

cp breast 73 test 0-3000

VIVI TANG

18/11/2021

```
## Warning: package 'lattice' was built under R version 3.6.2
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## Warning: package 'proxy' was built under R version 3.6.2
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## Warning: package 'dbscan' was built under R version 3.6.2
```

```
## Warning in dbscan(tucker1, eps = 16, MinPts = 20): converting argument MinPts  
## (fpc) to minPts (dbscan)!
```

```
## Warning: package 'mclust' was built under R version 3.6.2
```

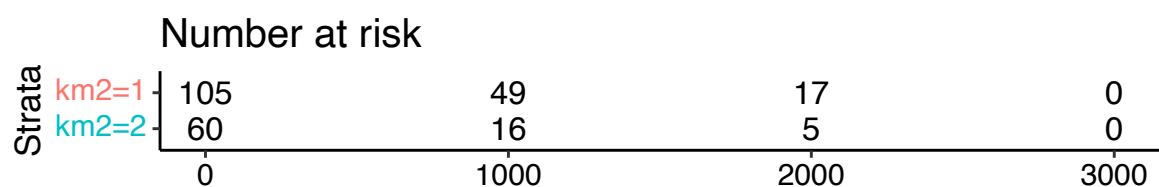
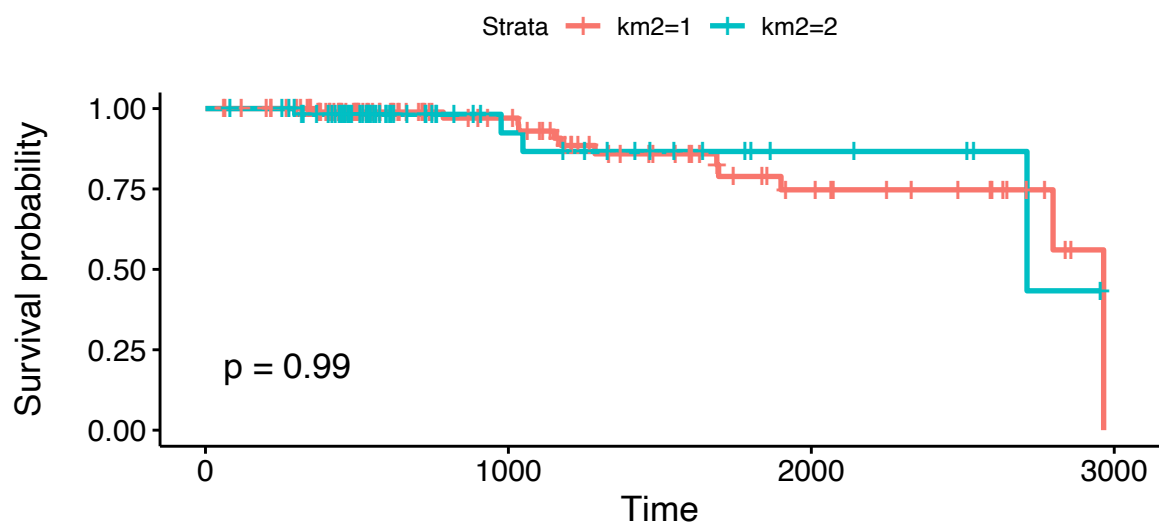
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## Warning: package 'dplyr' was built under R version 3.6.2
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## Warning: package 'survival' was built under R version 3.6.2
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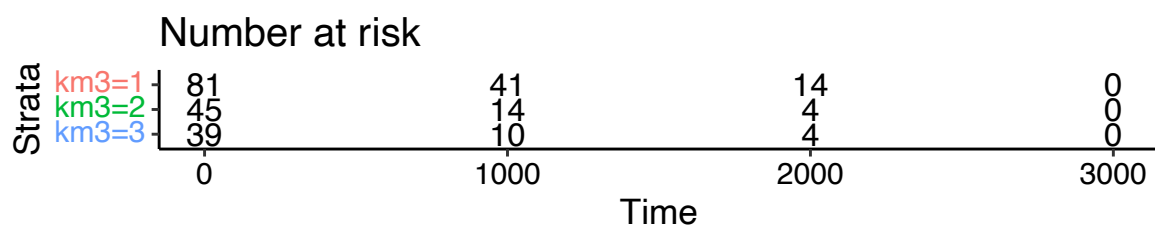
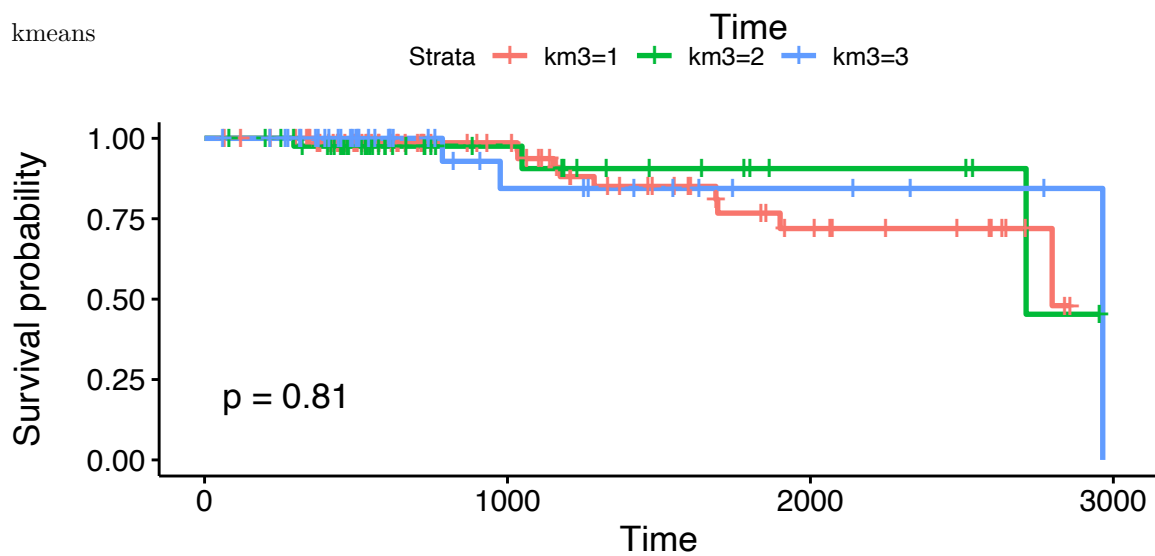
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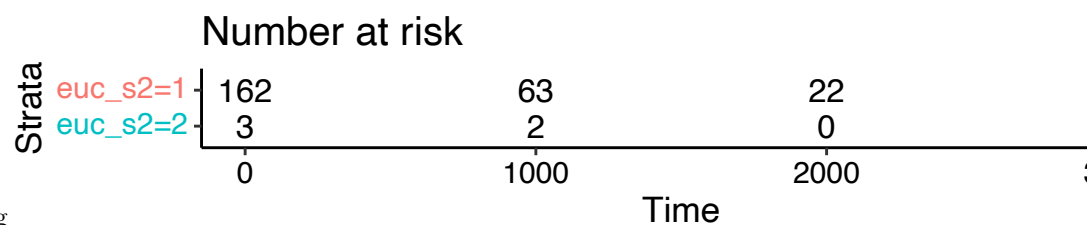
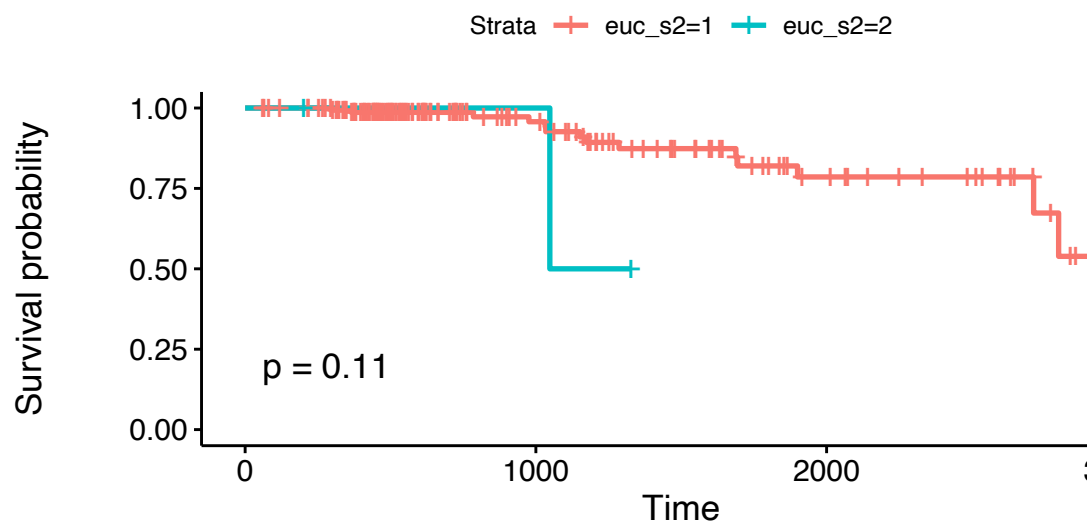
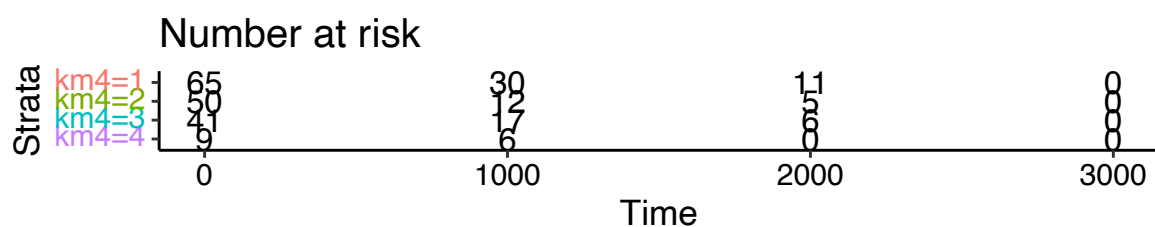
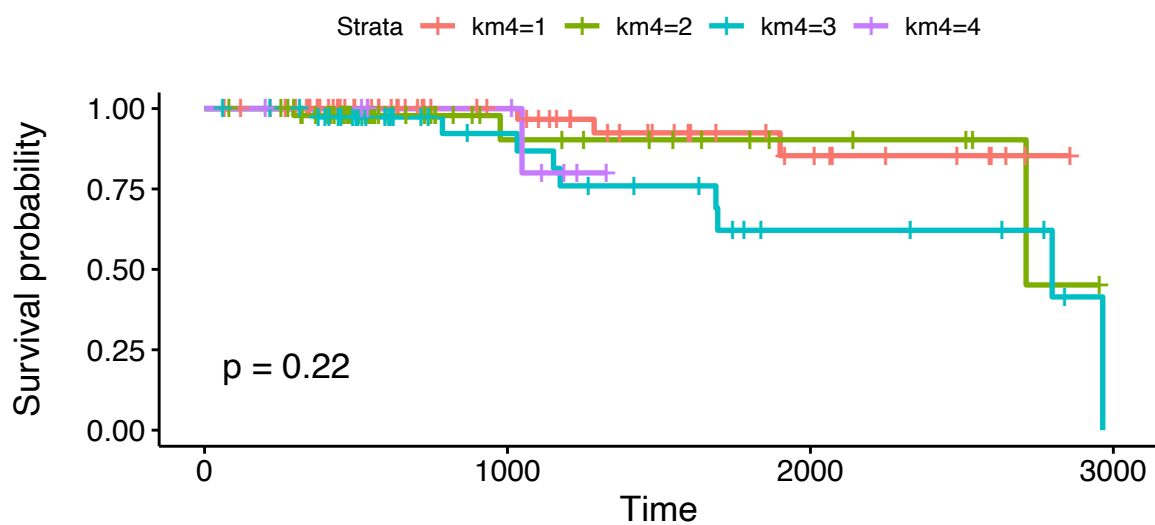
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## Warning: package 'ggplot2' was built under R version 3.6.2
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## Warning: package 'ggpubr' was built under R version 3.6.2
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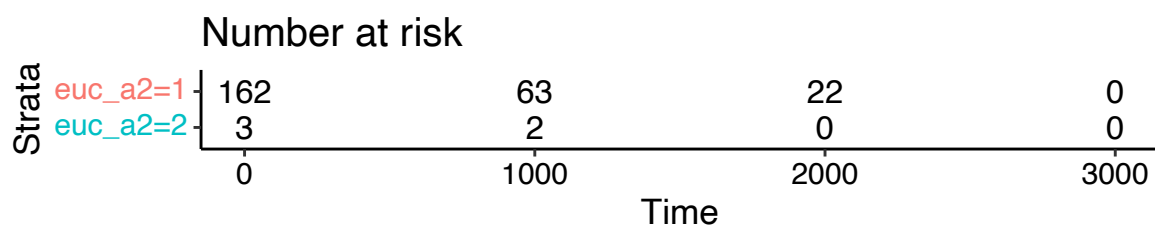
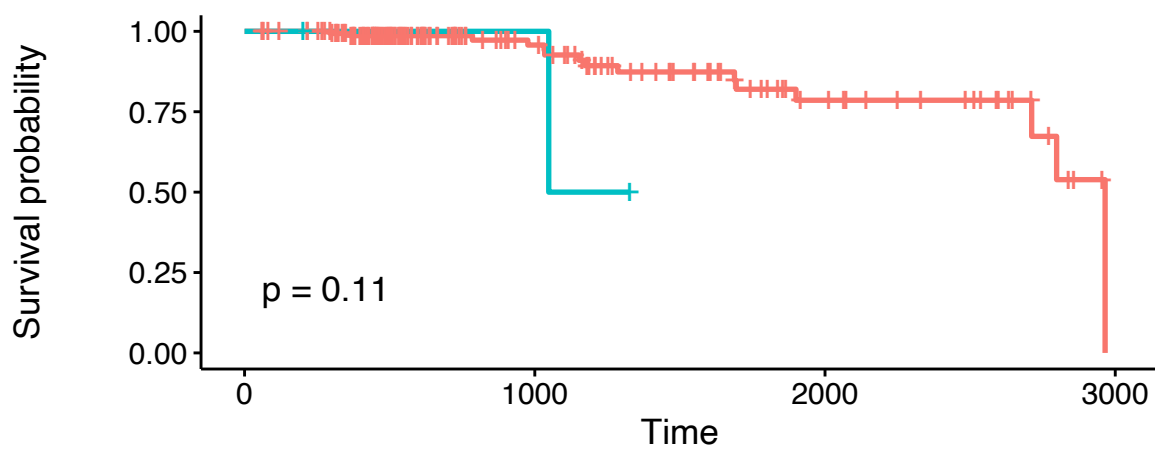
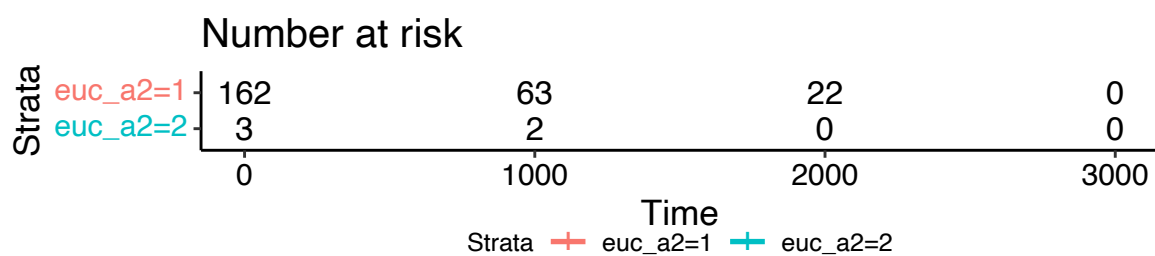
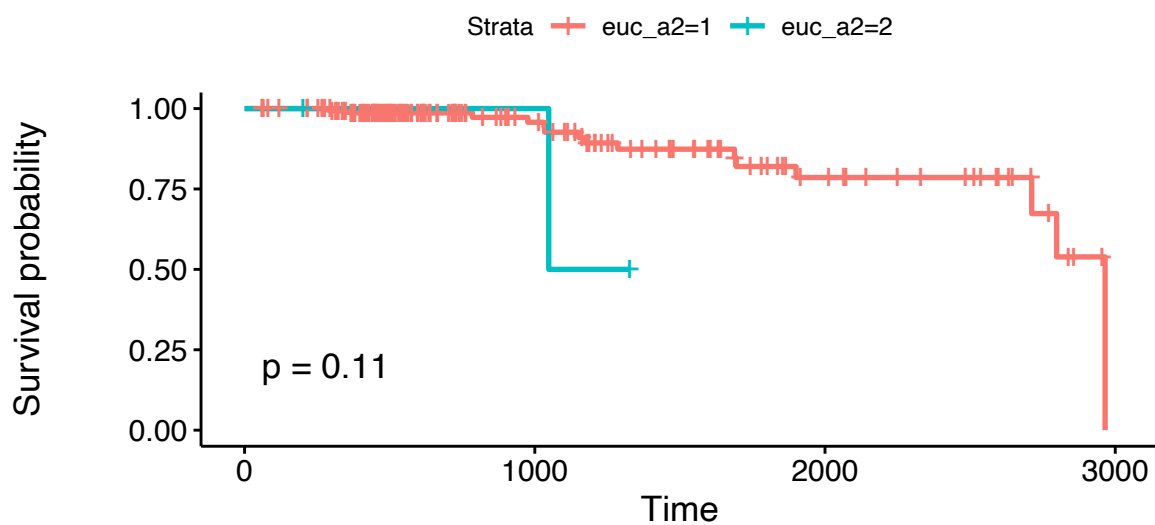


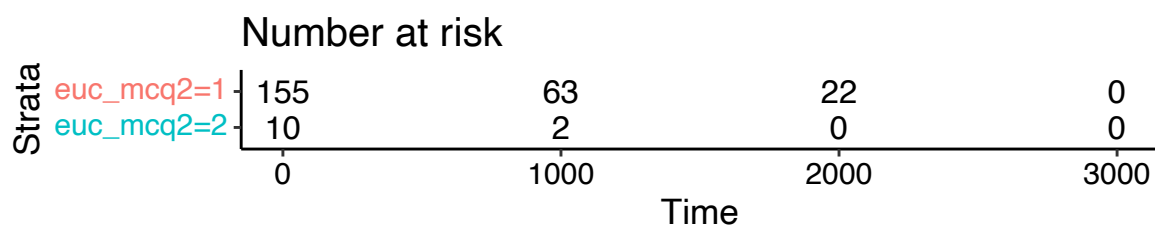
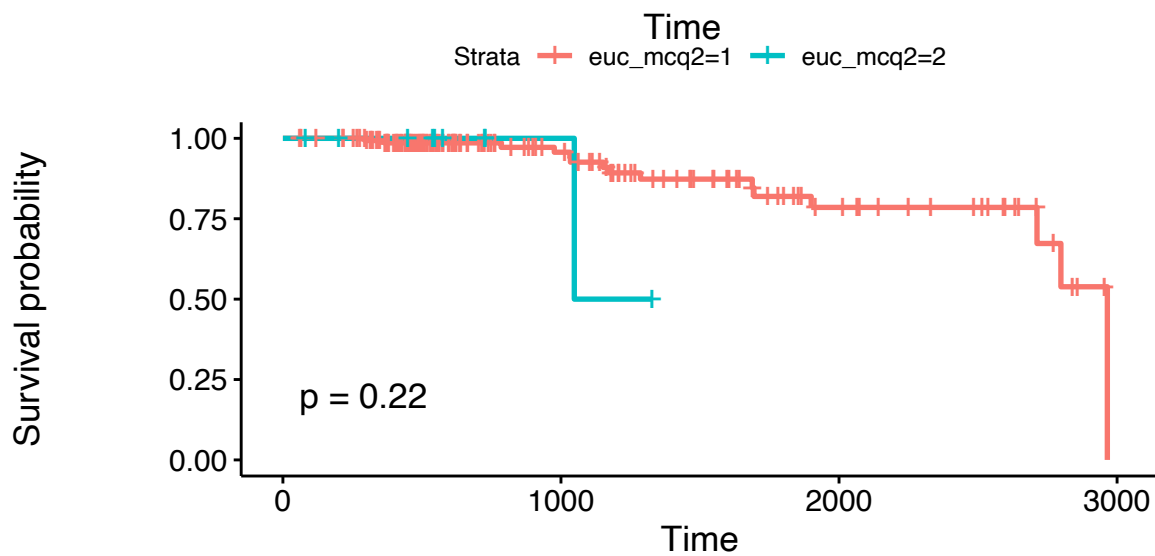
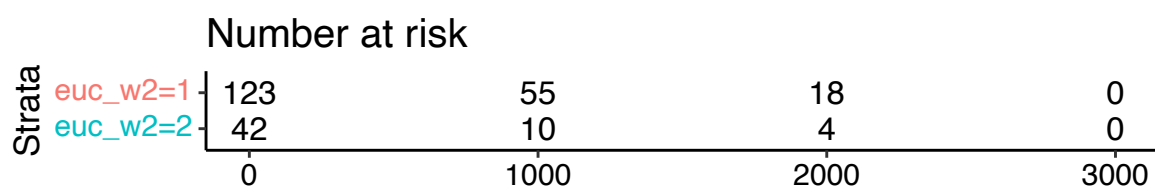
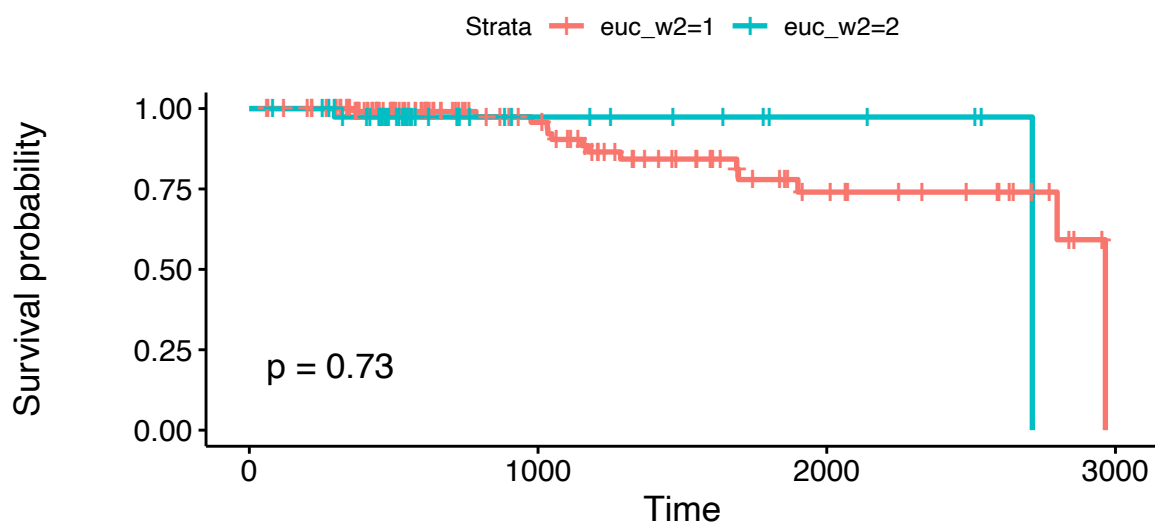
1. kmeans



