSe, RegLRSD, t-Test, Exact-Test (edgeR), and MetaStats, respectively.

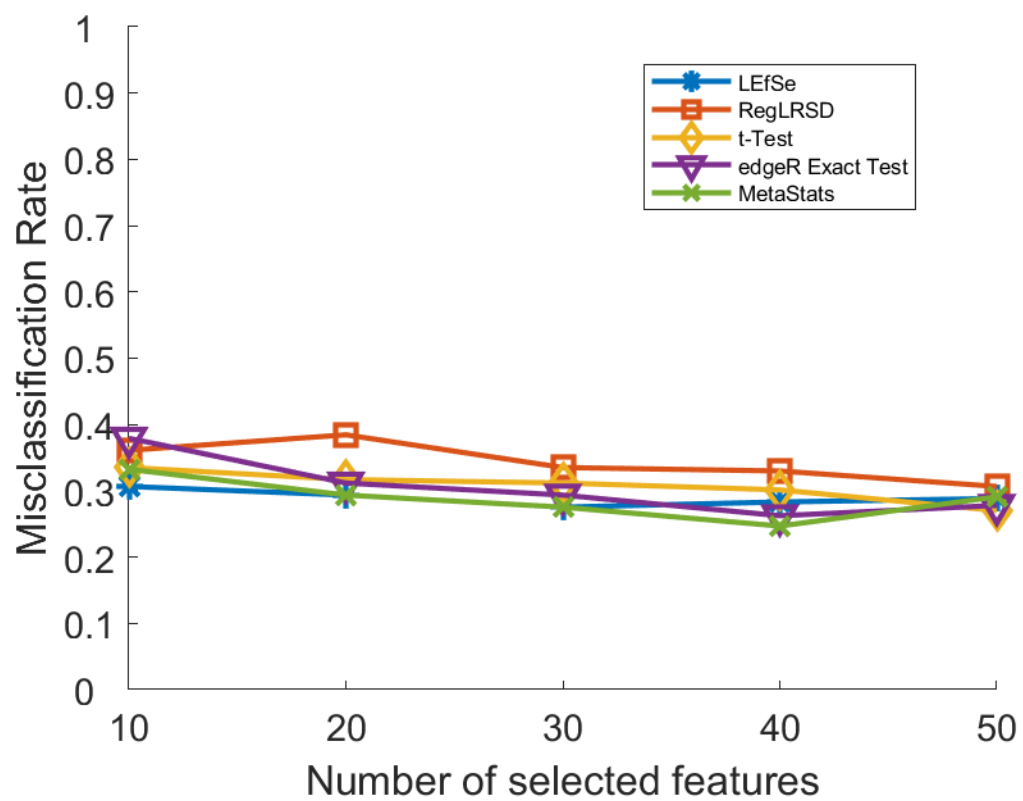


Fig. S3: Achieved MCR for the selected biomarker detection algorithms: LefSe, RegLRSD, t-Test, Exact-Test (edgeR), and MetaStats, respectively.

