

Simulated examples for the survival ensemble methods

Select data type

Hnsc

**Time point for event prediction:**

4

Random seed for calibration and validation

43

K_Outer loop CV (for validation)

5

K_inner CV folds (model tuning)

3

Simulated data: random seed (generation):

4242

Sample size:

150

Observation time

5

Expected event prevalence by study end

0.5

Expected drop out rate

0.3

Custom data: path to data file

~/Desktop/Study_KCL/PhD P

Predictors to use in the model

"baseline_age_", "genderdun

Time variable name

time

Event indicator variable name

event

Internally cross-validated results:

Show10▼entries

Search:

	AUCROC	BS	BS_scaled	C_score	Calib_slope	Calib_alpha	T
test	0.5734	0.2311	-1.2217	0.5706	0.037	-0.069	4
train	0.9658	0.0314	0.7178	0.9582	0.9911	-0.0102	4

Showing 1 to 2 of 2 entries

Previous1Next

Internally cross-validated Test results for each CV fold:

Show10▼entries

Search:

	AUCROC	BS	BS_scaled	C_score	Calib_slope	Calib_alpha	T
test.1	0.5679	0.2064	-1.5364	0.5643	0.0541	-0.1249	4
test.2	0.49	0.2865	-0.9411	0.4761	0.0212	-0.0388	4
test.3	0.6707	0.1768	-1.0995	0.6743	0.0919	-0.0762	4
test.4	0.5312	0.2141	-0.5349	0.5478	-0.0101	0.0284	4
test.5	0.6071	0.2719	-1.9966	0.5902	0.028	-0.1338	4

Showing 1 to 5 of 5 entries





Previous1Next

CoxPH coefficients:

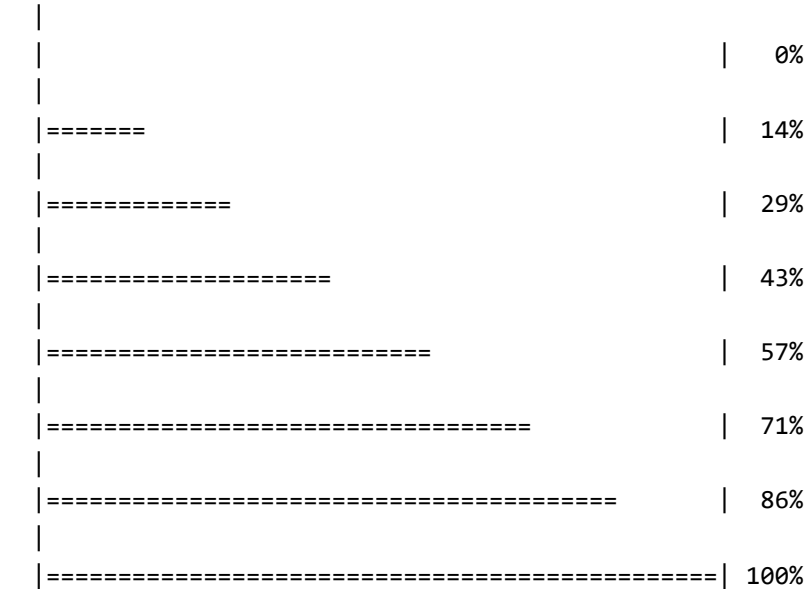
Show10▼entries

Search:

	coef	exp(coef)	se(coef)	z	Pr(> z)
original_firstorder_10Percentile	2.7726	16.0001	5.3806	0.5153	0.6063
original_firstorder_90Percentile	6.2932	540.8887	6.3476	0.9914	0.3215
original_firstorder_Energy	-5.872	0.0028	2.3249	-2.5257	0.0115
original_firstorder_Entropy	-47.6171	0	24.2541	-1.9633	0.0496
original_firstorder_InterquartileRange	-1.6075	0.2004	10.3194	-0.1558	0.8762
original_firstorder_Kurtosis	-0.0654	0.9367	0.6798	-0.0962	0.9234
original_firstorder_Maximum	-1.0313	0.3565	1.2112	-0.8515	0.3945

	coef 	exp(coef) 	se(coef) 	z 	Pr(> z)				
original_firstorder_Mean	-16.0747	0	13.8587	-1.1599	0.2461				
original_firstorder_MeanAbsoluteDeviation	12.7045	329225.0424	17.2438	0.7368	0.4613				
original_firstorder_Median	11.5328	102008.3908	7.3137	1.5769	0.1148				
Showing 1 to 10 of 107 entries	Previous	<div>1</div>	2	3	4	5	...	11	Next

Other results:



\$test						
T	AUCROC	BS	BS_scaled	C_score	Calib_slope	
1 4	0.5679024	0.2064015	-1.5363616	0.5643491	0.05412386	
2 4	0.4899945	0.2864594	-0.9410977	0.4761159	0.02123243	
3 4	0.6706729	0.1767628	-1.0995224	0.6743323	0.09194593	
4 4	0.5312015	0.2140925	-0.5349470	0.5478332	-0.01013862	
5 4	0.6070585	0.2719169	-1.9966247	0.5901750	0.02799401	
Calib_alpha test cv_n						
1	-0.12486210	1	1			
2	-0.03877795	1	2			
3	-0.07624413	1	3			
4	0.02842103	1	4			
5	-0.13377198	1	5			

\$train						
T	AUCROC	BS	BS_scaled	C_score	Calib_slope	
1 4	0.9440411	0.04585905	0.6082009	0.9330174	0.9125063	
2 4	0.9980374	0.01251241	0.8748880	0.9917371	1.6000633	
3 4	0.9690823	0.03094980	0.7356434	0.9613758	0.6660871	
4 4	0.9400561	0.04140304	0.5970122	0.9333211	1.2742888	
5 4	0.9777446	0.02605077	0.7734400	0.9717308	0.5023573	
Calib_alpha test cv_n						
1	-0.008318561	0	1			
2	-0.009689104	0	2			
3	-0.010614643	0	3			
4	-0.013337980	0	4			
5	-0.008916952	0	5			

\$testaverage						
T	AUCROC	BS	BS_scaled	C_score	Calib_slope	Calib_alpha test
4.00000000	0.57336597	0.23112661	-1.22171067	0.57056110	0.03703152	-0.06904703 1.00000000

\$trainaverage						
T	AUCROC	BS	BS_scaled	C_score	Calib_slope	Calib_alpha test
4.00000000	0.96579231	0.03135501	0.71783688			

```
0.95823643 0.99106056 -0.01017545 0.00000000
```

```
$model_list
```

```
$model_list[[1]]
```

```
Call:
```

```
coxph(formula = as.formula(paste("Surv(df_train$time, df_train$event) ~",
  paste(predict.factors, collapse = "+"))), data = df_train,
  x = TRUE)
```

	coef
original_firstorder_10Percentile	5.900e+00
original_firstorder_90Percentile	4.949e+00
original_firstorder_Energy	-1.118e+01
original_firstorder_Entropy	-4.575e+01
original_firstorder_InterquartileRange	2.820e+01
original_firstorder_Kurtosis	4.147e-01
original_firstorder_Maximum	-1.606e+00
original_firstorder_Mean	-3.615e+01
original_firstorder_MeanAbsoluteDeviation	2.947e+01
original_firstorder_Median	2.460e+01
original_firstorder_Minimum	1.549e+01
original_firstorder_Range	0.000e+00
original_firstorder_RobustMeanAbsoluteDeviation	-3.551e+01
original_firstorder_RootMeanSquared	-5.487e+00
original_firstorder_Skewness	-1.059e+00
original_firstorder_TotalEnergy	0.000e+00
original_firstorder_Uniformity	-2.321e+01
original_firstorder_Variance	5.227e+02
original_glcmm_Autocorrelation	-2.789e+01
original_glcmm_ClusterProminence	1.751e+02
original_glcmm_ClusterShade	3.754e+01
original_glcmm_ClusterTendency	2.709e+00
original_glcmm_Contrast	4.003e+02
original_glcmm_Correlation	-3.557e+00
original_glcmm_DifferenceAverage	1.237e+02
original_glcmm_DifferenceEntropy	1.919e+01
original_glcmm_DifferenceVariance	-6.298e+02
original_glcmm_Id	1.127e+03
original_glcmm_Idm	-1.009e+03
original_glcmm_Idmn	-1.472e+01
original_glcmm_Idn	1.349e+01
original_glcmm_Imc1	-1.363e+00
original_glcmm_Imc2	-5.296e+00
original_glcmm_InverseVariance	1.057e+02
original_glcmm_JointAverage	2.005e+00
original_glcmm_JointEnergy	8.888e+00
original_glcmm_JointEntropy	-1.898e+01
original_glcmm_MCC	1.841e-01
original_glcmm_MaximumProbability	6.502e+00
original_glcmm_SumAverage	0.000e+00
original_glcmm_SumEntropy	6.840e+00
original_glcmm_SumSquares	0.000e+00
original_gldm_DependenceEntropy	1.102e+01
original_gldm_DependenceNonUniformity	2.976e+00
original_gldm_DependenceNonUniformityNormalized	2.534e+00
original_gldm_DependenceVariance	-5.650e+00

original_gldm_GrayLevelNonUniformity	-1.194e+01
original_gldm_GrayLevelVariance	-5.953e+02
original_gldm_HighGrayLevelEmphasis	-2.024e+02
original_gldm_LargeDependenceEmphasis	-6.959e+01
original_gldm_LargeDependenceHighGrayLevelEmphasis	3.262e+01
original_gldm_LargeDependenceLowGrayLevelEmphasis	2.998e+01
original_gldm_LowGrayLevelEmphasis	3.422e+01
original_gldm_SmallDependenceEmphasis	2.022e+01
original_gldm_SmallDependenceHighGrayLevelEmphasis	-2.166e+00
original_gldm_SmallDependenceLowGrayLevelEmphasis	-6.334e+00
original_glrlm_GrayLevelNonUniformity	9.682e+00
original_glrlm_GrayLevelNonUniformityNormalized	2.834e+00
original_glrlm_GrayLevelVariance	4.383e+01
original_glrlm_HighGrayLevelRunEmphasis	1.324e+02
original_glrlm_LongRunEmphasis	4.595e+00
original_glrlm_LongRunHighGrayLevelEmphasis	-2.081e+00
original_glrlm_LongRunLowGrayLevelEmphasis	-4.287e+00
original_glrlm_LowGrayLevelRunEmphasis	-1.628e+02
original_glrlm_RunEntropy	4.339e+01
original_glrlm_RunLengthNonUniformity	8.819e+00
original_glrlm_RunLengthNonUniformityNormalized	3.858e+01
original_glrlm_RunPercentage	-8.684e+01
original_glrlm_RunVariance	-3.316e+00
original_glrlm_ShortRunEmphasis	-4.608e+01
original_glrlm_ShortRunHighGrayLevelEmphasis	9.602e+01
original_glrlm_ShortRunLowGrayLevelEmphasis	1.222e+02
original_glszm_GrayLevelNonUniformity	-1.559e+00
original_glszm_GrayLevelNonUniformityNormalized	4.500e+00
original_glszm_GrayLevelVariance	2.580e+00
original_glszm_HighGrayLevelZoneEmphasis	-1.450e+01
original_glszm_LargeAreaEmphasis	-1.214e+03
original_glszm_LargeAreaHighGrayLevelEmphasis	-6.876e-01
original_glszm_LargeAreaLowGrayLevelEmphasis	3.585e+00
original_glszm_LowGrayLevelZoneEmphasis	-1.232e+01
original_glszm_SizeZoneNonUniformity	5.390e+00
original_glszm_SizeZoneNonUniformityNormalized	-1.828e+01
original_glszm_SmallAreaEmphasis	1.501e+01
original_glszm_SmallAreaHighGrayLevelEmphasis	1.100e+01
original_glszm_SmallAreaLowGrayLevelEmphasis	6.324e+00
original_glszm_ZoneEntropy	7.657e-01
original_glszm_ZonePercentage	-3.354e+01
original_glszm_ZoneVariance	1.215e+03
original_ngtdm_Busyness	-1.236e+00
original_ngtdm_Coarseness	1.501e+00
original_ngtdm_Complexity	9.600e-01
original_ngtdm_Contrast	-1.271e+01
original_ngtdm_Strength	4.916e-01
original_shape_Elongation	3.230e+00
original_shape_Flatness	-3.087e+00
original_shape_LeastAxisLength	5.996e+00
original_shape_MajorAxisLength	3.788e+00
original_shape_Maximum2DDiameterColumn	-3.271e+00
original_shape_Maximum2DDiameterRow	-9.269e-01
original_shape_Maximum2DDiameterSlice	-2.307e+00
original_shape_Maximum3DDiameter	4.511e+00
original_shape_MeshVolume	1.887e+02

original_shape_MinorAxisLength	-3.470e+00
original_shape_Sphericity	5.975e-01
original_shape_SurfaceArea	-7.510e+00
original_shape_SurfaceVolumeRatio	7.590e+01
original_shape_VoxelVolume	-1.938e+02
	exp(coef)
original_firstorder_10Percentile	3.651e+02
original_firstorder_90Percentile	1.410e+02
original_firstorder_Energy	1.401e-05
original_firstorder_Entropy	1.355e-20
original_firstorder_InterquartileRange	1.765e+12
original_firstorder_Kurtosis	1.514e+00
original_firstorder_Maximum	2.007e-01
original_firstorder_Mean	1.997e-16
original_firstorder_MeanAbsoluteDeviation	6.305e+12
original_firstorder_Median	4.820e+10
original_firstorder_Minimum	5.344e+06
original_firstorder_Range	1.000e+00
original_firstorder_RobustMeanAbsoluteDeviation	3.780e-16
original_firstorder_RootMeanSquared	4.141e-03
original_firstorder_Skewness	3.468e-01
original_firstorder_TotalEnergy	1.000e+00
original_firstorder_Uniformity	8.296e-11
original_firstorder_Variance	1.030e+227
original_glcm_Autocorrelation	7.743e-13
original_glcm_ClusterProminence	1.056e+76
original_glcm_ClusterShade	2.014e+16
original_glcm_ClusterTendency	1.502e+01
original_glcm_Contrast	6.848e+173
original_glcm_Correlation	2.853e-02
original_glcm_DifferenceAverage	5.296e+53
original_glcm_DifferenceEntropy	2.164e+08
original_glcm_DifferenceVariance	3.174e-274
original_glcm_Id	Inf
original_glcm_Idm	0.000e+00
original_glcm_Idmn	4.034e-07
original_glcm_Idn	7.243e+05
original_glcm_Imc1	2.559e-01
original_glcm_Imc2	5.014e-03
original_glcm_InverseVariance	7.703e+45
original_glcm_JointAverage	7.423e+00
original_glcm_JointEnergy	7.246e+03
original_glcm_JointEntropy	5.709e-09
original_glcm_MCC	1.202e+00
original_glcm_MaximumProbability	6.668e+02
original_glcm_SumAverage	1.000e+00
original_glcm_SumEntropy	9.343e+02
original_glcm_SumSquares	1.000e+00
original_gldm_DependenceEntropy	6.106e+04
original_gldm_DependenceNonUniformity	1.960e+01
original_gldm_DependenceNonUniformityNormalized	1.260e+01
original_gldm_DependenceVariance	3.516e-03
original_gldm_GrayLevelNonUniformity	6.523e-06
original_gldm_GrayLevelVariance	2.856e-259
original_gldm_HighGrayLevelEmphasis	1.198e-88
original_gldm_LargeDependenceEmphasis	6.011e-31

original_gldm_LargeDependenceHighGrayLevelEmphasis	1.462e+14
original_gldm_LargeDependenceLowGrayLevelEmphasis	1.043e+13
original_gldm_LowGrayLevelEmphasis	7.303e+14
original_gldm_SmallDependenceEmphasis	6.028e+08
original_gldm_SmallDependenceHighGrayLevelEmphasis	1.147e-01
original_gldm_SmallDependenceLowGrayLevelEmphasis	1.775e-03
original_glrlm_GrayLevelNonUniformity	1.603e+04
original_glrlm_GrayLevelNonUniformityNormalized	1.701e+01
original_glrlm_GrayLevelVariance	1.088e+19
original_glrlm_HighGrayLevelRunEmphasis	3.297e+57
original_glrlm_LongRunEmphasis	9.895e+01
original_glrlm_LongRunHighGrayLevelEmphasis	1.248e-01
original_glrlm_LongRunLowGrayLevelEmphasis	1.374e-02
original_glrlm_LowGrayLevelRunEmphasis	1.932e-71
original_glrlm_RunEntropy	7.005e+18
original_glrlm_RunLengthNonUniformity	6.759e+03
original_glrlm_RunLengthNonUniformityNormalized	5.679e+16
original_glrlm_RunPercentage	1.940e-38
original_glrlm_RunVariance	3.630e-02
original_glrlm_ShortRunEmphasis	9.674e-21
original_glrlm_ShortRunHighGrayLevelEmphasis	5.014e+41
original_glrlm_ShortRunLowGrayLevelEmphasis	1.141e+53
original_glszm_GrayLevelNonUniformity	2.104e-01
original_glszm_GrayLevelNonUniformityNormalized	9.004e+01
original_glszm_GrayLevelVariance	1.320e+01
original_glszm_HighGrayLevelZoneEmphasis	5.061e-07
original_glszm_LargeAreaEmphasis	0.000e+00
original_glszm_LargeAreaHighGrayLevelEmphasis	5.028e-01
original_glszm_LargeAreaLowGrayLevelEmphasis	3.605e+01
original_glszm_LowGrayLevelZoneEmphasis	4.479e-06
original_glszm_SizeZoneNonUniformity	2.192e+02
original_glszm_SizeZoneNonUniformityNormalized	1.155e-08
original_glszm_SmallAreaEmphasis	3.317e+06
original_glszm_SmallAreaHighGrayLevelEmphasis	6.012e+04
original_glszm_SmallAreaLowGrayLevelEmphasis	5.577e+02
original_glszm_ZoneEntropy	2.151e+00
original_glszm_ZonePercentage	2.710e-15
original_glszm_ZoneVariance	Inf
original_ngtdm_Busyness	2.907e-01
original_ngtdm_Coarseness	4.488e+00
original_ngtdm_Complexity	2.612e+00
original_ngtdm_Contrast	3.017e-06
original_ngtdm_Strength	1.635e+00
original_shape_Elongation	2.527e+01
original_shape_Flatness	4.565e-02
original_shape_LeastAxisLength	4.019e+02
original_shape_MajorAxisLength	4.417e+01
original_shape_Maximum2DDiameterColumn	3.796e-02
original_shape_Maximum2DDiameterRow	3.958e-01
original_shape_Maximum2DDiameterSlice	9.956e-02
original_shape_Maximum3DDiameter	9.104e+01
original_shape_MeshVolume	8.593e+81
original_shape_MinorAxisLength	3.110e-02
original_shape_Sphericity	1.818e+00
original_shape_SurfaceArea	5.474e-04
original_shape_SurfaceVolumeRatio	9.139e+32

