

Figure S1 Recruitment pathway for patients in this study.

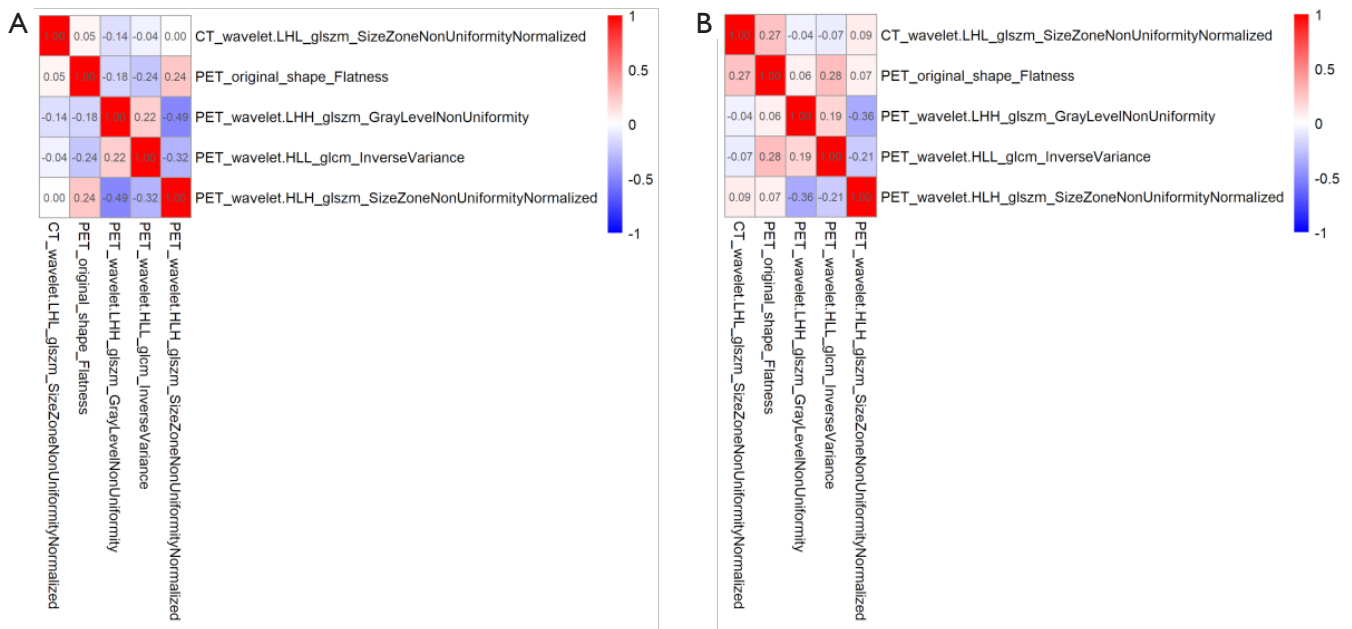
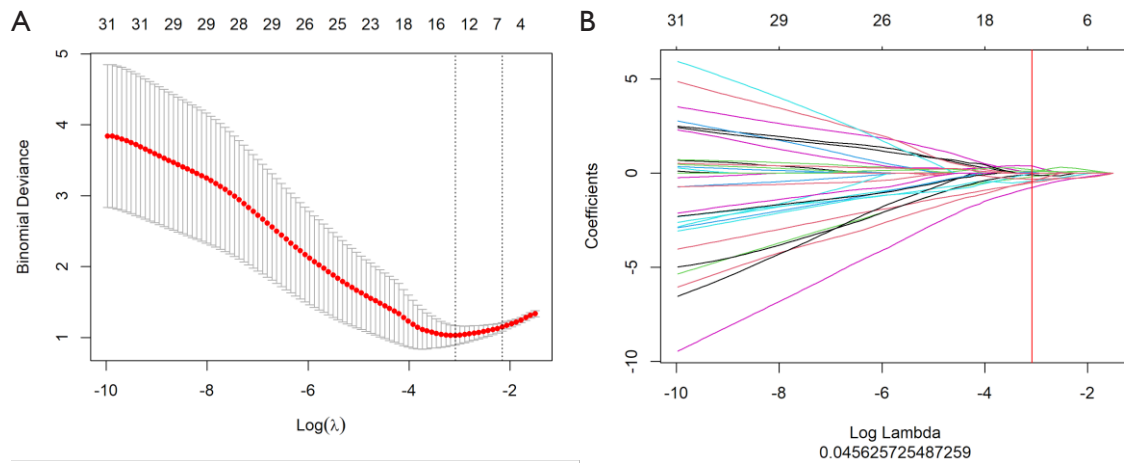
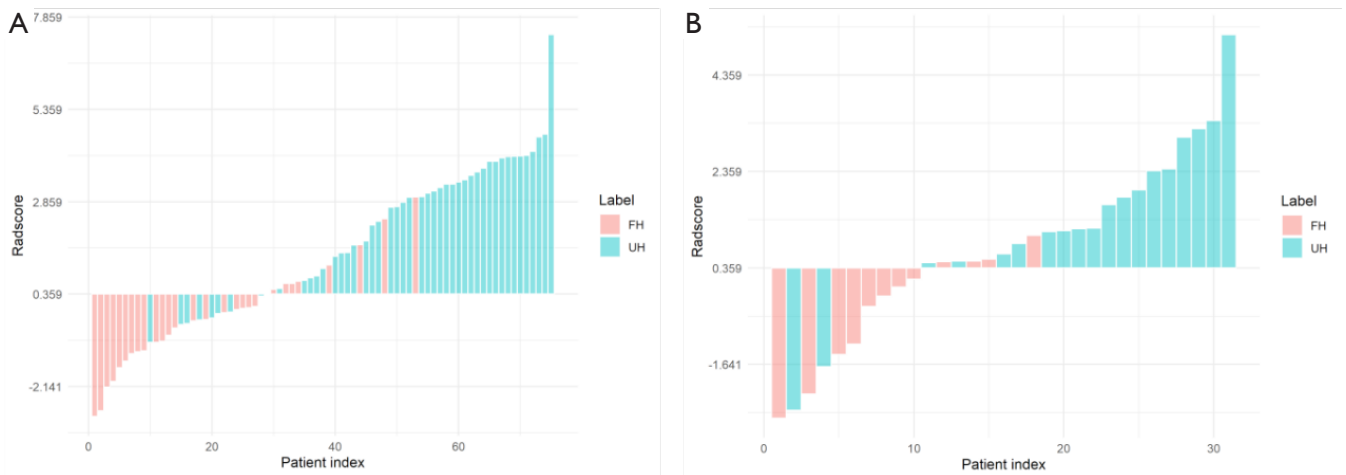


Figure S2 Heatmap comparison of the radiomics features. (A) Training cohort. (B) Validation cohort.



**Figure S3** Feature selection using the least absolute shrinkage and selection operator (LASSO) regression algorithm and the performance of radiomics signature. (A) The tuning parameter ( $\lambda$ ) in the LASSO model was selected via 10-fold cross-validation based on minimum criteria. The binomial deviance was plotted as a function of  $\log(\lambda)$ . Dotted red curve indicated the average binomial deviance values for each model with a given  $\lambda$ . The left dotted vertical line defined the optimal values of  $\lambda$  by using the minimum criteria and the 1 standard error of the minimum criteria. The  $\lambda$  value was set as 0.07008150 in this study. (B) The dotted vertical line was plotted at the selected  $\lambda$  value, resulting in 5 non-zero-coefficient features.



**Figure S4** The red bars show the scores for FH type pNTs patients and the blue bars show the scores for UH type pNTs patients. (A) Training cohort. (B) Validation cohort.