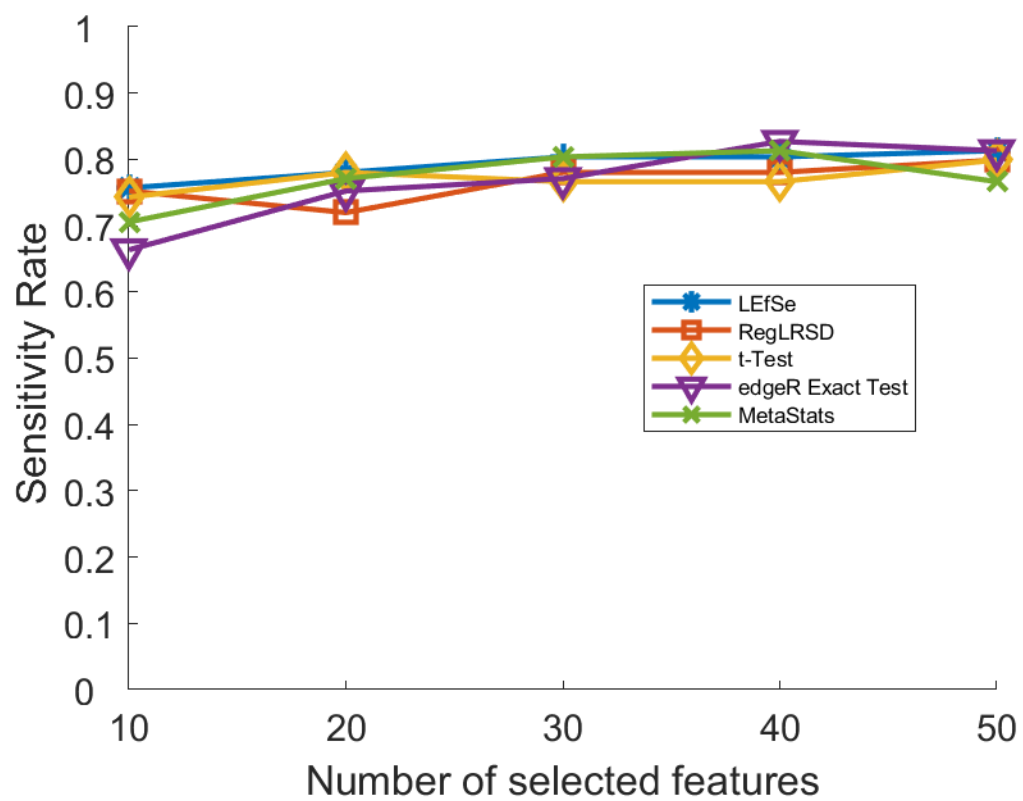


Fig. S4: Achieved sensitivity for the selected biomarker detection algorithms: LEfSe, RegLRSD, t-Test, Exact-Test (edgeR), and MetaStats, respectively.

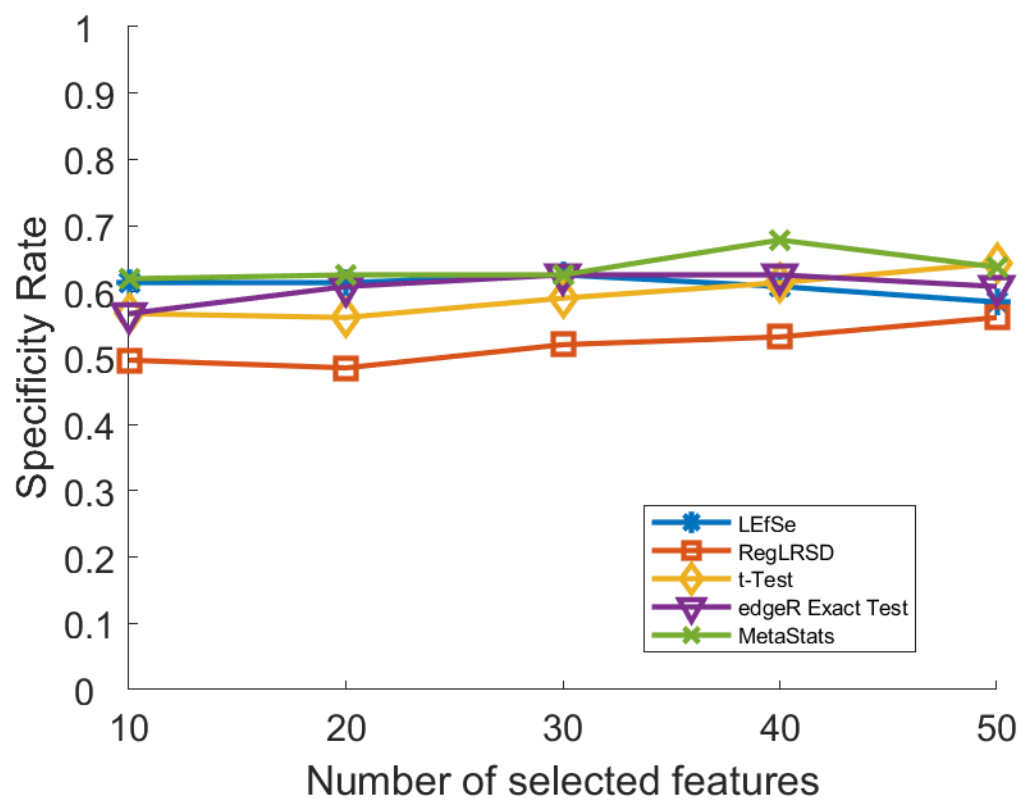


Fig. S5: Achieved specificity for the selected biomarker detection algorithms: LEfSe, RegLRSD, t-Test, Exact-Test (edgeR), and MetaStats, respectively.