original_shape_VoxelVolume	6.770e-85
	se(coef)
original_firstorder_10Percentile	1.469e-01
original_firstorder_90Percentile	8.189e-02
original_firstorder_Energy	1.433e-01
original_firstorder_Entropy	1.256e-01
original_firstorder_InterquartileRange	1.328e-01
original_firstorder_Kurtosis	1.188e-01
original_firstorder_Maximum	1.219e-01
original_firstorder_Mean	1.339e-01
original_firstorder_MeanAbsoluteDeviation	1.288e-01
original_firstorder_Median	1.478e-01
original_firstorder_Minimum	1.628e-01
original_firstorder_Range	1.357e-01
original_firstorder_RobustMeanAbsoluteDeviation	1.371e-01
original_firstorder_RootMeanSquared	1.347e-01
original_firstorder_Skewness	1.095e-01
original_firstorder_TotalEnergy	1.433e-01
original_firstorder_Uniformity	1.295e-01
original_firstorder_Variance	2.263e-01
original_glcm_Autocorrelation	1.509e-01
original_glcm_ClusterProminence	9.190e-01
original_glcm_ClusterShade	3.734e-01
original_glcm_ClusterTendency	2.015e-01
original_glcm_Contrast	6.203e-01
original_glcm_Correlation	1.444e-01
original_glcm_DifferenceAverage	1.417e-01
original_glcm_DifferenceEntropy	1.331e-01
original_glcm_DifferenceVariance	7.276e-01
original_glcm_Id	1.243e-01
original_glcm_Idm	1.245e-01
original_glcm_Idmn	2.056e-01
original_glcm_Idn	1.696e-01
original_glcm_Imc1	1.321e-01
original_glcm_Imc2	1.534e-01
original_glcm_InverseVariance	1.173e-01
original_glcm_JointAverage	1.593e-01
original_glcm_JointEnergy	1.165e-01
original_glcm_JointEntropy	1.223e-01
original_glcm_MCC	1.622e-01
original_glcm_MaximumProbability	1.271e-01
original_glcm_SumAverage	1.593e-01
original_glcm_SumEntropy	1.252e-01
original_glcm_SumSquares	2.402e-01
original_gldm_DependenceEntropy	1.206e-01
original_gldm_DependenceNonUniformity	8.766e-02
original_gldm_DependenceNonUniformityNormalized	1.022e-01
original_gldm_DependenceVariance	1.376e-01
original_gldm_GrayLevelNonUniformity	8.995e-02
original_gldm_GrayLevelVariance	2.259e-01
original_gldm_HighGrayLevelEmphasis	1.510e-01
original_gldm_LargeDependenceEmphasis	1.446e-01
original_gldm_LargeDependenceHighGrayLevelEmphasis	1.113e-01
original_gldm_LargeDependenceLowGrayLevelEmphasis	3.944e-01
original_gldm_LowGrayLevelEmphasis	1.640e-01
original_gldm_SmallDependenceEmphasis	1.387e-01

original_gldm_SmallDependenceHighGrayLevelEmphasis	1.229e-01
original_gldm_SmallDependenceLowGrayLevelEmphasis	1.812e-01
original_glrlm_GrayLevelNonUniformity	9.048e-02
original_glrlm_GrayLevelNonUniformityNormalized	1.288e-01
original_glrlm_GrayLevelVariance	2.137e-01
original_glrlm_HighGrayLevelRunEmphasis	1.505e-01
original_glrlm_LongRunEmphasis	8.367e-02
original_glrlm_LongRunHighGrayLevelEmphasis	9.366e-02
original_glrlm_LongRunLowGrayLevelEmphasis	2.326e-01
original_glrlm_LowGrayLevelRunEmphasis	1.748e-01
original_glrlm_RunEntropy	1.330e-01
original_glrlm_RunLengthNonUniformity	1.089e-01
original_glrlm_RunLengthNonUniformityNormalized	1.398e-01
original_glrlm_RunPercentage	1.428e-01
original_glrlm_RunVariance	7.623e-02
original_glrlm_ShortRunEmphasis	1.419e-01
original_glrlm_ShortRunHighGrayLevelEmphasis	1.517e-01
original_glrlm_ShortRunLowGrayLevelEmphasis	1.582e-01
original_glszm_GrayLevelNonUniformity	1.119e-01
original_glszm_GrayLevelNonUniformityNormalized	1.666e-01
original_glszm_GrayLevelVariance	1.415e-01
original_glszm_HighGrayLevelZoneEmphasis	1.443e-01
original_glszm_LargeAreaEmphasis	9.422e-02
original_glszm_LargeAreaHighGrayLevelEmphasis	6.865e-02
original_glszm_LargeAreaLowGrayLevelEmphasis	4.215e-01
original_glszm_LowGrayLevelZoneEmphasis	2.522e-01
original_glszm_SizeZoneNonUniformity	1.279e-01
original_glszm_SizeZoneNonUniformityNormalized	1.586e-01
original_glszm_SmallAreaEmphasis	1.661e-01
original_glszm_SmallAreaHighGrayLevelEmphasis	1.373e-01
original_glszm_SmallAreaLowGrayLevelEmphasis	2.150e-01
original_glszm_ZoneEntropy	1.597e-01
original_glszm_ZonePercentage	1.398e-01
original_glszm_ZoneVariance	9.404e-02
original_ngtdm_Busyness	3.187e-01
original_ngtdm_Coarseness	2.995e-01
original_ngtdm_Complexity	1.785e-01
original_ngtdm_Contrast	4.607e-01
original_ngtdm_Strength	2.509e-01
original_shape_Elongation	1.525e-01
original_shape_Flatness	1.671e-01
original_shape_LeastAxisLength	1.267e-01
original_shape_MajorAxisLength	1.388e-01
original_shape_Maximum2DDiameterColumn	1.303e-01
original_shape_Maximum2DDiameterRow	1.421e-01
original_shape_Maximum2DDiameterSlice	1.311e-01
original_shape_Maximum3DDiameter	1.250e-01
original_shape_MeshVolume	9.455e-02
original_shape_MinorAxisLength	1.303e-01
original_shape_Sphericity	1.536e-01
original_shape_SurfaceArea	9.923e-02
original_shape_SurfaceVolumeRatio	1.382e-01
original_shape_VoxelVolume	9.476e-02
z	
original_firstorder_10Percentile	40.155
original_firstorder_90Percentile	60.432

original_firstorder_Energy	-78.007
original_firstorder_Entropy	-364.251
original_firstorder_InterquartileRange	212.403
original_firstorder_Kurtosis	3.492
original_firstorder_Maximum	-13.181
original_firstorder_Mean	-270.033
original_firstorder_MeanAbsoluteDeviation	228.834
original_firstorder_Median	166.451
original_firstorder_Minimum	95.131
original_firstorder_Range	0.000
original_firstorder_RobustMeanAbsoluteDeviation	-258.934
original_firstorder_RootMeanSquared	-40.723
original_firstorder_Skewness	-9.670
original_firstorder_TotalEnergy	0.000
original_firstorder_Uniformity	-179.288
original_firstorder_Variance	2310.133
original_glcmm_Autocorrelation	-184.809
original_glcmm_ClusterProminence	190.486
original_glcmm_ClusterShade	100.552
original_glcmm_ClusterTendency	13.444
original_glcmm_Contrast	645.337
original_glcmm_Correlation	-24.638
original_glcmm_DifferenceAverage	872.725
original_glcmm_DifferenceEntropy	144.243
original_glcmm_DifferenceVariance	-865.498
original_glcmm_Id	9069.316
original_glcmm_Idm	-8108.036
original_glcmm_Idmn	-71.604
original_glcmm_Idn	79.561
original_glcmm_Imc1	-10.316
original_glcmm_Imc2	-34.530
original_glcmm_InverseVariance	900.523
original_glcmm_JointAverage	12.586
original_glcmm_JointEnergy	76.281
original_glcmm_JointEntropy	-155.217
original_glcmm_MCC	1.135
original_glcmm_MaximumProbability	51.178
original_glcmm_SumAverage	0.000
original_glcmm_SumEntropy	54.627
original_glcmm_SumSquares	0.000
original_gldm_DependenceEntropy	91.381
original_gldm_DependenceNonUniformity	33.945
original_gldm_DependenceNonUniformityNormalized	24.800
original_gldm_DependenceVariance	-41.068
original_gldm_GrayLevelNonUniformity	-132.741
original_gldm_GrayLevelVariance	-2635.085
original_gldm_HighGrayLevelEmphasis	-1340.404
original_gldm_LargeDependenceEmphasis	-481.366
original_gldm_LargeDependenceHighGrayLevelEmphasis	293.167
original_gldm_LargeDependenceLowGrayLevelEmphasis	75.995
original_gldm_LowGrayLevelEmphasis	208.633
original_gldm_SmallDependenceEmphasis	145.729
original_gldm_SmallDependenceHighGrayLevelEmphasis	-17.614
original_gldm_SmallDependenceLowGrayLevelEmphasis	-34.963
original_glrmm_GrayLevelNonUniformity	107.008
original_glrmm_GrayLevelNonUniformityNormalized	21.995

original_glrlm_GrayLevelVariance	205.108
original_glrlm_HighGrayLevelRunEmphasis	880.142
original_glrlm_LongRunEmphasis	54.915
original_glrlm_LongRunHighGrayLevelEmphasis	-22.216
original_glrlm_LongRunLowGrayLevelEmphasis	-18.433
original_glrlm_LowGrayLevelRunEmphasis	-931.539
original_glrlm_RunEntropy	326.181
original_glrlm_RunLengthNonUniformity	80.951
original_glrlm_RunLengthNonUniformityNormalized	276.006
original_glrlm_RunPercentage	-607.950
original_glrlm_RunVariance	-43.497
original_glrlm_ShortRunEmphasis	-324.850
original_glrlm_ShortRunHighGrayLevelEmphasis	632.851
original_glrlm_ShortRunLowGrayLevelEmphasis	772.375
original_glszm_GrayLevelNonUniformity	-13.933
original_glszm_GrayLevelNonUniformityNormalized	27.009
original_glszm_GrayLevelVariance	18.229
original_glszm_HighGrayLevelZoneEmphasis	-100.484
original_glszm_LargeAreaEmphasis	-12883.737
original_glszm_LargeAreaHighGrayLevelEmphasis	-10.017
original_glszm_LargeAreaLowGrayLevelEmphasis	8.505
original_glszm_LowGrayLevelZoneEmphasis	-48.828
original_glszm_SizeZoneNonUniformity	42.143
original_glszm_SizeZoneNonUniformityNormalized	-115.212
original_glszm_SmallAreaEmphasis	90.395
original_glszm_SmallAreaHighGrayLevelEmphasis	80.167
original_glszm_SmallAreaLowGrayLevelEmphasis	29.417
original_glszm_ZoneEntropy	4.795
original_glszm_ZonePercentage	-240.001
original_glszm_ZoneVariance	12915.122
original_ngtdm_Busyness	-3.876
original_ngtdm_Coarseness	5.014
original_ngtdm_Complexity	5.379
original_ngtdm_Contrast	-27.594
original_ngtdm_Strength	1.959
original_shape_Elongation	21.174
original_shape_Flatness	-18.475
original_shape_LeastAxisLength	47.339
original_shape_MajorAxisLength	27.286
original_shape_Maximum2DDiameterColumn	-25.110
original_shape_Maximum2DDiameterRow	-6.525
original_shape_Maximum2DDiameterSlice	-17.601
original_shape_Maximum3DDiameter	36.105
original_shape_MeshVolume	1995.443
original_shape_MinorAxisLength	-26.632
original_shape_Sphericity	3.890
original_shape_SurfaceArea	-75.689
original_shape_SurfaceVolumeRatio	549.129
original_shape_VoxelVolume	-2045.319
p	
original_firstorder_10Percentile	< 2e-16
original_firstorder_90Percentile	< 2e-16
original_firstorder_Energy	< 2e-16
original_firstorder_Entropy	< 2e-16
original_firstorder_InterquartileRange	< 2e-16
original_firstorder_Kurtosis	0.000479

original_firstorder_Maximum	< 2e-16
original_firstorder_Mean	< 2e-16
original_firstorder_MeanAbsoluteDeviation	< 2e-16
original_firstorder_Median	< 2e-16
original_firstorder_Minimum	< 2e-16
original_firstorder_Range	1.000000
original_firstorder_RobustMeanAbsoluteDeviation	< 2e-16
original_firstorder_RootMeanSquared	< 2e-16
original_firstorder_Skewness	< 2e-16
original_firstorder_TotalEnergy	1.000000
original_firstorder_Uniformity	< 2e-16
original_firstorder_Variance	< 2e-16
original_glcmm_Autocorrelation	< 2e-16
original_glcmm_ClusterProminence	< 2e-16
original_glcmm_ClusterShade	< 2e-16
original_glcmm_ClusterTendency	< 2e-16
original_glcmm_Contrast	< 2e-16
original_glcmm_Correlation	< 2e-16
original_glcmm_DifferenceAverage	< 2e-16
original_glcmm_DifferenceEntropy	< 2e-16
original_glcmm_DifferenceVariance	< 2e-16
original_glcmm_Id	< 2e-16
original_glcmm_Idm	< 2e-16
original_glcmm_Idmn	< 2e-16
original_glcmm_Idn	< 2e-16
original_glcmm_Imc1	< 2e-16
original_glcmm_Imc2	< 2e-16
original_glcmm_InverseVariance	< 2e-16
original_glcmm_JointAverage	< 2e-16
original_glcmm_JointEnergy	< 2e-16
original_glcmm_JointEntropy	< 2e-16
original_glcmm_MCC	0.256461
original_glcmm_MaximumProbability	< 2e-16
original_glcmm_SumAverage	1.000000
original_glcmm_SumEntropy	< 2e-16
original_glcmm_SumSquares	1.000000
original_gldm_DependenceEntropy	< 2e-16
original_gldm_DependenceNonUniformity	< 2e-16
original_gldm_DependenceNonUniformityNormalized	< 2e-16
original_gldm_DependenceVariance	< 2e-16
original_gldm_GrayLevelNonUniformity	< 2e-16
original_gldm_GrayLevelVariance	< 2e-16
original_gldm_HighGrayLevelEmphasis	< 2e-16
original_gldm_LargeDependenceEmphasis	< 2e-16
original_gldm_LargeDependenceHighGrayLevelEmphasis	< 2e-16
original_gldm_LargeDependenceLowGrayLevelEmphasis	< 2e-16
original_gldm_LowGrayLevelEmphasis	< 2e-16
original_gldm_SmallDependenceEmphasis	< 2e-16
original_gldm_SmallDependenceHighGrayLevelEmphasis	< 2e-16
original_gldm_SmallDependenceLowGrayLevelEmphasis	< 2e-16
original_glrlm_GrayLevelNonUniformity	< 2e-16
original_glrlm_GrayLevelNonUniformityNormalized	< 2e-16
original_glrlm_GrayLevelVariance	< 2e-16
original_glrlm_HighGrayLevelRunEmphasis	< 2e-16
original_glrlm_LongRunEmphasis	< 2e-16
original_glrlm_LongRunHighGrayLevelEmphasis	< 2e-16

original_glrlm_LongRunLowGrayLevelEmphasis	< 2e-16
original_glrlm_LowGrayLevelRunEmphasis	< 2e-16
original_glrlm_RunEntropy	< 2e-16
original_glrlm_RunLengthNonUniformity	< 2e-16
original_glrlm_RunLengthNonUniformityNormalized	< 2e-16
original_glrlm_RunPercentage	< 2e-16
original_glrlm_RunVariance	< 2e-16
original_glrlm_ShortRunEmphasis	< 2e-16
original_glrlm_ShortRunHighGrayLevelEmphasis	< 2e-16
original_glrlm_ShortRunLowGrayLevelEmphasis	< 2e-16
original_glszm_GrayLevelNonUniformity	< 2e-16
original_glszm_GrayLevelNonUniformityNormalized	< 2e-16
original_glszm_GrayLevelVariance	< 2e-16
original_glszm_HighGrayLevelZoneEmphasis	< 2e-16
original_glszm_LargeAreaEmphasis	< 2e-16
original_glszm_LargeAreaHighGrayLevelEmphasis	< 2e-16
original_glszm_LargeAreaLowGrayLevelEmphasis	< 2e-16
original_glszm_LowGrayLevelZoneEmphasis	< 2e-16
original_glszm_SizeZoneNonUniformity	< 2e-16
original_glszm_SizeZoneNonUniformityNormalized	< 2e-16
original_glszm_SmallAreaEmphasis	< 2e-16
original_glszm_SmallAreaHighGrayLevelEmphasis	< 2e-16
original_glszm_SmallAreaLowGrayLevelEmphasis	< 2e-16
original_glszm_ZoneEntropy	1.63e-06
original_glszm_ZonePercentage	< 2e-16
original_glszm_ZoneVariance	< 2e-16
original_ngtdm_Busyness	0.000106
original_ngtdm_Coarseness	5.34e-07
original_ngtdm_Complexity	7.48e-08
original_ngtdm_Contrast	< 2e-16
original_ngtdm_Strength	0.050099
original_shape_Elongation	< 2e-16
original_shape_Flatness	< 2e-16
original_shape_LeastAxisLength	< 2e-16
original_shape_MajorAxisLength	< 2e-16
original_shape_Maximum2DDiameterColumn	< 2e-16
original_shape_Maximum2DDiameterRow	6.80e-11
original_shape_Maximum2DDiameterSlice	< 2e-16
original_shape_Maximum3DDiameter	< 2e-16
original_shape_MeshVolume	< 2e-16
original_shape_MinorAxisLength	< 2e-16
original_shape_Sphericity	0.000100
original_shape_SurfaceArea	< 2e-16
original_shape_SurfaceVolumeRatio	< 2e-16
original_shape_VoxelVolume	< 2e-16

