ID	Model Name	AUC Score	AIC Score	C-Index	HL Statistic	Model Description	Rebalancing (Y/N)	Train/Test (split)	Other Notes
EX	Base RF Survival	N/A	N/A	0.66/ <mark>0.81</mark>	N/A	Given by challenge	N	provided	Need to run R file later -Ashley
EX	Cox Sex+Age	N/A	N/A	0.73/0.79	N/A	Given by challenge	N	provided	
EX	Cox All	N/A	N/A	0.71/0.83	N/A	Given by challenge	N	provided	
45	AE(500c)+LASSO (meta)+SSVM	N/A	N/A	0.6	5 N/A	standard normalization pipeline	N	70/30	best model configs
44	,	N/A	N/A	0.71	5 N/A	standard normalization pipeline	N	70/30	best model configs
43	,	N/A	N/A	0.69	8 N/A	Include negative event time	N	70/30	best model configs
42	PCA(500c) +LASSO(meta) +GBS	N/A	N/A	0.71	3 N/A	standard normalization pipeline	N	70/30	best model configs
41	PCA(500c) +LASSO(meta) +CoxEN	N/A	N/A	0.70	6 N/A	Include negative event time	N	70/30	best model configs
40	AE(50c)+LASSO (meta)+GBS	N/A	N/A	0.6	2 N/A	Grid Search	N	70/30	Using reduced data size to find best grid parameters then re-run with larger matrix
39	AE(50c)+LASSO (meta)+SSVM	N/A	N/A	0.6	4 N/A	Grid Search	N	70/30	Using reduced data size to find best grid parameters then re-run with larger matrix
38	AE(50c)+LASSO (meta)+RFS	N/A	N/A	0.6	1 N/A	Grid Search	N	70/30	Using reduced data size to find best grid parameters then re-run with larger matrix
37	AE(50c)+LASSO (meta)+ENCox	N/A	N/A	0.	7 N/A	Grid Search	N	70/30	Using reduced data size to find best grid parameters then re-run with larger matrix
36	PCA(50c) +LASSO(meta) +GBS	N/A	N/A	0.6	7 N/A	Grid Search	N	70/30	Using reduced data size to find best grid parameters then re-run with larger matrix
35	PCA(50c) +LASSO(meta) +SSVM	N/A	N/A	0.5	8 N/A	Grid Search	N	70/30	Using reduced data size to find best grid parameters then re-run with larger matrix
34	PCA(50c) +LASSO(meta) +RFS	N/A	N/A	0.6	7 N/A	Grid Search	N	70/30	Using reduced data size to find best grid parameters then re-run with larger matrix
33	PCA(50c) +LASSO(meta) +ENCox	N/A	N/A	0.6	9 N/A	Grid Search	N	70/30	Using reduced data size to find best grid parameters then re-run with larger matrix
32	PCA(500c)+AFT	N/A	734	0.	9 N/A	Bug fixes	N	70/30	lifelines implementation
31	AE(100c)+AFT	N/A	517	0.7	8 N/A	Bug fixes	N	70/30	lifelines implementation
30	UMAP+AFT	N/A	430	0.7	3 N/A	Bug fixes	N	70/30	lifelines implementation
29	LASSO+AFT	N/A	426	0.7	3 N/A	Bug fixes	N	70/30	lifelines implementation
28	PCA(0.99v)+AFT	N/A	N/A	N/A	N/A	Bug fixes	N	70/30	lifelines implementation
27	AE(100c)+CoxPH	N/A	6864	0.7	4 N/A	Bug fixes	N	70/30	lifelines implementation
26	UMAP+CoxPH	N/A	6662	0.7	3 N/A	Bug fixes	N	70/30	lifelines implementation
25	LASSO+CoxPH	N/A	6731	0.7	2 N/A	Bug fixes	N	70/30	lifelines implementation
24	PCA(0.99v) +CoxPH	N/A	7452	0.9	9 N/A	Bug fixes	N	70/30	lifelines implementation

ID	Model Name	AUC Score	AIC Score	C-Index	HL Statistic	Model Description	Rebalancing (Y/N)	Train/Test (split)	Other Notes
ΞX	Base RF Survival	N/A	N/A	0.66/ <mark>0.81</mark>	N/A	Given by challenge	N	provided	Need to run R file later -Ashley
ΞX	Cox Sex+Age	N/A	N/A	0.73/0.79	N/A	Given by challenge	N	provided	
ΞX	Cox All	N/A	N/A	0.71/0.83	N/A	Given by challenge	N	provided	
23	PCA(100c) +SSVM	N/A	N/A	0.51	N/A	Default settings, will add in grid search later	N	80/20	
22	PCA(100c)+GBS	N/A	N/A	0.69	N/A	Default settings, will add in grid search later	N	80/20	
21	PCA(100c)+RFS	N/A	N/A	0.61	N/A	Default settings, will add in grid search later	N	80/20	
20	PCA(0.85v)+AFT	N/A	N/A	N/A	N/A	Default settings, 1910 components produced by PCA	N	default lifelines	Failed - did not converge
19	UMAP+AFT	N/A	430	0.73	N/A	Default settings, 2 components from UMAP	N	default lifelines	
18	PCA(100c)+AFT	N/A	544	0.75	N/A	Default settings, 100 components from PCA	N	default lifelines	
