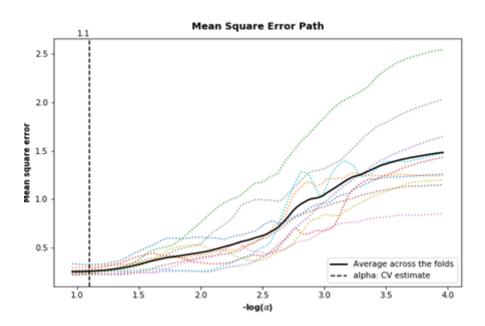
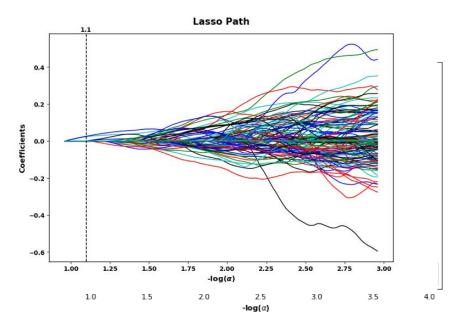
Appendix B

(a) mean square error path of $-\log(\alpha)$ with 10-fold cross validation



(b) radiomics features LASSO coefficients versus $-log(\alpha)$



Radiomics features selection via the least absolute shrinkage and selection operator (LASSO) binary logistic regression model. (a) The optimal value of α was selected using 10-fold cross validation via minimum average mean square error (MSE). MSE is plotted versus $-\log(\alpha)$. The colored dotted lines stand for MSE along the full path of α values for each fold. The black solid line is the MSE across the folds. The black dashed vertical line represents the optimal α value, which is expressed via $-\log(\alpha)$ with 1.1. (b)The above figure included all radiomics features LASSO coefficient profiles. The coefficient of features was plotted against the $-\log(\alpha)$. The vertical

dotted line was drawn at the selected value using 10-fold cross-validation, where the optical α value resulted in valuable non-zero coefficients.
Valuable Hon-zero Coefficients.