Likelihood ratio test=201.9 on 107 df, p=8.212e-08
n= 361, number of events= 48

```
$model_list[[2]]
```

```
Call:
```

```
coxph(formula = as.formula(paste("Surv(df_train$time, df_train$event) ~",  
  paste(predict.factors, collapse = "+"))), data = df_train,  
  x = TRUE)
```

coef

original_firstorder_10Percentile	-9.137e+01
original_firstorder_90Percentile	1.016e+02
original_firstorder_Energy	-5.892e+01
original_firstorder_Entropy	-2.553e+02
original_firstorder_InterquartileRange	1.359e+02
original_firstorder_Kurtosis	-1.416e-02
original_firstorder_Maximum	-2.010e+01
original_firstorder_Mean	-1.434e+02
original_firstorder_MeanAbsoluteDeviation	1.503e+02
original_firstorder_Median	8.449e+01
original_firstorder_Minimum	1.185e+02
original_firstorder_Range	0.000e+00
original_firstorder_RobustMeanAbsoluteDeviation	-2.953e+02
original_firstorder_RootMeanSquared	-3.857e+01
original_firstorder_Skewness	2.002e+00
original_firstorder_TotalEnergy	0.000e+00
original_firstorder_Uniformity	-7.872e+01
original_firstorder_Variance	1.933e+03
original_glcmm_Autocorrelation	-6.561e+02
original_glcmm_ClusterProminence	4.128e+02
original_glcmm_ClusterShade	1.681e+02
original_glcmm_ClusterTendency	-5.094e+00
original_glcmm_Contrast	3.047e+02
original_glcmm_Correlation	-2.097e+01
original_glcmm_DifferenceAverage	1.213e+02
original_glcmm_DifferenceEntropy	1.451e+02
original_glcmm_DifferenceVariance	-8.233e+02
original_glcmm_Id	2.526e+03
original_glcmm_Idm	-2.368e+03
original_glcmm_Idmn	-3.568e+01
original_glcmm_Idn	5.169e+01
original_glcmm_Imc1	-1.144e+01
original_glcmm_Imc2	-4.150e+01
original_glcmm_InverseVariance	2.237e+02
original_glcmm_JointAverage	4.160e+01
original_glcmm_JointEnergy	5.927e+01
original_glcmm_JointEntropy	-1.957e+02
original_glcmm_MCC	1.664e+01
original_glcmm_MaximumProbability	1.665e-01
original_glcmm_SumAverage	0.000e+00
original_glcmm_SumEntropy	2.330e+02
original_glcmm_SumSquares	0.000e+00
original_gldm_DependenceEntropy	7.757e+01
original_gldm_DependenceNonUniformity	2.762e+01
original_gldm_DependenceNonUniformityNormalized	3.934e+00
original_gldm_DependenceVariance	3.870e+01
original_gldm_GrayLevelNonUniformity	-5.308e+01
original_gldm_GrayLevelVariance	-2.443e+03
original_gldm_HighGrayLevelEmphasis	-2.246e+01
original_gldm_LargeDependenceEmphasis	-3.272e+02
original_gldm_LargeDependenceHighGrayLevelEmphasis	-6.803e+01
original_gldm_LargeDependenceLowGrayLevelEmphasis	-1.047e+02
original_gldm_LowGrayLevelEmphasis	-4.246e+01
original_gldm_SmallDependenceEmphasis	-6.972e+00
original_gldm_SmallDependenceHighGrayLevelEmphasis	4.693e+01
original_gldm_SmallDependenceLowGrayLevelEmphasis	9.059e+00

original_glrlm_GrayLevelNonUniformity	-2.790e+00
original_glrlm_GrayLevelNonUniformityNormalized	-7.221e+01
original_glrlm_GrayLevelVariance	3.792e+02
original_glrlm_HighGrayLevelRunEmphasis	1.047e+03
original_glrlm_LongRunEmphasis	-2.999e+01
original_glrlm_LongRunHighGrayLevelEmphasis	-1.173e+01
original_glrlm_LongRunLowGrayLevelEmphasis	-2.201e+01
original_glrlm_LowGrayLevelRunEmphasis	5.679e+02
original_glrlm_RunEntropy	-7.574e+01
original_glrlm_RunLengthNonUniformity	4.711e+00
original_glrlm_RunLengthNonUniformityNormalized	6.389e+02
original_glrlm_RunPercentage	-5.930e+02
original_glrlm_RunVariance	4.988e+01
original_glrlm_ShortRunEmphasis	-3.862e+02
original_glrlm_ShortRunHighGrayLevelEmphasis	-3.096e+02
original_glrlm_ShortRunLowGrayLevelEmphasis	-4.293e+02
original_glszm_GrayLevelNonUniformity	-9.915e+00
original_glszm_GrayLevelNonUniformityNormalized	5.752e+01
original_glszm_GrayLevelVariance	1.937e+01
original_glszm_HighGrayLevelZoneEmphasis	6.040e+01
original_glszm_LargeAreaEmphasis	-2.139e+03
original_glszm_LargeAreaHighGrayLevelEmphasis	8.375e+00
original_glszm_LargeAreaLowGrayLevelEmphasis	6.015e+00
original_glszm_LowGrayLevelZoneEmphasis	-1.259e+01
original_glszm_SizeZoneNonUniformity	3.725e+01
original_glszm_SizeZoneNonUniformityNormalized	1.440e+01
original_glszm_SmallAreaEmphasis	1.605e+01
original_glszm_SmallAreaHighGrayLevelEmphasis	-6.094e+01
original_glszm_SmallAreaLowGrayLevelEmphasis	-6.647e+00
original_glszm_ZoneEntropy	5.688e+01
original_glszm_ZonePercentage	-1.671e+00
original_glszm_ZoneVariance	2.155e+03
original_ngtdm_Busyness	-3.110e+00
original_ngtdm_Coarseness	1.330e+01
original_ngtdm_Complexity	1.241e+01
original_ngtdm_Contrast	-4.235e+01
original_ngtdm_Strength	-1.304e-01
original_shape_Elongation	8.041e+00
original_shape_Flatness	-1.365e+01
original_shape_LeastAxisLength	1.842e+01
original_shape_MajorAxisLength	3.674e+00
original_shape_Maximum2DDiameterColumn	-8.905e+00
original_shape_Maximum2DDiameterRow	2.083e+00
original_shape_Maximum2DDiameterSlice	-6.646e+00
original_shape_Maximum3DDiameter	9.710e+00
original_shape_MeshVolume	1.467e+03
original_shape_MinorAxisLength	8.784e+00
original_shape_Sphericity	-1.474e+01
original_shape_SurfaceArea	1.767e+01
original_shape_SurfaceVolumeRatio	3.324e+01
original_shape_VoxelVolume	-1.490e+03
	exp(coef)
original_firstorder_10Percentile	2.090e-40
original_firstorder_90Percentile	1.355e+44
original_firstorder_Energy	2.590e-26
original_firstorder_Entropy	1.336e-111

original_firstorder_InterquartileRange	1.016e+59
original_firstorder_Kurtosis	9.859e-01
original_firstorder_Maximum	1.863e-09
original_firstorder_Mean	5.272e-63
original_firstorder_MeanAbsoluteDeviation	1.946e+65
original_firstorder_Median	4.944e+36
original_firstorder_Minimum	2.917e+51
original_firstorder_Range	1.000e+00
original_firstorder_RobustMeanAbsoluteDeviation	5.402e-129
original_firstorder_RootMeanSquared	1.771e-17
original_firstorder_Skewness	7.407e+00
original_firstorder_TotalEnergy	1.000e+00
original_firstorder_Uniformity	6.469e-35
original_firstorder_Variance	Inf
original_glcmm_Autocorrelation	1.191e-285
original_glcmm_ClusterProminence	1.899e+179
original_glcmm_ClusterShade	1.048e+73
original_glcmm_ClusterTendency	6.136e-03
original_glcmm_Contrast	2.038e+132
original_glcmm_Correlation	7.783e-10
original_glcmm_DifferenceAverage	4.741e+52
original_glcmm_DifferenceEntropy	9.947e+62
original_glcmm_DifferenceVariance	0.000e+00
original_glcmm_Id	Inf
original_glcmm_Idm	0.000e+00
original_glcmm_Idmn	3.209e-16
original_glcmm_Idn	2.807e+22
original_glcmm_Imc1	1.073e-05
original_glcmm_Imc2	9.485e-19
original_glcmm_InverseVariance	1.389e+97
original_glcmm_JointAverage	1.169e+18
original_glcmm_JointEnergy	5.515e+25
original_glcmm_JointEntropy	9.781e-86
original_glcmm_MCC	1.688e+07
original_glcmm_MaximumProbability	1.181e+00
original_glcmm_SumAverage	1.000e+00
original_glcmm_SumEntropy	1.597e+101
original_glcmm_SumSquares	1.000e+00
original_gldm_DependenceEntropy	4.867e+33
original_gldm_DependenceNonUniformity	9.922e+11
original_gldm_DependenceNonUniformityNormalized	5.114e+01
original_gldm_DependenceVariance	6.407e+16
original_gldm_GrayLevelNonUniformity	8.894e-24
original_gldm_GrayLevelVariance	0.000e+00
original_gldm_HighGrayLevelEmphasis	1.769e-10
original_gldm_LargeDependenceEmphasis	7.885e-143
original_gldm_LargeDependenceHighGrayLevelEmphasis	2.847e-30
original_gldm_LargeDependenceLowGrayLevelEmphasis	3.327e-46
original_gldm_LowGrayLevelEmphasis	3.619e-19
original_gldm_SmallDependenceEmphasis	9.378e-04
original_gldm_SmallDependenceHighGrayLevelEmphasis	2.400e+20
original_gldm_SmallDependenceLowGrayLevelEmphasis	8.599e+03
original_glrmm_GrayLevelNonUniformity	6.142e-02
original_glrmm_GrayLevelNonUniformityNormalized	4.358e-32
original_glrmm_GrayLevelVariance	5.064e+164
original_glrmm_HighGrayLevelRunEmphasis	Inf

original_glrlm_LongRunEmphasis	9.482e-14
original_glrlm_LongRunHighGrayLevelEmphasis	8.064e-06
original_glrlm_LongRunLowGrayLevelEmphasis	2.760e-10
original_glrlm_LowGrayLevelRunEmphasis	4.166e+246
original_glrlm_RunEntropy	1.275e-33
original_glrlm_RunLengthNonUniformity	1.111e+02
original_glrlm_RunLengthNonUniformityNormalized	3.020e+277
original_glrlm_RunPercentage	2.924e-258
original_glrlm_RunVariance	4.601e+21
original_glrlm_ShortRunEmphasis	1.896e-168
original_glrlm_ShortRunHighGrayLevelEmphasis	3.641e-135
original_glrlm_ShortRunLowGrayLevelEmphasis	3.681e-187
original_glszm_GrayLevelNonUniformity	4.944e-05
original_glszm_GrayLevelNonUniformityNormalized	9.527e+24
original_glszm_GrayLevelVariance	2.578e+08
original_glszm_HighGrayLevelZoneEmphasis	1.711e+26
original_glszm_LargeAreaEmphasis	0.000e+00
original_glszm_LargeAreaHighGrayLevelEmphasis	4.339e+03
original_glszm_LargeAreaLowGrayLevelEmphasis	4.096e+02
original_glszm_LowGrayLevelZoneEmphasis	3.413e-06
original_glszm_SizeZoneNonUniformity	1.509e+16
original_glszm_SizeZoneNonUniformityNormalized	1.798e+06
original_glszm_SmallAreaEmphasis	9.369e+06
original_glszm_SmallAreaHighGrayLevelEmphasis	3.431e-27
original_glszm_SmallAreaLowGrayLevelEmphasis	1.298e-03
original_glszm_ZoneEntropy	5.065e+24
original_glszm_ZonePercentage	1.880e-01
original_glszm_ZoneVariance	Inf
original_ngtdm_Busyness	4.458e-02
original_ngtdm_Coarseness	5.982e+05
original_ngtdm_Complexity	2.449e+05
original_ngtdm_Contrast	4.039e-19
original_ngtdm_Strength	8.778e-01
original_shape_Elongation	3.106e+03
original_shape_Flatness	1.185e-06
original_shape_LeastAxisLength	9.971e+07
original_shape_MajorAxisLength	3.942e+01
original_shape_Maximum2DDiameterColumn	1.356e-04
original_shape_Maximum2DDiameterRow	8.027e+00
original_shape_Maximum2DDiameterSlice	1.299e-03
original_shape_Maximum3DDiameter	1.648e+04
original_shape_MeshVolume	Inf
original_shape_MinorAxisLength	6.526e+03
original_shape_Sphericity	3.986e-07
original_shape_SurfaceArea	4.701e+07
original_shape_SurfaceVolumeRatio	2.736e+14
original_shape_VoxelVolume	0.000e+00
se(coef)	
original_firstorder_10Percentile	1.536e-01
original_firstorder_90Percentile	2.204e-01
original_firstorder_Energy	1.586e-01
original_firstorder_Entropy	1.849e-01
original_firstorder_InterquartileRange	3.885e-01
original_firstorder_Kurtosis	1.289e-01
original_firstorder_Maximum	1.351e-01
original_firstorder_Mean	1.442e-01

original_firstorder_MeanAbsoluteDeviation	1.800e-01
original_firstorder_Median	1.553e-01
original_firstorder_Minimum	1.537e-01
original_firstorder_Range	1.455e-01
original_firstorder_RobustMeanAbsoluteDeviation	3.694e-01
original_firstorder_RootMeanSquared	1.794e-01
original_firstorder_Skewness	1.318e-01
original_firstorder_TotalEnergy	1.586e-01
original_firstorder_Uniformity	1.593e-01
original_firstorder_Variance	2.792e-01
original_glcmm_Autocorrelation	1.594e-01
original_glcmm_ClusterProminence	2.022e+00
original_glcmm_ClusterShade	3.993e-01
original_glcmm_ClusterTendency	2.327e-01
original_glcmm_Contrast	1.593e+00
original_glcmm_Correlation	1.387e-01
original_glcmm_DifferenceAverage	3.144e-01
original_glcmm_DifferenceEntropy	2.179e-01
original_glcmm_DifferenceVariance	1.684e+00
original_glcmm_Id	2.119e-01
original_glcmm_Idm	2.163e-01
original_glcmm_Idmn	1.688e-01
original_glcmm_Idn	1.415e-01
original_glcmm_Imc1	1.346e-01
original_glcmm_Imc2	1.480e-01
original_glcmm_InverseVariance	1.541e-01
original_glcmm_JointAverage	1.533e-01
original_glcmm_JointEnergy	1.467e-01
original_glcmm_JointEntropy	1.958e-01
original_glcmm_MCC	1.443e-01
original_glcmm_MaximumProbability	1.698e-01
original_glcmm_SumAverage	1.533e-01
original_glcmm_SumEntropy	1.762e-01
original_glcmm_SumSquares	2.862e-01
original_gldm_DependenceEntropy	1.549e-01
original_gldm_DependenceNonUniformity	1.172e-01
original_gldm_DependenceNonUniformityNormalized	1.213e-01
original_gldm_DependenceVariance	1.507e-01
original_gldm_GrayLevelNonUniformity	1.367e-01
original_gldm_GrayLevelVariance	2.787e-01
original_gldm_HighGrayLevelEmphasis	1.593e-01
original_gldm_LargeDependenceEmphasis	1.584e-01
original_gldm_LargeDependenceHighGrayLevelEmphasis	1.287e-01
original_gldm_LargeDependenceLowGrayLevelEmphasis	4.667e-01
original_gldm_LowGrayLevelEmphasis	9.790e-02
original_gldm_SmallDependenceEmphasis	1.716e-01
original_gldm_SmallDependenceHighGrayLevelEmphasis	2.148e-01
original_gldm_SmallDependenceLowGrayLevelEmphasis	9.583e-02
original_glrlm_GrayLevelNonUniformity	1.440e-01
original_glrlm_GrayLevelNonUniformityNormalized	1.597e-01
original_glrlm_GrayLevelVariance	2.585e-01
original_glrlm_HighGrayLevelRunEmphasis	1.593e-01
original_glrlm_LongRunEmphasis	9.737e-02
original_glrlm_LongRunHighGrayLevelEmphasis	1.071e-01
original_glrlm_LongRunLowGrayLevelEmphasis	2.182e-01
original_glrlm_LowGrayLevelRunEmphasis	1.006e-01

original_glrlm_RunEntropy	1.616e-01
original_glrlm_RunLengthNonUniformity	1.679e-01
original_glrlm_RunLengthNonUniformityNormalized	1.485e-01
original_glrlm_RunPercentage	1.535e-01
original_glrlm_RunVariance	8.898e-02
original_glrlm_ShortRunEmphasis	1.520e-01
original_glrlm_ShortRunHighGrayLevelEmphasis	1.622e-01
original_glrlm_ShortRunLowGrayLevelEmphasis	8.917e-02
original_glszm_GrayLevelNonUniformity	1.869e-01
original_glszm_GrayLevelNonUniformityNormalized	1.801e-01
original_glszm_GrayLevelVariance	1.576e-01
original_glszm_HighGrayLevelZoneEmphasis	1.594e-01
original_glszm_LargeAreaEmphasis	1.346e-01
original_glszm_LargeAreaHighGrayLevelEmphasis	1.015e-01
original_glszm_LargeAreaLowGrayLevelEmphasis	7.969e-01
original_glszm_LowGrayLevelZoneEmphasis	1.428e-01
original_glszm_SizeZoneNonUniformity	1.616e-01
original_glszm_SizeZoneNonUniformityNormalized	1.471e-01
original_glszm_SmallAreaEmphasis	1.371e-01
original_glszm_SmallAreaHighGrayLevelEmphasis	1.557e-01
original_glszm_SmallAreaLowGrayLevelEmphasis	1.597e-01
original_glszm_ZoneEntropy	1.592e-01
original_glszm_ZonePercentage	1.713e-01
original_glszm_ZoneVariance	1.345e-01
original_ngtdm_Busyness	4.024e-01
original_ngtdm_Coarseness	1.007e-01
original_ngtdm_Complexity	3.800e-01
original_ngtdm_Contrast	7.341e-01
original_ngtdm_Strength	3.191e-01
original_shape_Elongation	1.659e-01
original_shape_Flatness	1.839e-01
original_shape_LeastAxisLength	1.516e-01
original_shape_MajorAxisLength	1.312e-01
original_shape_Maximum2DDiameterColumn	1.134e-01
original_shape_Maximum2DDiameterRow	1.513e-01
original_shape_Maximum2DDiameterSlice	1.418e-01
original_shape_Maximum3DDiameter	1.183e-01
original_shape_MeshVolume	1.576e-01
original_shape_MinorAxisLength	1.188e-01
original_shape_Sphericity	1.700e-01
original_shape_SurfaceArea	1.453e-01
original_shape_SurfaceVolumeRatio	1.455e-01
original_shape_VoxelVolume	1.578e-01
z	
original_firstorder_10Percentile	-594.734
original_firstorder_90Percentile	460.986
original_firstorder_Energy	-371.553
original_firstorder_Entropy	-1380.550
original_firstorder_InterquartileRange	349.741
original_firstorder_Kurtosis	-0.110
original_firstorder_Maximum	-148.763
original_firstorder_Mean	-994.468
original_firstorder_MeanAbsoluteDeviation	835.183
original_firstorder_Median	543.890
original_firstorder_Minimum	770.782
original_firstorder_Range	0.000

original_firstorder_RobustMeanAbsoluteDeviation	-799.449
original_firstorder_RootMeanSquared	-215.007
original_firstorder_Skewness	15.192
original_firstorder_TotalEnergy	0.000
original_firstorder_Uniformity	-494.313
original_firstorder_Variance	6924.383
original_glcmm_Autocorrelation	-4115.952
original_glcmm_ClusterProminence	204.148
original_glcmm_ClusterShade	421.052
original_glcmm_ClusterTendency	-21.886
original_glcmm_Contrast	191.228
original_glcmm_Correlation	-151.226
original_glcmm_DifferenceAverage	385.758
original_glcmm_DifferenceEntropy	665.747
original_glcmm_DifferenceVariance	-488.855
original_glcmm_Id	11921.170
original_glcmm_Idm	-10947.477
original_glcmm_Idmn	-211.302
original_glcmm_Idn	365.373
original_glcmm_Imc1	-85.035
original_glcmm_Imc2	-280.495
original_glcmm_InverseVariance	1451.661
original_glcmm_JointAverage	271.392
original_glcmm_JointEnergy	403.983
original_glcmm_JointEntropy	-999.757
original_glcmm_MCC	115.298
original_glcmm_MaximumProbability	0.981
original_glcmm_SumAverage	0.000
original_glcmm_SumEntropy	1322.871
original_glcmm_SumSquares	0.000
original_gldm_DependenceEntropy	500.903
original_gldm_DependenceNonUniformity	235.706
original_gldm_DependenceNonUniformityNormalized	32.434
original_gldm_DependenceVariance	256.716
original_gldm_GrayLevelNonUniformity	-388.132
original_gldm_GrayLevelVariance	-8765.139
original_gldm_HighGrayLevelEmphasis	-140.958
original_gldm_LargeDependenceEmphasis	-2066.305
original_gldm_LargeDependenceHighGrayLevelEmphasis	-528.784
original_gldm_LargeDependenceLowGrayLevelEmphasis	-224.356
original_gldm_LowGrayLevelEmphasis	-433.746
original_gldm_SmallDependenceEmphasis	-40.629
original_gldm_SmallDependenceHighGrayLevelEmphasis	218.487
original_gldm_SmallDependenceLowGrayLevelEmphasis	94.540
original_glrlm_GrayLevelNonUniformity	-19.378
original_glrlm_GrayLevelNonUniformityNormalized	-452.287
original_glrlm_GrayLevelVariance	1467.280
original_glrlm_HighGrayLevelRunEmphasis	6569.727
original_glrlm_LongRunEmphasis	-307.978
original_glrlm_LongRunHighGrayLevelEmphasis	-109.522
original_glrlm_LongRunLowGrayLevelEmphasis	-100.890
original_glrlm_LowGrayLevelRunEmphasis	5647.322
original_glrlm_RunEntropy	-468.639
original_glrlm_RunLengthNonUniformity	28.062
original_glrlm_RunLengthNonUniformityNormalized	4302.920
original_glrlm_RunPercentage	-3864.054

