BACKGROUND KNOWLEDGE **FEATURE INTEGRATION** Resources Patient data Extracted information Databases **KEGG VCELLS** Tools Clinical features **FATHMM** CSCAPE -Carcinogenic gene status Survival Models **Datasets** Clinical-only **RSF - Random Survival Forest KEGG-Mel GBS - Gradient Boosting Survival** MODEL TRAINING VCELLS-Mel **EST - Extra Survival Trees** MR^{KEGG} **SVM - Survival Support Vector Machine** $MR^{KEGG-Mel}$ **EN-COX - Cox PH with Elastic Net Penalty** $MR^{VCELLS-Mel}$ **Fathmm** Cscape $Cscape^{High}$ **Nested-Cross Validation** Data preprocessing Training Testing **Metrics** Results Uno's Concordance Index Best model/dataset Wilcoxon test Dynamic AUC pair Integrated Brier Score