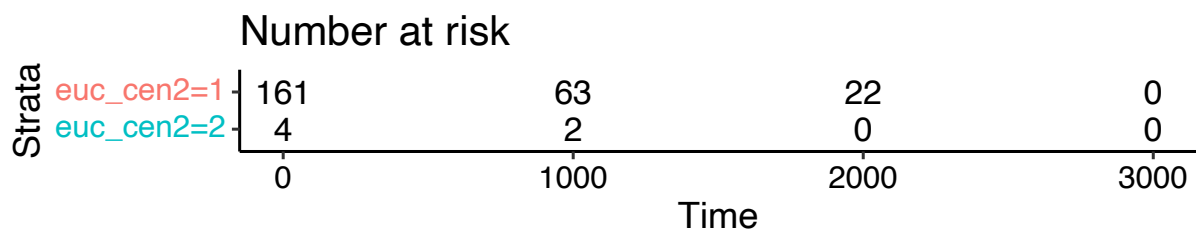
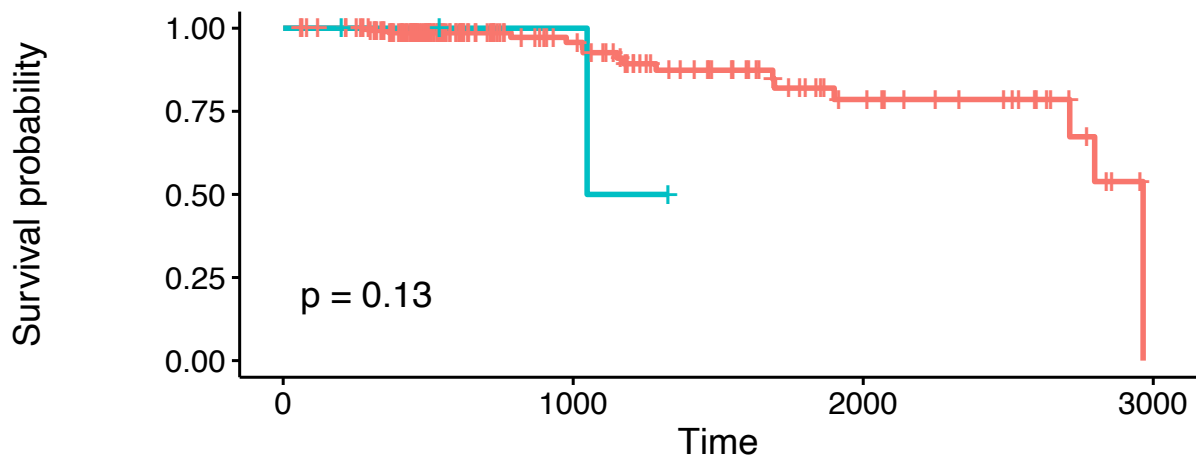
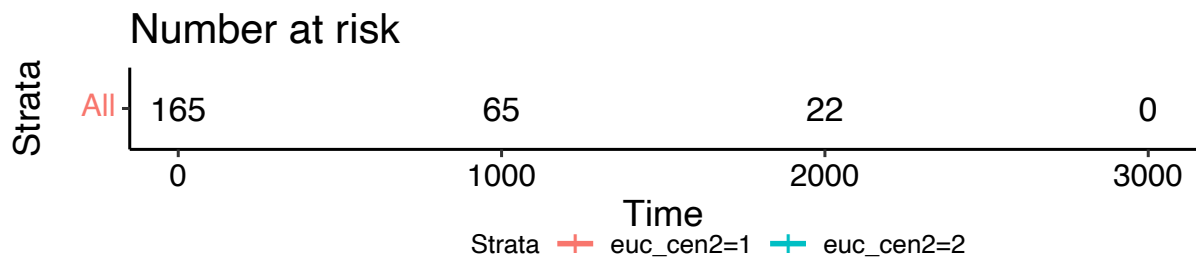
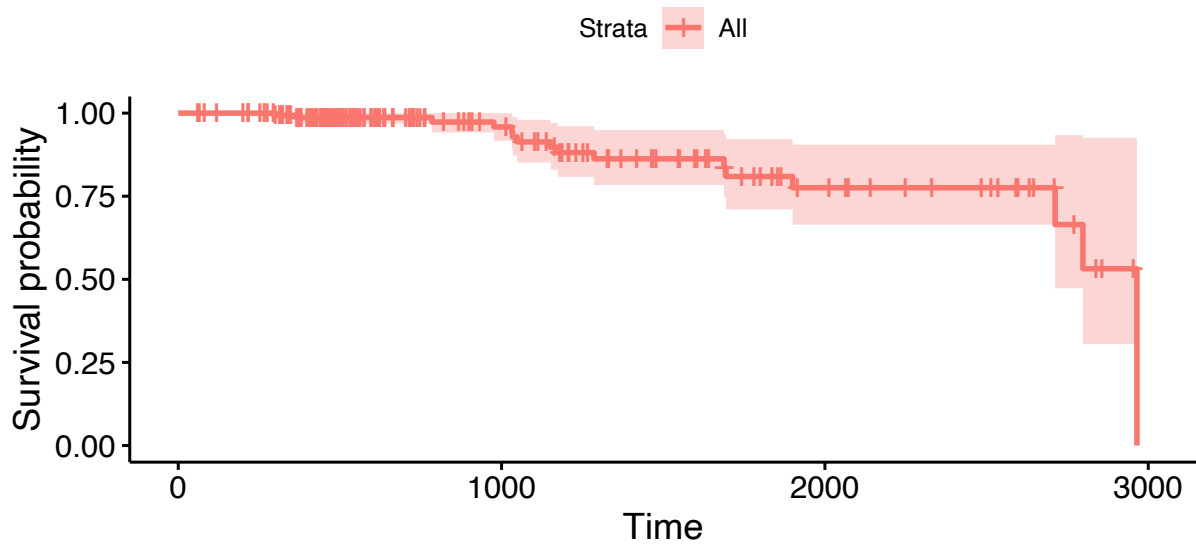


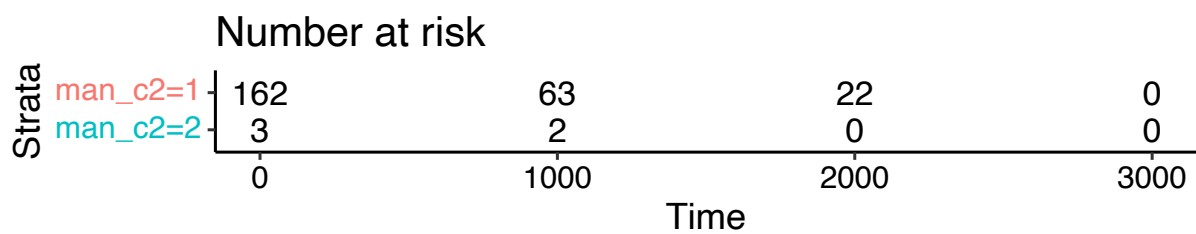
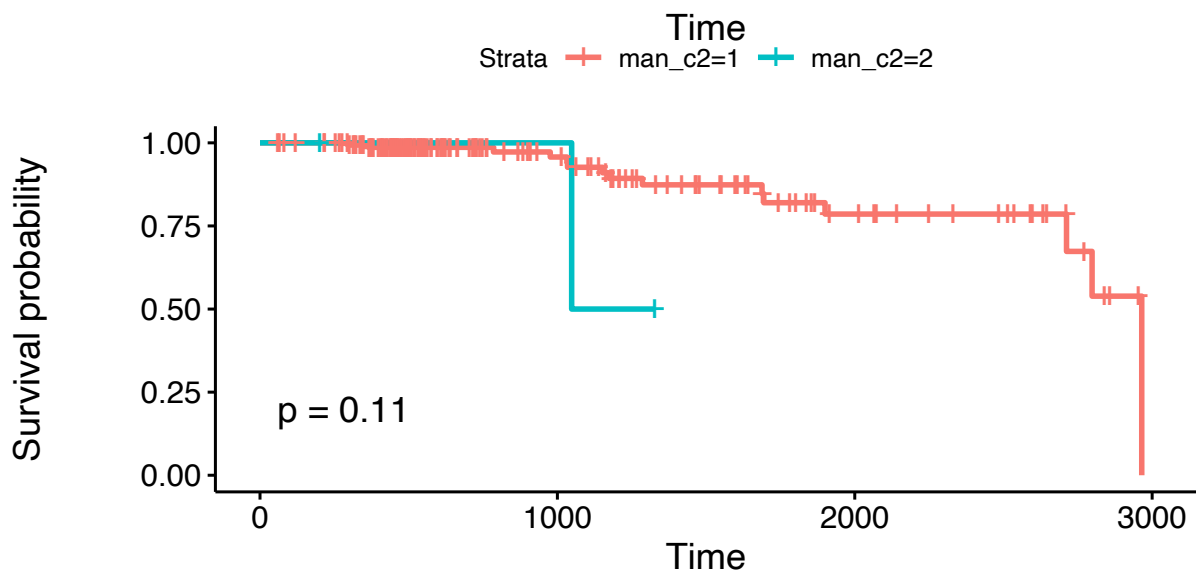
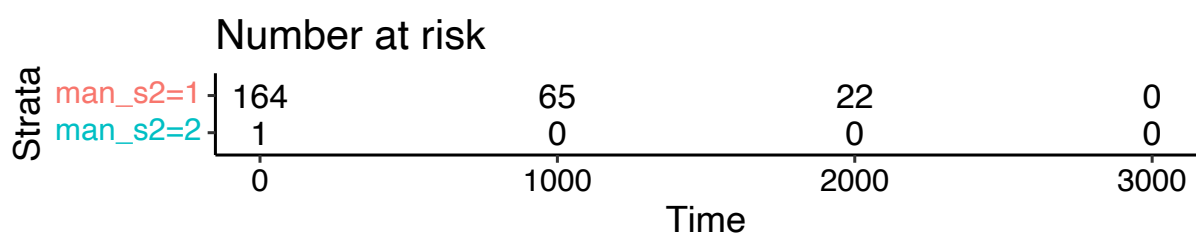
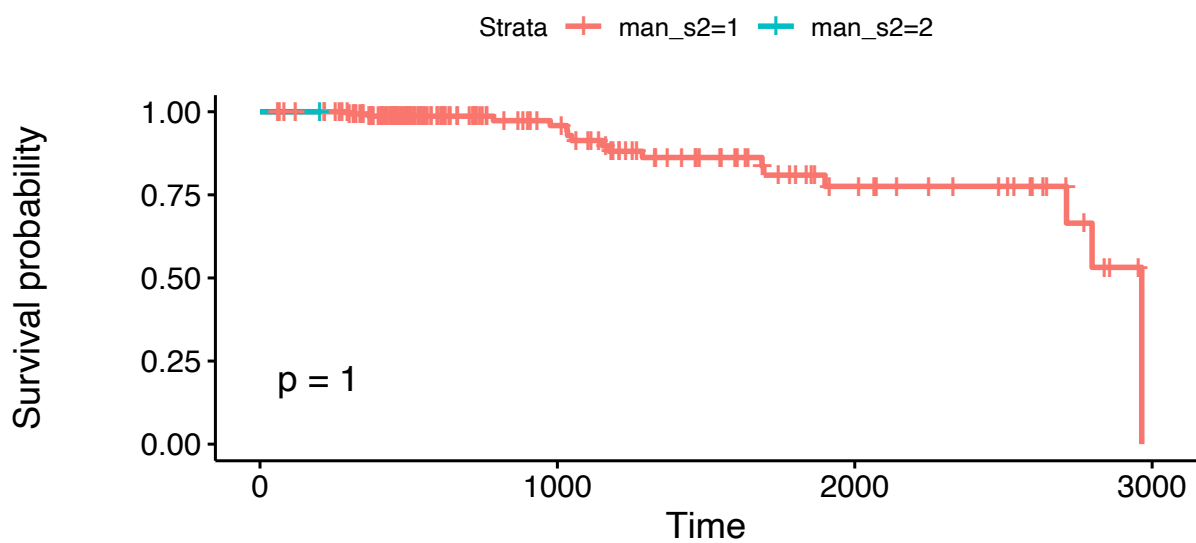
2. Hierarchical Clustering

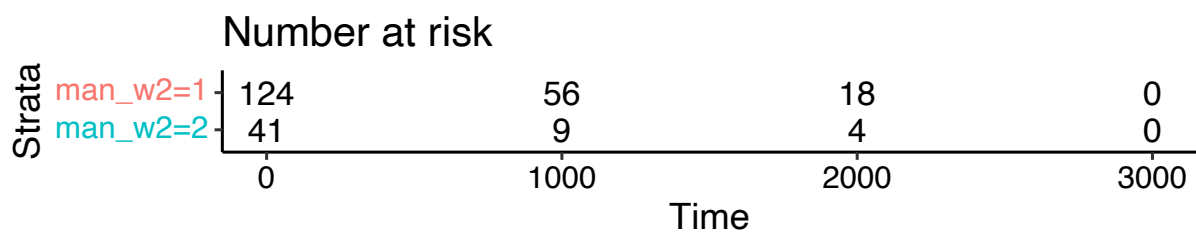
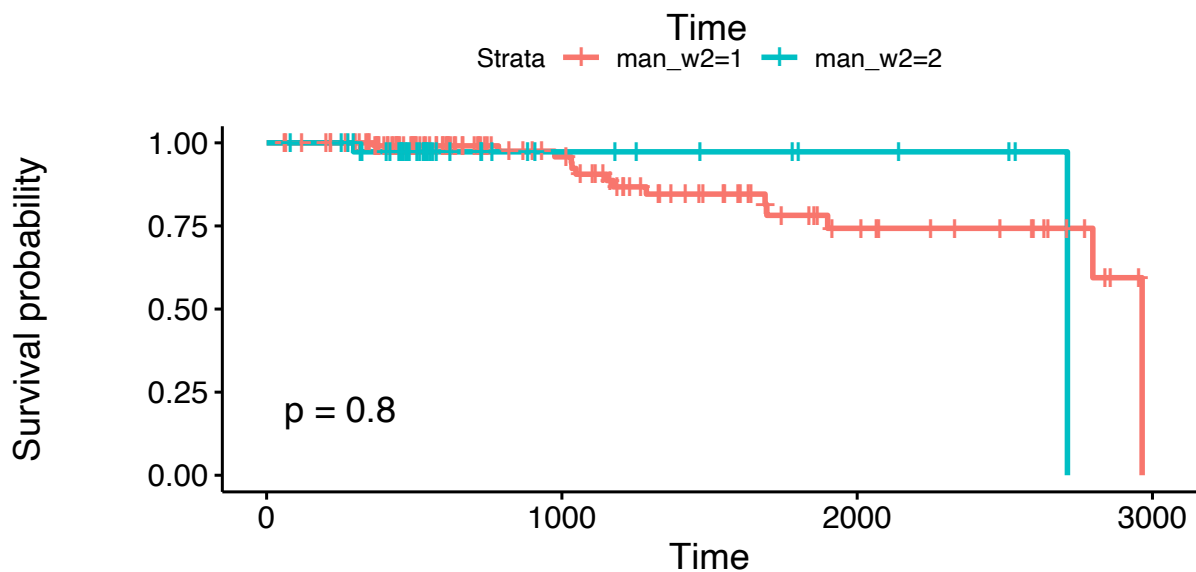
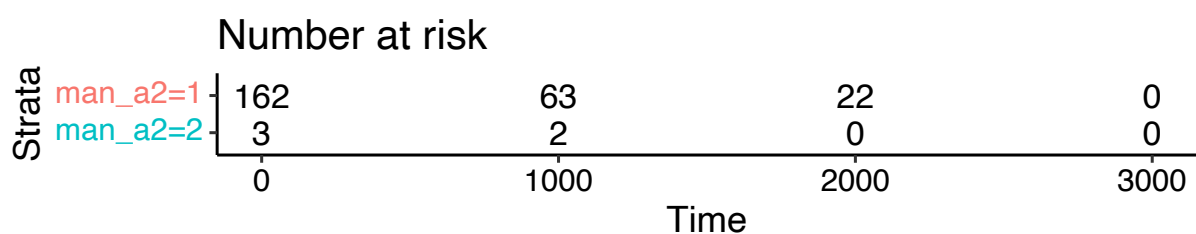
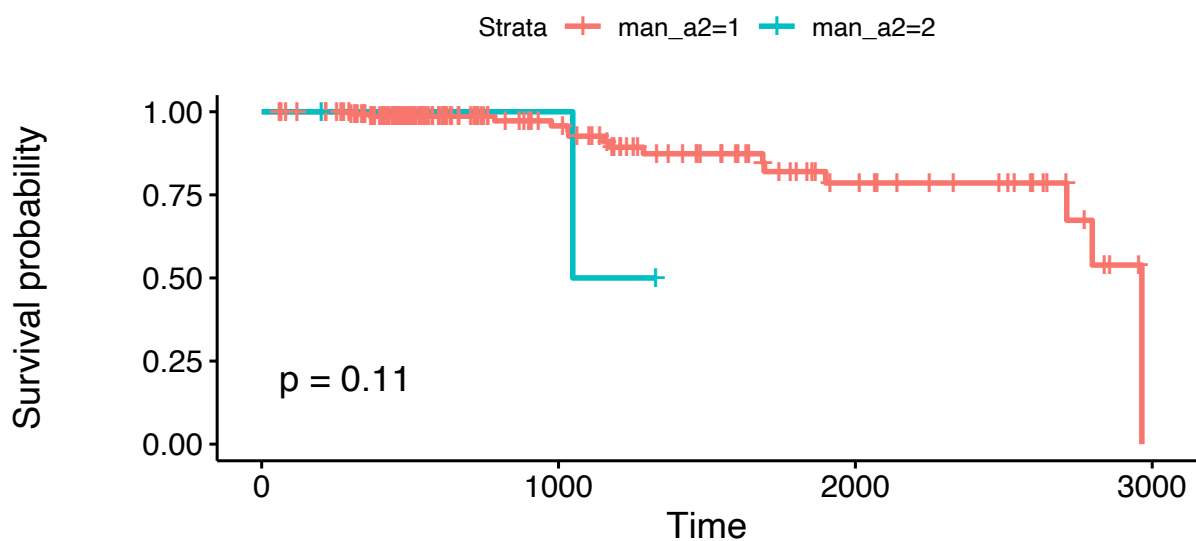




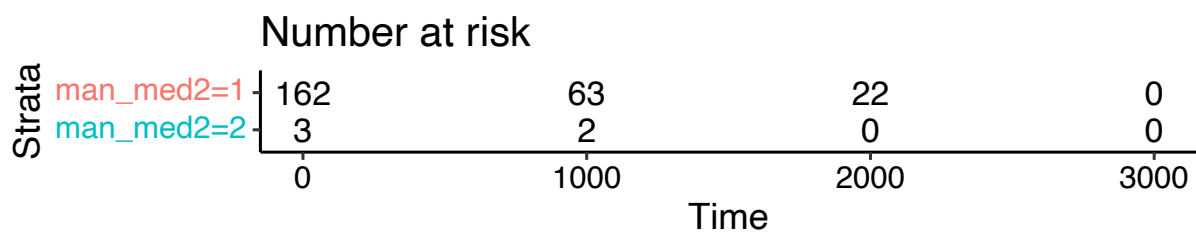
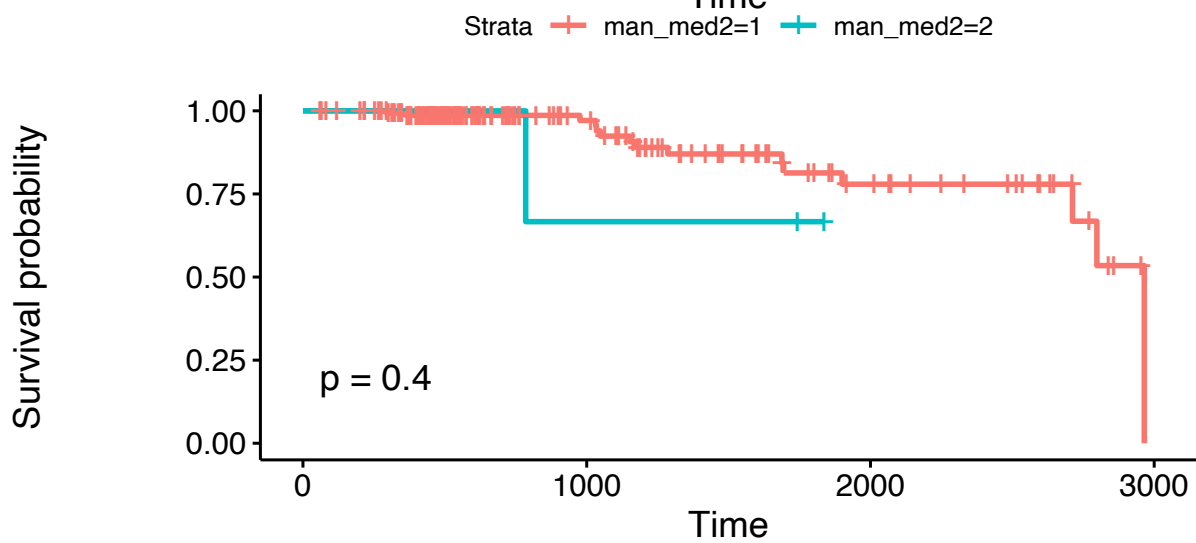
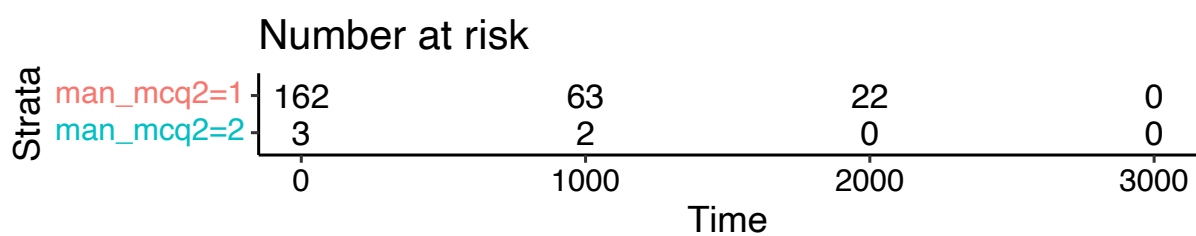
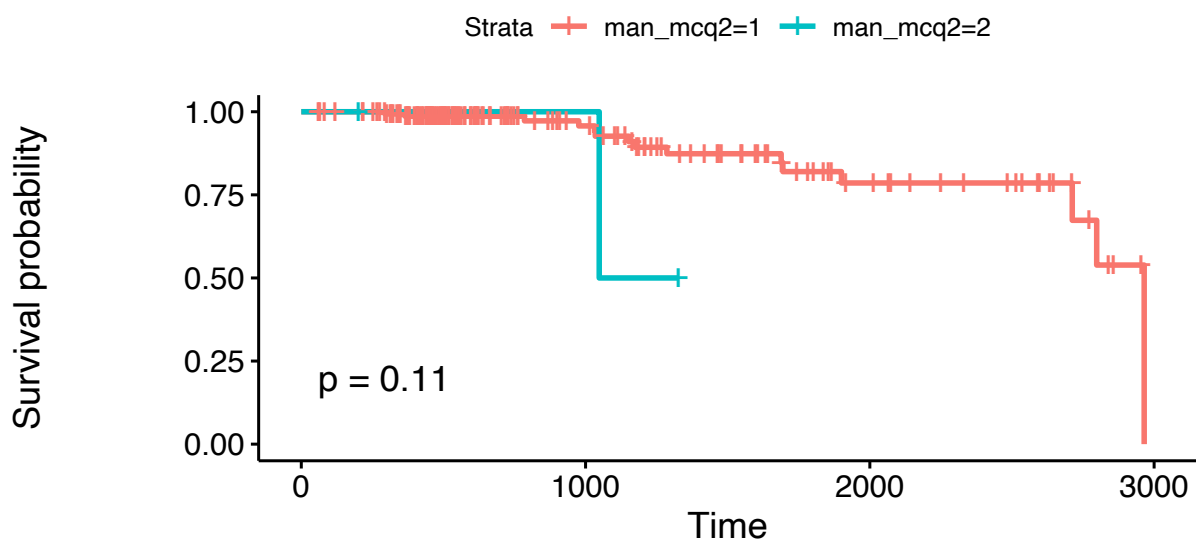
```
## Warning in .pvalue(fit, data = data, method = method, pval = pval, pval.coord = pval.coord, : There is a
## This is a null model.
```