original_glrlm_RunVariance	560.560
original_glrlm_ShortRunEmphasis	-2541.102
original_glrlm_ShortRunHighGrayLevelEmphasis	-1908.146
original_glrlm_ShortRunLowGrayLevelEmphasis	-4814.307
original_glszm_GrayLevelNonUniformity	-53.053
original_glszm_GrayLevelNonUniformityNormalized	319.411
original_glszm_GrayLevelVariance	122.860
original_glszm_HighGrayLevelZoneEmphasis	378.899
original_glszm_LargeAreaEmphasis	-15886.862
original_glszm_LargeAreaHighGrayLevelEmphasis	82.505
original_glszm_LargeAreaLowGrayLevelEmphasis	7.548
original_glszm_LowGrayLevelZoneEmphasis	-88.120
original_glszm_SizeZoneNonUniformity	230.534
original_glszm_SizeZoneNonUniformityNormalized	97.881
original_glszm_SmallAreaEmphasis	117.047
original_glszm_SmallAreaHighGrayLevelEmphasis	-391.368
original_glszm_SmallAreaLowGrayLevelEmphasis	-41.633
original_glszm_ZoneEntropy	357.258
original_glszm_ZonePercentage	-9.757
original_glszm_ZoneVariance	16019.962
original_ngtdm_Busyness	-7.730
original_ngtdm_Coarseness	132.102
original_ngtdm_Complexity	32.655
original_ngtdm_Contrast	-57.692
original_ngtdm_Strength	-0.409
original_shape_Elongation	48.478
original_shape_Flatness	-74.185
original_shape_LeastAxisLength	121.499
original_shape_MajorAxisLength	28.012
original_shape_Maximum2DDiameterColumn	-78.503
original_shape_Maximum2DDiameterRow	13.764
original_shape_Maximum2DDiameterSlice	-46.871
original_shape_Maximum3DDiameter	82.074
original_shape_MeshVolume	9305.263
original_shape_MinorAxisLength	73.962
original_shape_Sphericity	-86.681
original_shape_SurfaceArea	121.623
original_shape_SurfaceVolumeRatio	228.433
original_shape_VoxelVolume	-9437.327
p	
original_firstorder_10Percentile	< 2e-16
original_firstorder_90Percentile	< 2e-16
original_firstorder_Energy	< 2e-16
original_firstorder_Entropy	< 2e-16
original_firstorder_InterquartileRange	< 2e-16
original_firstorder_Kurtosis	0.913
original_firstorder_Maximum	< 2e-16
original_firstorder_Mean	< 2e-16
original_firstorder_MeanAbsoluteDeviation	< 2e-16
original_firstorder_Median	< 2e-16
original_firstorder_Minimum	< 2e-16
original_firstorder_Range	1.000
original_firstorder_RobustMeanAbsoluteDeviation	< 2e-16
original_firstorder_RootMeanSquared	< 2e-16
original_firstorder_Skewness	< 2e-16
original_firstorder_TotalEnergy	1.000

original_firstorder_Uniformity	< 2e-16
original_firstorder_Variance	< 2e-16
original_glcmm_Autocorrelation	< 2e-16
original_glcmm_ClusterProminence	< 2e-16
original_glcmm_ClusterShade	< 2e-16
original_glcmm_ClusterTendency	< 2e-16
original_glcmm_Contrast	< 2e-16
original_glcmm_Correlation	< 2e-16
original_glcmm_DifferenceAverage	< 2e-16
original_glcmm_DifferenceEntropy	< 2e-16
original_glcmm_DifferenceVariance	< 2e-16
original_glcmm_Id	< 2e-16
original_glcmm_Idm	< 2e-16
original_glcmm_Idmn	< 2e-16
original_glcmm_Idn	< 2e-16
original_glcmm_Imc1	< 2e-16
original_glcmm_Imc2	< 2e-16
original_glcmm_InverseVariance	< 2e-16
original_glcmm_JointAverage	< 2e-16
original_glcmm_JointEnergy	< 2e-16
original_glcmm_JointEntropy	< 2e-16
original_glcmm_MCC	< 2e-16
original_glcmm_MaximumProbability	0.327
original_glcmm_SumAverage	1.000
original_glcmm_SumEntropy	< 2e-16
original_glcmm_SumSquares	1.000
original_gldm_DependenceEntropy	< 2e-16
original_gldm_DependenceNonUniformity	< 2e-16
original_gldm_DependenceNonUniformityNormalized	< 2e-16
original_gldm_DependenceVariance	< 2e-16
original_gldm_GrayLevelNonUniformity	< 2e-16
original_gldm_GrayLevelVariance	< 2e-16
original_gldm_HighGrayLevelEmphasis	< 2e-16
original_gldm_LargeDependenceEmphasis	< 2e-16
original_gldm_LargeDependenceHighGrayLevelEmphasis	< 2e-16
original_gldm_LargeDependenceLowGrayLevelEmphasis	< 2e-16
original_gldm_LowGrayLevelEmphasis	< 2e-16
original_gldm_SmallDependenceEmphasis	< 2e-16
original_gldm_SmallDependenceHighGrayLevelEmphasis	< 2e-16
original_gldm_SmallDependenceLowGrayLevelEmphasis	< 2e-16
original_glrmm_GrayLevelNonUniformity	< 2e-16
original_glrmm_GrayLevelNonUniformityNormalized	< 2e-16
original_glrmm_GrayLevelVariance	< 2e-16
original_glrmm_HighGrayLevelRunEmphasis	< 2e-16
original_glrmm_LongRunEmphasis	< 2e-16
original_glrmm_LongRunHighGrayLevelEmphasis	< 2e-16
original_glrmm_LongRunLowGrayLevelEmphasis	< 2e-16
original_glrmm_LowGrayLevelRunEmphasis	< 2e-16
original_glrmm_RunEntropy	< 2e-16
original_glrmm_RunLengthNonUniformity	< 2e-16
original_glrmm_RunLengthNonUniformityNormalized	< 2e-16
original_glrmm_RunPercentage	< 2e-16
original_glrmm_RunVariance	< 2e-16
original_glrmm_ShortRunEmphasis	< 2e-16
original_glrmm_ShortRunHighGrayLevelEmphasis	< 2e-16
original_glrmm_ShortRunLowGrayLevelEmphasis	< 2e-16

original_glszm_GrayLevelNonUniformity	< 2e-16
original_glszm_GrayLevelNonUniformityNormalized	< 2e-16
original_glszm_GrayLevelVariance	< 2e-16
original_glszm_HighGrayLevelZoneEmphasis	< 2e-16
original_glszm_LargeAreaEmphasis	< 2e-16
original_glszm_LargeAreaHighGrayLevelEmphasis	< 2e-16
original_glszm_LargeAreaLowGrayLevelEmphasis	4.41e-14
original_glszm_LowGrayLevelZoneEmphasis	< 2e-16
original_glszm_SizeZoneNonUniformity	< 2e-16
original_glszm_SizeZoneNonUniformityNormalized	< 2e-16
original_glszm_SmallAreaEmphasis	< 2e-16
original_glszm_SmallAreaHighGrayLevelEmphasis	< 2e-16
original_glszm_SmallAreaLowGrayLevelEmphasis	< 2e-16
original_glszm_ZoneEntropy	< 2e-16
original_glszm_ZonePercentage	< 2e-16
original_glszm_ZoneVariance	< 2e-16
original_ngtdm_Busyness	1.07e-14
original_ngtdm_Coarseness	< 2e-16
original_ngtdm_Complexity	< 2e-16
original_ngtdm_Contrast	< 2e-16
original_ngtdm_Strength	0.683
original_shape_Elongation	< 2e-16
original_shape_Flatness	< 2e-16
original_shape_LeastAxisLength	< 2e-16
original_shape_MajorAxisLength	< 2e-16
original_shape_Maximum2DDiameterColumn	< 2e-16
original_shape_Maximum2DDiameterRow	< 2e-16
original_shape_Maximum2DDiameterSlice	< 2e-16
original_shape_Maximum3DDiameter	< 2e-16
original_shape_MeshVolume	< 2e-16
original_shape_MinorAxisLength	< 2e-16
original_shape_Sphericity	< 2e-16
original_shape_SurfaceArea	< 2e-16
original_shape_SurfaceVolumeRatio	< 2e-16
original_shape_VoxelVolume	< 2e-16

Likelihood ratio test=311.4 on 107 df, p=< 2.2e-16

n= 361, number of events= 40

\$model_list[[3]]

Call:

```
coxph(formula = as.formula(paste("Surv(df_train$time, df_train$event) ~",
  paste(predict.factors, collapse = "+"))), data = df_train,
  x = TRUE)
```

	coef
original_firstorder_10Percentile	2.772e+01
original_firstorder_90Percentile	1.082e+01
original_firstorder_Energy	-1.645e+01
original_firstorder_Entropy	6.994e+01
original_firstorder_InterquartileRange	-5.901e+01
original_firstorder_Kurtosis	-7.485e+00
original_firstorder_Maximum	1.069e+00
original_firstorder_Mean	-5.096e+01
original_firstorder_MeanAbsoluteDeviation	5.266e+00
original_firstorder_Median	2.724e+01

original_firstorder_Minimum	3.131e+01
original_firstorder_Range	0.000e+00
original_firstorder_RobustMeanAbsoluteDeviation	8.025e+01
original_firstorder_RootMeanSquared	-1.841e+01
original_firstorder_Skewness	2.404e+00
original_firstorder_TotalEnergy	0.000e+00
original_firstorder_Uniformity	5.439e+01
original_firstorder_Variance	3.764e+03
original_glcmm_Autocorrelation	-3.397e+02
original_glcmm_ClusterProminence	8.985e+02
original_glcmm_ClusterShade	-7.149e+01
original_glcmm_ClusterTendency	-1.863e+02
original_glcmm_Contrast	-3.916e+02
original_glcmm_Correlation	-2.275e+00
original_glcmm_DifferenceAverage	5.947e+02
original_glcmm_DifferenceEntropy	-6.472e+01
original_glcmm_DifferenceVariance	-5.680e+02
original_glcmm_Id	3.583e+03
original_glcmm_Idm	-3.132e+03
original_glcmm_Idmn	-2.276e+01
original_glcmm_Idn	1.477e+01
original_glcmm_Imc1	1.631e+01
original_glcmm_Imc2	-7.699e+00
original_glcmm_InverseVariance	3.014e+02
original_glcmm_JointAverage	-2.258e+00
original_glcmm_JointEnergy	-6.585e+01
original_glcmm_JointEntropy	-6.515e+01
original_glcmm_MCC	5.960e-01
original_glcmm_MaximumProbability	9.207e+00
original_glcmm_SumAverage	0.000e+00
original_glcmm_SumEntropy	4.777e+01
original_glcmm_SumSquares	0.000e+00
original_gldm_DependenceEntropy	6.546e+00
original_gldm_DependenceNonUniformity	-3.214e+01
original_gldm_DependenceNonUniformityNormalized	7.076e+01
original_gldm_DependenceVariance	5.449e+00
original_gldm_GrayLevelNonUniformity	-9.545e+00
original_gldm_GrayLevelVariance	-3.817e+03
original_gldm_HighGrayLevelEmphasis	4.589e+02
original_gldm_LargeDependenceEmphasis	6.088e+01
original_gldm_LargeDependenceHighGrayLevelEmphasis	-1.272e+00
original_gldm_LargeDependenceLowGrayLevelEmphasis	-3.628e+01
original_gldm_LowGrayLevelEmphasis	3.015e+02
original_gldm_SmallDependenceEmphasis	-1.253e+02
original_gldm_SmallDependenceHighGrayLevelEmphasis	5.708e+01
original_gldm_SmallDependenceLowGrayLevelEmphasis	9.132e+00
original_glrmm_GrayLevelNonUniformity	1.601e+01
original_glrmm_GrayLevelNonUniformityNormalized	2.920e+01
original_glrmm_GrayLevelVariance	8.631e+01
original_glrmm_HighGrayLevelRunEmphasis	2.290e+01
original_glrmm_LongRunEmphasis	-5.683e+01
original_glrmm_LongRunHighGrayLevelEmphasis	-1.373e+01
original_glrmm_LongRunLowGrayLevelEmphasis	-2.770e+01
original_glrmm_LowGrayLevelRunEmphasis	-9.890e+01
original_glrmm_RunEntropy	1.395e+01
original_glrmm_RunLengthNonUniformity	6.671e+01

original_glrlm_RunLengthNonUniformityNormalized	-9.676e+01
original_glrlm_RunPercentage	-6.537e+01
original_glrlm_RunVariance	4.267e+01
original_glrlm_ShortRunEmphasis	1.395e+02
original_glrlm_ShortRunHighGrayLevelEmphasis	-1.399e+02
original_glrlm_ShortRunLowGrayLevelEmphasis	-1.648e+02
original_glszm_GrayLevelNonUniformity	-1.796e+01
original_glszm_GrayLevelNonUniformityNormalized	-1.241e+00
original_glszm_GrayLevelVariance	3.866e+00
original_glszm_HighGrayLevelZoneEmphasis	2.571e+01
original_glszm_LargeAreaEmphasis	-2.985e+02
original_glszm_LargeAreaHighGrayLevelEmphasis	1.369e+01
original_glszm_LargeAreaLowGrayLevelEmphasis	4.574e+00
original_glszm_LowGrayLevelZoneEmphasis	-1.549e+01
original_glszm_SizeZoneNonUniformity	1.343e+01
original_glszm_SizeZoneNonUniformityNormalized	-9.607e+01
original_glszm_SmallAreaEmphasis	1.181e+02
original_glszm_SmallAreaHighGrayLevelEmphasis	-2.393e+01
original_glszm_SmallAreaLowGrayLevelEmphasis	4.418e+00
original_glszm_ZoneEntropy	-4.869e+00
original_glszm_ZonePercentage	3.414e+01
original_glszm_ZoneVariance	3.064e+02
original_ngtdm_Busyness	-2.822e+00
original_ngtdm_Coarseness	2.086e+00
original_ngtdm_Complexity	1.816e+00
original_ngtdm_Contrast	-4.752e+00
original_ngtdm_Strength	8.962e+00
original_shape_Elongation	1.166e+01
original_shape_Flatness	-1.676e+01
original_shape_LeastAxisLength	3.454e+01
original_shape_MajorAxisLength	1.028e+01
original_shape_Maximum2DDiameterColumn	-3.527e+00
original_shape_Maximum2DDiameterRow	-3.984e+00
original_shape_Maximum2DDiameterSlice	-3.510e+00
original_shape_Maximum3DDiameter	-2.068e+00
original_shape_MeshVolume	-6.064e+02
original_shape_MinorAxisLength	-1.375e+01
original_shape_Sphericity	-1.637e-01
original_shape_SurfaceArea	-1.776e+01
original_shape_SurfaceVolumeRatio	1.077e+02
original_shape_VoxelVolume	5.628e+02
	exp(coef)
original_firstorder_10Percentile	1.092e+12
original_firstorder_90Percentile	5.009e+04
original_firstorder_Energy	7.149e-08
original_firstorder_Entropy	2.362e+30
original_firstorder_InterquartileRange	2.365e-26
original_firstorder_Kurtosis	5.613e-04
original_firstorder_Maximum	2.913e+00
original_firstorder_Mean	7.420e-23
original_firstorder_MeanAbsoluteDeviation	1.937e+02
original_firstorder_Median	6.793e+11
original_firstorder_Minimum	3.949e+13
original_firstorder_Range	1.000e+00
original_firstorder_RobustMeanAbsoluteDeviation	7.111e+34
original_firstorder_RootMeanSquared	1.010e-08

original_firstorder_Skewness	1.106e+01
original_firstorder_TotalEnergy	1.000e+00
original_firstorder_Uniformity	4.175e+23
original_firstorder_Variance	Inf
original_glcmm_Autocorrelation	2.871e-148
original_glcmm_ClusterProminence	Inf
original_glcmm_ClusterShade	8.925e-32
original_glcmm_ClusterTendency	1.181e-81
original_glcmm_Contrast	8.728e-171
original_glcmm_Correlation	1.028e-01
original_glcmm_DifferenceAverage	1.837e+258
original_glcmm_DifferenceEntropy	7.834e-29
original_glcmm_DifferenceVariance	2.084e-247
original_glcmm_Id	Inf
original_glcmm_Idm	0.000e+00
original_glcmm_Idmn	1.309e-10
original_glcmm_Idn	2.593e+06
original_glcmm_Imc1	1.210e+07
original_glcmm_Imc2	4.531e-04
original_glcmm_InverseVariance	7.684e+130
original_glcmm_JointAverage	1.046e-01
original_glcmm_JointEnergy	2.516e-29
original_glcmm_JointEntropy	5.069e-29
original_glcmm_MCC	1.815e+00
original_glcmm_MaximumProbability	9.972e+03
original_glcmm_SumAverage	1.000e+00
original_glcmm_SumEntropy	5.572e+20
original_glcmm_SumSquares	1.000e+00
original_gldm_DependenceEntropy	6.964e+02
original_gldm_DependenceNonUniformity	1.106e-14
original_gldm_DependenceNonUniformityNormalized	5.358e+30
original_gldm_DependenceVariance	2.325e+02
original_gldm_GrayLevelNonUniformity	7.152e-05
original_gldm_GrayLevelVariance	0.000e+00
original_gldm_HighGrayLevelEmphasis	2.010e+199
original_gldm_LargeDependenceEmphasis	2.763e+26
original_gldm_LargeDependenceHighGrayLevelEmphasis	2.803e-01
original_gldm_LargeDependenceLowGrayLevelEmphasis	1.761e-16
original_gldm_LowGrayLevelEmphasis	8.465e+130
original_gldm_SmallDependenceEmphasis	3.940e-55
original_gldm_SmallDependenceHighGrayLevelEmphasis	6.159e+24
original_gldm_SmallDependenceLowGrayLevelEmphasis	9.250e+03
original_glrlm_GrayLevelNonUniformity	8.999e+06
original_glrlm_GrayLevelNonUniformityNormalized	4.807e+12
original_glrlm_GrayLevelVariance	3.049e+37
original_glrlm_HighGrayLevelRunEmphasis	8.778e+09
original_glrlm_LongRunEmphasis	2.093e-25
original_glrlm_LongRunHighGrayLevelEmphasis	1.086e-06
original_glrlm_LongRunLowGrayLevelEmphasis	9.324e-13
original_glrlm_LowGrayLevelRunEmphasis	1.118e-43
original_glrlm_RunEntropy	1.148e+06
original_glrlm_RunLengthNonUniformity	9.408e+28
original_glrlm_RunLengthNonUniformityNormalized	9.467e-43
original_glrlm_RunPercentage	4.078e-29
original_glrlm_RunVariance	3.410e+18
original_glrlm_ShortRunEmphasis	3.717e+60