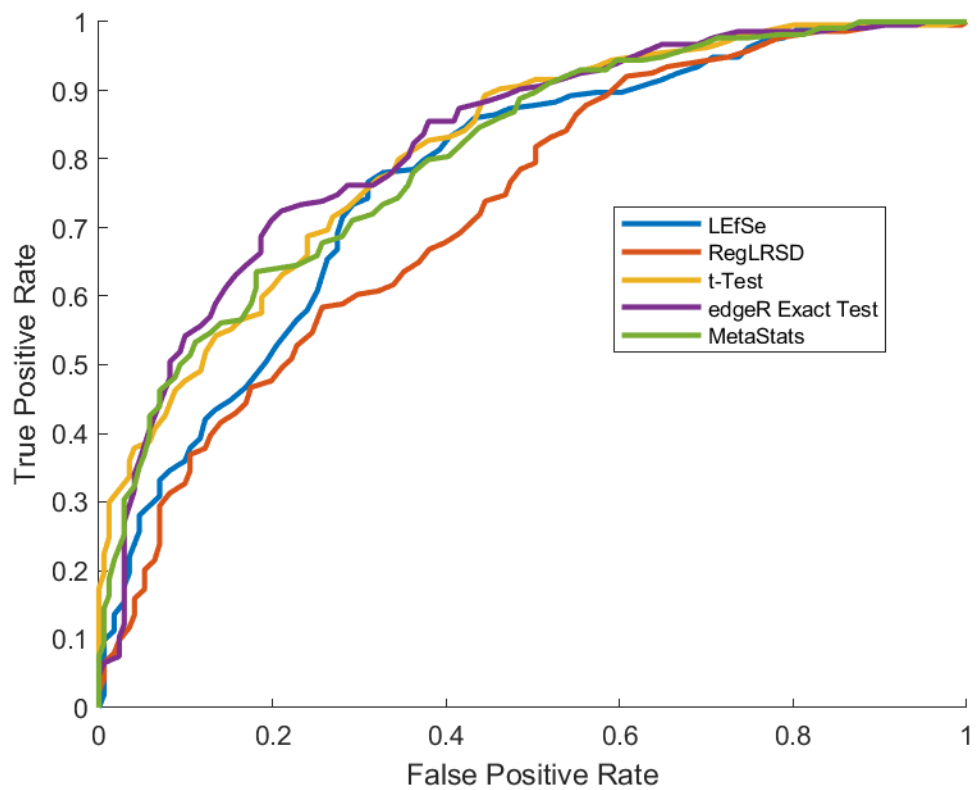


Fig. S6: Achieved ROC for the selected biomarker detection algorithms: LefSe, RegLRSD, t-Test, Exact-Test (edgeR), and MetaStats, respectively.