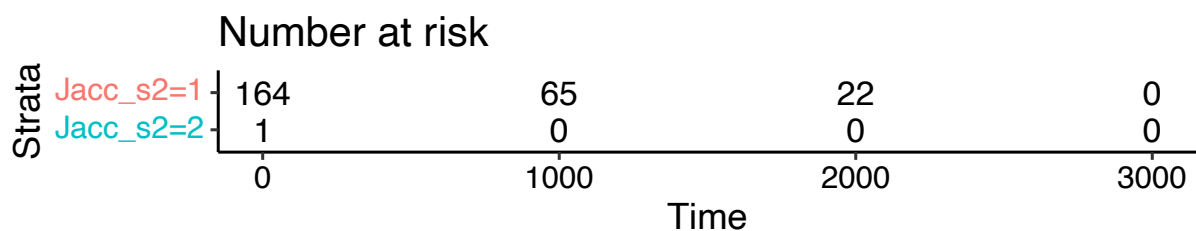
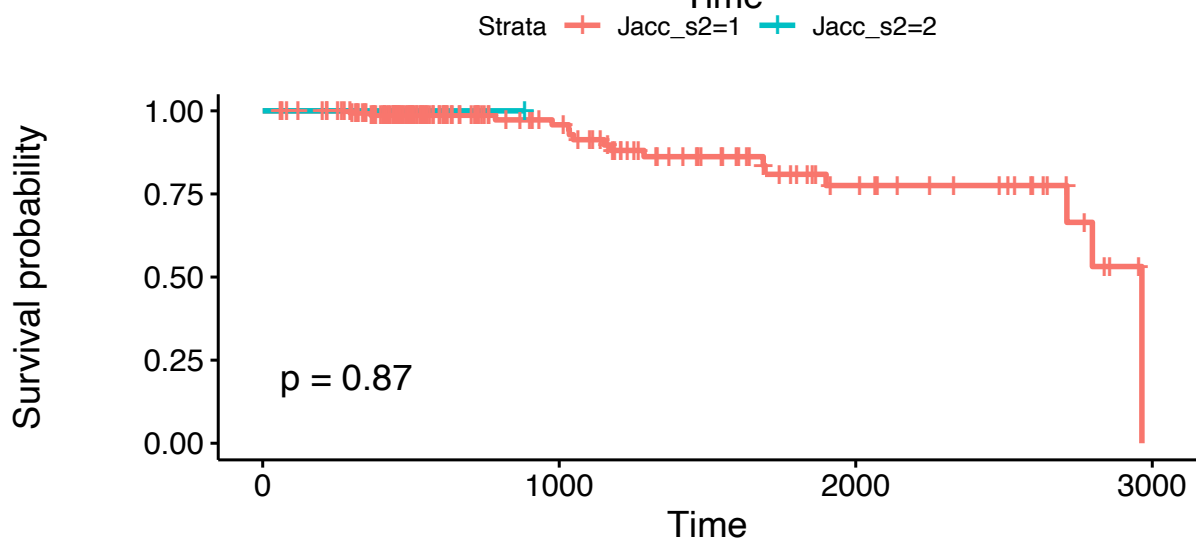
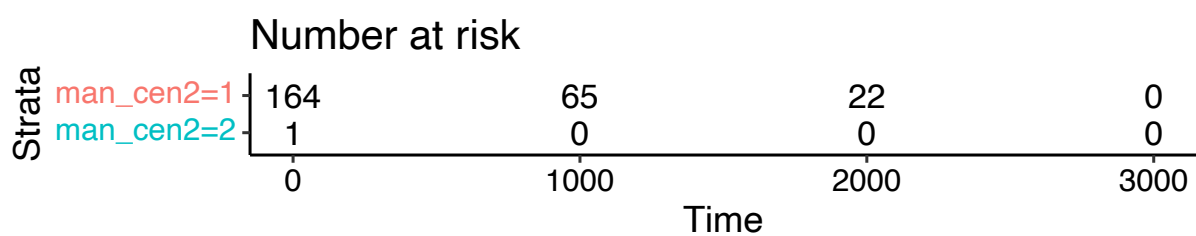
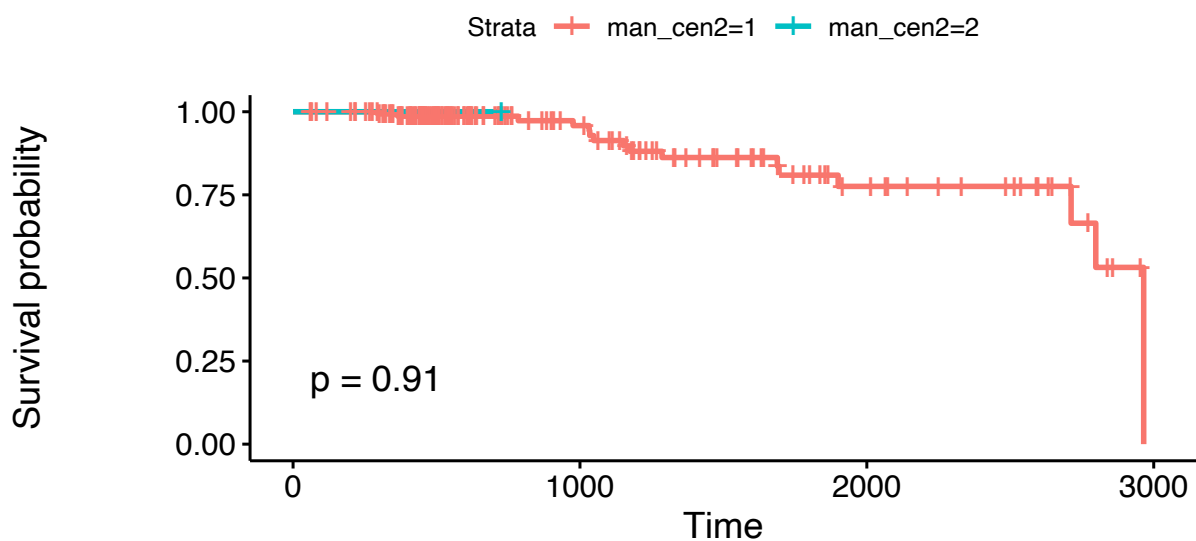


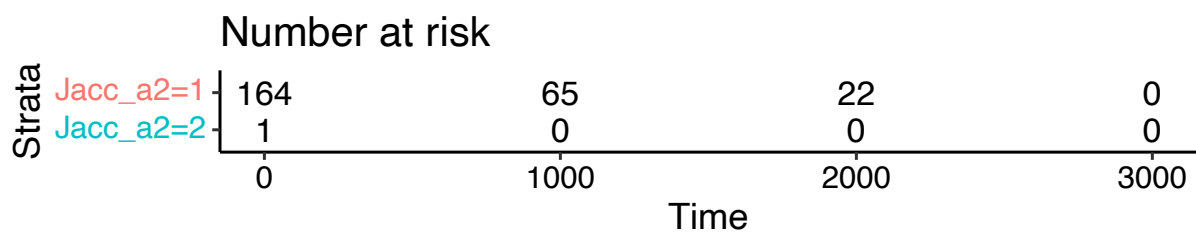
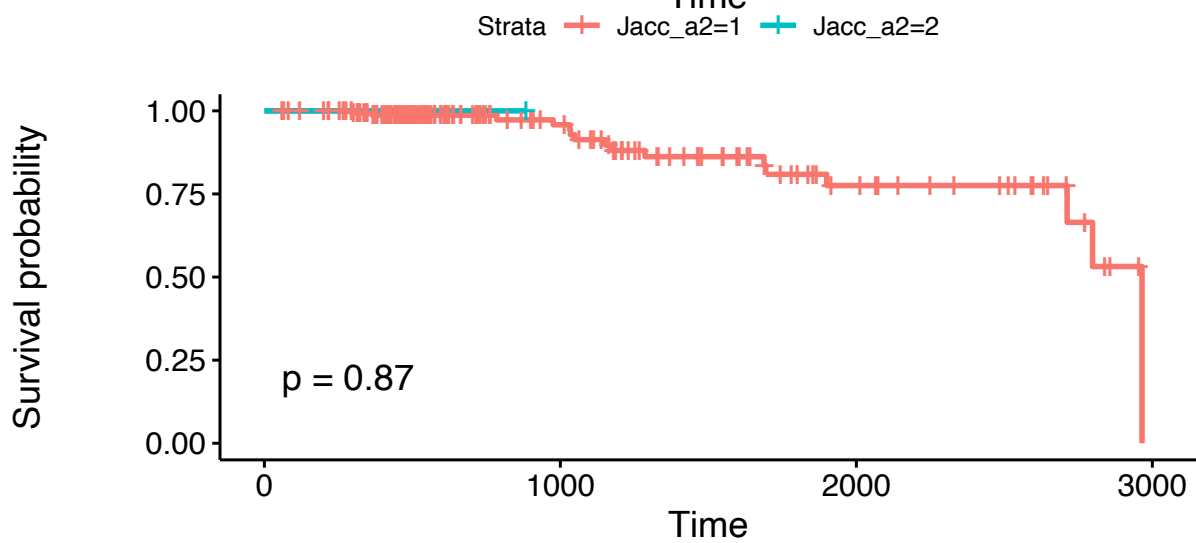
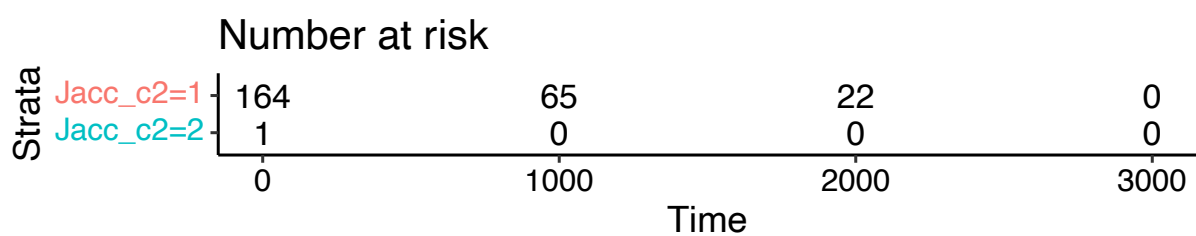
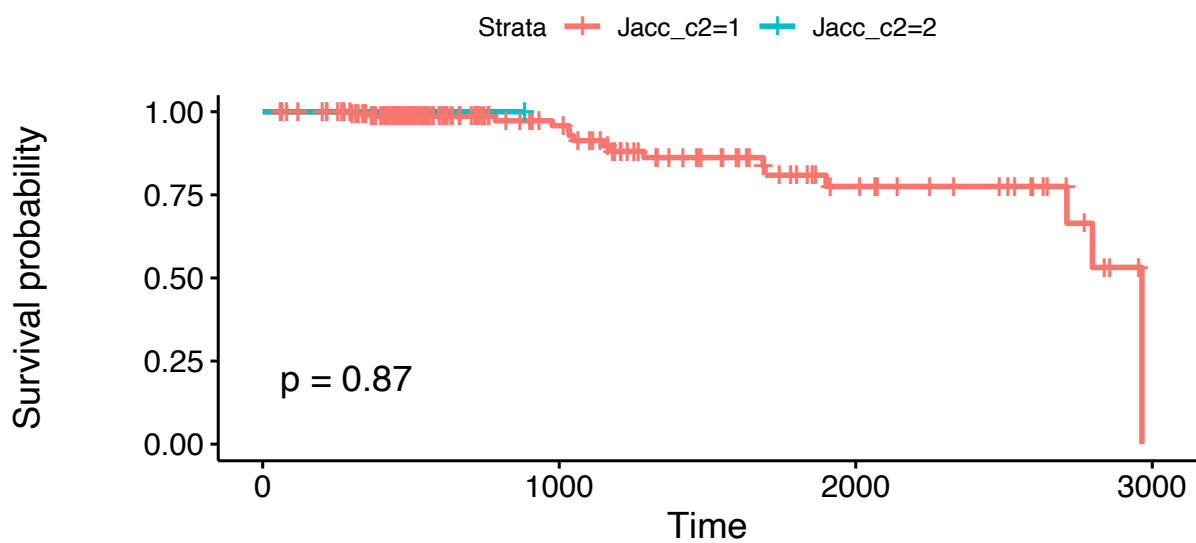


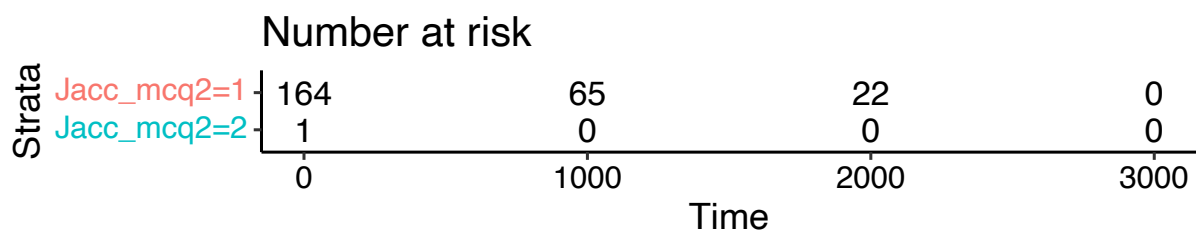
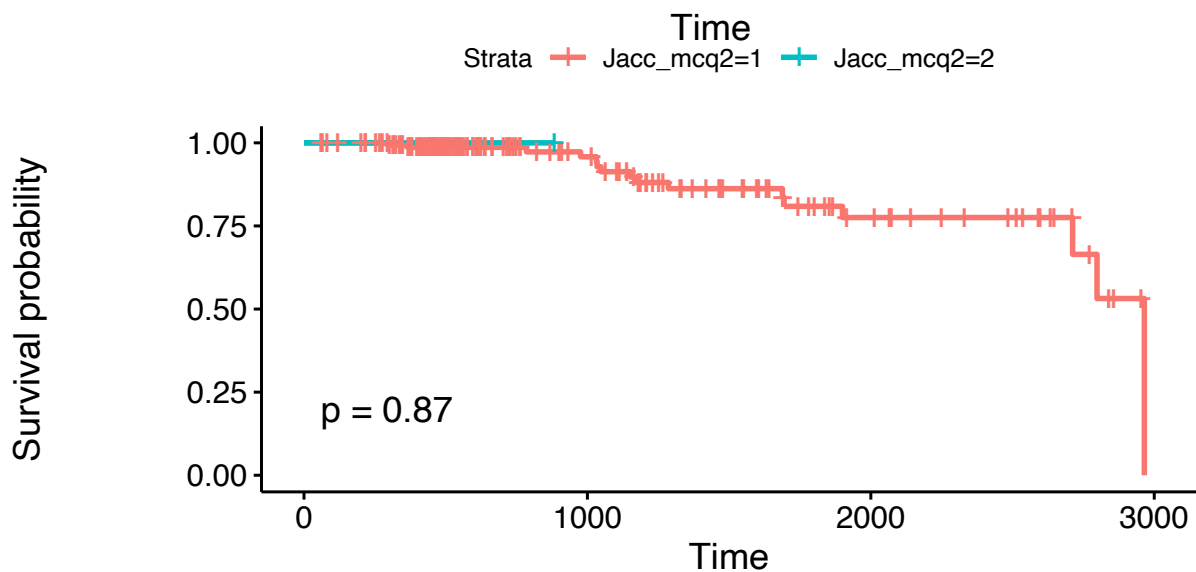
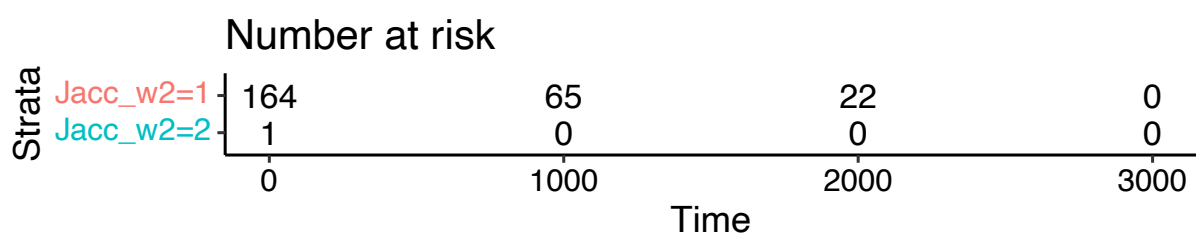
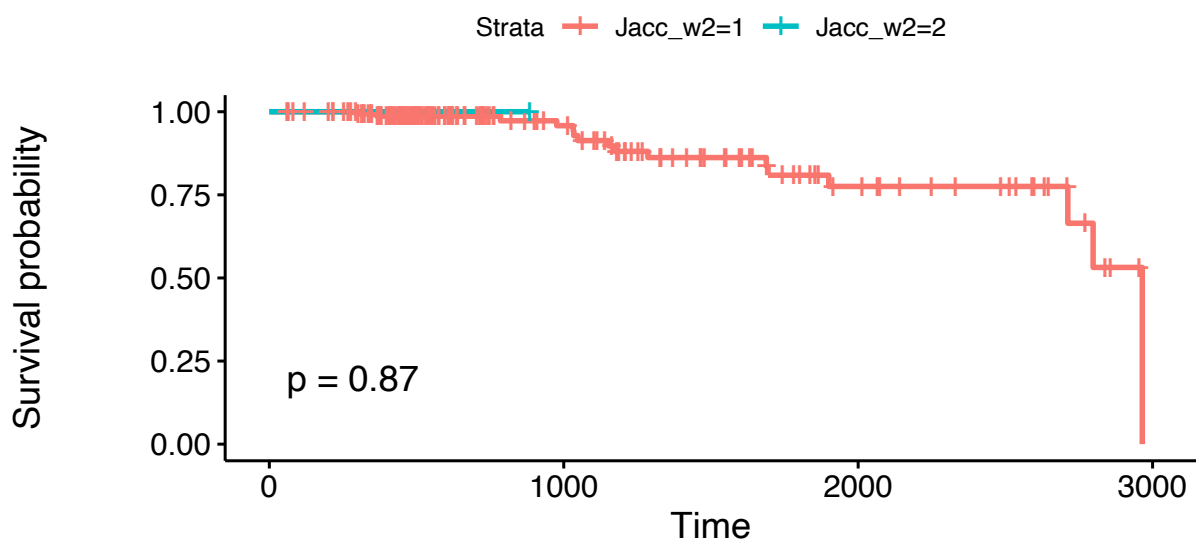


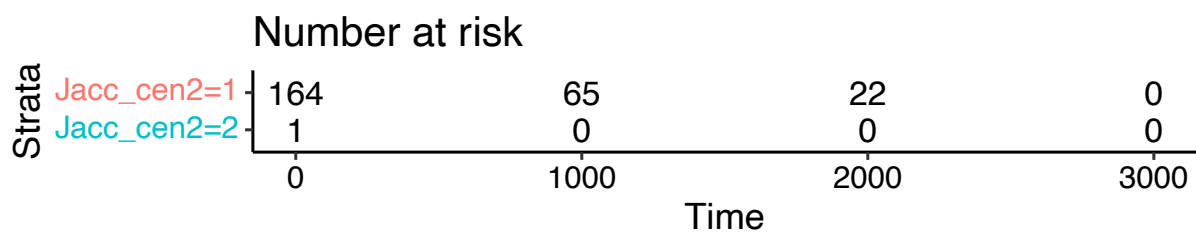
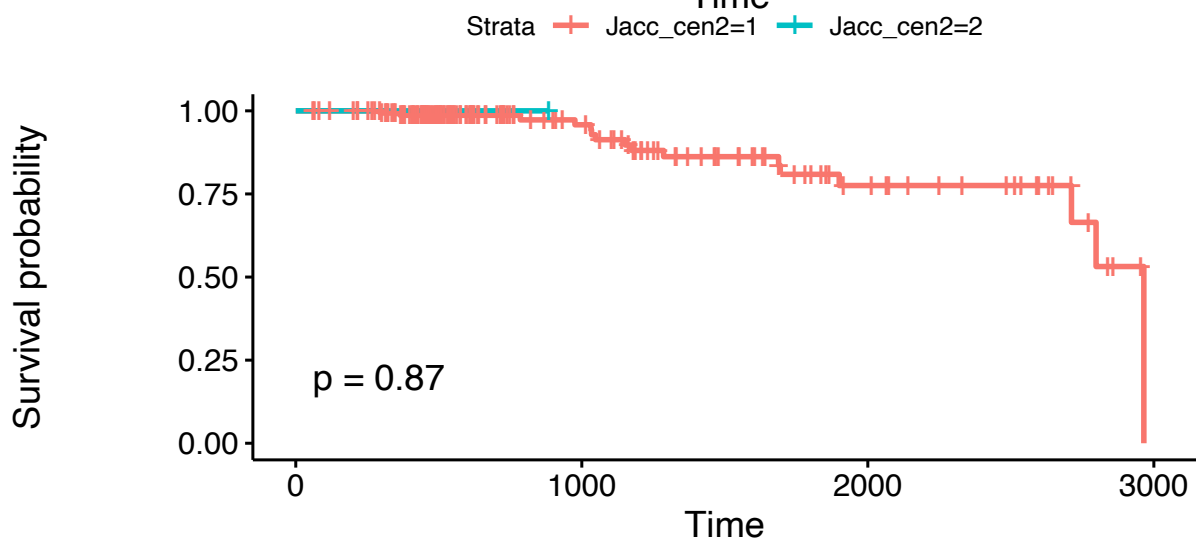
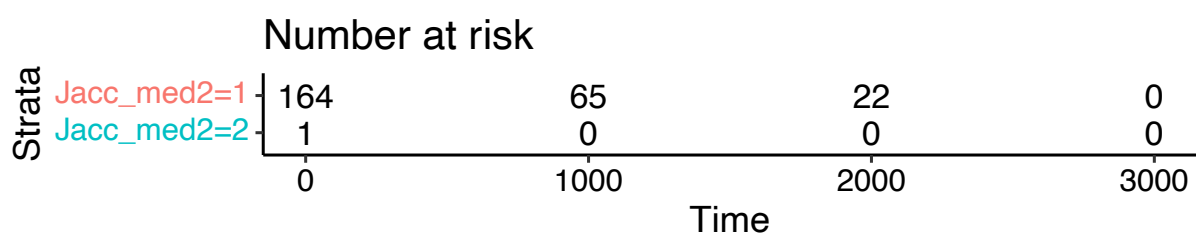
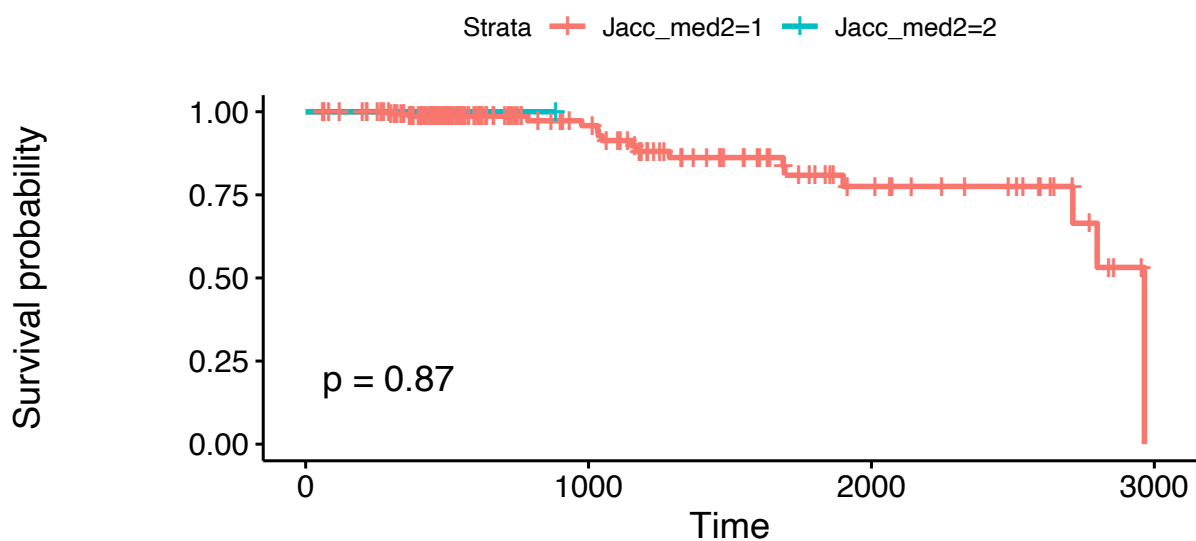