original_glrlm_ShortRunHighGrayLevelEmphasis	1.749e-61
original_glrlm_ShortRunLowGrayLevelEmphasis	2.558e-72
original_glszm_GrayLevelNonUniformity	1.588e-08
original_glszm_GrayLevelNonUniformityNormalized	2.891e-01
original_glszm_GrayLevelVariance	4.777e+01
original_glszm_HighGrayLevelZoneEmphasis	1.469e+11
original_glszm_LargeAreaEmphasis	2.257e-130
original_glszm_LargeAreaHighGrayLevelEmphasis	8.786e+05
original_glszm_LargeAreaLowGrayLevelEmphasis	9.690e+01
original_glszm_LowGrayLevelZoneEmphasis	1.868e-07
original_glszm_SizeZoneNonUniformity	6.820e+05
original_glszm_SizeZoneNonUniformityNormalized	1.890e-42
original_glszm_SmallAreaEmphasis	2.038e+51
original_glszm_SmallAreaHighGrayLevelEmphasis	4.058e-11
original_glszm_SmallAreaLowGrayLevelEmphasis	8.289e+01
original_glszm_ZoneEntropy	7.684e-03
original_glszm_ZonePercentage	6.744e+14
original_glszm_ZoneVariance	1.173e+133
original_ngtdm_Busyness	5.949e-02
original_ngtdm_Coarseness	8.049e+00
original_ngtdm_Complexity	6.148e+00
original_ngtdm_Contrast	8.635e-03
original_ngtdm_Strength	7.802e+03
original_shape_Elongation	1.157e+05
original_shape_Flatness	5.241e-08
original_shape_LeastAxisLength	9.988e+14
original_shape_MajorAxisLength	2.923e+04
original_shape_Maximum2DDiameterColumn	2.940e-02
original_shape_Maximum2DDiameterRow	1.862e-02
original_shape_Maximum2DDiameterSlice	2.989e-02
original_shape_Maximum3DDiameter	1.264e-01
original_shape_MeshVolume	4.440e-264
original_shape_MinorAxisLength	1.068e-06
original_shape_Sphericity	8.490e-01
original_shape_SurfaceArea	1.928e-08
original_shape_SurfaceVolumeRatio	6.055e+46
original_shape_VoxelVolume	2.688e+244
	se(coef)
original_firstorder_10Percentile	2.085e+01
original_firstorder_90Percentile	1.519e+01
original_firstorder_Energy	6.347e+00
original_firstorder_Entropy	8.826e+01
original_firstorder_InterquartileRange	4.126e+01
original_firstorder_Kurtosis	2.945e+00
original_firstorder_Maximum	2.613e+00
original_firstorder_Mean	4.101e+01
original_firstorder_MeanAbsoluteDeviation	5.160e+01
original_firstorder_Median	2.038e+01
original_firstorder_Minimum	2.390e+01
original_firstorder_Range	0.000e+00
original_firstorder_RobustMeanAbsoluteDeviation	5.326e+01
original_firstorder_RootMeanSquared	1.078e+01
original_firstorder_Skewness	1.849e+00
original_firstorder_TotalEnergy	0.000e+00
original_firstorder_Uniformity	4.023e+01
original_firstorder_Variance	1.610e+03

original_glcm_Autocorrelation	3.911e+02
original_glcm_ClusterProminence	3.370e+02
original_glcm_ClusterShade	7.469e+01
original_glcm_ClusterTendency	6.782e+01
original_glcm_Contrast	7.364e+02
original_glcm_Correlation	2.864e+00
original_glcm_DifferenceAverage	2.940e+02
original_glcm_DifferenceEntropy	5.020e+01
original_glcm_DifferenceVariance	4.803e+02
original_glcm_Id	1.584e+03
original_glcm_Idm	1.334e+03
original_glcm_Idmn	1.013e+01
original_glcm_Idn	9.482e+00
original_glcm_Imc1	9.441e+00
original_glcm_Imc2	1.010e+01
original_glcm_InverseVariance	1.416e+02
original_glcm_JointAverage	3.698e+01
original_glcm_JointEnergy	3.291e+01
original_glcm_JointEntropy	5.420e+01
original_glcm_MCC	2.458e+00
original_glcm_MaximumProbability	3.504e+00
original_glcm_SumAverage	0.000e+00
original_glcm_SumEntropy	5.074e+01
original_glcm_SumSquares	0.000e+00
original_gldm_DependenceEntropy	2.674e+01
original_gldm_DependenceNonUniformity	1.631e+01
original_gldm_DependenceNonUniformityNormalized	2.104e+01
original_gldm_DependenceVariance	1.716e+01
original_gldm_GrayLevelNonUniformity	7.471e+00
original_gldm_GrayLevelVariance	1.597e+03
original_gldm_HighGrayLevelEmphasis	4.828e+02
original_gldm_LargeDependenceEmphasis	7.341e+01
original_gldm_LargeDependenceHighGrayLevelEmphasis	1.692e+01
original_gldm_LargeDependenceLowGrayLevelEmphasis	4.368e+01
original_gldm_LowGrayLevelEmphasis	1.367e+02
original_gldm_SmallDependenceEmphasis	5.322e+01
original_gldm_SmallDependenceHighGrayLevelEmphasis	2.228e+01
original_gldm_SmallDependenceLowGrayLevelEmphasis	1.222e+01
original_glrlm_GrayLevelNonUniformity	9.186e+00
original_glrlm_GrayLevelNonUniformityNormalized	1.575e+01
original_glrlm_GrayLevelVariance	6.311e+01
original_glrlm_HighGrayLevelRunEmphasis	2.234e+02
original_glrlm_LongRunEmphasis	4.869e+01
original_glrlm_LongRunHighGrayLevelEmphasis	7.794e+00
original_glrlm_LongRunLowGrayLevelEmphasis	9.462e+00
original_glrlm_LowGrayLevelRunEmphasis	1.418e+02
original_glrlm_RunEntropy	5.303e+01
original_glrlm_RunLengthNonUniformity	2.487e+01
original_glrlm_RunLengthNonUniformityNormalized	8.140e+01
original_glrlm_RunPercentage	1.186e+02
original_glrlm_RunVariance	3.966e+01
original_glrlm_ShortRunEmphasis	6.087e+01
original_glrlm_ShortRunHighGrayLevelEmphasis	7.703e+01
original_glrlm_ShortRunLowGrayLevelEmphasis	1.601e+02
original_glszm_GrayLevelNonUniformity	7.114e+00
original_glszm_GrayLevelNonUniformityNormalized	5.107e+00

original_glszm_GrayLevelVariance	7.867e+00
original_glszm_HighGrayLevelZoneEmphasis	3.249e+01
original_glszm_LargeAreaEmphasis	6.396e+02
original_glszm_LargeAreaHighGrayLevelEmphasis	5.557e+00
original_glszm_LargeAreaLowGrayLevelEmphasis	1.282e+01
original_glszm_LowGrayLevelZoneEmphasis	2.088e+01
original_glszm_SizeZoneNonUniformity	8.675e+00
original_glszm_SizeZoneNonUniformityNormalized	3.113e+01
original_glszm_SmallAreaEmphasis	3.664e+01
original_glszm_SmallAreaHighGrayLevelEmphasis	1.772e+01
original_glszm_SmallAreaLowGrayLevelEmphasis	1.127e+01
original_glszm_ZoneEntropy	6.920e+00
original_glszm_ZonePercentage	2.983e+01
original_glszm_ZoneVariance	6.388e+02
original_ngtdm_Busyness	7.769e+00
original_ngtdm_Coarseness	2.741e+00
original_ngtdm_Complexity	9.990e+00
original_ngtdm_Contrast	2.011e+01
original_ngtdm_Strength	3.854e+00
original_shape_Elongation	4.716e+00
original_shape_Flatness	6.665e+00
original_shape_LeastAxisLength	1.388e+01
original_shape_MajorAxisLength	4.288e+00
original_shape_Maximum2DDiameterColumn	2.703e+00
original_shape_Maximum2DDiameterRow	2.409e+00
original_shape_Maximum2DDiameterSlice	2.527e+00
original_shape_Maximum3DDiameter	5.101e+00
original_shape_MeshVolume	3.937e+02
original_shape_MinorAxisLength	6.705e+00
original_shape_Sphericity	7.419e+00
original_shape_SurfaceArea	5.799e+00
original_shape_SurfaceVolumeRatio	6.021e+01
original_shape_VoxelVolume	3.919e+02
z	
original_firstorder_10Percentile	1.330
original_firstorder_90Percentile	0.712
original_firstorder_Energy	-2.592
original_firstorder_Entropy	0.792
original_firstorder_InterquartileRange	-1.430
original_firstorder_Kurtosis	-2.542
original_firstorder_Maximum	0.409
original_firstorder_Mean	-1.243
original_firstorder_MeanAbsoluteDeviation	0.102
original_firstorder_Median	1.337
original_firstorder_Minimum	1.310
original_firstorder_Range	NaN
original_firstorder_RobustMeanAbsoluteDeviation	1.507
original_firstorder_RootMeanSquared	-1.708
original_firstorder_Skewness	1.300
original_firstorder_TotalEnergy	NaN
original_firstorder_Uniformity	1.352
original_firstorder_Variance	2.338
original_glcmm_Autocorrelation	-0.869
original_glcmm_ClusterProminence	2.666
original_glcmm_ClusterShade	-0.957
original_glcmm_ClusterTendency	-2.748

original_glcm_Contrast	-0.532
original_glcm_Correlation	-0.794
original_glcm_DifferenceAverage	2.023
original_glcm_DifferenceEntropy	-1.289
original_glcm_DifferenceVariance	-1.183
original_glcm_Id	2.262
original_glcm_Idm	-2.348
original_glcm_Idmn	-2.245
original_glcm_Idn	1.557
original_glcm_Imc1	1.727
original_glcm_Imc2	-0.762
original_glcm_InverseVariance	2.128
original_glcm_JointAverage	-0.061
original_glcm_JointEnergy	-2.001
original_glcm_JointEntropy	-1.202
original_glcm_MCC	0.242
original_glcm_MaximumProbability	2.628
original_glcm_SumAverage	NaN
original_glcm_SumEntropy	0.942
original_glcm_SumSquares	NaN
original_gldm_DependenceEntropy	0.245
original_gldm_DependenceNonUniformity	-1.970
original_gldm_DependenceNonUniformityNormalized	3.363
original_gldm_DependenceVariance	0.318
original_gldm_GrayLevelNonUniformity	-1.278
original_gldm_GrayLevelVariance	-2.390
original_gldm_HighGrayLevelEmphasis	0.951
original_gldm_LargeDependenceEmphasis	0.829
original_gldm_LargeDependenceHighGrayLevelEmphasis	-0.075
original_gldm_LargeDependenceLowGrayLevelEmphasis	-0.830
original_gldm_LowGrayLevelEmphasis	2.205
original_gldm_SmallDependenceEmphasis	-2.354
original_gldm_SmallDependenceHighGrayLevelEmphasis	2.562
original_gldm_SmallDependenceLowGrayLevelEmphasis	0.747
original_glrlm_GrayLevelNonUniformity	1.743
original_glrlm_GrayLevelNonUniformityNormalized	1.854
original_glrlm_GrayLevelVariance	1.368
original_glrlm_HighGrayLevelRunEmphasis	0.102
original_glrlm_LongRunEmphasis	-1.167
original_glrlm_LongRunHighGrayLevelEmphasis	-1.762
original_glrlm_LongRunLowGrayLevelEmphasis	-2.928
original_glrlm_LowGrayLevelRunEmphasis	-0.697
original_glrlm_RunEntropy	0.263
original_glrlm_RunLengthNonUniformity	2.682
original_glrlm_RunLengthNonUniformityNormalized	-1.189
original_glrlm_RunPercentage	-0.551
original_glrlm_RunVariance	1.076
original_glrlm_ShortRunEmphasis	2.291
original_glrlm_ShortRunHighGrayLevelEmphasis	-1.816
original_glrlm_ShortRunLowGrayLevelEmphasis	-1.030
original_glszm_GrayLevelNonUniformity	-2.524
original_glszm_GrayLevelNonUniformityNormalized	-0.243
original_glszm_GrayLevelVariance	0.491
original_glszm_HighGrayLevelZoneEmphasis	0.792
original_glszm_LargeAreaEmphasis	-0.467
original_glszm_LargeAreaHighGrayLevelEmphasis	2.463

original_glszm_LargeAreaLowGrayLevelEmphasis	0.357
original_glszm_LowGrayLevelZoneEmphasis	-0.742
original_glszm_SizeZoneNonUniformity	1.549
original_glszm_SizeZoneNonUniformityNormalized	-3.086
original_glszm_SmallAreaEmphasis	3.224
original_glszm_SmallAreaHighGrayLevelEmphasis	-1.350
original_glszm_SmallAreaLowGrayLevelEmphasis	0.392
original_glszm_ZoneEntropy	-0.704
original_glszm_ZonePercentage	1.144
original_glszm_ZoneVariance	0.480
original_ngtdm_Busyness	-0.363
original_ngtdm_Coarseness	0.761
original_ngtdm_Complexity	0.182
original_ngtdm_Contrast	-0.236
original_ngtdm_Strength	2.325
original_shape_Elongation	2.472
original_shape_Flatness	-2.515
original_shape_LeastAxisLength	2.488
original_shape_MajorAxisLength	2.398
original_shape_Maximum2DDiameterColumn	-1.305
original_shape_Maximum2DDiameterRow	-1.654
original_shape_Maximum2DDiameterSlice	-1.389
original_shape_Maximum3DDiameter	-0.405
original_shape_MeshVolume	-1.540
original_shape_MinorAxisLength	-2.051
original_shape_Sphericity	-0.022
original_shape_SurfaceArea	-3.064
original_shape_SurfaceVolumeRatio	1.789
original_shape_VoxelVolume	1.436
p	
original_firstorder_10Percentile	0.183634
original_firstorder_90Percentile	0.476174
original_firstorder_Energy	0.009534
original_firstorder_Entropy	0.428142
original_firstorder_InterquartileRange	0.152672
original_firstorder_Kurtosis	0.011038
original_firstorder_Maximum	0.682378
original_firstorder_Mean	0.213995
original_firstorder_MeanAbsoluteDeviation	0.918715
original_firstorder_Median	0.181365
original_firstorder_Minimum	0.190170
original_firstorder_Range	NaN
original_firstorder_RobustMeanAbsoluteDeviation	0.131871
original_firstorder_RootMeanSquared	0.087655
original_firstorder_Skewness	0.193581
original_firstorder_TotalEnergy	NaN
original_firstorder_Uniformity	0.176374
original_firstorder_Variance	0.019410
original_glcmm_Autocorrelation	0.385054
original_glcmm_ClusterProminence	0.007669
original_glcmm_ClusterShade	0.338467
original_glcmm_ClusterTendency	0.006000
original_glcmm_Contrast	0.594906
original_glcmm_Correlation	0.427049
original_glcmm_DifferenceAverage	0.043110
original_glcmm_DifferenceEntropy	0.197312

original_glcm_DifferenceVariance	0.236932
original_glcm_Id	0.023712
original_glcm_Idm	0.018859
original_glcm_Idmn	0.024746
original_glcm_Idn	0.119353
original_glcm_Imc1	0.084081
original_glcm_Imc2	0.445867
original_glcm_InverseVariance	0.033350
original_glcm_JointAverage	0.951313
original_glcm_JointEnergy	0.045409
original_glcm_JointEntropy	0.229320
original_glcm_MCC	0.808441
original_glcm_MaximumProbability	0.008599
original_glcm_SumAverage	NaN
original_glcm_SumEntropy	0.346437
original_glcm_SumSquares	NaN
original_gldm_DependenceEntropy	0.806603
original_gldm_DependenceNonUniformity	0.048804
original_gldm_DependenceNonUniformityNormalized	0.000771
original_gldm_DependenceVariance	0.750860
original_gldm_GrayLevelNonUniformity	0.201362
original_gldm_GrayLevelVariance	0.016838
original_gldm_HighGrayLevelEmphasis	0.341853
original_gldm_LargeDependenceEmphasis	0.406921
original_gldm_LargeDependenceHighGrayLevelEmphasis	0.940081
original_gldm_LargeDependenceLowGrayLevelEmphasis	0.406257
original_gldm_LowGrayLevelEmphasis	0.027471
original_gldm_SmallDependenceEmphasis	0.018575
original_gldm_SmallDependenceHighGrayLevelEmphasis	0.010410
original_gldm_SmallDependenceLowGrayLevelEmphasis	0.454992
original_glrlm_GrayLevelNonUniformity	0.081303
original_glrlm_GrayLevelNonUniformityNormalized	0.063753
original_glrlm_GrayLevelVariance	0.171400
original_glrlm_HighGrayLevelRunEmphasis	0.918360
original_glrlm_LongRunEmphasis	0.243185
original_glrlm_LongRunHighGrayLevelEmphasis	0.078061
original_glrlm_LongRunLowGrayLevelEmphasis	0.003416
original_glrlm_LowGrayLevelRunEmphasis	0.485598
original_glrlm_RunEntropy	0.792437
original_glrlm_RunLengthNonUniformity	0.007311
original_glrlm_RunLengthNonUniformityNormalized	0.234563
original_glrlm_RunPercentage	0.581560
original_glrlm_RunVariance	0.281924
original_glrlm_ShortRunEmphasis	0.021946
original_glrlm_ShortRunHighGrayLevelEmphasis	0.069363
original_glrlm_ShortRunLowGrayLevelEmphasis	0.303211
original_glszm_GrayLevelNonUniformity	0.011587
original_glszm_GrayLevelNonUniformityNormalized	0.808029
original_glszm_GrayLevelVariance	0.623079
original_glszm_HighGrayLevelZoneEmphasis	0.428637
original_glszm_LargeAreaEmphasis	0.640682
original_glszm_LargeAreaHighGrayLevelEmphasis	0.013783
original_glszm_LargeAreaLowGrayLevelEmphasis	0.721309
original_glszm_LowGrayLevelZoneEmphasis	0.458065
original_glszm_SizeZoneNonUniformity	0.121497
original_glszm_SizeZoneNonUniformityNormalized	0.002028

original_glszm_SmallAreaEmphasis	0.001264
original_glszm_SmallAreaHighGrayLevelEmphasis	0.176983
original_glszm_SmallAreaLowGrayLevelEmphasis	0.695071
original_glszm_ZoneEntropy	0.481733
original_glszm_ZonePercentage	0.252431
original_glszm_ZoneVariance	0.631451
original_ngtdm_Busyness	0.716434
original_ngtdm_Coarseness	0.446652
original_ngtdm_Complexity	0.855746
original_ngtdm_Contrast	0.813222
original_ngtdm_Strength	0.020048
original_shape_Elongation	0.013420
original_shape_Flatness	0.011899
original_shape_LeastAxisLength	0.012844
original_shape_MajorAxisLength	0.016474
original_shape_Maximum2DDiameterColumn	0.191963
original_shape_Maximum2DDiameterRow	0.098206
original_shape_Maximum2DDiameterSlice	0.164876
original_shape_Maximum3DDiameter	0.685188
original_shape_MeshVolume	0.123485
original_shape_MinorAxisLength	0.040301
original_shape_Sphericity	0.982393
original_shape_SurfaceArea	0.002187
original_shape_SurfaceVolumeRatio	0.073593
original_shape_VoxelVolume	0.150953

Likelihood ratio test=247.5 on 107 df, p=3.836e-13
n= 361, number of events= 48

```
$model_list[[4]]
```