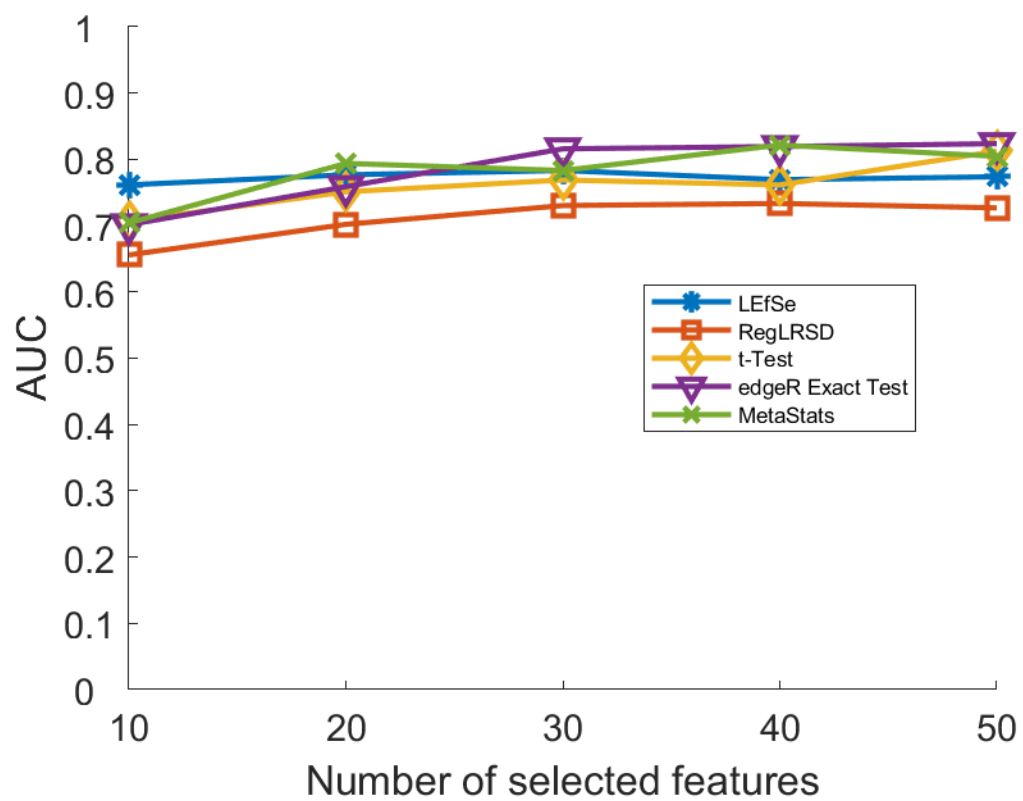


Fig. S7: Achieved AUC for the selected biomarker detection algorithms: LefSe, RegLRSD, t-Test, Exact-Test (edgeR), and MetaStats, respectively.

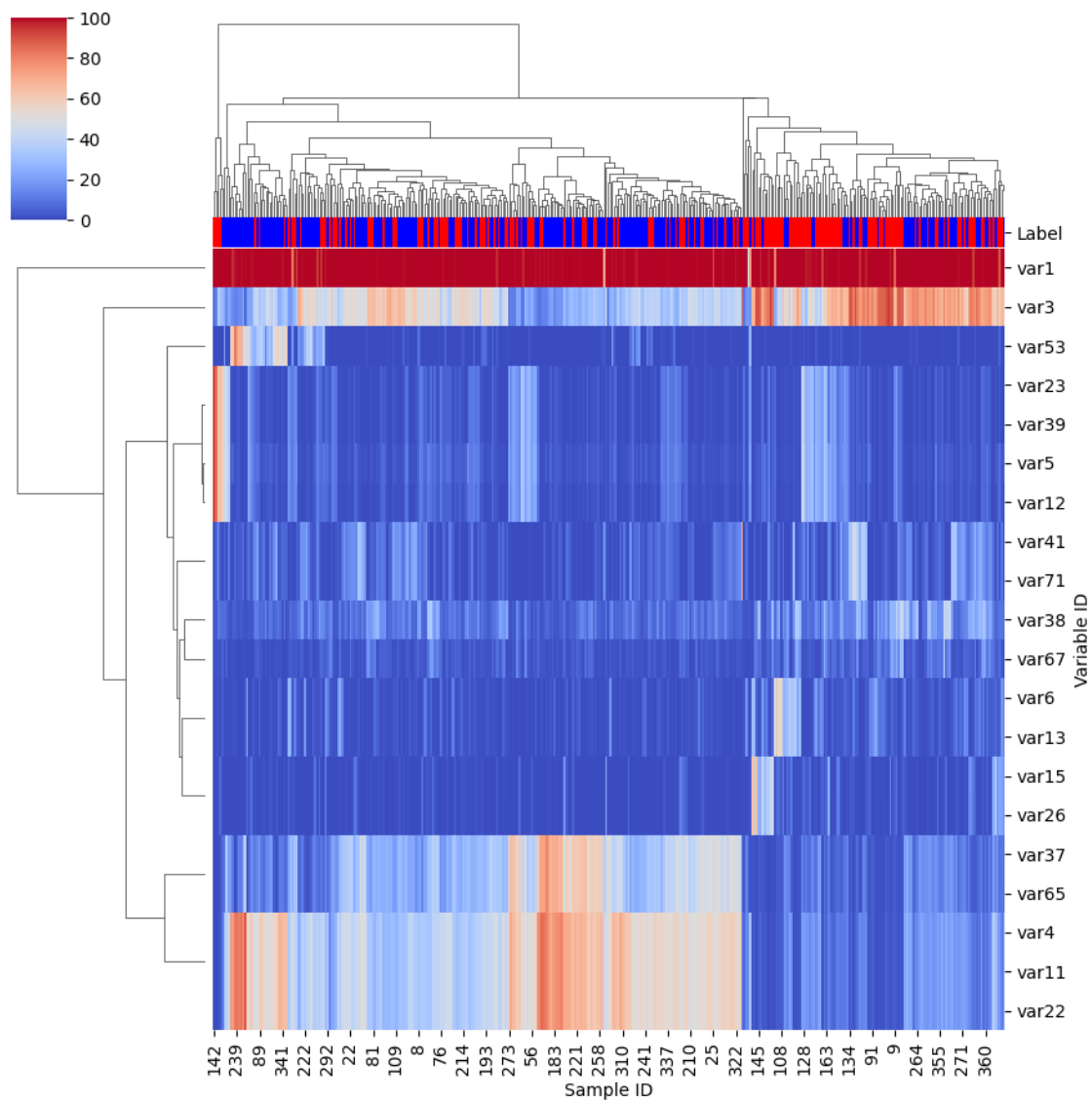


Fig. S8: The unsupervised clustering performance of the top 20 markers as suggested by LefSe algorithm.