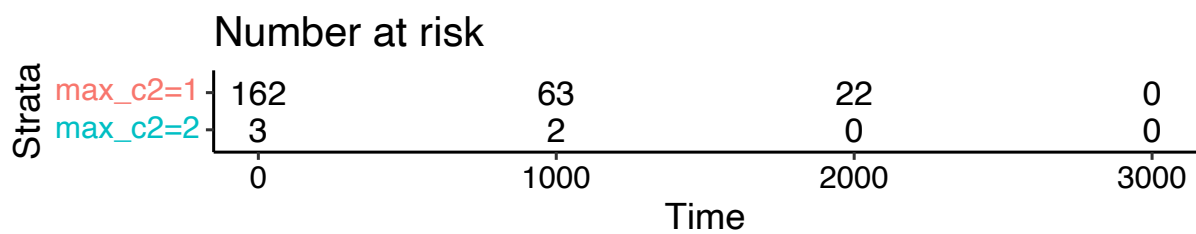
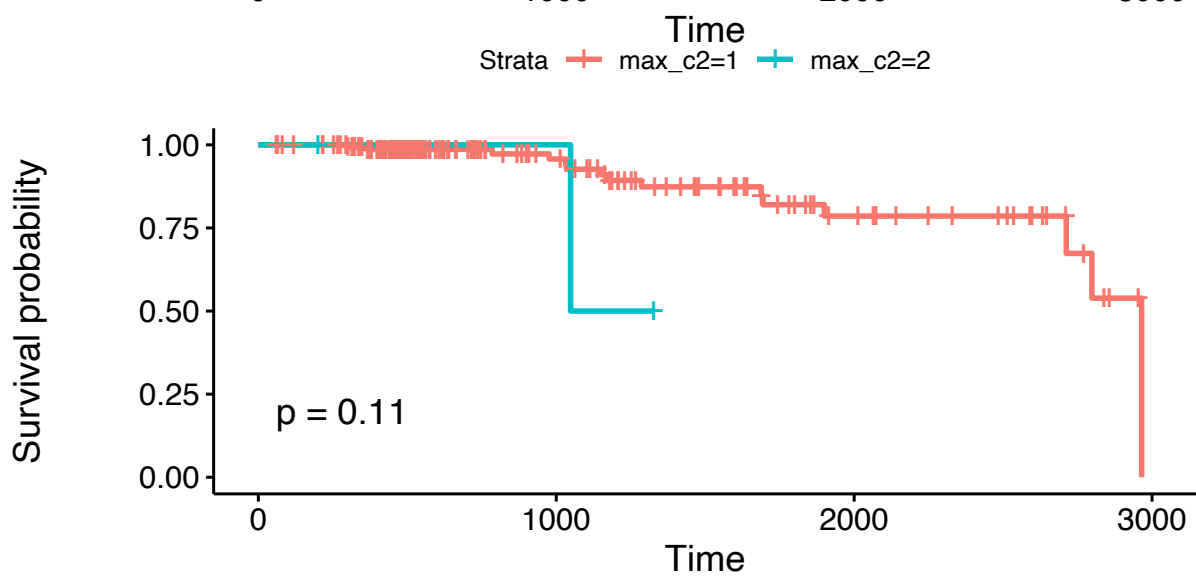
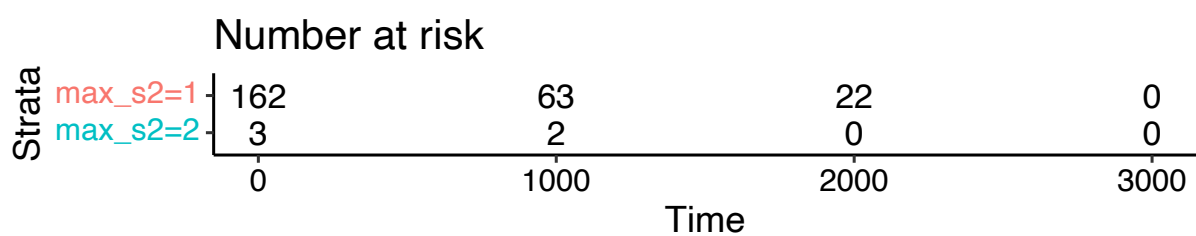
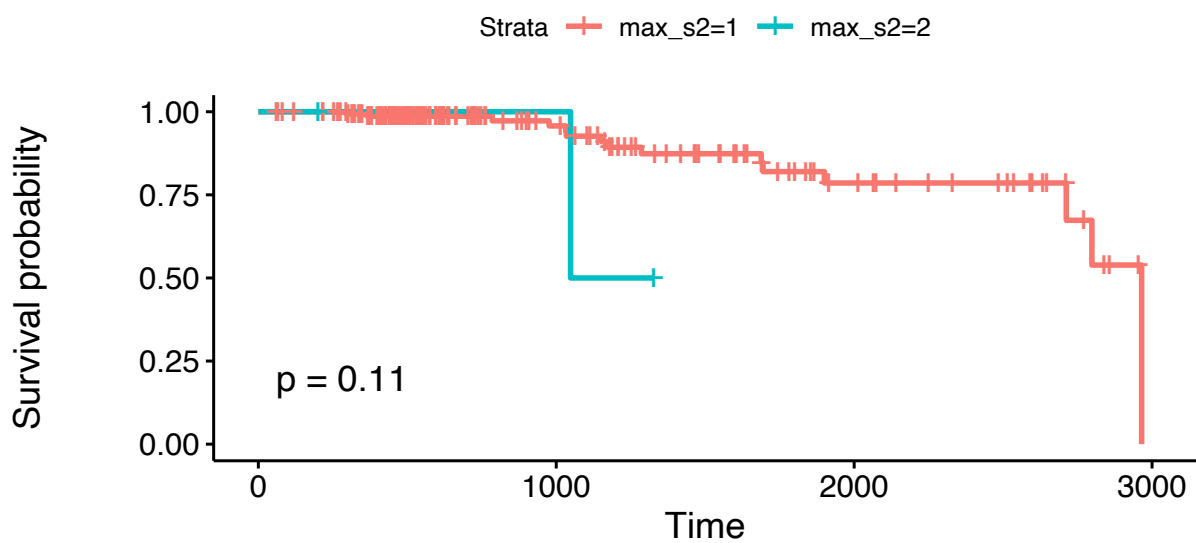


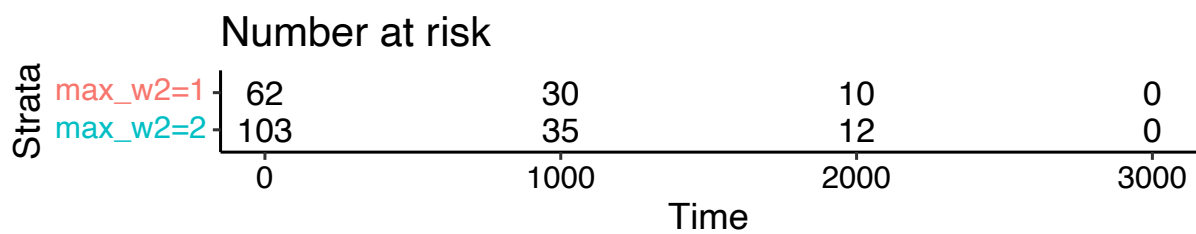
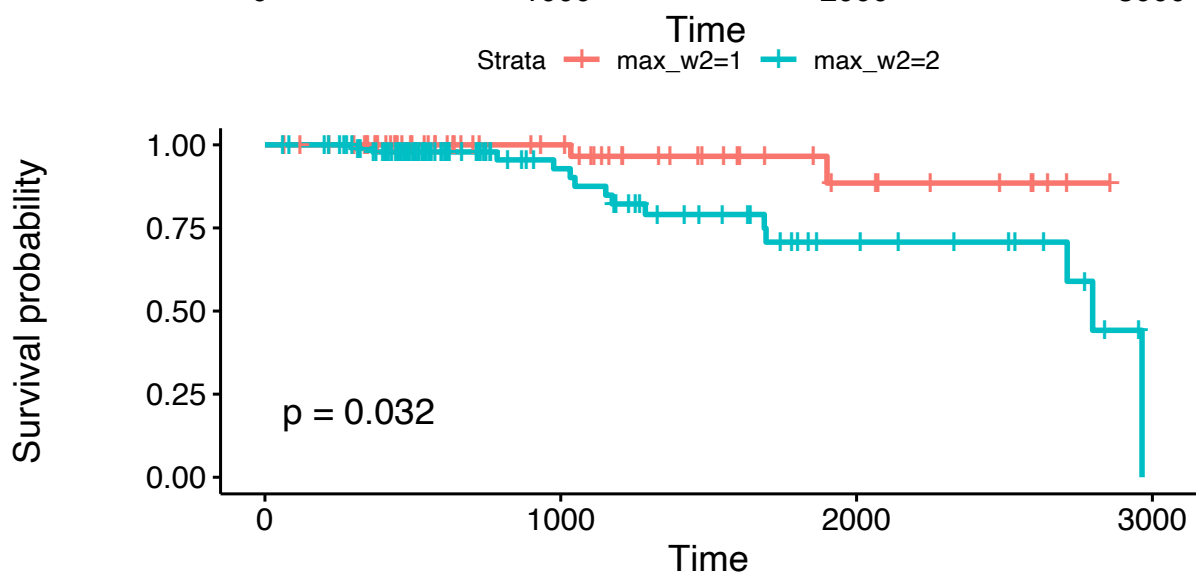
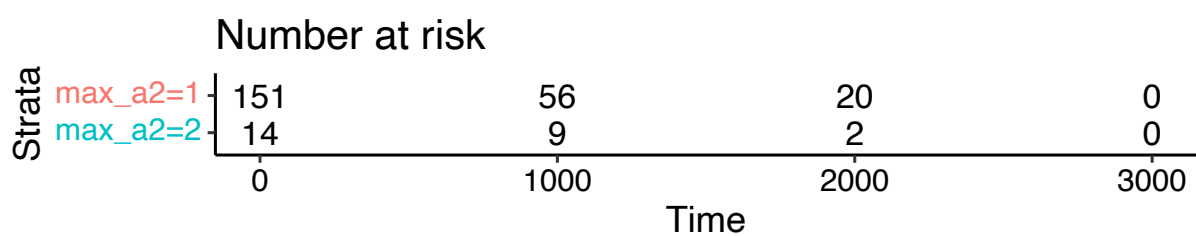
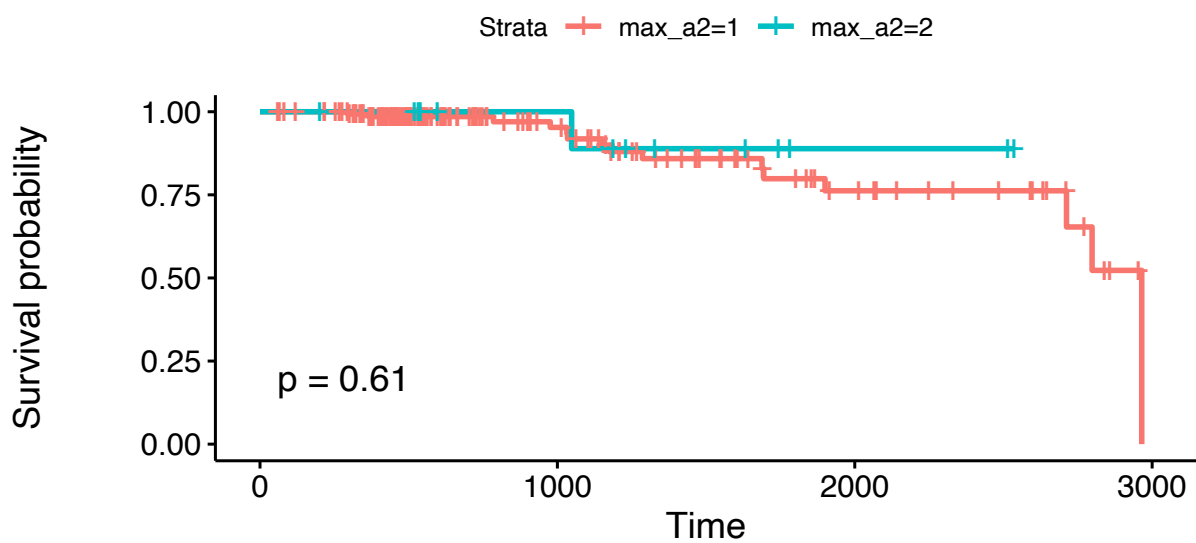


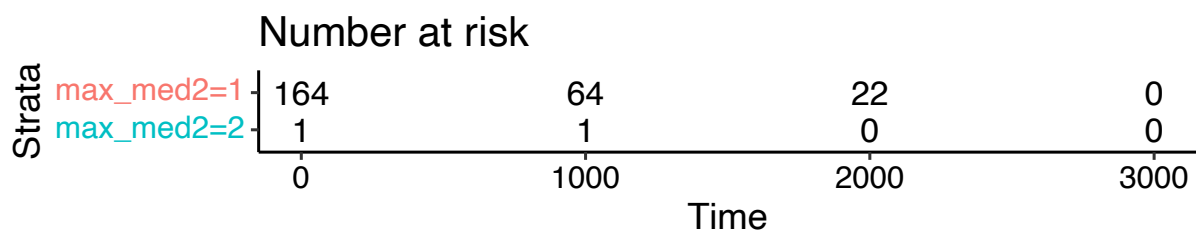
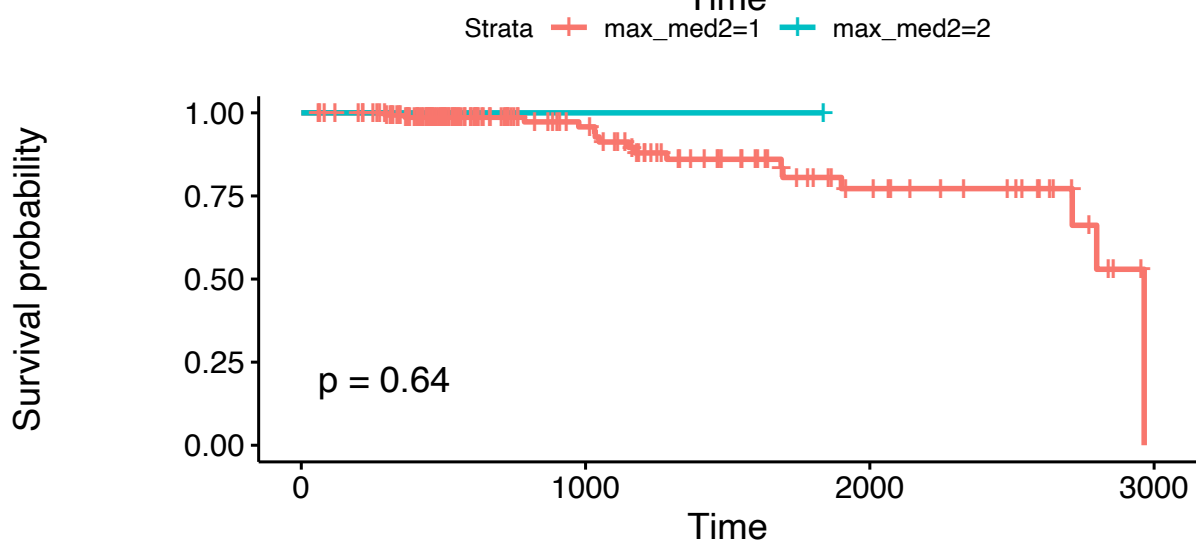
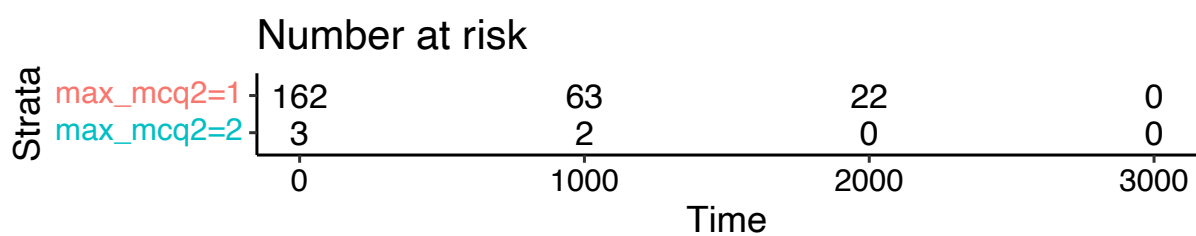
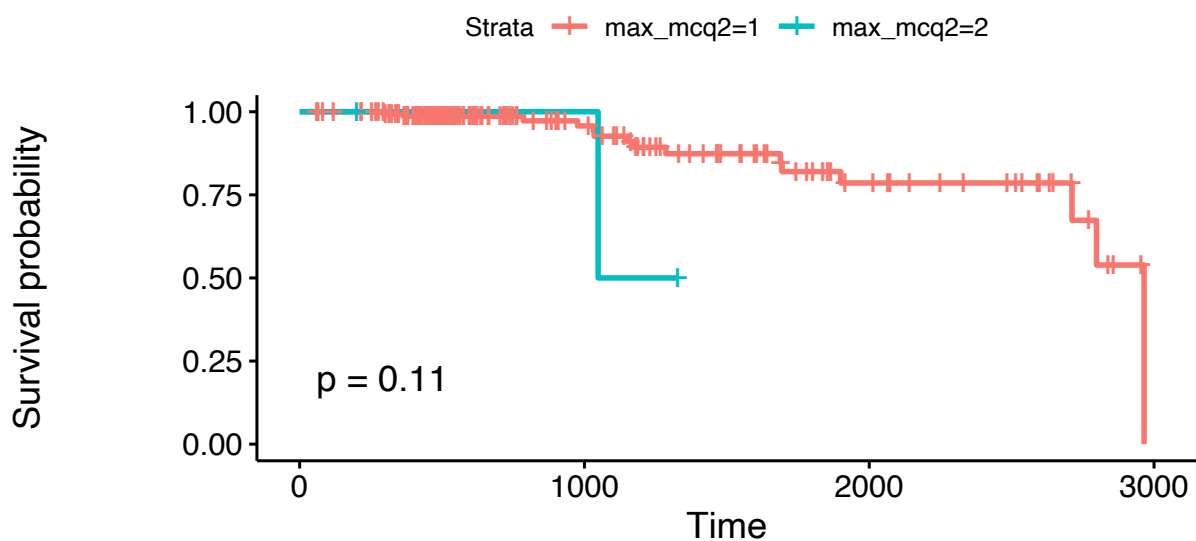






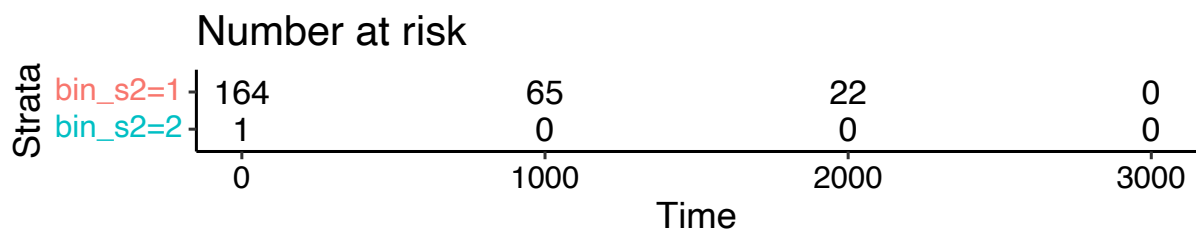
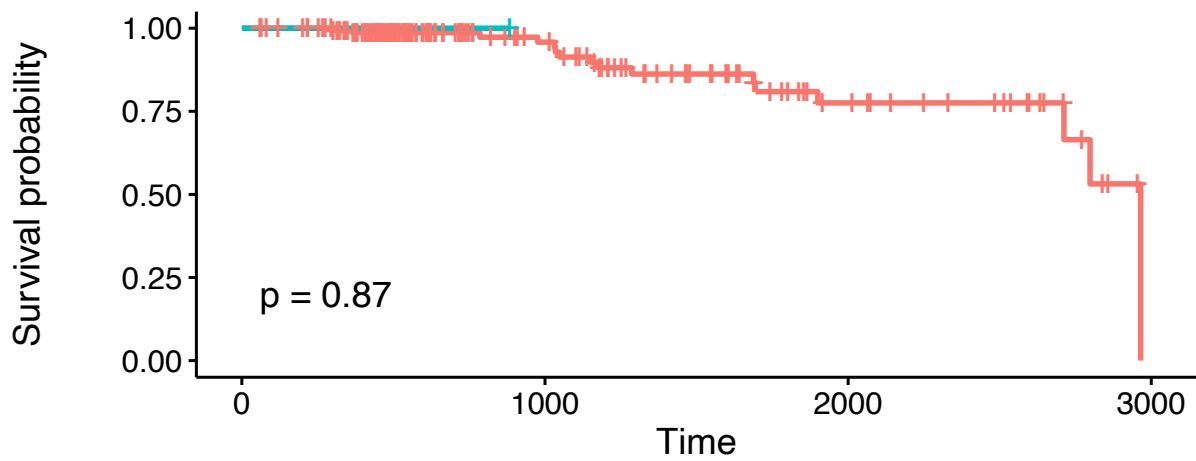
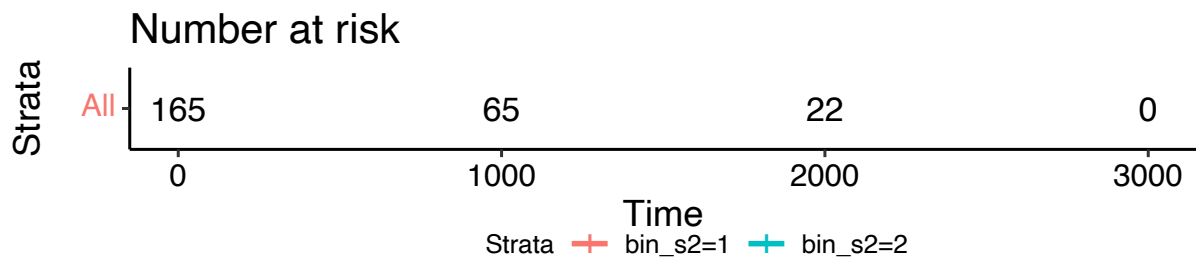
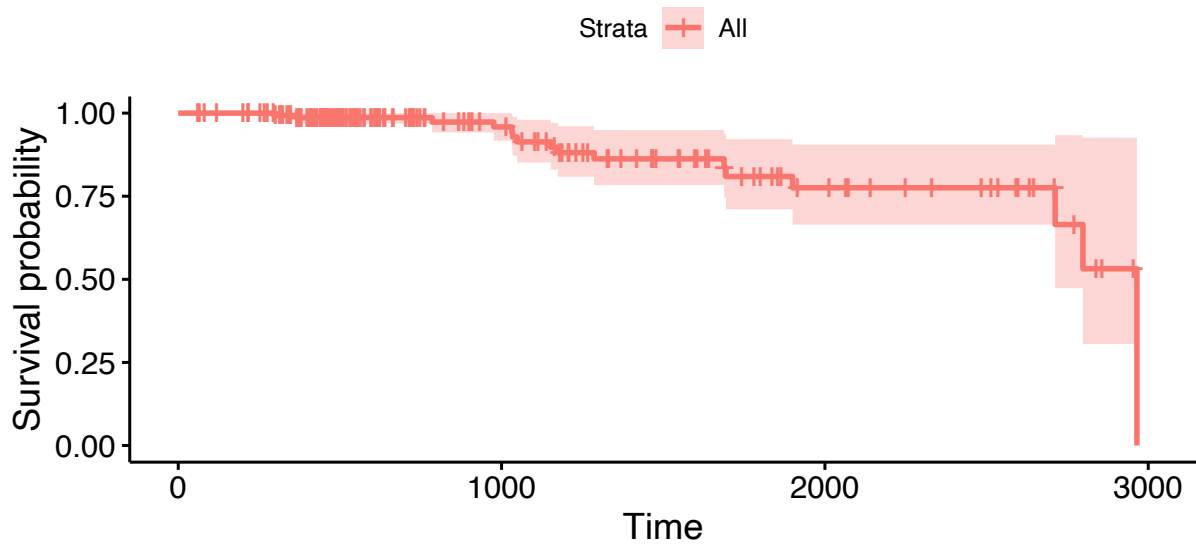