Call:

```
coxph(formula = as.formula(paste("Surv(df_train$time, df_train$event) ~",
  paste(predict.factors, collapse = "+"))), data = df_train,
  x = TRUE)
```

	coef
original_firstorder_10Percentile	2.960e+00
original_firstorder_90Percentile	3.526e-01
original_firstorder_Energy	-7.371e-01
original_firstorder_Entropy	-2.582e+01
original_firstorder_InterquartileRange	1.481e+00
original_firstorder_Kurtosis	4.341e-01
original_firstorder_Maximum	2.691e-01
original_firstorder_Mean	-1.872e+00
original_firstorder_MeanAbsoluteDeviation	1.220e+01
original_firstorder_Median	-7.229e-01
original_firstorder_Minimum	1.014e+01
original_firstorder_Range	0.000e+00
original_firstorder_RobustMeanAbsoluteDeviation	1.166e-01
original_firstorder_RootMeanSquared	-2.108e+00
original_firstorder_Skewness	5.727e-01
original_firstorder_TotalEnergy	0.000e+00
original_firstorder_Uniformity	-9.457e+00
original_firstorder_Variance	4.677e+02
original_glcmm_Autocorrelation	-6.582e+01
original_glcmm_ClusterProminence	-3.445e+00

original_glcm_ClusterShade	-1.195e+00
original_glcm_ClusterTendency	-4.464e+00
original_glcm_Contrast	1.976e+02
original_glcm_Correlation	-3.892e+00
original_glcm_DifferenceAverage	-1.834e+01
original_glcm_DifferenceEntropy	2.589e+00
original_glcm_DifferenceVariance	-1.799e+02
original_glcm_Id	5.752e+01
original_glcm_Idm	-7.627e+01
original_glcm_Idmn	-2.229e+00
original_glcm_Idn	-5.497e-01
original_glcm_Imc1	-4.354e+00
original_glcm_Imc2	-2.722e-01
original_glcm_InverseVariance	4.018e+00
original_glcm_JointAverage	1.045e+01
original_glcm_JointEnergy	3.959e-01
original_glcm_JointEntropy	-9.359e+00
original_glcm_MCC	6.271e-01
original_glcm_MaximumProbability	2.384e+00
original_glcm_SumAverage	0.000e+00
original_glcm_SumEntropy	6.646e+00
original_glcm_SumSquares	0.000e+00
original_gldm_DependenceEntropy	-4.882e+00
original_gldm_DependenceNonUniformity	6.606e+00
original_gldm_DependenceNonUniformityNormalized	-8.894e-01
original_gldm_DependenceVariance	-2.716e+00
original_gldm_GrayLevelNonUniformity	-7.835e-01
original_gldm_GrayLevelVariance	-4.568e+02
original_gldm_HighGrayLevelEmphasis	8.309e+01
original_gldm_LargeDependenceEmphasis	-7.511e+00
original_gldm_LargeDependenceHighGrayLevelEmphasis	1.219e+01
original_gldm_LargeDependenceLowGrayLevelEmphasis	-9.661e+00
original_gldm_LowGrayLevelEmphasis	-7.169e+00
original_gldm_SmallDependenceEmphasis	1.547e+01
original_gldm_SmallDependenceHighGrayLevelEmphasis	-8.169e-01
original_gldm_SmallDependenceLowGrayLevelEmphasis	5.826e+00
original_glrlm_GrayLevelNonUniformity	6.051e-01
original_glrlm_GrayLevelNonUniformityNormalized	4.871e+00
original_glrlm_GrayLevelVariance	-8.751e+00
original_glrlm_HighGrayLevelRunEmphasis	-5.527e+01
original_glrlm_LongRunEmphasis	1.296e+01
original_glrlm_LongRunHighGrayLevelEmphasis	-1.747e+00
original_glrlm_LongRunLowGrayLevelEmphasis	3.070e+00
original_glrlm_LowGrayLevelRunEmphasis	5.894e+01
original_glrlm_RunEntropy	2.406e+01
original_glrlm_RunLengthNonUniformity	4.952e+00
original_glrlm_RunLengthNonUniformityNormalized	-2.063e+01
original_glrlm_RunPercentage	-1.736e+01
original_glrlm_RunVariance	-1.761e+01
original_glrlm_ShortRunEmphasis	1.850e+01
original_glrlm_ShortRunHighGrayLevelEmphasis	4.396e+01
original_glrlm_ShortRunLowGrayLevelEmphasis	-4.793e+01
original_glszm_GrayLevelNonUniformity	8.616e-01
original_glszm_GrayLevelNonUniformityNormalized	2.374e+00
original_glszm_GrayLevelVariance	6.992e-01
original_glszm_HighGrayLevelZoneEmphasis	-2.150e+01

original_glszm_LargeAreaEmphasis	-1.064e+02
original_glszm_LargeAreaHighGrayLevelEmphasis	3.540e-02
original_glszm_LargeAreaLowGrayLevelEmphasis	1.858e+00
original_glszm_LowGrayLevelZoneEmphasis	-4.816e+00
original_glszm_SizeZoneNonUniformity	1.695e+00
original_glszm_SizeZoneNonUniformityNormalized	-4.991e+00
original_glszm_SmallAreaEmphasis	2.421e+00
original_glszm_SmallAreaHighGrayLevelEmphasis	1.458e+01
original_glszm_SmallAreaLowGrayLevelEmphasis	-2.321e-01
original_glszm_ZoneEntropy	2.467e+00
original_glszm_ZonePercentage	-2.251e+01
original_glszm_ZoneVariance	1.082e+02
original_ngtdm_Busyness	-2.848e+00
original_ngtdm_Coarseness	5.281e-01
original_ngtdm_Complexity	-2.983e+00
original_ngtdm_Contrast	-8.163e+00
original_ngtdm_Strength	2.794e-01
original_shape_Elongation	1.190e+00
original_shape_Flatness	-1.102e+00
original_shape_LeastAxisLength	2.393e+00
original_shape_MajorAxisLength	6.482e-01
original_shape_Maximum2DDiameterColumn	-1.591e+00
original_shape_Maximum2DDiameterRow	2.450e-01
original_shape_Maximum2DDiameterSlice	-8.457e-01
original_shape_Maximum3DDiameter	3.192e+00
original_shape_MeshVolume	2.821e+02
original_shape_MinorAxisLength	-1.258e+00
original_shape_Sphericity	6.896e-01
original_shape_SurfaceArea	-3.724e+00
original_shape_SurfaceVolumeRatio	2.979e+01
original_shape_VoxelVolume	-2.916e+02
	exp(coef)
original_firstorder_10Percentile	1.930e+01
original_firstorder_90Percentile	1.423e+00
original_firstorder_Energy	4.785e-01
original_firstorder_Entropy	6.127e-12
original_firstorder_InterquartileRange	4.399e+00
original_firstorder_Kurtosis	1.544e+00
original_firstorder_Maximum	1.309e+00
original_firstorder_Mean	1.538e-01
original_firstorder_MeanAbsoluteDeviation	1.994e+05
original_firstorder_Median	4.854e-01
original_firstorder_Minimum	2.534e+04
original_firstorder_Range	1.000e+00
original_firstorder_RobustMeanAbsoluteDeviation	1.124e+00
original_firstorder_RootMeanSquared	1.214e-01
original_firstorder_Skewness	1.773e+00
original_firstorder_TotalEnergy	1.000e+00
original_firstorder_Uniformity	7.816e-05
original_firstorder_Variance	1.336e+203
original_glcmm_Autocorrelation	2.605e-29
original_glcmm_ClusterProminence	3.192e-02
original_glcmm_ClusterShade	3.028e-01
original_glcmm_ClusterTendency	1.152e-02
original_glcmm_Contrast	6.768e+85
original_glcmm_Correlation	2.040e-02

original_glcm_DifferenceAverage	1.089e-08
original_glcm_DifferenceEntropy	1.331e+01
original_glcm_DifferenceVariance	7.731e-79
original_glcm_Id	9.581e+24
original_glcm_Idm	7.520e-34
original_glcm_Idmn	1.076e-01
original_glcm_Idn	5.771e-01
original_glcm_Imc1	1.285e-02
original_glcm_Imc2	7.617e-01
original_glcm_InverseVariance	5.559e+01
original_glcm_JointAverage	3.455e+04
original_glcm_JointEnergy	1.486e+00
original_glcm_JointEntropy	8.619e-05
original_glcm_MCC	1.872e+00
original_glcm_MaximumProbability	1.085e+01
original_glcm_SumAverage	1.000e+00
original_glcm_SumEntropy	7.699e+02
original_glcm_SumSquares	1.000e+00
original_gldm_DependenceEntropy	7.581e-03
original_gldm_DependenceNonUniformity	7.399e+02
original_gldm_DependenceNonUniformityNormalized	4.109e-01
original_gldm_DependenceVariance	6.613e-02
original_gldm_GrayLevelNonUniformity	4.568e-01
original_gldm_GrayLevelVariance	4.061e-199
original_gldm_HighGrayLevelEmphasis	1.217e+36
original_gldm_LargeDependenceEmphasis	5.469e-04
original_gldm_LargeDependenceHighGrayLevelEmphasis	1.964e+05
original_gldm_LargeDependenceLowGrayLevelEmphasis	6.374e-05
original_gldm_LowGrayLevelEmphasis	7.704e-04
original_gldm_SmallDependenceEmphasis	5.209e+06
original_gldm_SmallDependenceHighGrayLevelEmphasis	4.418e-01
original_gldm_SmallDependenceLowGrayLevelEmphasis	3.391e+02
original_glrlm_GrayLevelNonUniformity	1.831e+00
original_glrlm_GrayLevelNonUniformityNormalized	1.305e+02
original_glrlm_GrayLevelVariance	1.583e-04
original_glrlm_HighGrayLevelRunEmphasis	9.873e-25
original_glrlm_LongRunEmphasis	4.233e+05
original_glrlm_LongRunHighGrayLevelEmphasis	1.743e-01
original_glrlm_LongRunLowGrayLevelEmphasis	2.155e+01
original_glrlm_LowGrayLevelRunEmphasis	3.975e+25
original_glrlm_RunEntropy	2.821e+10
original_glrlm_RunLengthNonUniformity	1.414e+02
original_glrlm_RunLengthNonUniformityNormalized	1.100e-09
original_glrlm_RunPercentage	2.879e-08
original_glrlm_RunVariance	2.244e-08
original_glrlm_ShortRunEmphasis	1.082e+08
original_glrlm_ShortRunHighGrayLevelEmphasis	1.240e+19
original_glrlm_ShortRunLowGrayLevelEmphasis	1.528e-21
original_glszm_GrayLevelNonUniformity	2.367e+00
original_glszm_GrayLevelNonUniformityNormalized	1.074e+01
original_glszm_GrayLevelVariance	2.012e+00
original_glszm_HighGrayLevelZoneEmphasis	4.591e-10
original_glszm_LargeAreaEmphasis	6.421e-47
original_glszm_LargeAreaHighGrayLevelEmphasis	1.036e+00
original_glszm_LargeAreaLowGrayLevelEmphasis	6.411e+00
original_glszm_LowGrayLevelZoneEmphasis	8.100e-03

original_glszm_SizeZoneNonUniformity	5.446e+00
original_glszm_SizeZoneNonUniformityNormalized	6.796e-03
original_glszm_SmallAreaEmphasis	1.126e+01
original_glszm_SmallAreaHighGrayLevelEmphasis	2.149e+06
original_glszm_SmallAreaLowGrayLevelEmphasis	7.929e-01
original_glszm_ZoneEntropy	1.179e+01
original_glszm_ZonePercentage	1.671e-10
original_glszm_ZoneVariance	9.893e+46
original_ngtdm_Busyness	5.794e-02
original_ngtdm_Coarseness	1.696e+00
original_ngtdm_Complexity	5.064e-02
original_ngtdm_Contrast	2.849e-04
original_ngtdm_Strength	1.322e+00
original_shape_Elongation	3.288e+00
original_shape_Flatness	3.322e-01
original_shape_LeastAxisLength	1.094e+01
original_shape_MajorAxisLength	1.912e+00
original_shape_Maximum2DDiameterColumn	2.038e-01
original_shape_Maximum2DDiameterRow	1.278e+00
original_shape_Maximum2DDiameterSlice	4.293e-01
original_shape_Maximum3DDiameter	2.434e+01
original_shape_MeshVolume	3.175e+122
original_shape_MinorAxisLength	2.843e-01
original_shape_Sphericity	1.993e+00
original_shape_SurfaceArea	2.413e-02
original_shape_SurfaceVolumeRatio	8.638e+12
original_shape_VoxelVolume	2.385e-127
se(coef)	
original_firstorder_10Percentile	1.315e-01
original_firstorder_90Percentile	9.475e-02
original_firstorder_Energy	7.491e-02
original_firstorder_Entropy	1.394e-01
original_firstorder_InterquartileRange	1.479e-01
original_firstorder_Kurtosis	1.384e-01
original_firstorder_Maximum	1.361e-01
original_firstorder_Mean	1.327e-01
original_firstorder_MeanAbsoluteDeviation	1.266e-01
original_firstorder_Median	1.501e-01
original_firstorder_Minimum	1.667e-01
original_firstorder_Range	1.410e-01
original_firstorder_RobustMeanAbsoluteDeviation	1.513e-01
original_firstorder_RootMeanSquared	1.318e-01
original_firstorder_Skewness	1.480e-01
original_firstorder_TotalEnergy	7.491e-02
original_firstorder_Uniformity	1.580e-01
original_firstorder_Variance	1.980e-01
original_glcmm_Autocorrelation	1.622e-01
original_glcmm_ClusterProminence	4.524e-01
original_glcmm_ClusterShade	2.735e-01
original_glcmm_ClusterTendency	1.721e-01
original_glcmm_Contrast	4.022e-01
original_glcmm_Correlation	1.559e-01
original_glcmm_DifferenceAverage	1.506e-01
original_glcmm_DifferenceEntropy	1.446e-01
original_glcmm_DifferenceVariance	4.220e-01
original_glcmm_Id	1.420e-01

original_glcm_Idm	1.407e-01
original_glcm_Idmn	1.704e-01
original_glcm_Idn	1.522e-01
original_glcm_Imc1	1.508e-01
original_glcm_Imc2	1.739e-01
original_glcm_InverseVariance	1.522e-01
original_glcm_JointAverage	1.613e-01
original_glcm_JointEnergy	1.722e-01
original_glcm_JointEntropy	1.368e-01
original_glcm_MCC	1.814e-01
original_glcm_MaximumProbability	1.616e-01
original_glcm_SumAverage	1.613e-01
original_glcm_SumEntropy	1.410e-01
original_glcm_SumSquares	2.011e-01
original_gldm_DependenceEntropy	1.512e-01
original_gldm_DependenceNonUniformity	1.200e-01
original_gldm_DependenceNonUniformityNormalized	1.669e-01
original_gldm_DependenceVariance	1.600e-01
original_gldm_GrayLevelNonUniformity	1.068e-01
original_gldm_GrayLevelVariance	1.978e-01
original_gldm_HighGrayLevelEmphasis	1.622e-01
original_gldm_LargeDependenceEmphasis	1.647e-01
original_gldm_LargeDependenceHighGrayLevelEmphasis	1.299e-01
original_gldm_LargeDependenceLowGrayLevelEmphasis	2.943e-01
original_gldm_LowGrayLevelEmphasis	1.112e-01
original_gldm_SmallDependenceEmphasis	1.655e-01
original_gldm_SmallDependenceHighGrayLevelEmphasis	1.430e-01
original_gldm_SmallDependenceLowGrayLevelEmphasis	1.298e-01
original_glrlm_GrayLevelNonUniformity	1.089e-01
original_glrlm_GrayLevelNonUniformityNormalized	1.516e-01
original_glrlm_GrayLevelVariance	1.899e-01
original_glrlm_HighGrayLevelRunEmphasis	1.616e-01
original_glrlm_LongRunEmphasis	1.961e-01
original_glrlm_LongRunHighGrayLevelEmphasis	1.362e-01
original_glrlm_LongRunLowGrayLevelEmphasis	2.079e-01
original_glrlm_LowGrayLevelRunEmphasis	1.157e-01
original_glrlm_RunEntropy	1.509e-01
original_glrlm_RunLengthNonUniformity	1.076e-01
original_glrlm_RunLengthNonUniformityNormalized	1.642e-01
original_glrlm_RunPercentage	1.640e-01
original_glrlm_RunVariance	2.024e-01
original_glrlm_ShortRunEmphasis	1.643e-01
original_glrlm_ShortRunHighGrayLevelEmphasis	1.632e-01
original_glrlm_ShortRunLowGrayLevelEmphasis	1.043e-01
original_glszm_GrayLevelNonUniformity	1.142e-01
original_glszm_GrayLevelNonUniformityNormalized	1.740e-01
original_glszm_GrayLevelVariance	1.413e-01
original_glszm_HighGrayLevelZoneEmphasis	1.530e-01
original_glszm_LargeAreaEmphasis	1.144e-01
original_glszm_LargeAreaHighGrayLevelEmphasis	8.544e-02
original_glszm_LargeAreaLowGrayLevelEmphasis	3.212e-01
original_glszm_LowGrayLevelZoneEmphasis	1.785e-01
original_glszm_SizeZoneNonUniformity	9.519e-02
original_glszm_SizeZoneNonUniformityNormalized	1.536e-01
original_glszm_SmallAreaEmphasis	1.471e-01
original_glszm_SmallAreaHighGrayLevelEmphasis	1.450e-01

original_glszm_SmallAreaLowGrayLevelEmphasis	2.181e-01
original_glszm_ZoneEntropy	1.639e-01
original_glszm_ZonePercentage	1.643e-01
original_glszm_ZoneVariance	1.142e-01
original_ngtdm_Busyness	3.147e-01
original_ngtdm_Coarseness	1.067e-01
original_ngtdm_Complexity	1.780e-01
original_ngtdm_Contrast	3.274e-01
original_ngtdm_Strength	2.971e-01
original_shape_Elongation	1.508e-01
original_shape_Flatness	1.692e-01
original_shape_LeastAxisLength	1.309e-01
original_shape_MajorAxisLength	1.455e-01
original_shape_Maximum2DDiameterColumn	1.431e-01
original_shape_Maximum2DDiameterRow	1.304e-01
original_shape_Maximum2DDiameterSlice	1.439e-01
original_shape_Maximum3DDiameter	1.419e-01
original_shape_MeshVolume	1.015e-01
original_shape_MinorAxisLength	1.469e-01
original_shape_Sphericity	1.815e-01
original_shape_SurfaceArea	1.041e-01
original_shape_SurfaceVolumeRatio	1.611e-01
original_shape_VoxelVolume	1.016e-01
z	
original_firstorder_10Percentile	22.504
original_firstorder_90Percentile	3.721
original_firstorder_Energy	-9.841
original_firstorder_Entropy	-185.184
original_firstorder_InterquartileRange	10.015
original_firstorder_Kurtosis	3.136
original_firstorder_Maximum	1.977
original_firstorder_Mean	-14.105
original_firstorder_MeanAbsoluteDeviation	96.358
original_firstorder_Median	-4.814
original_firstorder_Minimum	60.831
original_firstorder_Range	0.000
original_firstorder_RobustMeanAbsoluteDeviation	0.771
original_firstorder_RootMeanSquared	-15.992
original_firstorder_Skewness	3.869
original_firstorder_TotalEnergy	0.000
original_firstorder_Uniformity	-59.865
original_firstorder_Variance	2362.552
original_glcmm_Autocorrelation	-405.864
original_glcmm_ClusterProminence	-7.614
original_glcmm_ClusterShade	-4.368
original_glcmm_ClusterTendency	-25.934
original_glcmm_Contrast	491.335
original_glcmm_Correlation	-24.973
original_glcmm_DifferenceAverage	-121.726
original_glcmm_DifferenceEntropy	17.899
original_glcmm_DifferenceVariance	-426.204
original_glcmm_Id	405.116
original_glcmm_Idm	-542.232
original_glcmm_Idmn	-13.083
original_glcmm_Idn	-3.611
original_glcmm_Imc1	-28.866

