Kaplan-Meier Survival Curves (High vs Low Risk)

Log-Rank Test p-value: 0.0000
Breslow Test p-value: 0.0000
Tarone-Ware Test p-value: 0.0000
Wilcoxon Test p-value: 0.0000
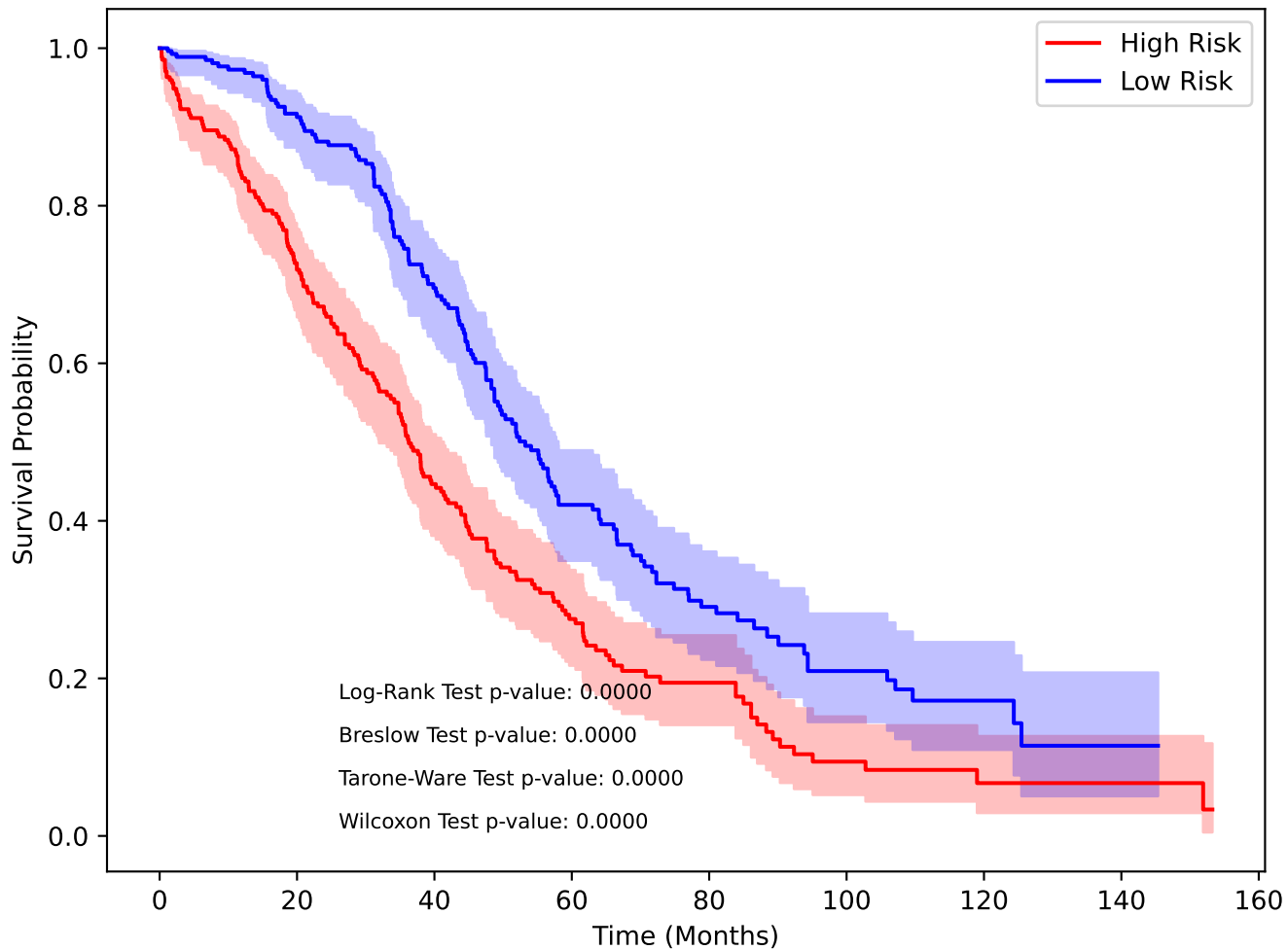
Feature Coefficients from LASSO Cox Model
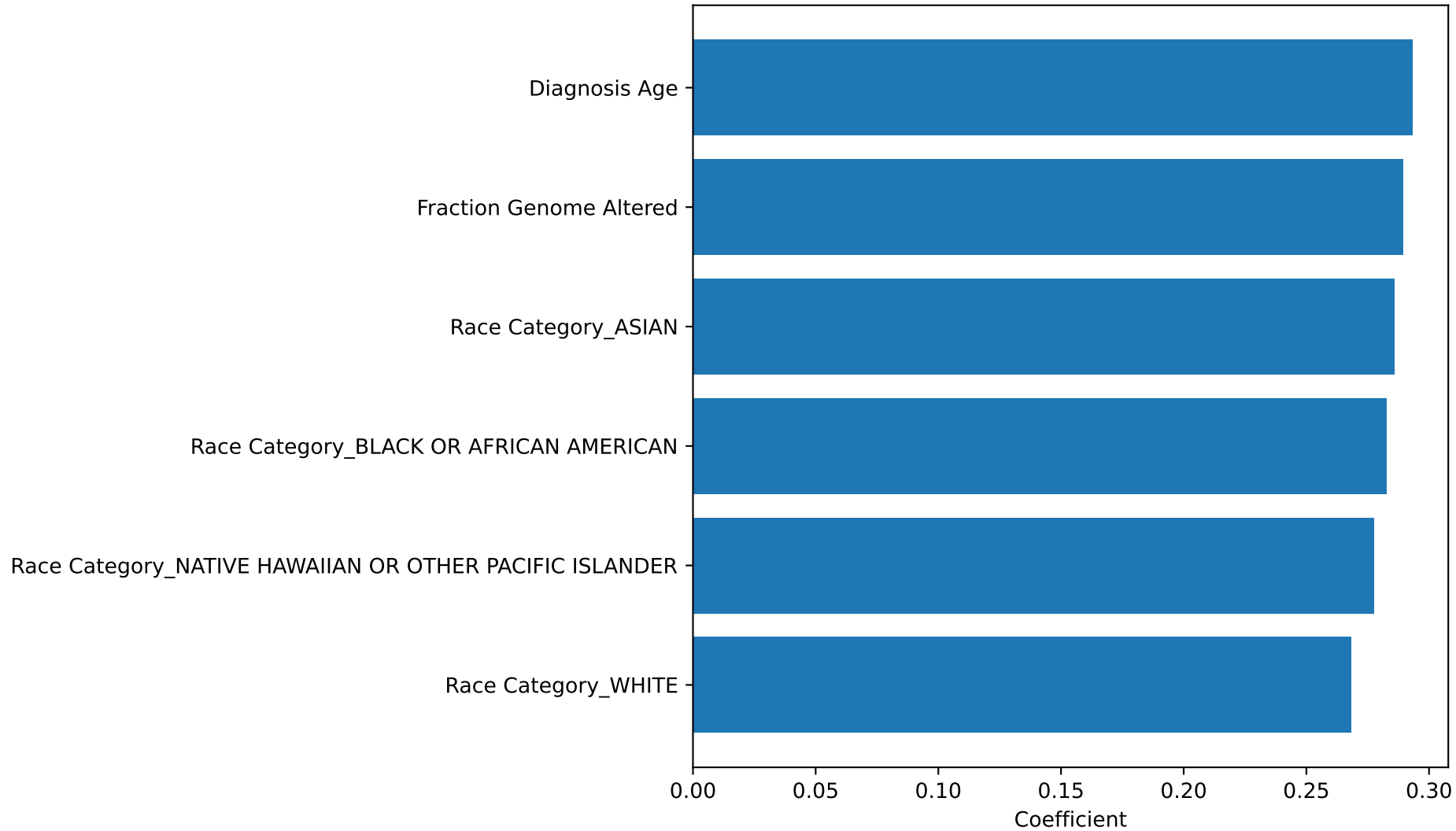
Conclusions:

1. The best alpha chosen by cross-validation is 0.0010.
2. The cross-validated c-index was 0.608, indicating above chance performance model discriminative ability.
3. Patients stratified by median predicted risk scores show distinct survival curves, with the high-risk group demonstrating worse survival.