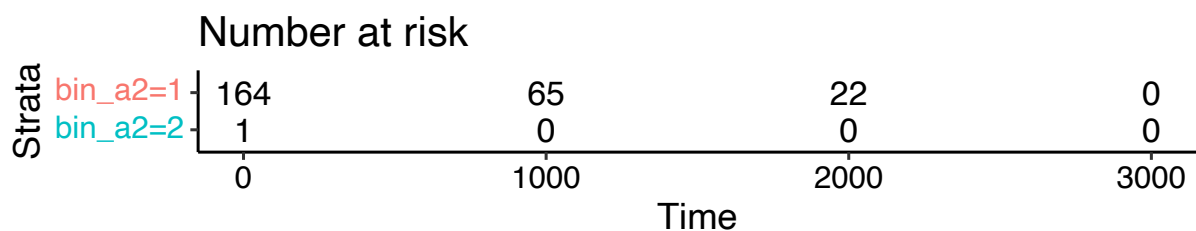
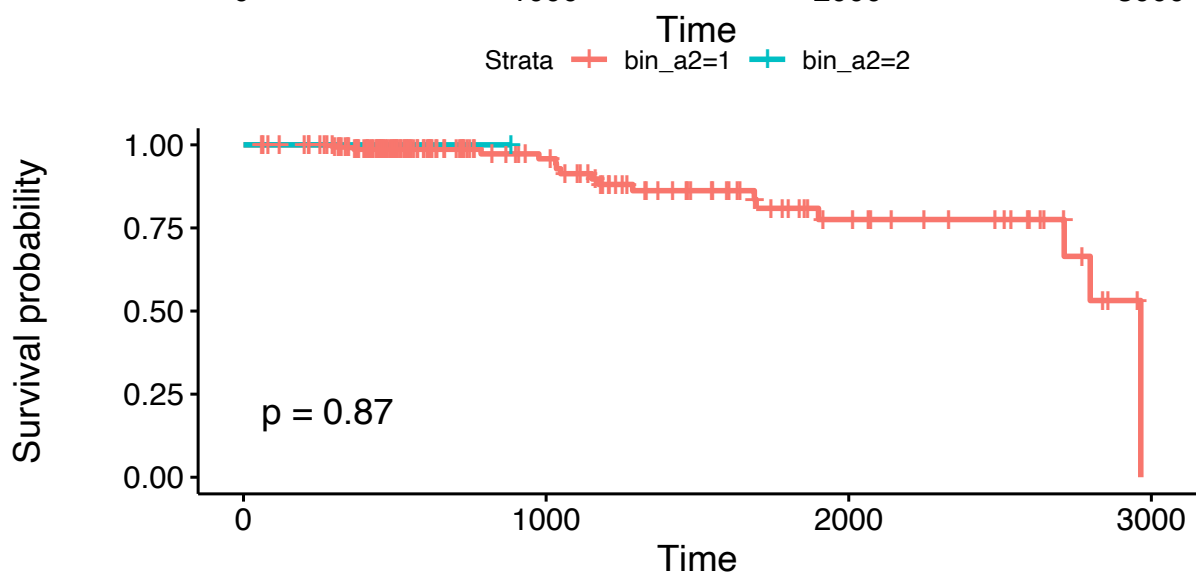
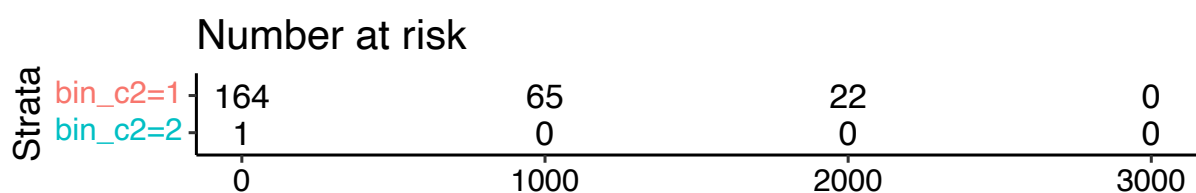
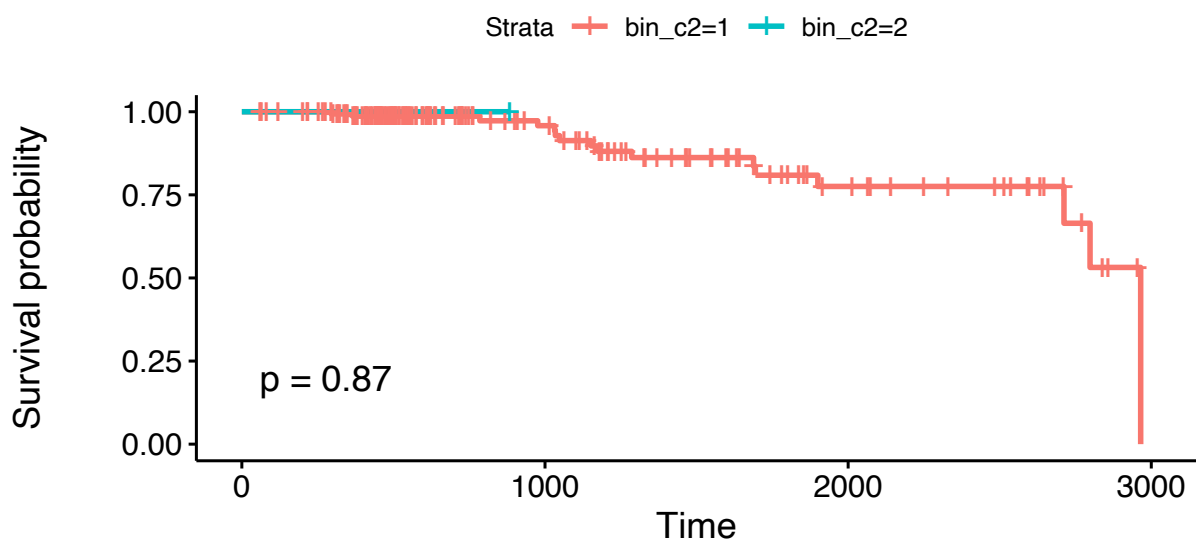


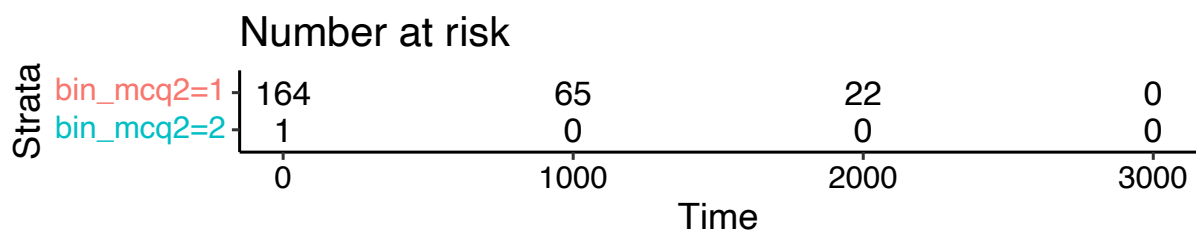
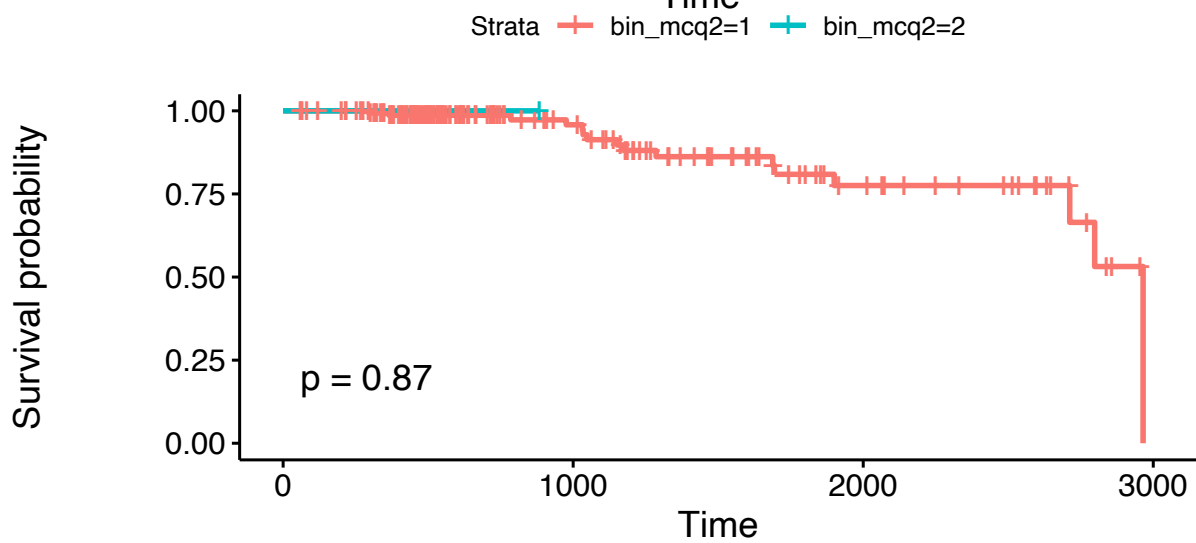
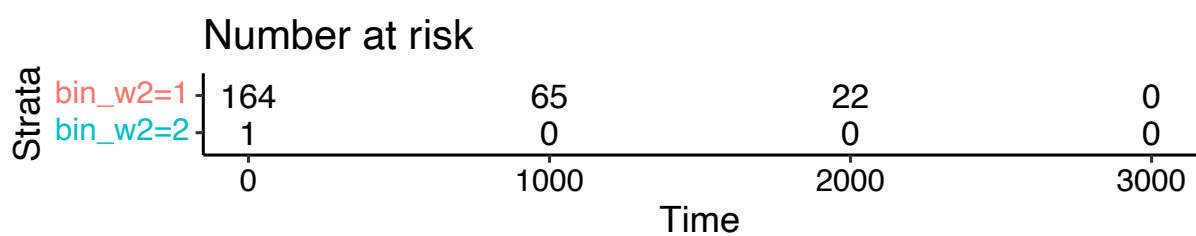
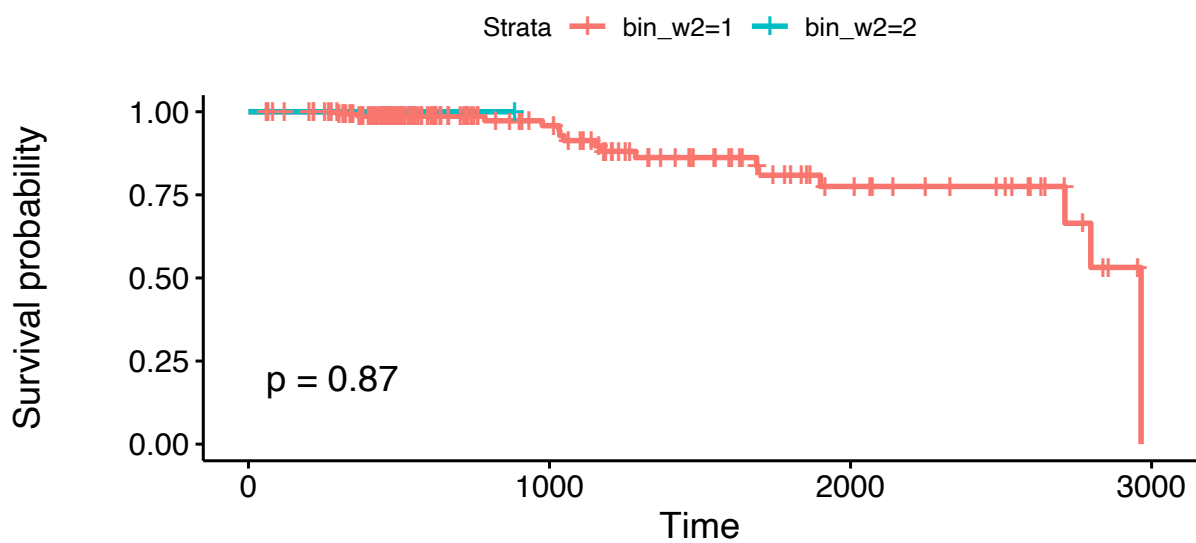


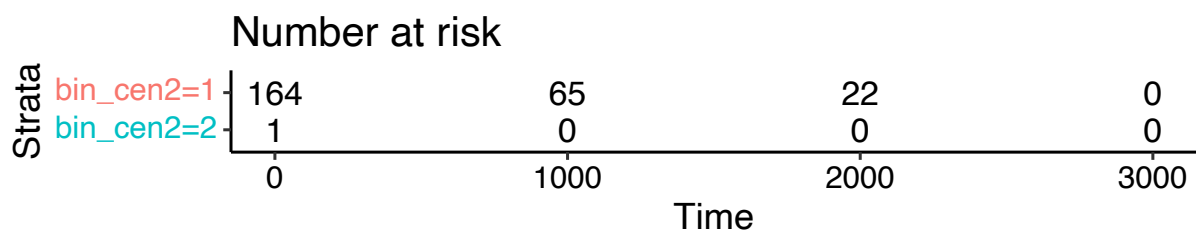
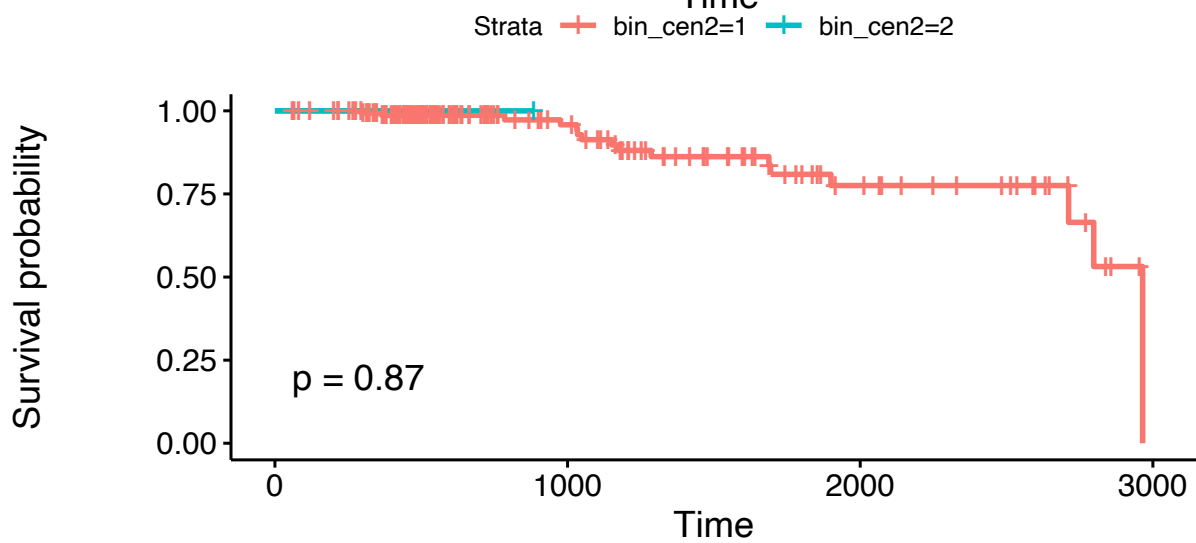
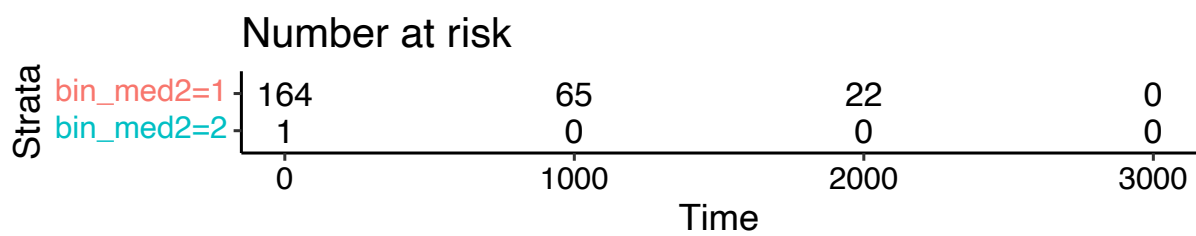
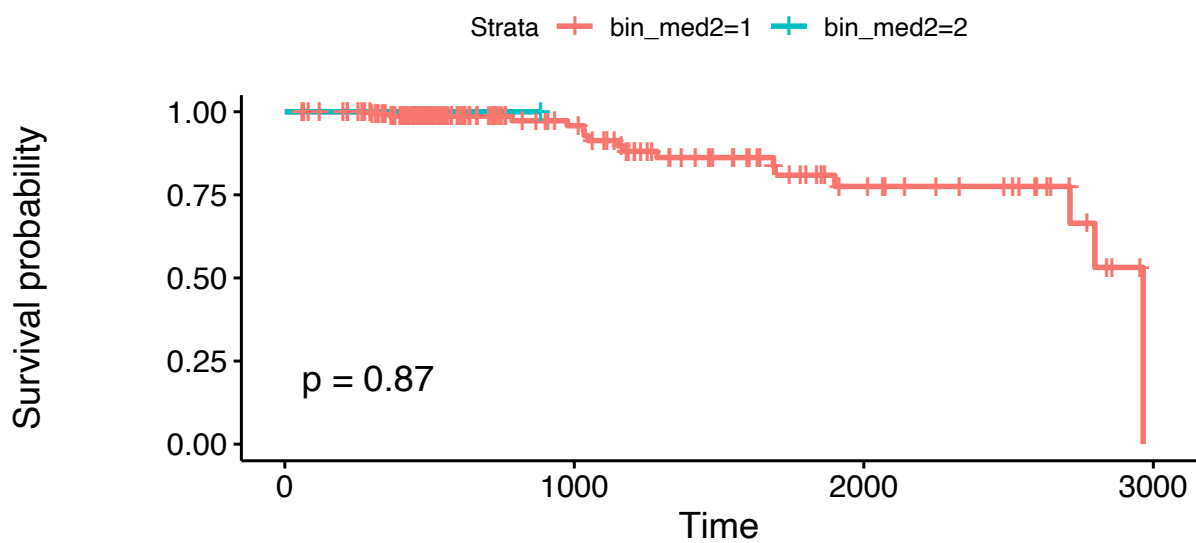
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## This is a null model.
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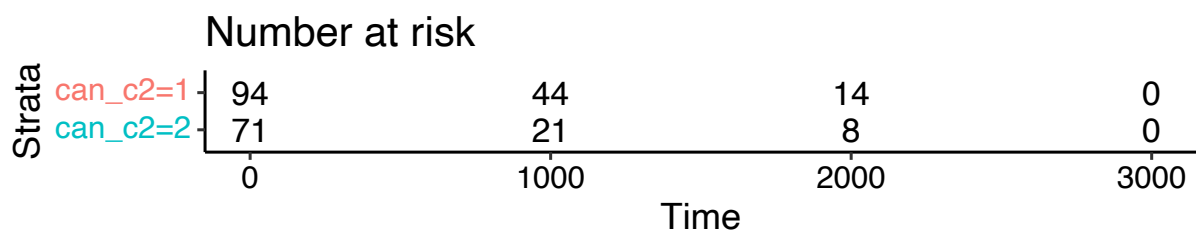
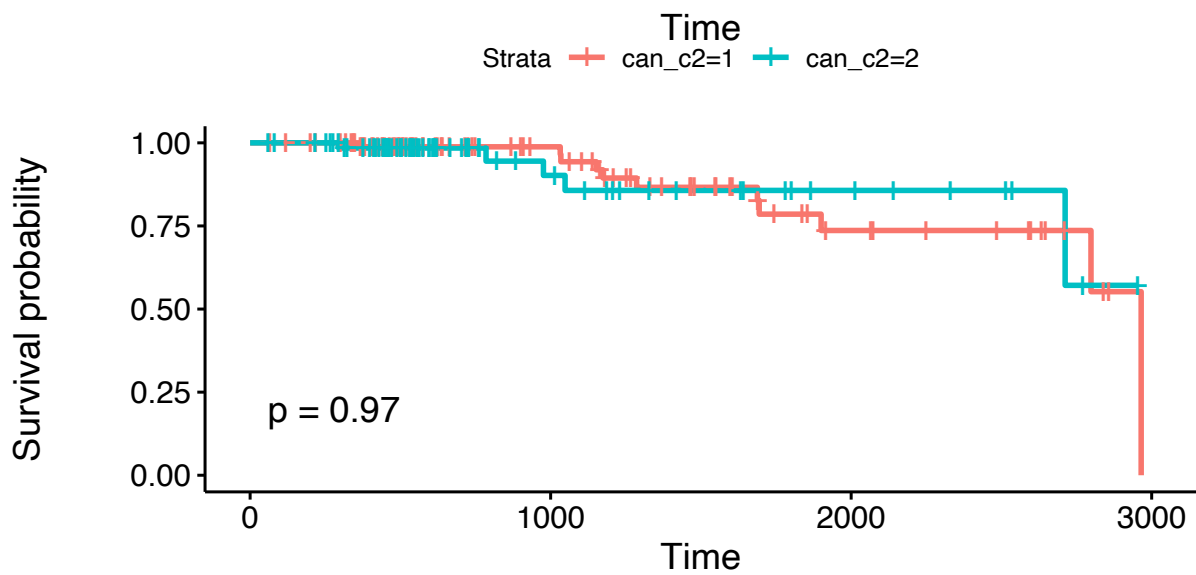
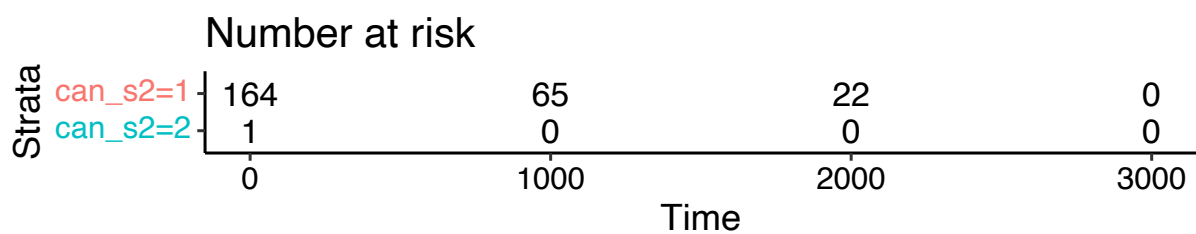
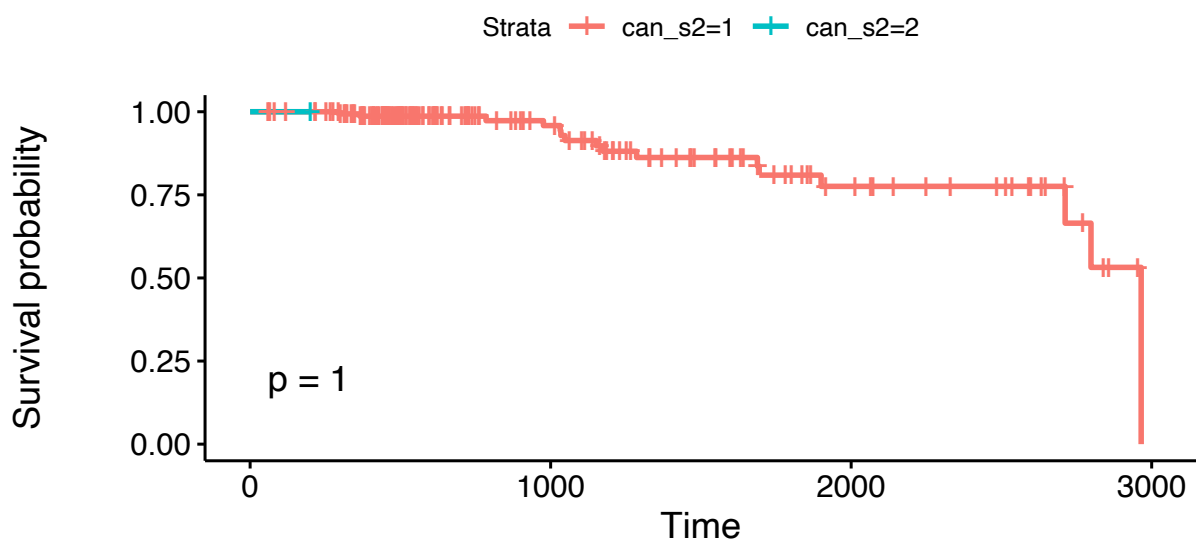