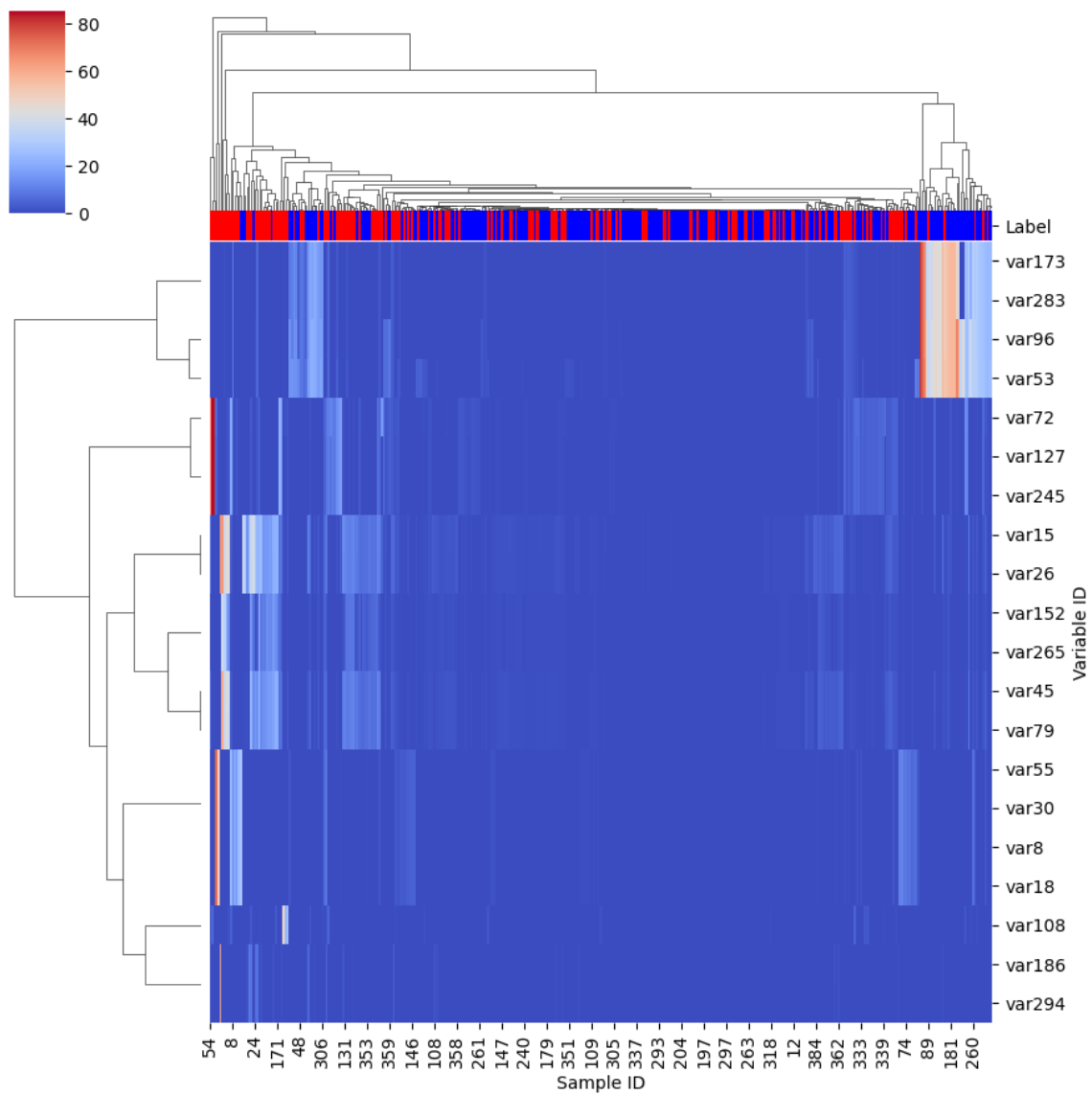


Fig. S9: The unsupervised clustering performance of the top 20 markers as suggested by edgeR (exact test).