original_glcm_Imc2	-1.565
original_glcm_InverseVariance	26.398
original_glcm_JointAverage	64.801
original_glcm_JointEnergy	2.299
original_glcm_JointEntropy	-68.431
original_glcm_MCC	3.457
original_glcm_MaximumProbability	14.756
original_glcm_SumAverage	0.000
original_glcm_SumEntropy	47.143
original_glcm_SumSquares	0.000
original_gldm_DependenceEntropy	-32.279
original_gldm_DependenceNonUniformity	55.069
original_gldm_DependenceNonUniformityNormalized	-5.331
original_gldm_DependenceVariance	-16.976
original_gldm_GrayLevelNonUniformity	-7.340
original_gldm_GrayLevelVariance	-2310.039
original_gldm_HighGrayLevelEmphasis	512.415
original_gldm_LargeDependenceEmphasis	-45.598
original_gldm_LargeDependenceHighGrayLevelEmphasis	93.853
original_gldm_LargeDependenceLowGrayLevelEmphasis	-32.824
original_gldm_LowGrayLevelEmphasis	-64.494
original_gldm_SmallDependenceEmphasis	93.464
original_gldm_SmallDependenceHighGrayLevelEmphasis	-5.711
original_gldm_SmallDependenceLowGrayLevelEmphasis	44.892
original_glrlm_GrayLevelNonUniformity	5.555
original_glrlm_GrayLevelNonUniformityNormalized	32.121
original_glrlm_GrayLevelVariance	-46.084
original_glrlm_HighGrayLevelRunEmphasis	-341.989
original_glrlm_LongRunEmphasis	66.080
original_glrlm_LongRunHighGrayLevelEmphasis	-12.828
original_glrlm_LongRunLowGrayLevelEmphasis	14.766
original_glrlm_LowGrayLevelRunEmphasis	509.299
original_glrlm_RunEntropy	159.494
original_glrlm_RunLengthNonUniformity	46.031
original_glrlm_RunLengthNonUniformityNormalized	-125.604
original_glrlm_RunPercentage	-105.843
original_glrlm_RunVariance	-87.027
original_glrlm_ShortRunEmphasis	112.625
original_glrlm_ShortRunHighGrayLevelEmphasis	269.433
original_glrlm_ShortRunLowGrayLevelEmphasis	-459.586
original_glszm_GrayLevelNonUniformity	7.545
original_glszm_GrayLevelNonUniformityNormalized	13.645
original_glszm_GrayLevelVariance	4.947
original_glszm_HighGrayLevelZoneEmphasis	-140.500
original_glszm_LargeAreaEmphasis	-930.128
original_glszm_LargeAreaHighGrayLevelEmphasis	0.414
original_glszm_LargeAreaLowGrayLevelEmphasis	5.785
original_glszm_LowGrayLevelZoneEmphasis	-26.979
original_glszm_SizeZoneNonUniformity	17.804
original_glszm_SizeZoneNonUniformityNormalized	-32.487
original_glszm_SmallAreaEmphasis	16.460
original_glszm_SmallAreaHighGrayLevelEmphasis	100.564
original_glszm_SmallAreaLowGrayLevelEmphasis	-1.064
original_glszm_ZoneEntropy	15.055
original_glszm_ZonePercentage	-137.006
original_glszm_ZoneVariance	947.408

original_ngtdm_Busyness	-9.051
original_ngtdm_Coarseness	4.949
original_ngtdm_Complexity	-16.761
original_ngtdm_Contrast	-24.936
original_ngtdm_Strength	0.940
original_shape_Elongation	7.892
original_shape_Flatness	-6.512
original_shape_LeastAxisLength	18.280
original_shape_MajorAxisLength	4.456
original_shape_Maximum2DDiameterColumn	-11.115
original_shape_Maximum2DDiameterRow	1.878
original_shape_Maximum2DDiameterSlice	-5.876
original_shape_Maximum3DDiameter	22.492
original_shape_MeshVolume	2779.567
original_shape_MinorAxisLength	-8.564
original_shape_Sphericity	3.799
original_shape_SurfaceArea	-35.783
original_shape_SurfaceVolumeRatio	184.892
original_shape_VoxelVolume	-2869.596
p	
original_firstorder_10Percentile	< 2e-16
original_firstorder_90Percentile	0.000198
original_firstorder_Energy	< 2e-16
original_firstorder_Entropy	< 2e-16
original_firstorder_InterquartileRange	< 2e-16
original_firstorder_Kurtosis	0.001713
original_firstorder_Maximum	0.048004
original_firstorder_Mean	< 2e-16
original_firstorder_MeanAbsoluteDeviation	< 2e-16
original_firstorder_Median	1.48e-06
original_firstorder_Minimum	< 2e-16
original_firstorder_Range	1.000000
original_firstorder_RobustMeanAbsoluteDeviation	0.440619
original_firstorder_RootMeanSquared	< 2e-16
original_firstorder_Skewness	0.000109
original_firstorder_TotalEnergy	1.000000
original_firstorder_Uniformity	< 2e-16
original_firstorder_Variance	< 2e-16
original_glcm_Autocorrelation	< 2e-16
original_glcm_ClusterProminence	2.66e-14
original_glcm_ClusterShade	1.26e-05
original_glcm_ClusterTendency	< 2e-16
original_glcm_Contrast	< 2e-16
original_glcm_Correlation	< 2e-16
original_glcm_DifferenceAverage	< 2e-16
original_glcm_DifferenceEntropy	< 2e-16
original_glcm_DifferenceVariance	< 2e-16
original_glcm_Id	< 2e-16
original_glcm_Idm	< 2e-16
original_glcm_Idmn	< 2e-16
original_glcm_Idn	0.000305
original_glcm_Imc1	< 2e-16
original_glcm_Imc2	0.117504
original_glcm_InverseVariance	< 2e-16
original_glcm_JointAverage	< 2e-16
original_glcm_JointEnergy	0.021506

original_glcm_JointEntropy	< 2e-16
original_glcm_MCC	0.000547
original_glcm_MaximumProbability	< 2e-16
original_glcm_SumAverage	1.000000
original_glcm_SumEntropy	< 2e-16
original_glcm_SumSquares	1.000000
original_gldm_DependenceEntropy	< 2e-16
original_gldm_DependenceNonUniformity	< 2e-16
original_gldm_DependenceNonUniformityNormalized	9.78e-08
original_gldm_DependenceVariance	< 2e-16
original_gldm_GrayLevelNonUniformity	2.14e-13
original_gldm_GrayLevelVariance	< 2e-16
original_gldm_HighGrayLevelEmphasis	< 2e-16
original_gldm_LargeDependenceEmphasis	< 2e-16
original_gldm_LargeDependenceHighGrayLevelEmphasis	< 2e-16
original_gldm_LargeDependenceLowGrayLevelEmphasis	< 2e-16
original_gldm_LowGrayLevelEmphasis	< 2e-16
original_gldm_SmallDependenceEmphasis	< 2e-16
original_gldm_SmallDependenceHighGrayLevelEmphasis	1.12e-08
original_gldm_SmallDependenceLowGrayLevelEmphasis	< 2e-16
original_glrlm_GrayLevelNonUniformity	2.78e-08
original_glrlm_GrayLevelNonUniformityNormalized	< 2e-16
original_glrlm_GrayLevelVariance	< 2e-16
original_glrlm_HighGrayLevelRunEmphasis	< 2e-16
original_glrlm_LongRunEmphasis	< 2e-16
original_glrlm_LongRunHighGrayLevelEmphasis	< 2e-16
original_glrlm_LongRunLowGrayLevelEmphasis	< 2e-16
original_glrlm_LowGrayLevelRunEmphasis	< 2e-16
original_glrlm_RunEntropy	< 2e-16
original_glrlm_RunLengthNonUniformity	< 2e-16
original_glrlm_RunLengthNonUniformityNormalized	< 2e-16
original_glrlm_RunPercentage	< 2e-16
original_glrlm_RunVariance	< 2e-16
original_glrlm_ShortRunEmphasis	< 2e-16
original_glrlm_ShortRunHighGrayLevelEmphasis	< 2e-16
original_glrlm_ShortRunLowGrayLevelEmphasis	< 2e-16
original_glszm_GrayLevelNonUniformity	4.51e-14
original_glszm_GrayLevelNonUniformityNormalized	< 2e-16
original_glszm_GrayLevelVariance	7.55e-07
original_glszm_HighGrayLevelZoneEmphasis	< 2e-16
original_glszm_LargeAreaEmphasis	< 2e-16
original_glszm_LargeAreaHighGrayLevelEmphasis	0.678648
original_glszm_LargeAreaLowGrayLevelEmphasis	7.25e-09
original_glszm_LowGrayLevelZoneEmphasis	< 2e-16
original_glszm_SizeZoneNonUniformity	< 2e-16
original_glszm_SizeZoneNonUniformityNormalized	< 2e-16
original_glszm_SmallAreaEmphasis	< 2e-16
original_glszm_SmallAreaHighGrayLevelEmphasis	< 2e-16
original_glszm_SmallAreaLowGrayLevelEmphasis	0.287194
original_glszm_ZoneEntropy	< 2e-16
original_glszm_ZonePercentage	< 2e-16
original_glszm_ZoneVariance	< 2e-16
original_ngtdm_Busyness	< 2e-16
original_ngtdm_Coarseness	7.45e-07
original_ngtdm_Complexity	< 2e-16
original_ngtdm_Contrast	< 2e-16

original_ngtdm_Strength	0.347027
original_shape_Elongation	2.96e-15
original_shape_Flatness	7.42e-11
original_shape_LeastAxisLength	< 2e-16
original_shape_MajorAxisLength	8.33e-06
original_shape_Maximum2DDiameterColumn	< 2e-16
original_shape_Maximum2DDiameterRow	0.060327
original_shape_Maximum2DDiameterSlice	4.21e-09
original_shape_Maximum3DDiameter	< 2e-16
original_shape_MeshVolume	< 2e-16
original_shape_MinorAxisLength	< 2e-16
original_shape_Sphericity	0.000145
original_shape_SurfaceArea	< 2e-16
original_shape_SurfaceVolumeRatio	< 2e-16
original_shape_VoxelVolume	< 2e-16

Likelihood ratio test=152.5 on 107 df, p=0.002555

n= 360, number of events= 41

\$model_list[[5]]

Call:

```
coxph(formula = as.formula(paste("Surv(df_train$time, df_train$event) ~",
  paste(predict.factors, collapse = "+"))), data = df_train,
  x = TRUE)
```

	coef
original_firstorder_10Percentile	2.537e+02
original_firstorder_90Percentile	1.216e+02
original_firstorder_Energy	-5.394e+01
original_firstorder_Entropy	7.815e+01
original_firstorder_InterquartileRange	-2.031e+02
original_firstorder_Kurtosis	6.668e+00
original_firstorder_Maximum	-1.525e+00
original_firstorder_Mean	-7.775e+02
original_firstorder_MeanAbsoluteDeviation	-2.501e+02
original_firstorder_Median	4.026e+02
original_firstorder_Minimum	3.091e+02
original_firstorder_Range	0.000e+00
original_firstorder_RobustMeanAbsoluteDeviation	3.580e+02
original_firstorder_RootMeanSquared	1.933e+01
original_firstorder_Skewness	6.335e+00
original_firstorder_TotalEnergy	0.000e+00
original_firstorder_Uniformity	-3.577e+01
original_firstorder_Variance	1.928e+04
original_glcmm_Autocorrelation	-7.756e+02
original_glcmm_ClusterProminence	4.921e+03
original_glcmm_ClusterShade	7.546e+02
original_glcmm_ClusterTendency	-1.140e+02
original_glcmm_Contrast	7.476e+03
original_glcmm_Correlation	-2.884e+01
original_glcmm_DifferenceAverage	-6.436e+01
original_glcmm_DifferenceEntropy	3.400e+02
original_glcmm_DifferenceVariance	-8.295e+03
original_glcmm_Id	3.395e+03
original_glcmm_Idm	-2.906e+03
original_glcmm_Idmn	-1.074e+02

original_glcm_Idn	1.041e+02
original_glcm_Imc1	-7.310e+01
original_glcm_Imc2	-7.217e+01
original_glcm_InverseVariance	3.255e+02
original_glcm_JointAverage	1.837e+02
original_glcm_JointEnergy	-2.245e+01
original_glcm_JointEntropy	-3.632e+02
original_glcm_MCC	1.453e+01
original_glcm_MaximumProbability	4.959e+01
original_glcm_SumAverage	0.000e+00
original_glcm_SumEntropy	1.391e+02
original_glcm_SumSquares	0.000e+00
original_gldm_DependenceEntropy	1.813e+02
original_gldm_DependenceNonUniformity	-8.487e+01
original_gldm_DependenceNonUniformityNormalized	2.102e+02
original_gldm_DependenceVariance	-1.788e+01
original_gldm_GrayLevelNonUniformity	9.643e+00
original_gldm_GrayLevelVariance	-2.041e+04
original_gldm_HighGrayLevelEmphasis	-3.778e+02
original_gldm_LargeDependenceEmphasis	5.606e+02
original_gldm_LargeDependenceHighGrayLevelEmphasis	1.757e+02
original_gldm_LargeDependenceLowGrayLevelEmphasis	-1.584e+02
original_gldm_LowGrayLevelEmphasis	-9.875e+01
original_gldm_SmallDependenceEmphasis	-1.713e+02
original_gldm_SmallDependenceHighGrayLevelEmphasis	2.023e+01
original_gldm_SmallDependenceLowGrayLevelEmphasis	-7.487e+00
original_glrlm_GrayLevelNonUniformity	1.048e+02
original_glrlm_GrayLevelNonUniformityNormalized	5.979e+01
original_glrlm_GrayLevelVariance	7.530e+02
original_glrlm_HighGrayLevelRunEmphasis	6.944e+02
original_glrlm_LongRunEmphasis	-2.665e+02
original_glrlm_LongRunHighGrayLevelEmphasis	-5.263e+01
original_glrlm_LongRunLowGrayLevelEmphasis	-8.931e+01
original_glrlm_LowGrayLevelRunEmphasis	9.725e+02
original_glrlm_RunEntropy	4.715e+01
original_glrlm_RunLengthNonUniformity	2.708e+02
original_glrlm_RunLengthNonUniformityNormalized	-1.821e+02
original_glrlm_RunPercentage	9.787e+02
original_glrlm_RunVariance	2.188e+02
original_glrlm_ShortRunEmphasis	-2.366e+02
original_glrlm_ShortRunHighGrayLevelEmphasis	5.670e+02
original_glrlm_ShortRunLowGrayLevelEmphasis	-7.002e+02
original_glszm_GrayLevelNonUniformity	-3.030e+01
original_glszm_GrayLevelNonUniformityNormalized	7.505e+01
original_glszm_GrayLevelVariance	5.345e+01
original_glszm_HighGrayLevelZoneEmphasis	-4.450e+01
original_glszm_LargeAreaEmphasis	-3.671e+03
original_glszm_LargeAreaHighGrayLevelEmphasis	8.432e+00
original_glszm_LargeAreaLowGrayLevelEmphasis	-6.121e+01
original_glszm_LowGrayLevelZoneEmphasis	-7.579e+01
original_glszm_SizeZoneNonUniformity	1.964e+01
original_glszm_SizeZoneNonUniformityNormalized	-8.359e+01
original_glszm_SmallAreaEmphasis	1.129e+02
original_glszm_SmallAreaHighGrayLevelEmphasis	-3.683e+01
original_glszm_SmallAreaLowGrayLevelEmphasis	5.704e+01
original_glszm_ZoneEntropy	4.558e+01

original_glszm_ZonePercentage	9.315e+01
original_glszm_ZoneVariance	3.708e+03
original_ngtdm_Busyness	1.652e+01
original_ngtdm_Coarseness	-1.165e+01
original_ngtdm_Complexity	-1.007e+01
original_ngtdm_Contrast	8.718e+01
original_ngtdm_Strength	-4.112e+01
original_shape_Elongation	3.659e+01
original_shape_Flatness	-3.366e+01
original_shape_LeastAxisLength	5.629e+01
original_shape_MajorAxisLength	4.536e+01
original_shape_Maximum2DDiameterColumn	-2.273e+01
original_shape_Maximum2DDiameterRow	-2.547e+00
original_shape_Maximum2DDiameterSlice	-2.621e+01
original_shape_Maximum3DDiameter	2.304e+01
original_shape_MeshVolume	7.311e+03
original_shape_MinorAxisLength	-2.343e+01
original_shape_Sphericity	-4.570e+00
original_shape_SurfaceArea	-7.155e+01
original_shape_SurfaceVolumeRatio	-4.887e+01
original_shape_VoxelVolume	-7.570e+03
	exp(coef)
original_firstorder_10Percentile	1.541e+110
original_firstorder_90Percentile	6.527e+52
original_firstorder_Energy	3.733e-24
original_firstorder_Entropy	8.755e+33
original_firstorder_InterquartileRange	6.145e-89
original_firstorder_Kurtosis	7.868e+02
original_firstorder_Maximum	2.176e-01
original_firstorder_Mean	0.000e+00
original_firstorder_MeanAbsoluteDeviation	2.397e-109
original_firstorder_Median	7.233e+174
original_firstorder_Minimum	1.734e+134
original_firstorder_Range	1.000e+00
original_firstorder_RobustMeanAbsoluteDeviation	3.003e+155
original_firstorder_RootMeanSquared	2.472e+08
original_firstorder_Skewness	5.640e+02
original_firstorder_TotalEnergy	1.000e+00
original_firstorder_Uniformity	2.920e-16
original_firstorder_Variance	Inf
original_glcmm_Autocorrelation	0.000e+00
original_glcmm_ClusterProminence	Inf
original_glcmm_ClusterShade	Inf
original_glcmm_ClusterTendency	3.183e-50
original_glcmm_Contrast	Inf
original_glcmm_Correlation	2.991e-13
original_glcmm_DifferenceAverage	1.123e-28
original_glcmm_DifferenceEntropy	4.533e+147
original_glcmm_DifferenceVariance	0.000e+00
original_glcmm_Id	Inf
original_glcmm_Idm	0.000e+00
original_glcmm_Idmn	2.339e-47
original_glcmm_Idn	1.651e+45
original_glcmm_Imc1	1.795e-32
original_glcmm_Imc2	4.532e-32
original_glcmm_InverseVariance	2.301e+141

original_glcm_JointAverage	5.870e+79
original_glcm_JointEnergy	1.771e-10
original_glcm_JointEntropy	1.807e-158
original_glcm_MCC	2.044e+06
original_glcm_MaximumProbability	3.441e+21
original_glcm_SumAverage	1.000e+00
original_glcm_SumEntropy	2.666e+60
original_glcm_SumSquares	1.000e+00
original_gldm_DependenceEntropy	5.740e+78
original_gldm_DependenceNonUniformity	1.380e-37
original_gldm_DependenceNonUniformityNormalized	1.887e+91
original_gldm_DependenceVariance	1.723e-08
original_gldm_GrayLevelNonUniformity	1.542e+04
original_gldm_GrayLevelVariance	0.000e+00
original_gldm_HighGrayLevelEmphasis	8.000e-165
original_gldm_LargeDependenceEmphasis	2.809e+243
original_gldm_LargeDependenceHighGrayLevelEmphasis	2.088e+76
original_gldm_LargeDependenceLowGrayLevelEmphasis	1.691e-69
original_gldm_LowGrayLevelEmphasis	1.303e-43
original_gldm_SmallDependenceEmphasis	4.112e-75
original_gldm_SmallDependenceHighGrayLevelEmphasis	6.137e+08
original_gldm_SmallDependenceLowGrayLevelEmphasis	5.603e-04
original_glrlm_GrayLevelNonUniformity	3.405e+45
original_glrlm_GrayLevelNonUniformityNormalized	9.273e+25
original_glrlm_GrayLevelVariance	Inf
original_glrlm_HighGrayLevelRunEmphasis	3.781e+301
original_glrlm_LongRunEmphasis	1.746e-116
original_glrlm_LongRunHighGrayLevelEmphasis	1.386e-23
original_glrlm_LongRunLowGrayLevelEmphasis	1.638e-39
original_glrlm_LowGrayLevelRunEmphasis	Inf
original_glrlm_RunEntropy	3.000e+20
original_glrlm_RunLengthNonUniformity	3.901e+117
original_glrlm_RunLengthNonUniformityNormalized	8.140e-80
original_glrlm_RunPercentage	Inf
original_glrlm_RunVariance	1.045e+95
original_glrlm_ShortRunEmphasis	1.824e-103
original_glrlm_ShortRunHighGrayLevelEmphasis	1.783e+246
original_glrlm_ShortRunLowGrayLevelEmphasis	8.366e-305
original_glszm_GrayLevelNonUniformity	6.947e-14
original_glszm_GrayLevelNonUniformityNormalized	3.931e+32
original_glszm_GrayLevelVariance	1.641e+23
original_glszm_HighGrayLevelZoneEmphasis	4.709e-20
original_glszm_LargeAreaEmphasis	0.000e+00
original_glszm_LargeAreaHighGrayLevelEmphasis	4.590e+03
original_glszm_LargeAreaLowGrayLevelEmphasis	2.609e-27
original_glszm_LowGrayLevelZoneEmphasis	1.214e-33
original_glszm_SizeZoneNonUniformity	3.399e+08
original_glszm_SizeZoneNonUniformityNormalized	4.961e-37
original_glszm_SmallAreaEmphasis	1.106e+49
original_glszm_SmallAreaHighGrayLevelEmphasis	1.013e-16
original_glszm_SmallAreaLowGrayLevelEmphasis	5.902e+24
original_glszm_ZoneEntropy	6.245e+19
original_glszm_ZonePercentage	2.847e+40
original_glszm_ZoneVariance	Inf
original_ngtdm_Busyness	1.490e+07
original_ngtdm_Coarseness	8.759e-06