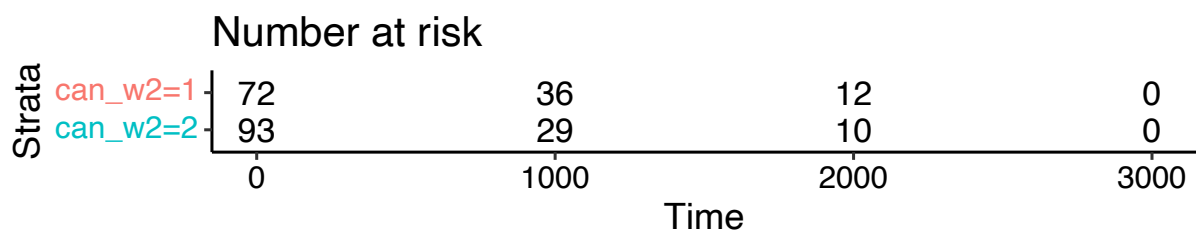
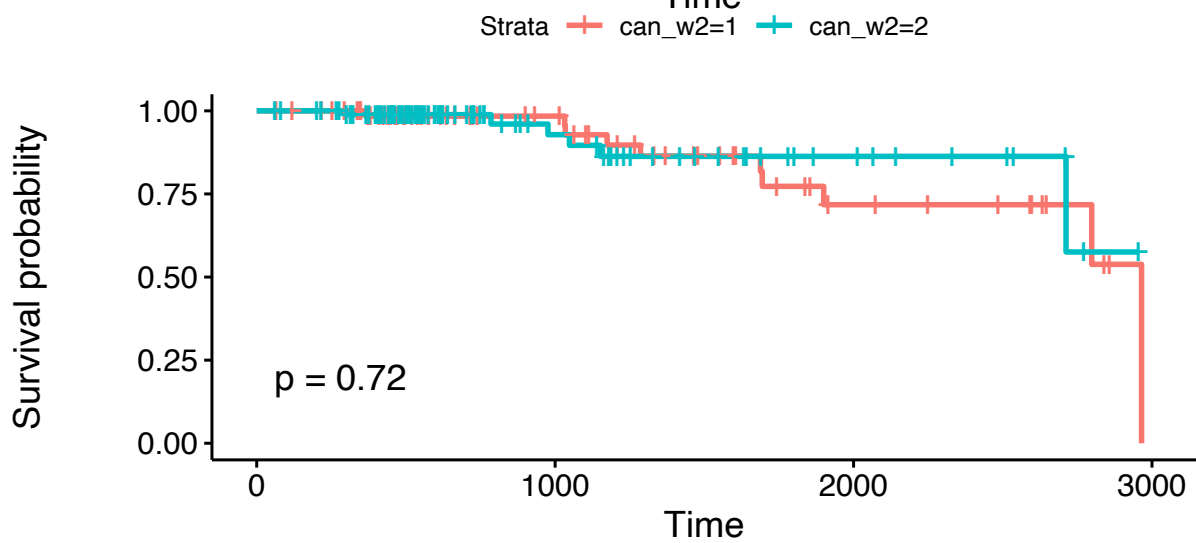
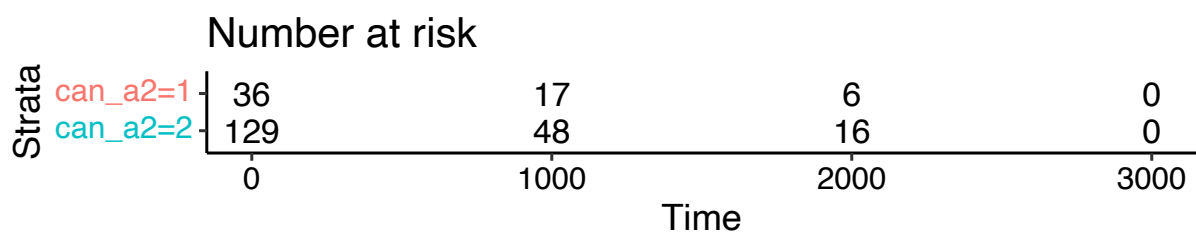
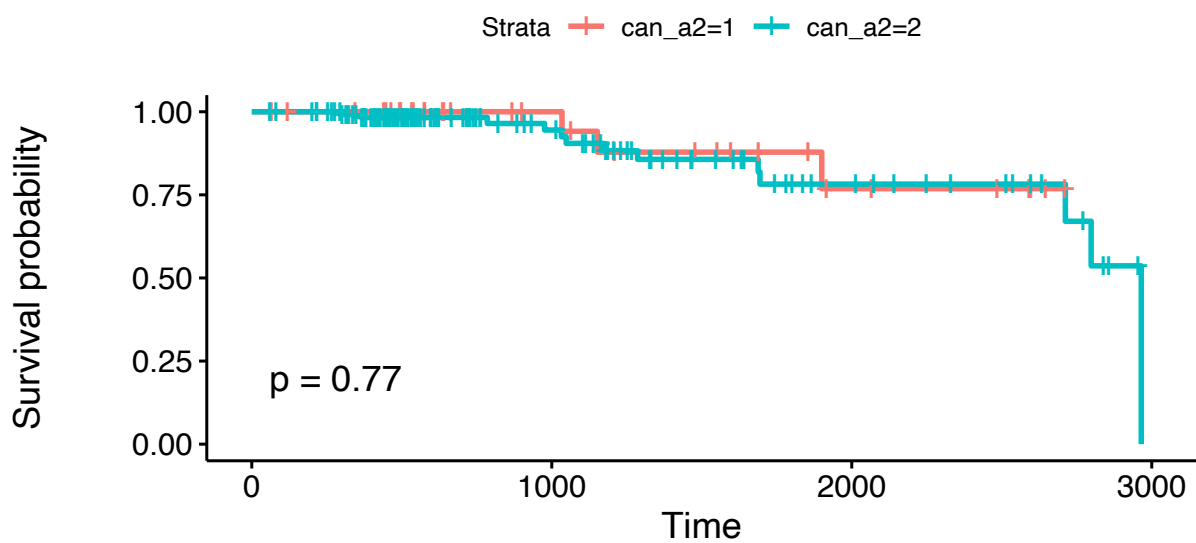


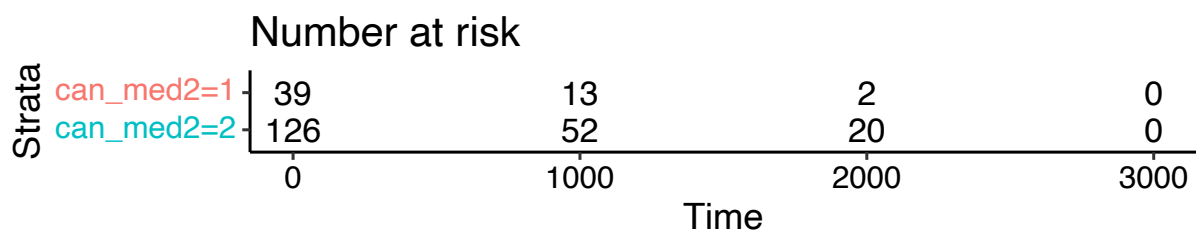
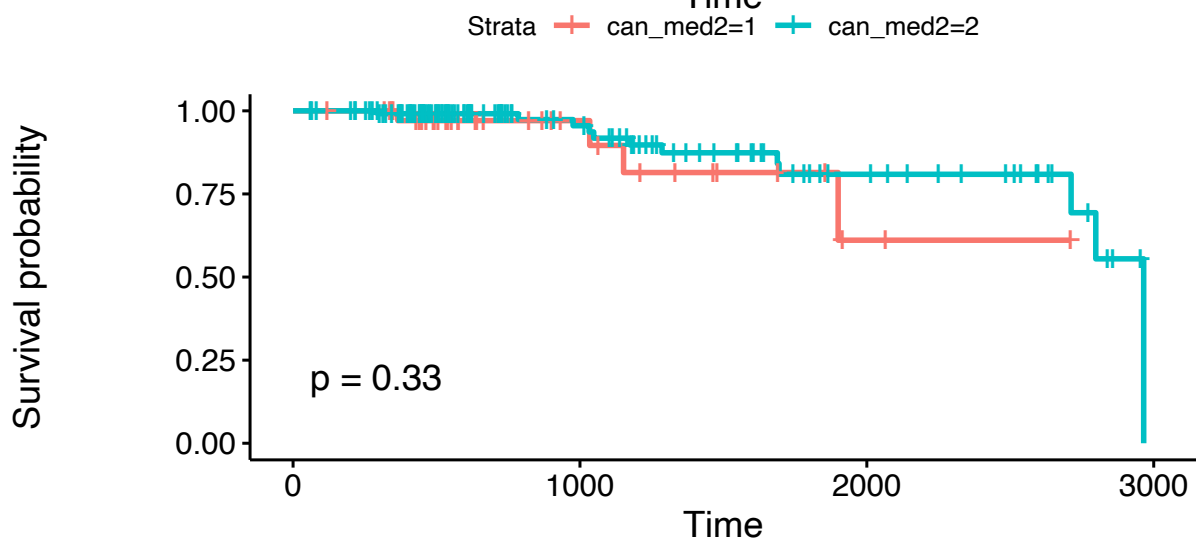
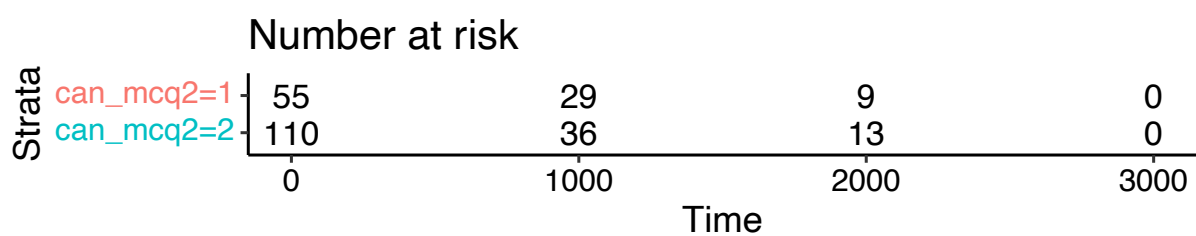
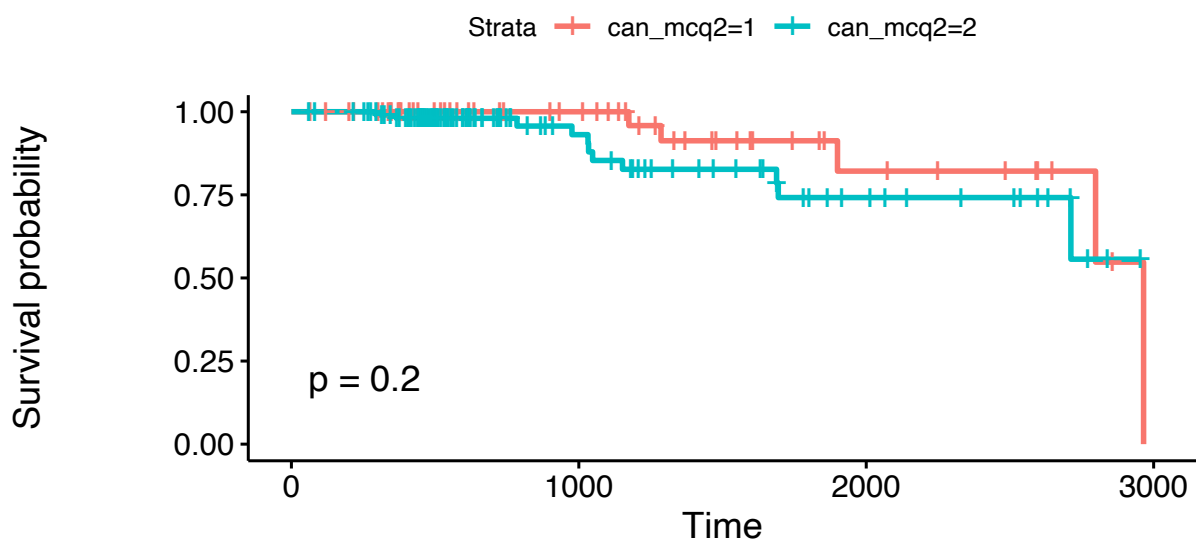


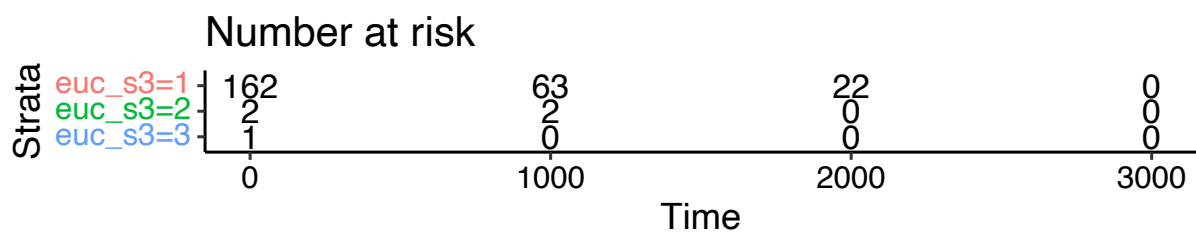
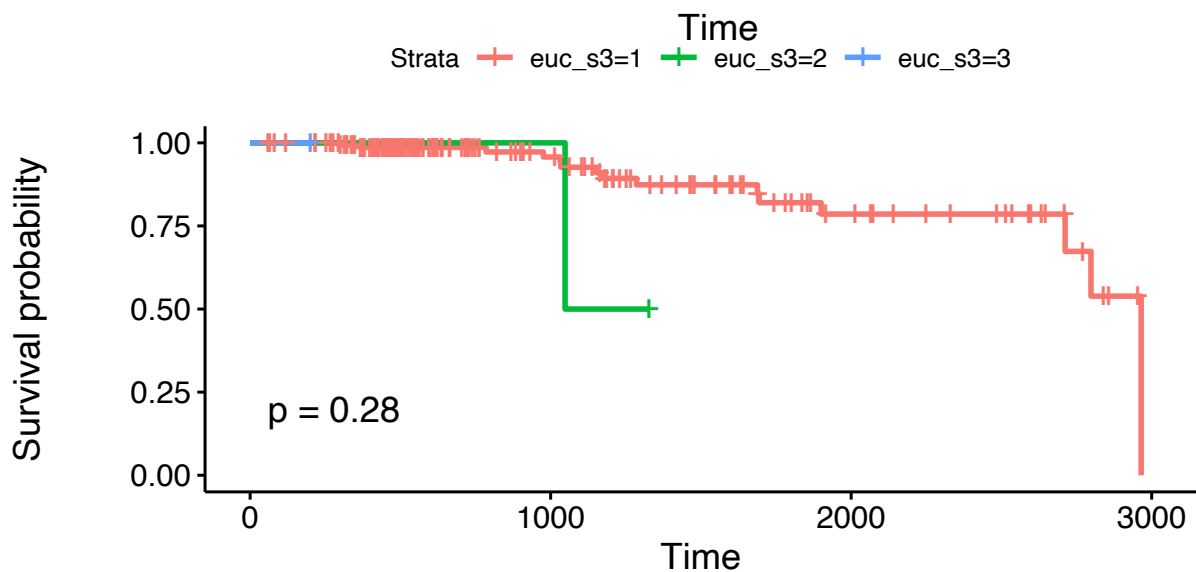
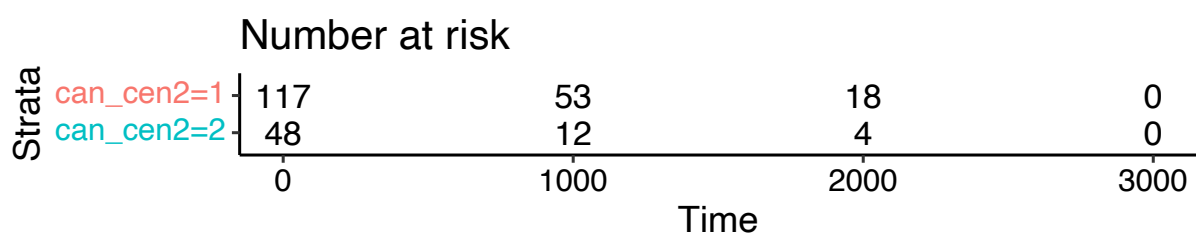
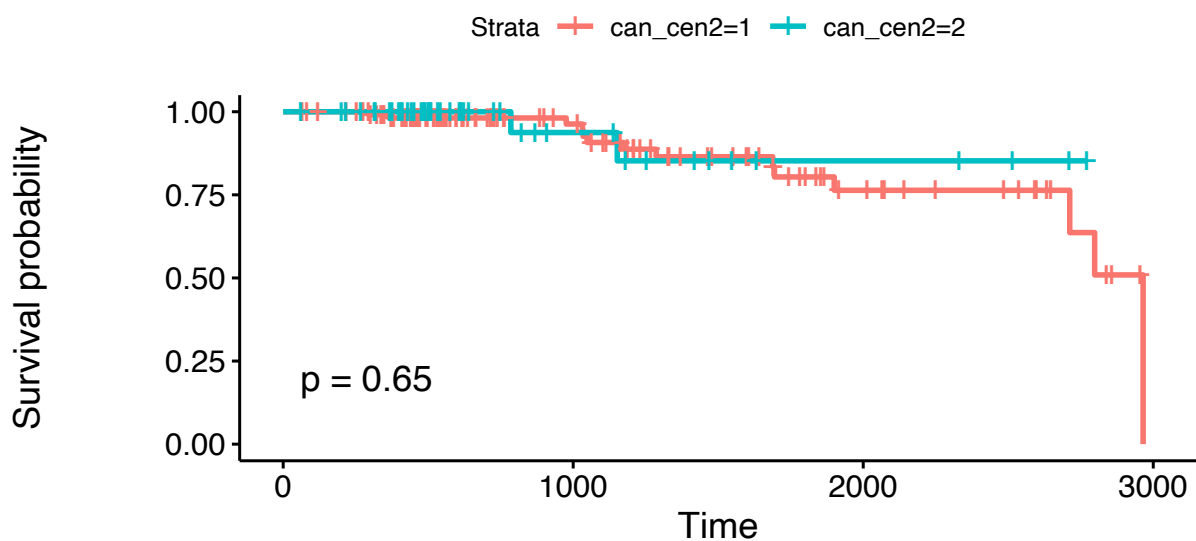




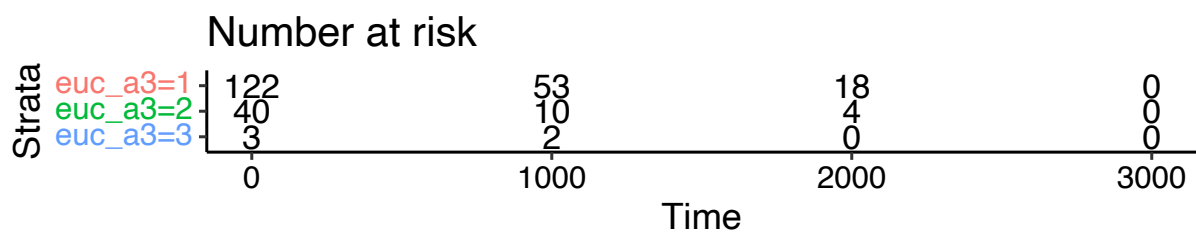
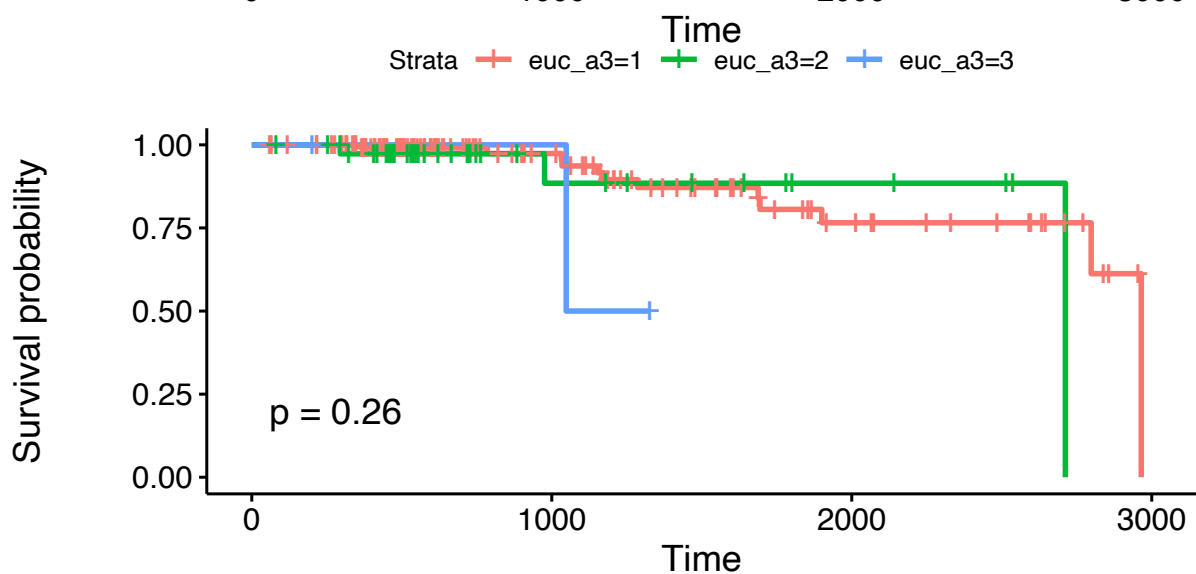
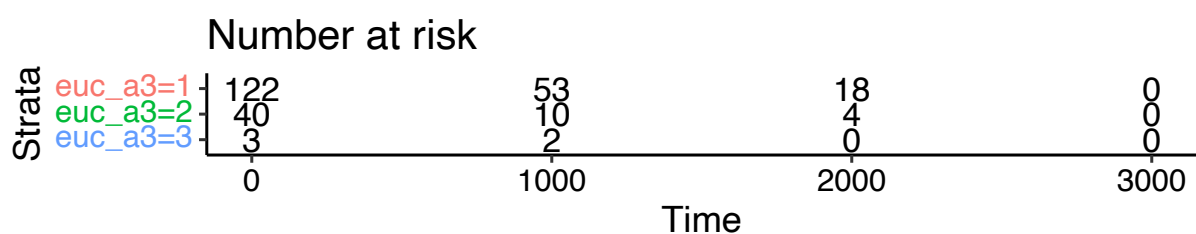
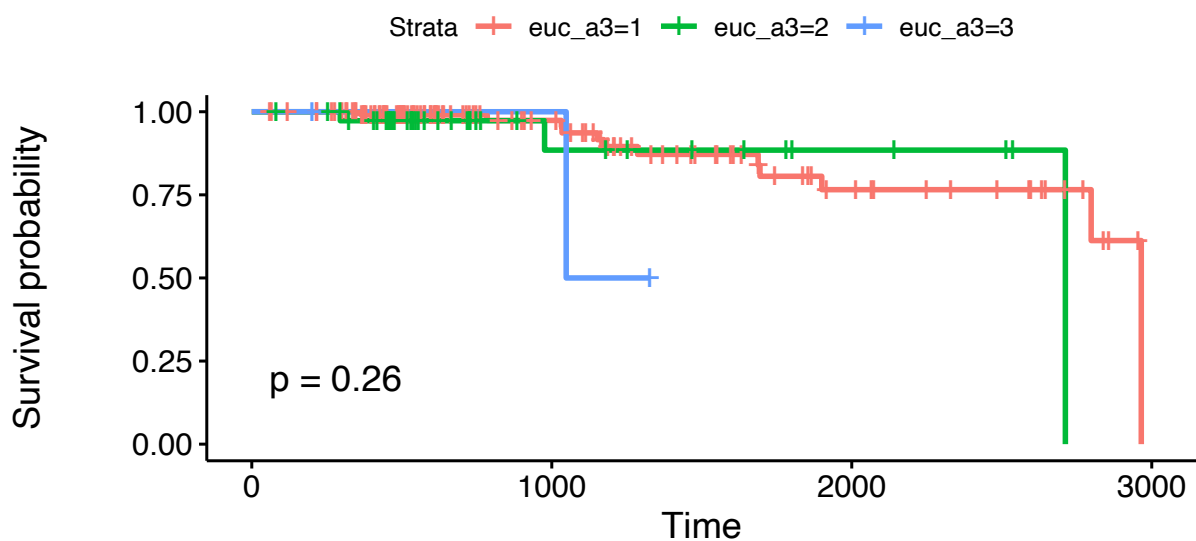