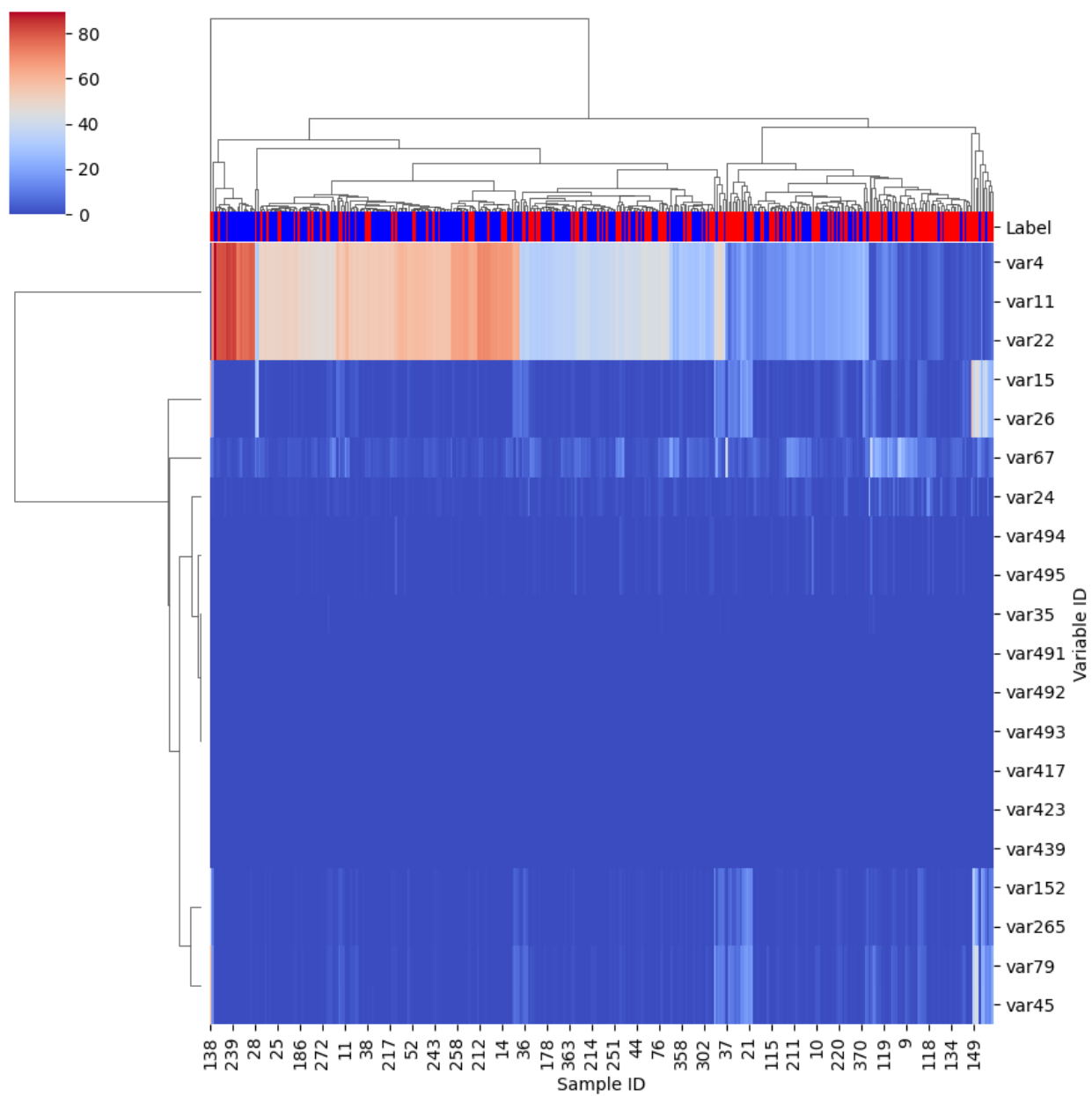


Fig. S10: The unsupervised clustering performance of the top 20 markers as suggested by t-test.