4. Statistical test results comparing survival curves:
   - Log-Rank Test p-value: 0.0000, Test-statistics: 25.9450
   - Breslow Test p-value: 0.0000, Test-statistics: 4077207.5729
   - Tarone-Ware Test p-value: 0.0000, Test-statistics: 184746.5402
   - Wilcoxon Test p-value: 0.0000, Test-statistics: 4077207.5729
5. The LASSO penalty shrinks some coefficients to zero, highlighting the most informative features.

Hazard Ratios with Confidence Intervals
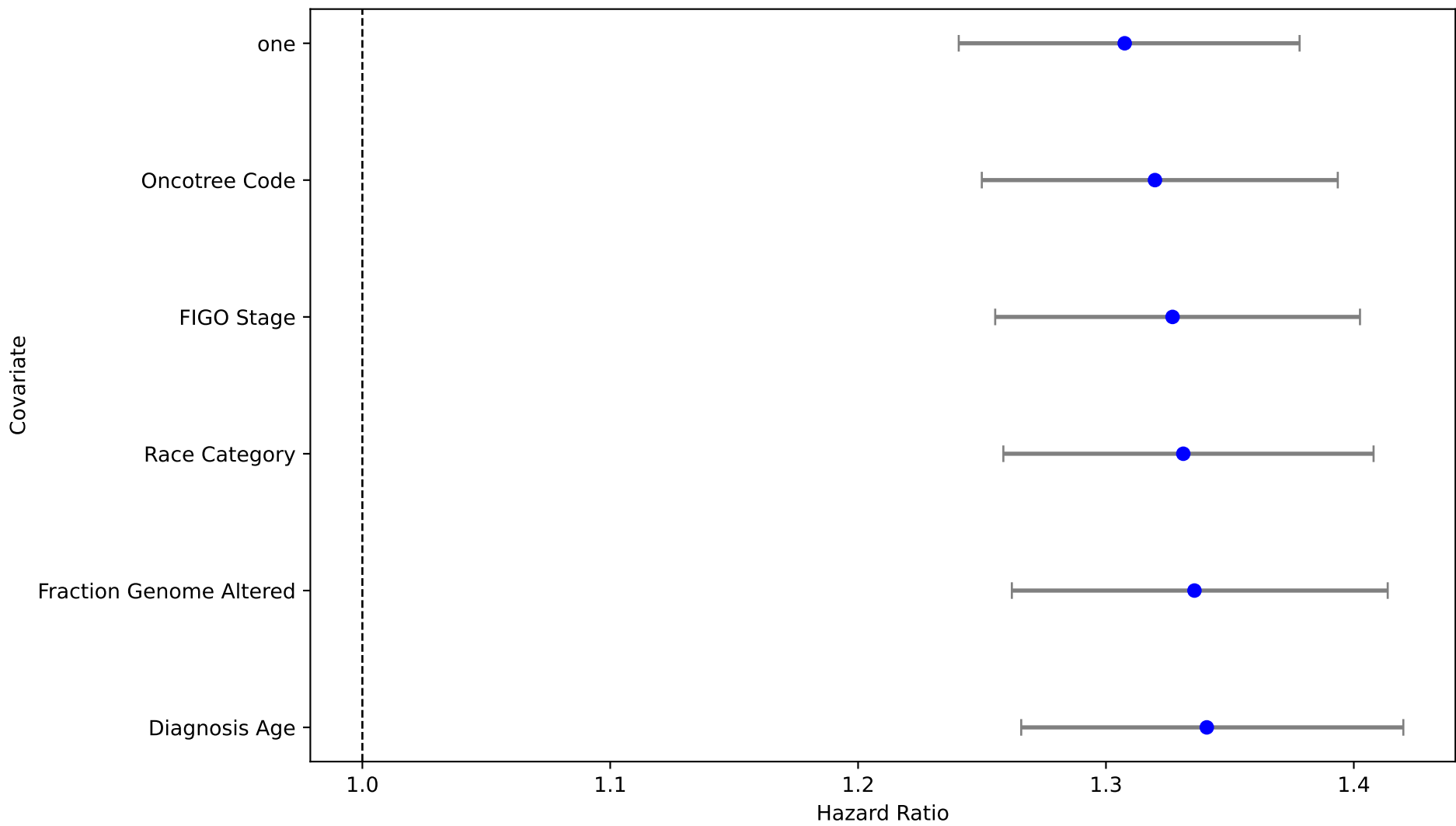
Covariate Effects on Survival

Feature	Coefficient	Hazard Ratio (HR)	Lower CI	Upper CI
Diagnosis Age	0.293177976877388	1.3406813794848773	1.265813620145012	1.4199772641817203
Fraction Genome Altered	0.28946096565743523	1.335707301833062	1.2620364120894636	1.4136787014063477
Race Category	0.2860800796199513	1.3311990528983209	1.258610562094371	1.4079739768658597
FIGO Stage	0.28281865777072224	1.3268645234282377	1.25531457789062	1.4024926457006768
Oncotree Code	0.2774591871754821	1.3197722544111574	1.2499170467212177	1.3935315212178243
one	0.26816133246052065	1.3075580745606263	1.2406081603727925	1.3781209675704047