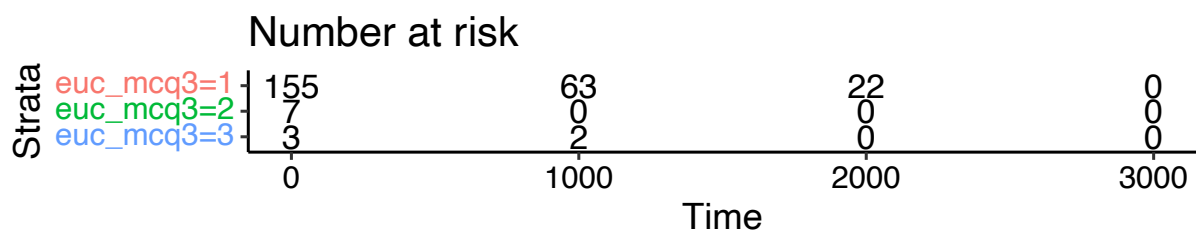
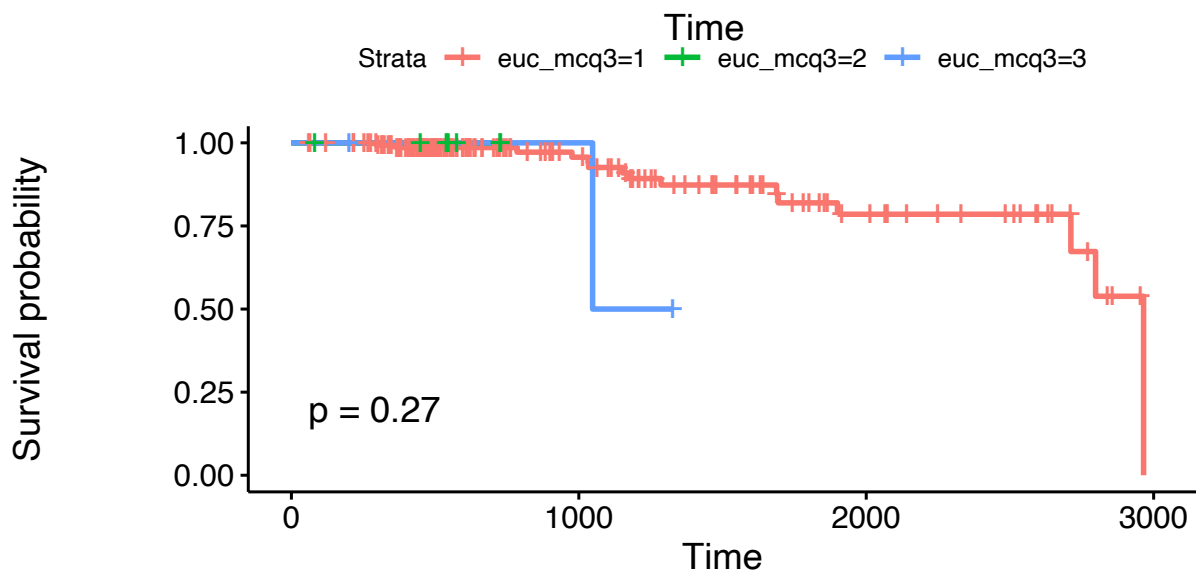
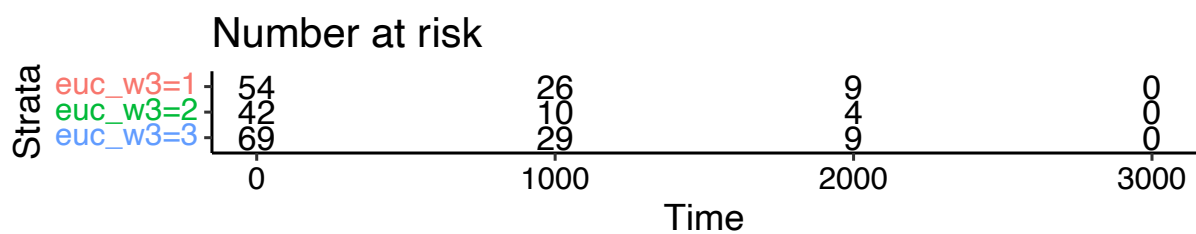
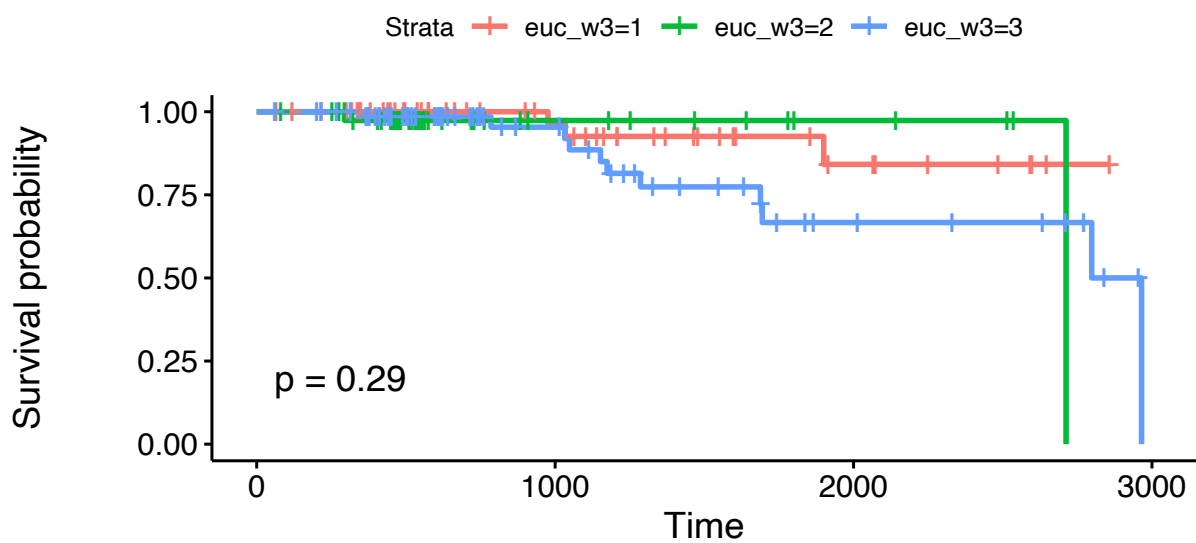


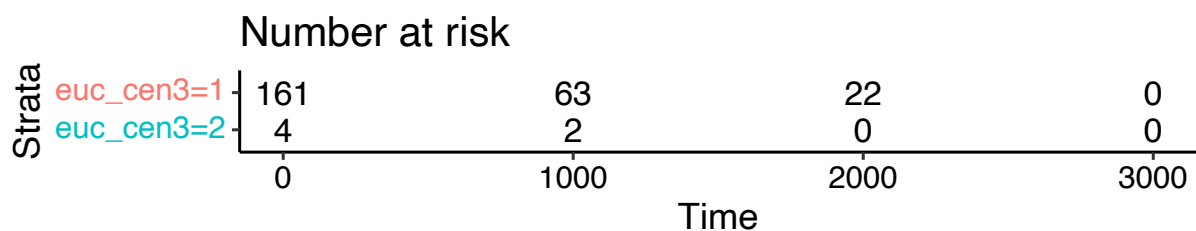
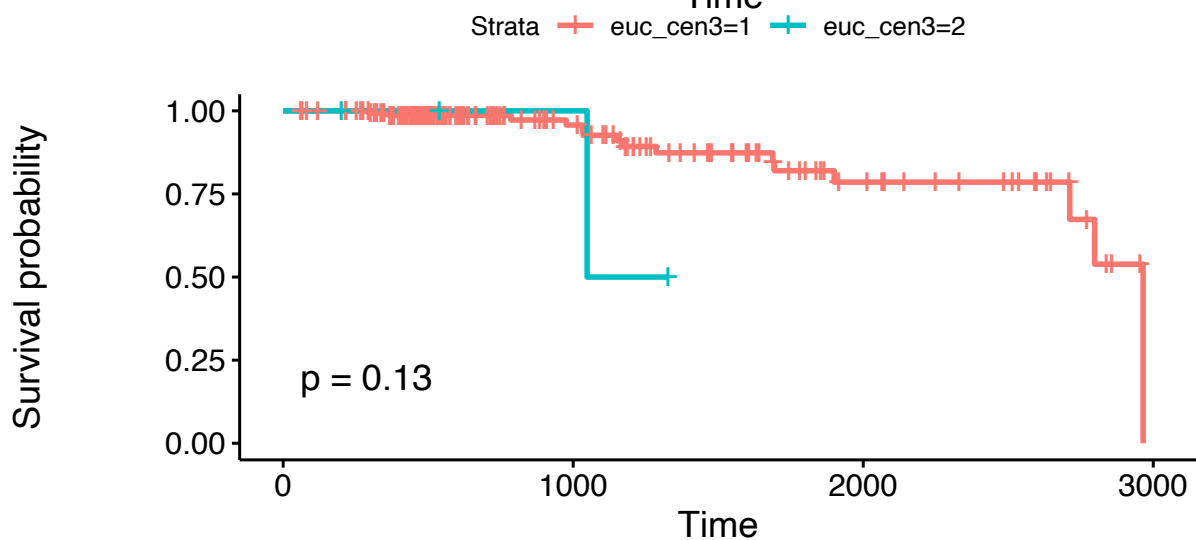
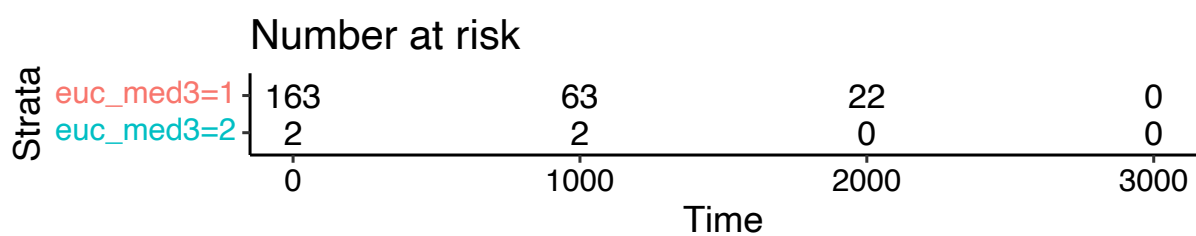
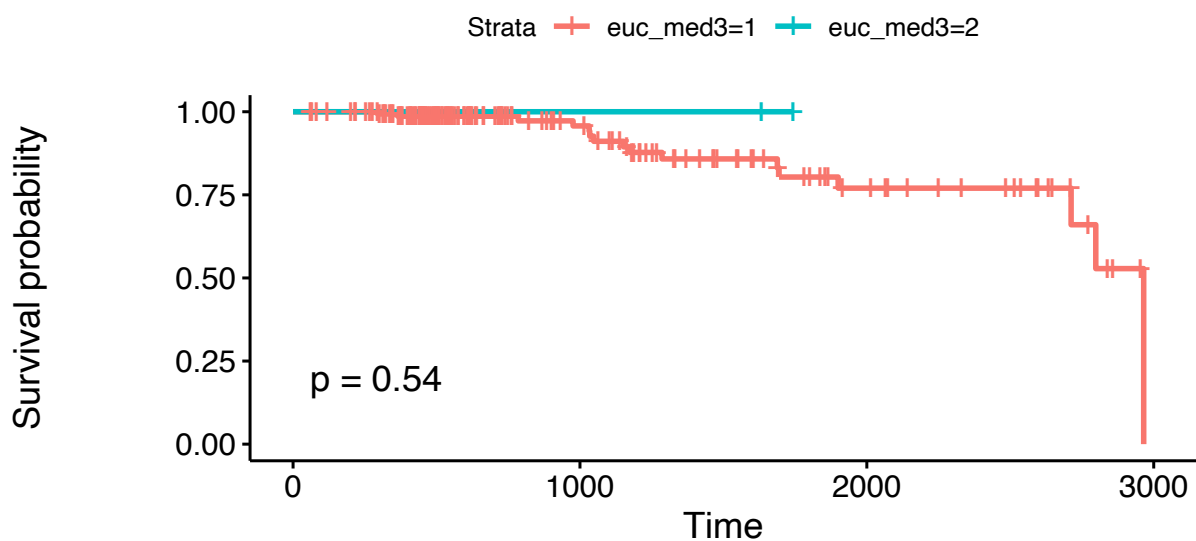


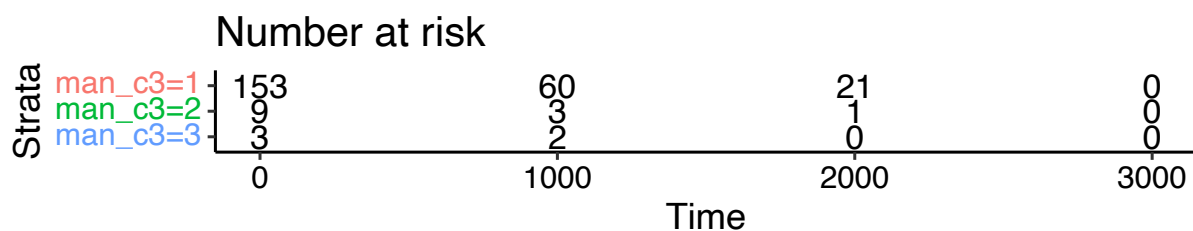
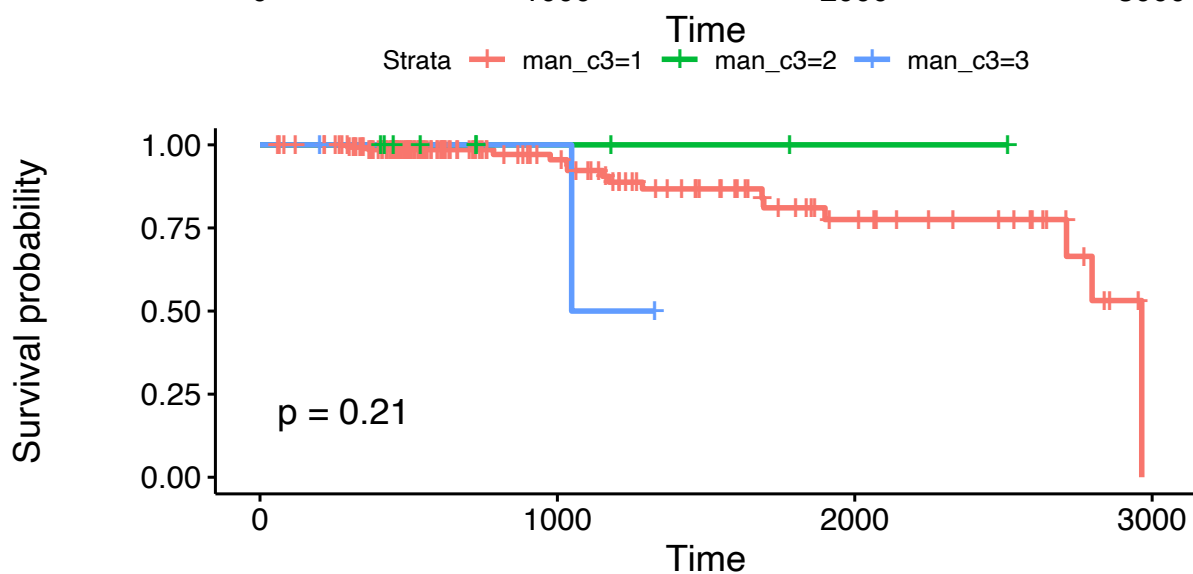
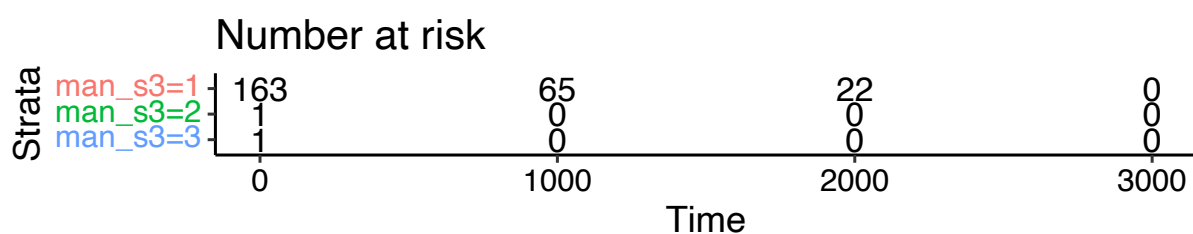
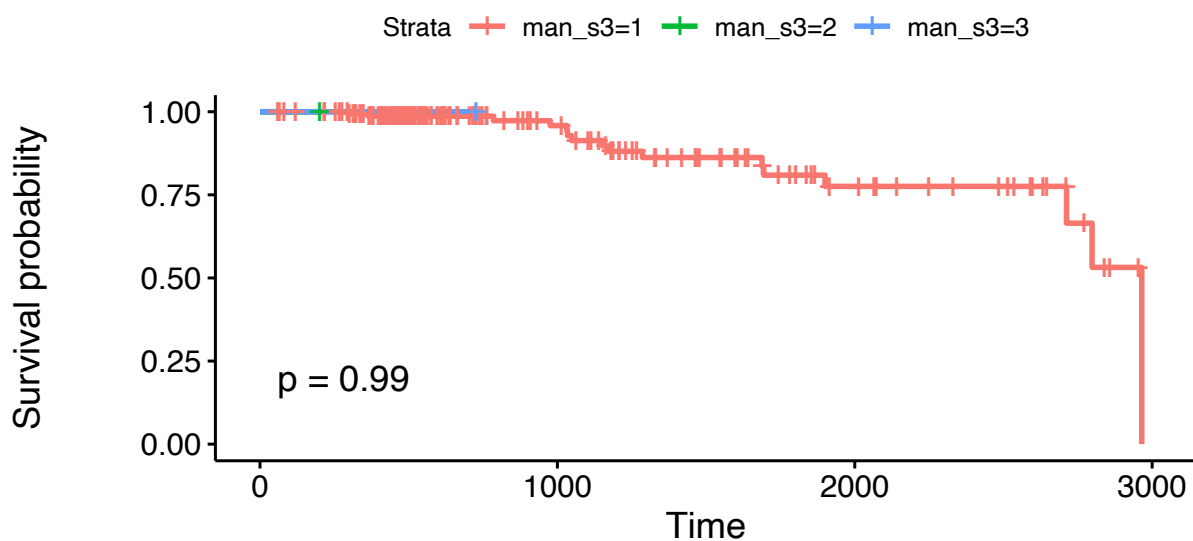


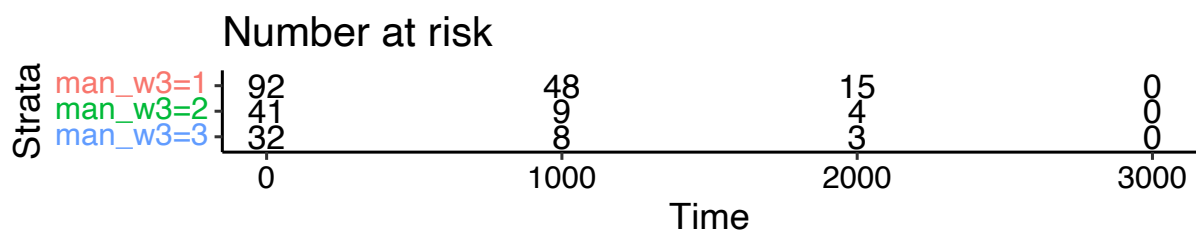
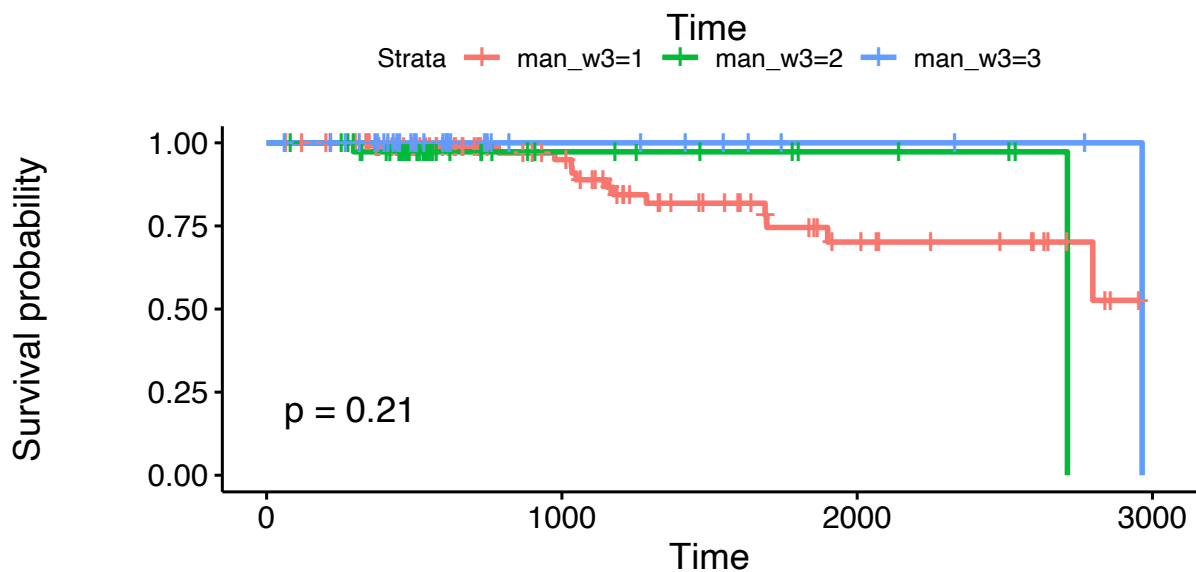
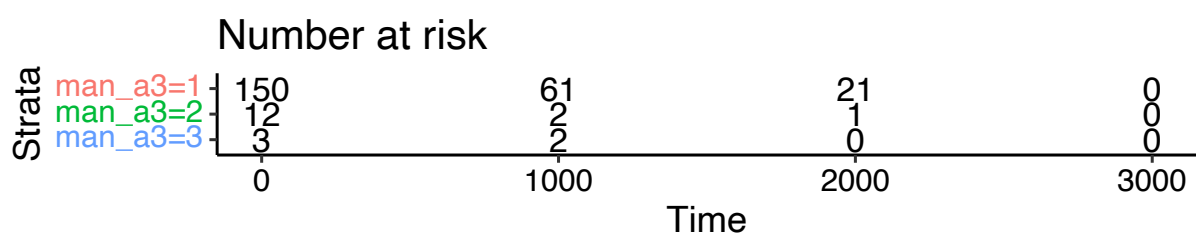
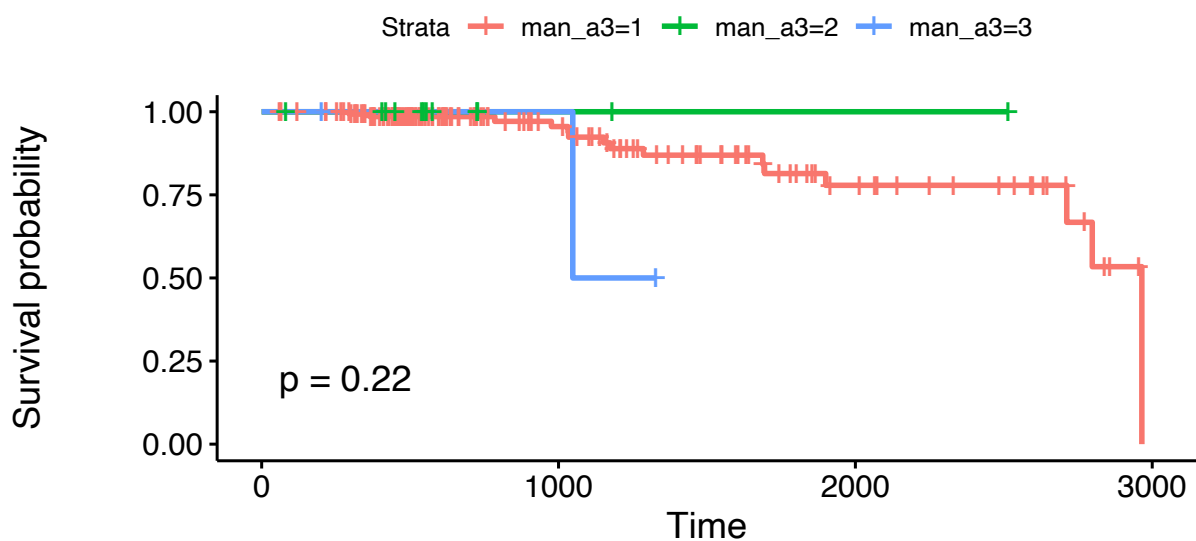