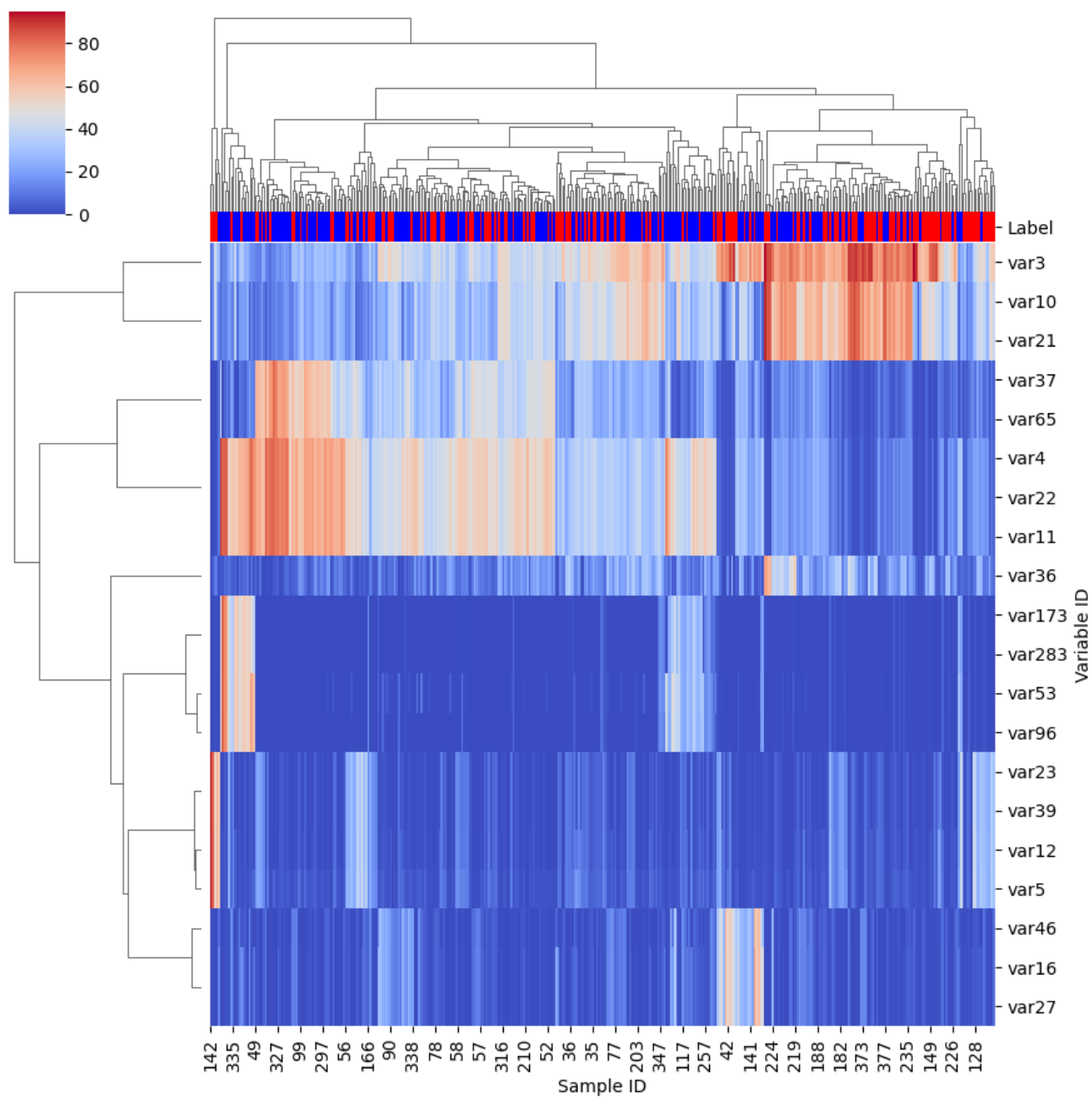


Fig. S11: The unsupervised clustering performance of the top 20 markers as suggested by RegLRSD algorithm.