original_ngtdm_Complexity	4.214e-05
original_ngtdm_Contrast	7.252e+37
original_ngtdm_Strength	1.389e-18
original_shape_Elongation	7.807e+15
original_shape_Flatness	2.403e-15
original_shape_LeastAxisLength	2.796e+24
original_shape_MajorAxisLength	4.984e+19
original_shape_Maximum2DDiameterColumn	1.344e-10
original_shape_Maximum2DDiameterRow	7.830e-02
original_shape_Maximum2DDiameterSlice	4.124e-12
original_shape_Maximum3DDiameter	1.013e+10
original_shape_MeshVolume	Inf
original_shape_MinorAxisLength	6.654e-11
original_shape_Sphericity	1.036e-02
original_shape_SurfaceArea	8.398e-32
original_shape_SurfaceVolumeRatio	5.981e-22
original_shape_VoxelVolume	0.000e+00
	se(coef)
original_firstorder_10Percentile	3.043e-01
original_firstorder_90Percentile	8.815e-02
original_firstorder_Energy	1.694e-01
original_firstorder_Entropy	1.293e-01
original_firstorder_InterquartileRange	1.401e-01
original_firstorder_Kurtosis	1.243e-01
original_firstorder_Maximum	1.364e-01
original_firstorder_Mean	1.664e-01
original_firstorder_MeanAbsoluteDeviation	1.693e-01
original_firstorder_Median	1.464e-01
original_firstorder_Minimum	1.513e-01
original_firstorder_Range	1.446e-01
original_firstorder_RobustMeanAbsoluteDeviation	1.480e-01
original_firstorder_RootMeanSquared	1.689e-01
original_firstorder_Skewness	1.132e-01
original_firstorder_TotalEnergy	1.694e-01
original_firstorder_Uniformity	1.282e-01
original_firstorder_Variance	3.647e-01
original_glcm_Autocorrelation	1.463e-01
original_glcm_ClusterProminence	6.016e+00
original_glcm_ClusterShade	1.032e+00
original_glcm_ClusterTendency	3.679e-01
original_glcm_Contrast	8.143e-01
original_glcm_Correlation	1.526e-01
original_glcm_DifferenceAverage	1.465e-01
original_glcm_DifferenceEntropy	1.329e-01
original_glcm_DifferenceVariance	1.078e+00
original_glcm_Id	1.226e-01
original_glcm_Idm	1.227e-01
original_glcm_Idmn	1.617e-01
original_glcm_Idn	1.364e-01
original_glcm_Imc1	1.414e-01
original_glcm_Imc2	1.645e-01
original_glcm_InverseVariance	1.237e-01
original_glcm_JointAverage	1.451e-01
original_glcm_JointEnergy	1.185e-01
original_glcm_JointEntropy	1.234e-01
original_glcm_MCC	1.773e-01

original_glcm_MaximumProbability	1.299e-01
original_glcm_SumAverage	1.451e-01
original_glcm_SumEntropy	1.288e-01
original_glcm_SumSquares	4.165e-01
original_gldm_DependenceEntropy	1.193e-01
original_gldm_DependenceNonUniformity	8.564e-02
original_gldm_DependenceNonUniformityNormalized	1.061e-01
original_gldm_DependenceVariance	1.509e-01
original_gldm_GrayLevelNonUniformity	9.765e-02
original_gldm_GrayLevelVariance	3.645e-01
original_gldm_HighGrayLevelEmphasis	1.465e-01
original_gldm_LargeDependenceEmphasis	1.558e-01
original_gldm_LargeDependenceHighGrayLevelEmphasis	1.327e-01
original_gldm_LargeDependenceLowGrayLevelEmphasis	4.065e-01
original_gldm_LowGrayLevelEmphasis	1.132e-01
original_gldm_SmallDependenceEmphasis	1.454e-01
original_gldm_SmallDependenceHighGrayLevelEmphasis	1.335e-01
original_gldm_SmallDependenceLowGrayLevelEmphasis	1.137e-01
original_glrlm_GrayLevelNonUniformity	9.010e-02
original_glrlm_GrayLevelNonUniformityNormalized	1.249e-01
original_glrlm_GrayLevelVariance	3.285e-01
original_glrlm_HighGrayLevelRunEmphasis	1.462e-01
original_glrlm_LongRunEmphasis	8.882e-02
original_glrlm_LongRunHighGrayLevelEmphasis	1.050e-01
original_glrlm_LongRunLowGrayLevelEmphasis	2.666e-01
original_glrlm_LowGrayLevelRunEmphasis	1.147e-01
original_glrlm_RunEntropy	1.308e-01
original_glrlm_RunLengthNonUniformity	9.839e-02
original_glrlm_RunLengthNonUniformityNormalized	1.463e-01
original_glrlm_RunPercentage	1.500e-01
original_glrlm_RunVariance	8.149e-02
original_glrlm_ShortRunEmphasis	1.500e-01
original_glrlm_ShortRunHighGrayLevelEmphasis	1.466e-01
original_glrlm_ShortRunLowGrayLevelEmphasis	1.021e-01
original_glszm_GrayLevelNonUniformity	1.044e-01
original_glszm_GrayLevelNonUniformityNormalized	1.636e-01
original_glszm_GrayLevelVariance	1.962e-01
original_glszm_HighGrayLevelZoneEmphasis	1.489e-01
original_glszm_LargeAreaEmphasis	1.072e-01
original_glszm_LargeAreaHighGrayLevelEmphasis	8.833e-02
original_glszm_LargeAreaLowGrayLevelEmphasis	4.284e-01
original_glszm_LowGrayLevelZoneEmphasis	1.563e-01
original_glszm_SizeZoneNonUniformity	1.136e-01
original_glszm_SizeZoneNonUniformityNormalized	1.492e-01
original_glszm_SmallAreaEmphasis	1.398e-01
original_glszm_SmallAreaHighGrayLevelEmphasis	1.517e-01
original_glszm_SmallAreaLowGrayLevelEmphasis	1.844e-01
original_glszm_ZoneEntropy	1.539e-01
original_glszm_ZonePercentage	1.427e-01
original_glszm_ZoneVariance	1.070e-01
original_ngtdm_Busyness	3.304e-01
original_ngtdm_Coarseness	9.572e-02
original_ngtdm_Complexity	1.940e-01
original_ngtdm_Contrast	4.862e-01
original_ngtdm_Strength	2.795e-01
original_shape_Elongation	1.504e-01

original_shape_Flatness	1.603e-01
original_shape_LeastAxisLength	1.198e-01
original_shape_MajorAxisLength	1.192e-01
original_shape_Maximum2DDiameterColumn	1.150e-01
original_shape_Maximum2DDiameterRow	1.260e-01
original_shape_Maximum2DDiameterSlice	1.253e-01
original_shape_Maximum3DDiameter	1.098e-01
original_shape_MeshVolume	9.541e-02
original_shape_MinorAxisLength	1.286e-01
original_shape_Sphericity	1.627e-01
original_shape_SurfaceArea	9.967e-02
original_shape_SurfaceVolumeRatio	1.398e-01
original_shape_VoxelVolume	9.550e-02
z	
original_firstorder_10Percentile	833.65
original_firstorder_90Percentile	1379.55
original_firstorder_Energy	-318.40
original_firstorder_Entropy	604.62
original_firstorder_InterquartileRange	-1449.47
original_firstorder_Kurtosis	53.63
original_firstorder_Maximum	-11.19
original_firstorder_Mean	-4672.61
original_firstorder_MeanAbsoluteDeviation	-1477.69
original_firstorder_Median	2751.02
original_firstorder_Minimum	2043.07
original_firstorder_Range	0.00
original_firstorder_RobustMeanAbsoluteDeviation	2419.39
original_firstorder_RootMeanSquared	114.43
original_firstorder_Skewness	55.98
original_firstorder_TotalEnergy	0.00
original_firstorder_Uniformity	-279.06
original_firstorder_Variance	52861.62
original_glcm_Autocorrelation	-5302.60
original_glcm_ClusterProminence	818.04
original_glcm_ClusterShade	731.33
original_glcm_ClusterTendency	-309.79
original_glcm_Contrast	9180.38
original_glcm_Correlation	-189.04
original_glcm_DifferenceAverage	-439.15
original_glcm_DifferenceEntropy	2559.16
original_glcm_DifferenceVariance	-7691.66
original_glcm_Id	27681.77
original_glcm_Idm	-23671.14
original_glcm_Idmn	-663.93
original_glcm_Idn	763.47
original_glcm_Imc1	-516.93
original_glcm_Imc2	-438.63
original_glcm_InverseVariance	2631.70
original_glcm_JointAverage	1265.64
original_glcm_JointEnergy	-189.52
original_glcm_JointEntropy	-2942.45
original_glcm_MCC	81.97
original_glcm_MaximumProbability	381.81
original_glcm_SumAverage	0.00
original_glcm_SumEntropy	1080.05
original_glcm_SumSquares	0.00

original_gldm_DependenceEntropy	1520.64
original_gldm_DependenceNonUniformity	-991.05
original_gldm_DependenceNonUniformityNormalized	1981.57
original_gldm_DependenceVariance	-118.44
original_gldm_GrayLevelNonUniformity	98.75
original_gldm_GrayLevelVariance	-55974.57
original_gldm_HighGrayLevelEmphasis	-2578.90
original_gldm_LargeDependenceEmphasis	3597.74
original_gldm_LargeDependenceHighGrayLevelEmphasis	1323.79
original_gldm_LargeDependenceLowGrayLevelEmphasis	-389.59
original_gldm_LowGrayLevelEmphasis	-872.43
original_gldm_SmallDependenceEmphasis	-1178.19
original_gldm_SmallDependenceHighGrayLevelEmphasis	151.62
original_gldm_SmallDependenceLowGrayLevelEmphasis	-65.84
original_glrlm_GrayLevelNonUniformity	1163.56
original_glrlm_GrayLevelNonUniformityNormalized	478.84
original_glrlm_GrayLevelVariance	2292.05
original_glrlm_HighGrayLevelRunEmphasis	4749.75
original_glrlm_LongRunEmphasis	-3001.06
original_glrlm_LongRunHighGrayLevelEmphasis	-501.23
original_glrlm_LongRunLowGrayLevelEmphasis	-335.04
original_glrlm_LowGrayLevelRunEmphasis	8480.08
original_glrlm_RunEntropy	360.48
original_glrlm_RunLengthNonUniformity	2752.04
original_glrlm_RunLengthNonUniformityNormalized	-1245.12
original_glrlm_RunPercentage	6525.68
original_glrlm_RunVariance	2684.96
original_glrlm_ShortRunEmphasis	-1577.59
original_glrlm_ShortRunHighGrayLevelEmphasis	3868.34
original_glrlm_ShortRunLowGrayLevelEmphasis	-6854.75
original_glszm_GrayLevelNonUniformity	-290.32
original_glszm_GrayLevelNonUniformityNormalized	458.70
original_glszm_GrayLevelVariance	272.42
original_glszm_HighGrayLevelZoneEmphasis	-298.97
original_glszm_LargeAreaEmphasis	-34256.75
original_glszm_LargeAreaHighGrayLevelEmphasis	95.45
original_glszm_LargeAreaLowGrayLevelEmphasis	-142.87
original_glszm_LowGrayLevelZoneEmphasis	-484.91
original_glszm_SizeZoneNonUniformity	172.93
original_glszm_SizeZoneNonUniformityNormalized	-560.24
original_glszm_SmallAreaEmphasis	807.79
original_glszm_SmallAreaHighGrayLevelEmphasis	-242.76
original_glszm_SmallAreaLowGrayLevelEmphasis	309.32
original_glszm_ZoneEntropy	296.09
original_glszm_ZonePercentage	652.58
original_glszm_ZoneVariance	34649.53
original_ngtdm_Busyness	49.99
original_ngtdm_Coarseness	-121.67
original_ngtdm_Complexity	-51.92
original_ngtdm_Contrast	179.30
original_ngtdm_Strength	-147.09
original_shape_Elongation	243.28
original_shape_Flatness	-209.95
original_shape_LeastAxisLength	469.95
original_shape_MajorAxisLength	380.49
original_shape_Maximum2DDiameterColumn	-197.71

original_shape_Maximum2DDiameterRow	-20.22
original_shape_Maximum2DDiameterSlice	-209.22
original_shape_Maximum3DDiameter	209.75
original_shape_MeshVolume	76632.70
original_shape_MinorAxisLength	-182.24
original_shape_Sphericity	-28.09
original_shape_SurfaceArea	-717.89
original_shape_SurfaceVolumeRatio	-349.54
original_shape_VoxelVolume	-79265.10
p	
original_firstorder_10Percentile	<2e-16
original_firstorder_90Percentile	<2e-16
original_firstorder_Energy	<2e-16
original_firstorder_Entropy	<2e-16
original_firstorder_InterquartileRange	<2e-16
original_firstorder_Kurtosis	<2e-16
original_firstorder_Maximum	<2e-16
original_firstorder_Mean	<2e-16
original_firstorder_MeanAbsoluteDeviation	<2e-16
original_firstorder_Median	<2e-16
original_firstorder_Minimum	<2e-16
original_firstorder_Range	1
original_firstorder_RobustMeanAbsoluteDeviation	<2e-16
original_firstorder_RootMeanSquared	<2e-16
original_firstorder_Skewness	<2e-16
original_firstorder_TotalEnergy	1
original_firstorder_Uniformity	<2e-16
original_firstorder_Variance	<2e-16
original_glcm_Autocorrelation	<2e-16
original_glcm_ClusterProminence	<2e-16
original_glcm_ClusterShade	<2e-16
original_glcm_ClusterTendency	<2e-16
original_glcm_Contrast	<2e-16
original_glcm_Correlation	<2e-16
original_glcm_DifferenceAverage	<2e-16
original_glcm_DifferenceEntropy	<2e-16
original_glcm_DifferenceVariance	<2e-16
original_glcm_Id	<2e-16
original_glcm_Idm	<2e-16
original_glcm_Idmn	<2e-16
original_glcm_Idn	<2e-16
original_glcm_Imc1	<2e-16
original_glcm_Imc2	<2e-16
original_glcm_InverseVariance	<2e-16
original_glcm_JointAverage	<2e-16
original_glcm_JointEnergy	<2e-16
original_glcm_JointEntropy	<2e-16
original_glcm_MCC	<2e-16
original_glcm_MaximumProbability	<2e-16
original_glcm_SumAverage	1
original_glcm_SumEntropy	<2e-16
original_glcm_SumSquares	1
original_gldm_DependenceEntropy	<2e-16
original_gldm_DependenceNonUniformity	<2e-16
original_gldm_DependenceNonUniformityNormalized	<2e-16
original_gldm_DependenceVariance	<2e-16

original_gldm_GrayLevelNonUniformity	<2e-16
original_gldm_GrayLevelVariance	<2e-16
original_gldm_HighGrayLevelEmphasis	<2e-16
original_gldm_LargeDependenceEmphasis	<2e-16
original_gldm_LargeDependenceHighGrayLevelEmphasis	<2e-16
original_gldm_LargeDependenceLowGrayLevelEmphasis	<2e-16
original_gldm_LowGrayLevelEmphasis	<2e-16
original_gldm_SmallDependenceEmphasis	<2e-16
original_gldm_SmallDependenceHighGrayLevelEmphasis	<2e-16
original_gldm_SmallDependenceLowGrayLevelEmphasis	<2e-16
original_glrlm_GrayLevelNonUniformity	<2e-16
original_glrlm_GrayLevelNonUniformityNormalized	<2e-16
original_glrlm_GrayLevelVariance	<2e-16
original_glrlm_HighGrayLevelRunEmphasis	<2e-16
original_glrlm_LongRunEmphasis	<2e-16
original_glrlm_LongRunHighGrayLevelEmphasis	<2e-16
original_glrlm_LongRunLowGrayLevelEmphasis	<2e-16
original_glrlm_LowGrayLevelRunEmphasis	<2e-16
original_glrlm_RunEntropy	<2e-16
original_glrlm_RunLengthNonUniformity	<2e-16
original_glrlm_RunLengthNonUniformityNormalized	<2e-16
original_glrlm_RunPercentage	<2e-16
original_glrlm_RunVariance	<2e-16
original_glrlm_ShortRunEmphasis	<2e-16
original_glrlm_ShortRunHighGrayLevelEmphasis	<2e-16
original_glrlm_ShortRunLowGrayLevelEmphasis	<2e-16
original_glszm_GrayLevelNonUniformity	<2e-16
original_glszm_GrayLevelNonUniformityNormalized	<2e-16
original_glszm_GrayLevelVariance	<2e-16
original_glszm_HighGrayLevelZoneEmphasis	<2e-16
original_glszm_LargeAreaEmphasis	<2e-16
original_glszm_LargeAreaHighGrayLevelEmphasis	<2e-16
original_glszm_LargeAreaLowGrayLevelEmphasis	<2e-16
original_glszm_LowGrayLevelZoneEmphasis	<2e-16
original_glszm_SizeZoneNonUniformity	<2e-16
original_glszm_SizeZoneNonUniformityNormalized	<2e-16
original_glszm_SmallAreaEmphasis	<2e-16
original_glszm_SmallAreaHighGrayLevelEmphasis	<2e-16
original_glszm_SmallAreaLowGrayLevelEmphasis	<2e-16
original_glszm_ZoneEntropy	<2e-16
original_glszm_ZonePercentage	<2e-16
original_glszm_ZoneVariance	<2e-16
original_ngtdm_Busyness	<2e-16
original_ngtdm_Coarseness	<2e-16
original_ngtdm_Complexity	<2e-16
original_ngtdm_Contrast	<2e-16
original_ngtdm_Strength	<2e-16
original_shape_Elongation	<2e-16
original_shape_Flatness	<2e-16
original_shape_LeastAxisLength	<2e-16
original_shape_MajorAxisLength	<2e-16
original_shape_Maximum2DDiameterColumn	<2e-16
original_shape_Maximum2DDiameterRow	<2e-16
original_shape_Maximum2DDiameterSlice	<2e-16
original_shape_Maximum3DDiameter	<2e-16
original_shape_MeshVolume	<2e-16

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original_shape_MinorAxisLength      <2e-16
original_shape_Sphericity            <2e-16
original_shape_SurfaceArea           <2e-16
original_shape_SurfaceVolumeRatio    <2e-16
original_shape_VoxelVolume           <2e-16

Likelihood ratio test=262.3  on 107 df, p=4.777e-15
n= 361, number of events= 47

$time
Time difference of 4.563884 secs
```