17	UMAP+CoxPH	N/A	6659	0.73	N/A	Default settings, 2 components from UMAP	N	default lifelines	
16	PCA(100c) +CoxPH	N/A	6801	0.74	N/A	Default settings, 100 components from PCA	N	default lifelines	
15	PCA(0.85v) +CoxPH	N/A	7957	0.98	N/A	Default settings, 1910 components produced by PCA	N	default lifelines	
14	FULL+CoxPH	N/A	N/A	N/A	N/A	Default settings	N	default lifelines	Failed due to sparsity
13	FULL+XGB	0.54	N/A	0.46	N/A	standard normalization pipeline	Y	70/30 with stratification	
12	AE+SVM	N/A	N/A	N/A	N/A	AE performed on reads, pheno left alone, standard normalization pipeline	Υ	70/30 with stratification	need to rerun
11	UMAP+SVM	0.52	N/A	0.5	N/A	UMAP performed on reads, pheno left alone, standard normalization pipeline	Y	70/30 with stratification	
10	LASSO+SVM	0.53	N/A	0.48	N/A	LASSO performed on reads, pheno left alone, standard normalization pipeline	Υ	70/30 with stratification	
9	PCA(0.85v)+SVM	0.5	N/A	0.5	N/A	PCA performed on reads, pheno left alone, standard normalization pipeline	Υ	70/30 with stratification	
8	AE+RF	0.48	N/A	0.49	N/A	AE performed on reads, pheno left alone, standard normalization pipeline	Υ	70/30 with stratification	
7	UMAP+RF	0.5	N/A	0.52	N/A	UMAP performed on reads, pheno left alone, standard normalization pipeline	Υ	70/30 with stratification	
6	LASSO+RF	0.51	N/A	0.48	N/A	LASSO performed on reads, pheno left alone, standard normalization pipeline	Υ	70/30 with stratification	
5	PCA(0.85v)+RF	0.46	N/A	0.5	N/A	PCA performed on reads, pheno left alone, standard normalization pipeline	Y	70/30 with stratification	
4	AE+XGB	0.49	N/A	0.49	N/A	AE performed on reads, pheno left alone, standard normalization pipeline  UMAP performed on reads, pheno left alone, standard	Υ	70/30 with stratification	
3	UMAP+XGB	0.51	N/A	0.51	N/A	normalization pipeline  LASSO performed on reads, pheno left alone, standard	Υ	70/30 with stratification	
2	LASSO+XGB	0.52	N/A	0.42	N/A	normalization pipeline  PCA performed on reads, pheno left alone, standard	Υ	70/30 with stratification	
1	PCA(0.85v)+XGB	0.56	N/A	0.44	N/A	normalization pipeline	Y	70/30 with stratification	
	PCA(0.95v) +CoxPHFitter	N/A	4263	0.69	N/A	PCA performed on reads, pheno left alone (without prevalentHFail), Standard normalization	N	given in train/test folders	will not converge with prevalentHFa

ID	Model Name	AUC Score	AIC Score	C-Index	HL Statistic	Model Description	Rebalancing (Y/N)	Train/Test (split)	Other Notes
EX	Base RF Survival	N/A	N/A	0.66/ <mark>0.81</mark>	N/A	Given by challenge	N	provided	Need to run R file later -Ashley
EX	Cox Sex+Age	N/A	N/A	0.73/0.79	N/A	Given by challenge	N	provided	
EX	Cox All	N/A	N/A	0.71/0.83	N/A	Given by challenge	N	provided	
	PCA(0.85v) +CoxPHFitter	N/A	4245	0.69	N/A	PCA performed on reads, pheno left alone (without prevalentHFail), Standard normalization	N	given in train/test folders	will not converge with prevalentHFail
	CoxPHFitter	N/A	4232	0.71	N/A	Only pheno data (without prevalentHFail), Standard normalization	N	given in train/test folders	will not converge with prevalentHFail
	PCA(0.95v) +Weibull AFTFitter	N/A	3310	0.69	N/A	PCA performed on reads, pheno left alone (without prevalentHFail), Standard normalization	N	given in train/test folders	warns about suspiscious paramters with prevalentHFail
	PCA(0.85v) +Weibull AFTFitter	N/A	3292	0.69	N/A	Only pheno data (without prevalentHFail), Standard normalization	N	given in train/test folders	
	Weibull AFTFitter	N/A	3275	0.71	N/A	Only pheno data (without prevalentHFail), Standard normalization	N	given in train/test folders	
	PCA(0.85v) +RandomSurvival Forest (maxdepth=10)	N/A	N/A	0.68	N/A	PCA performed on reads, pheno left alone (without prevalentHFail), Standard normalization	N	given in train/test folders	
	PCA(0.85v)+Cox- nnet								