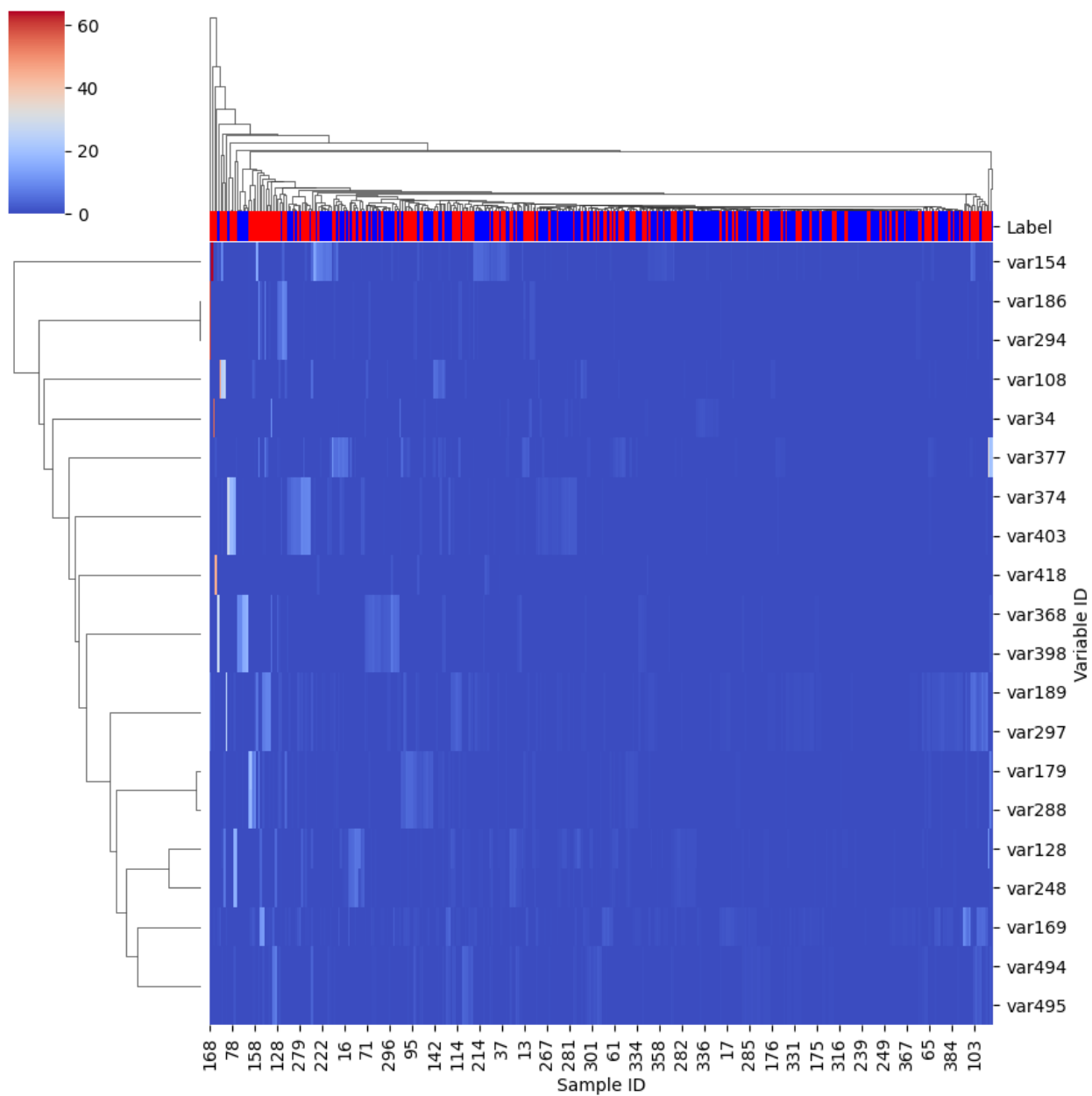


Fig. S12: The unsupervised clustering performance of the top 20 markers as suggested by MetaStats algorithm.

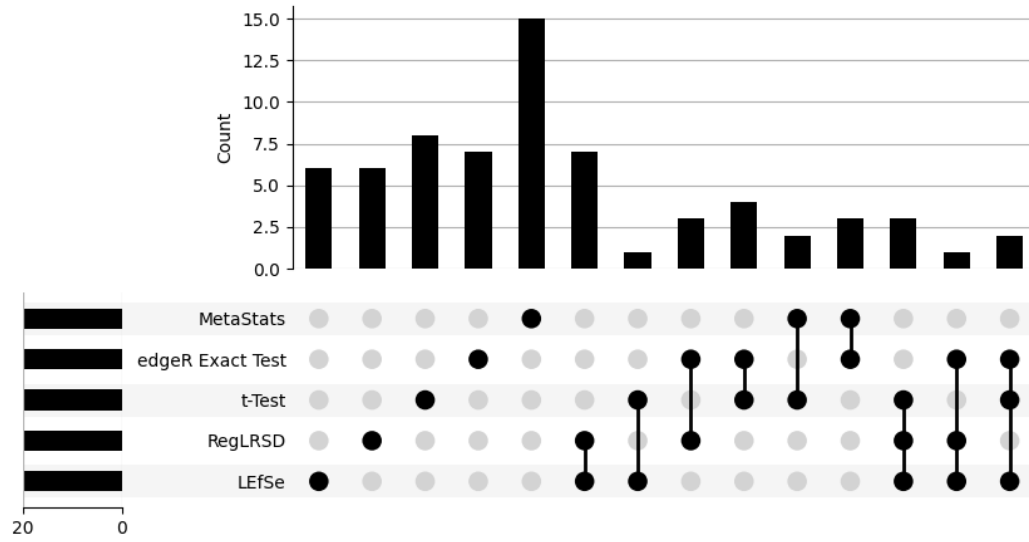


Fig. S13: The number of overlapped potential markers among the five BD algorithms