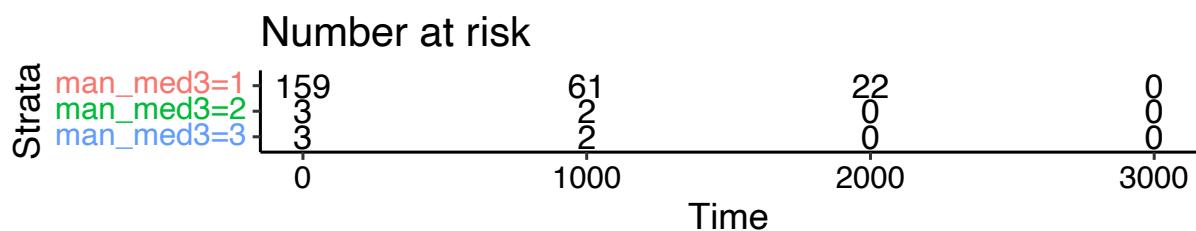
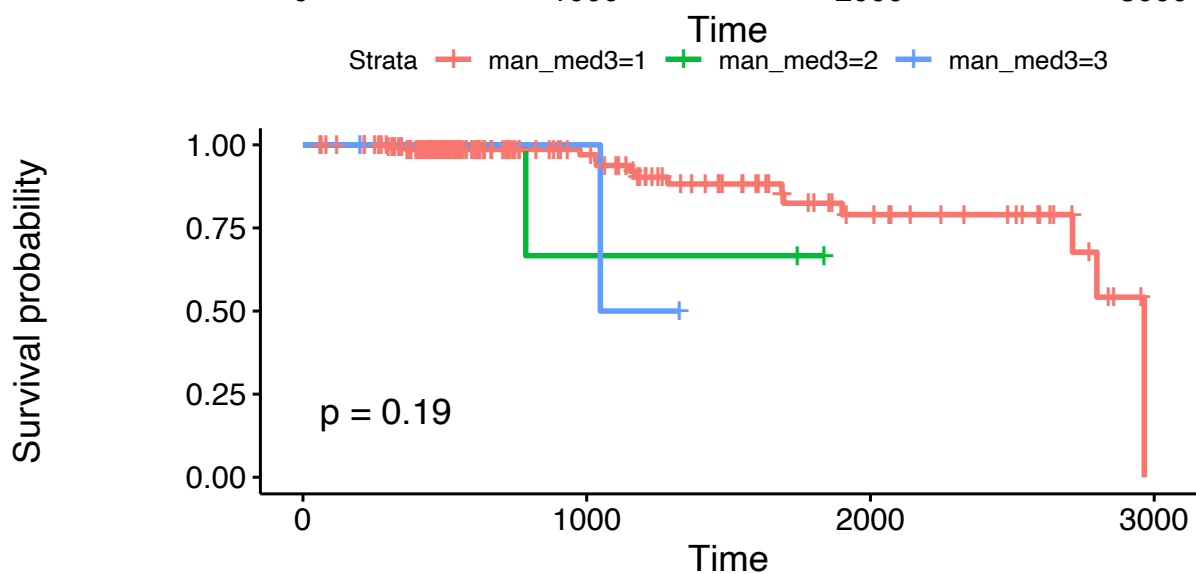
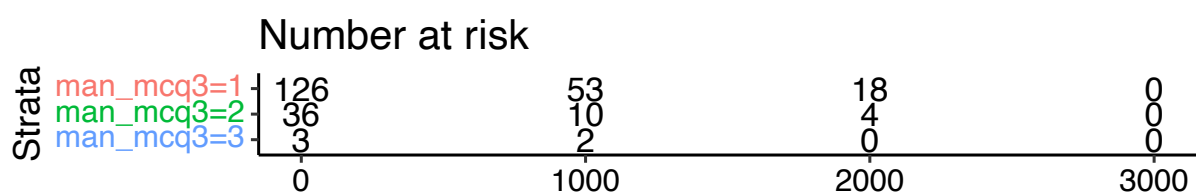
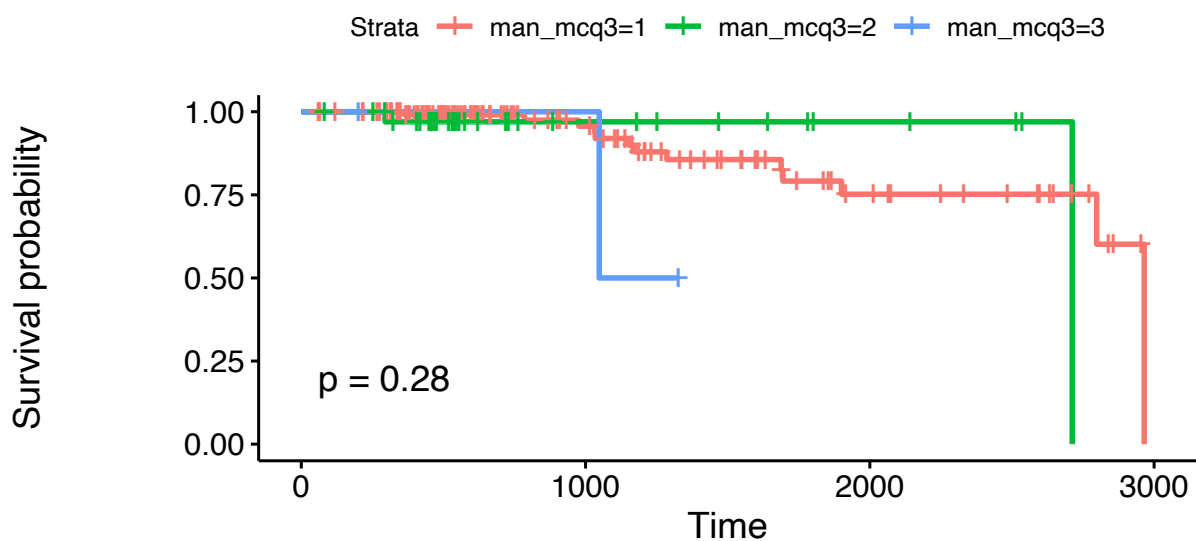


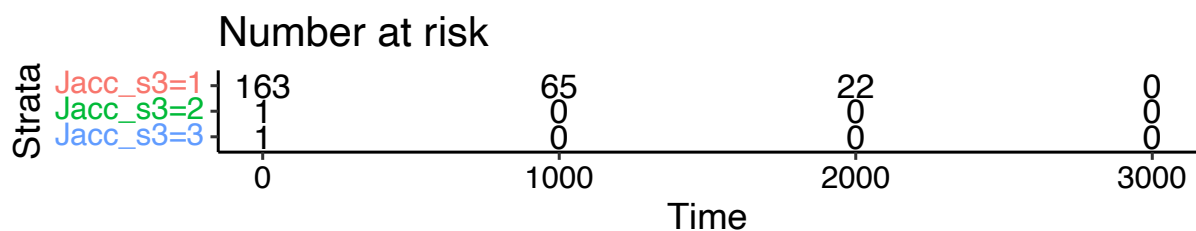
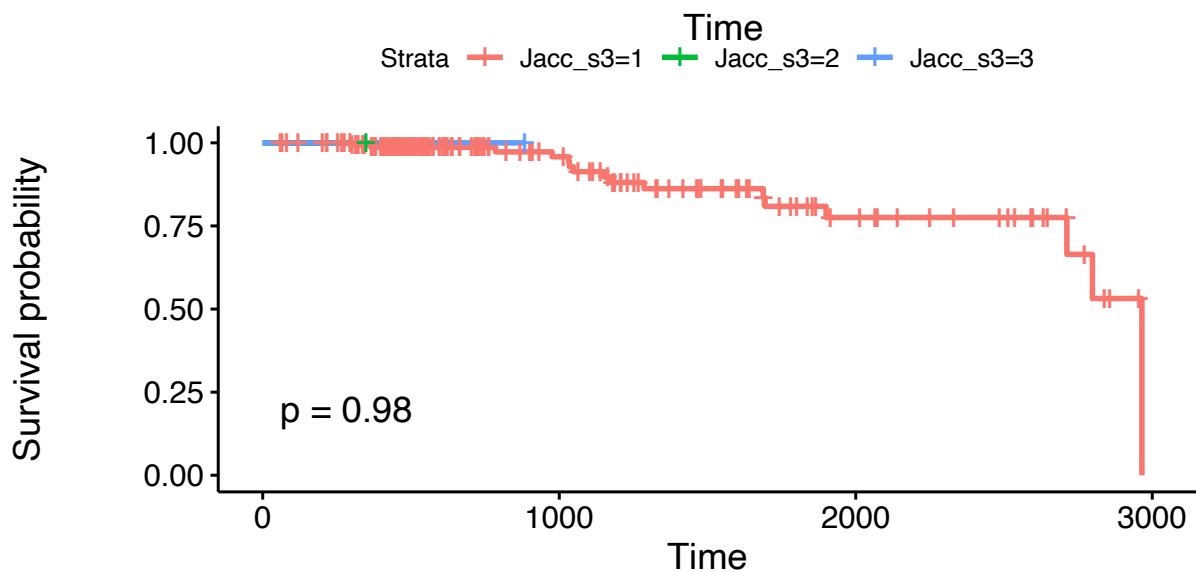
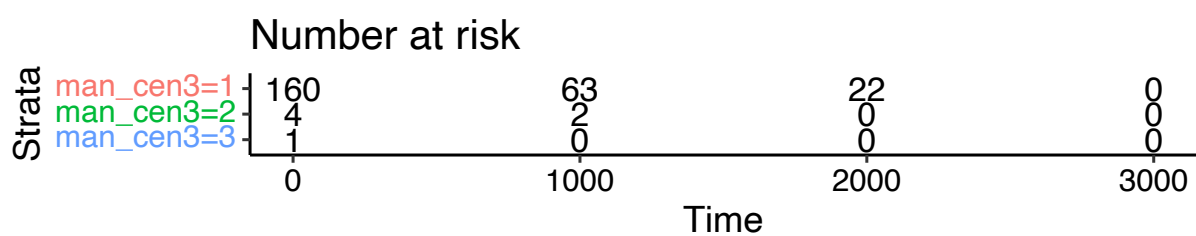
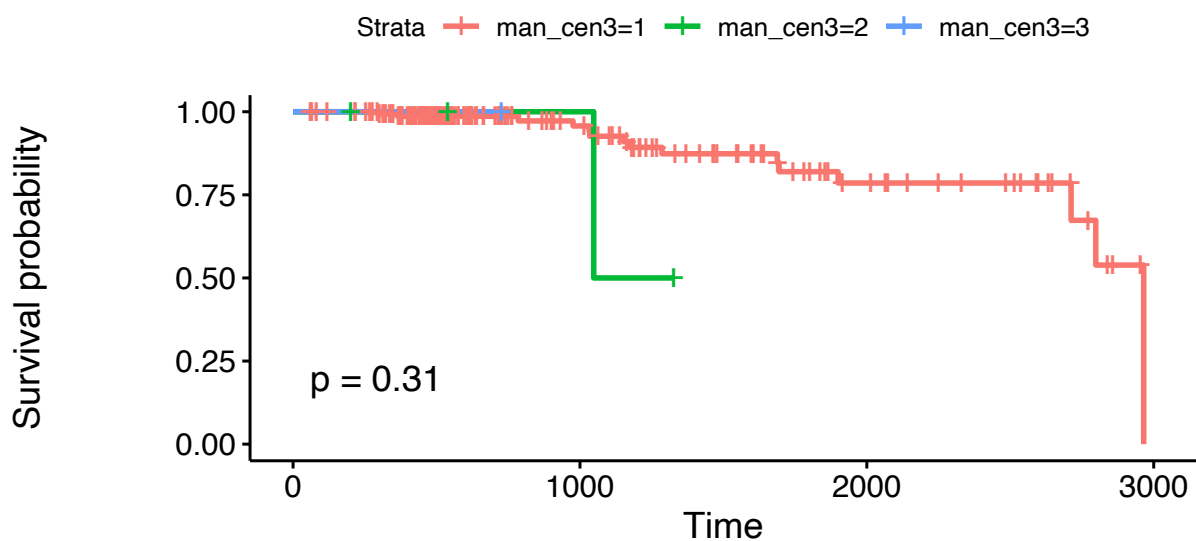


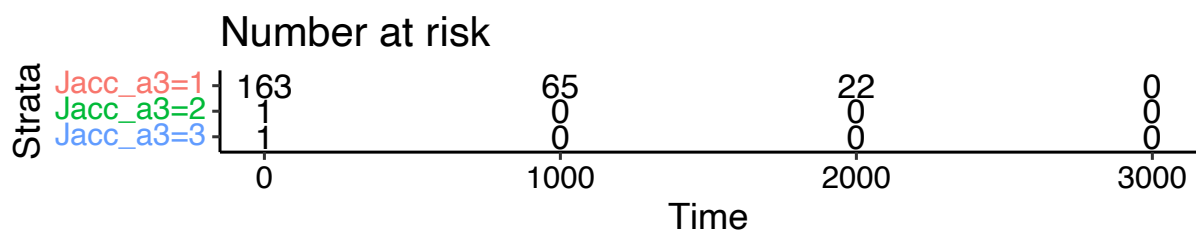
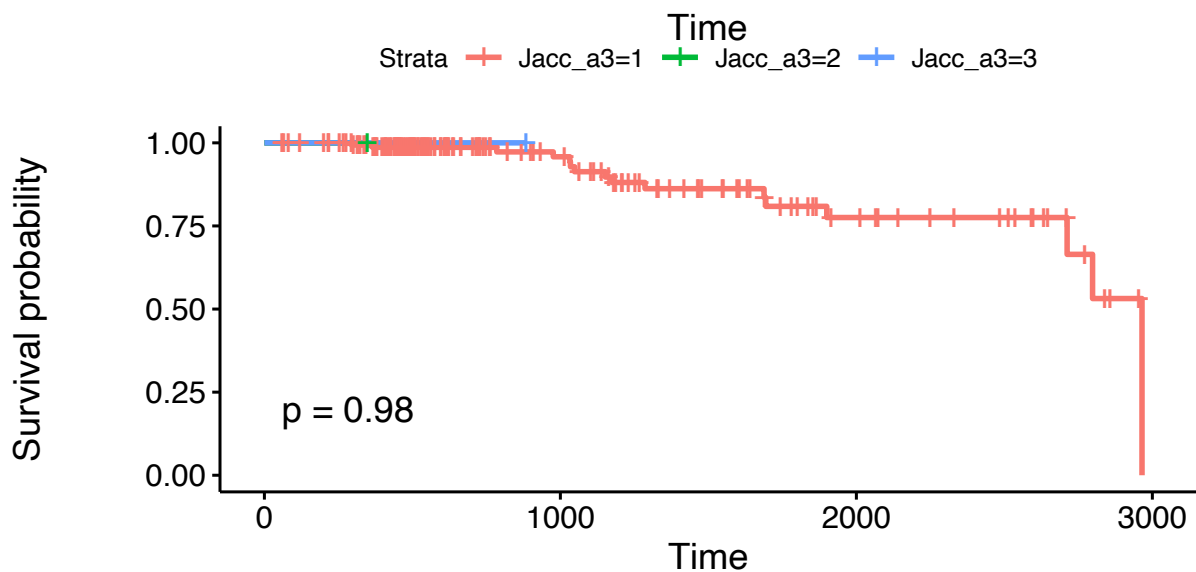
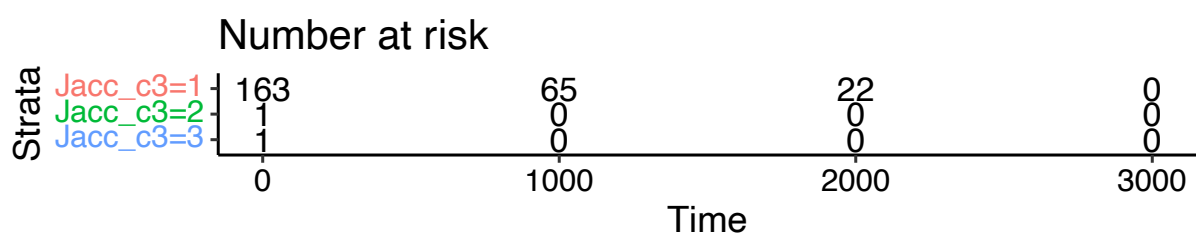
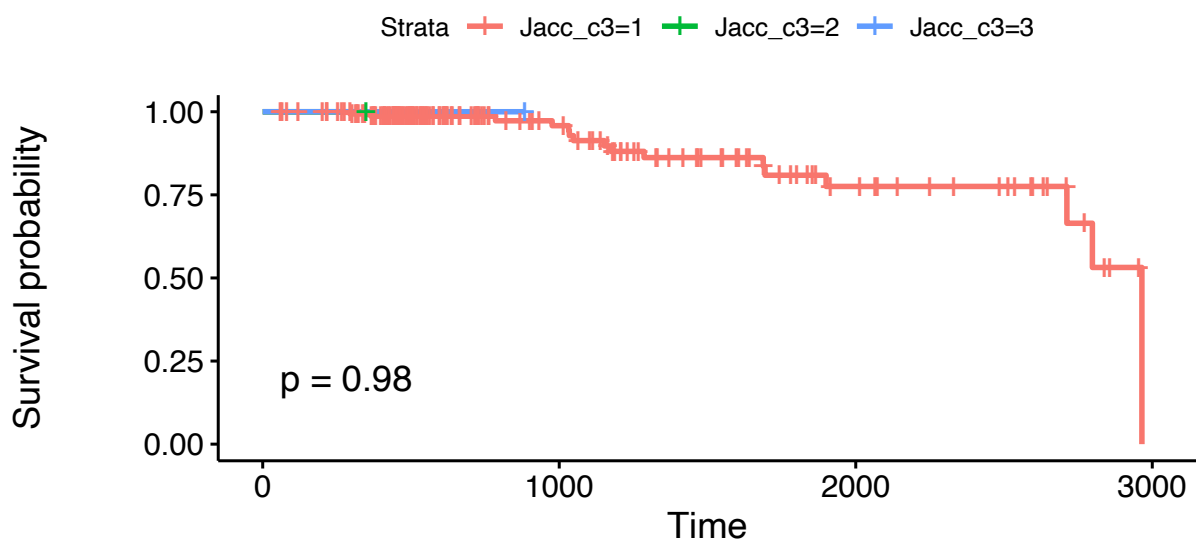




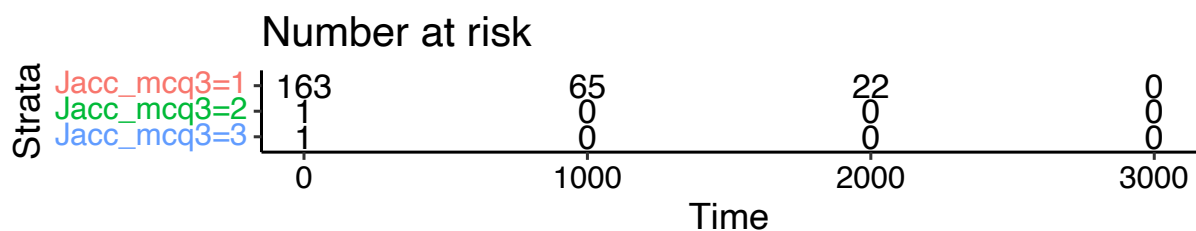
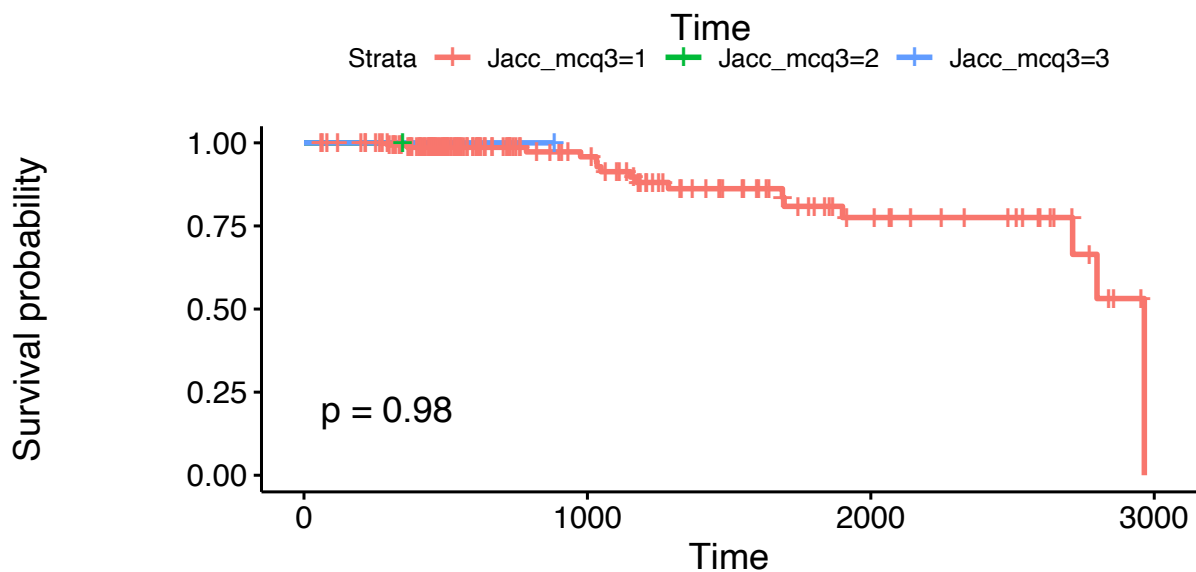
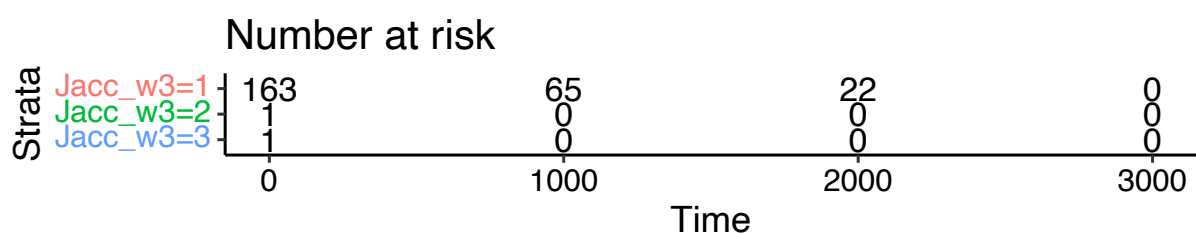
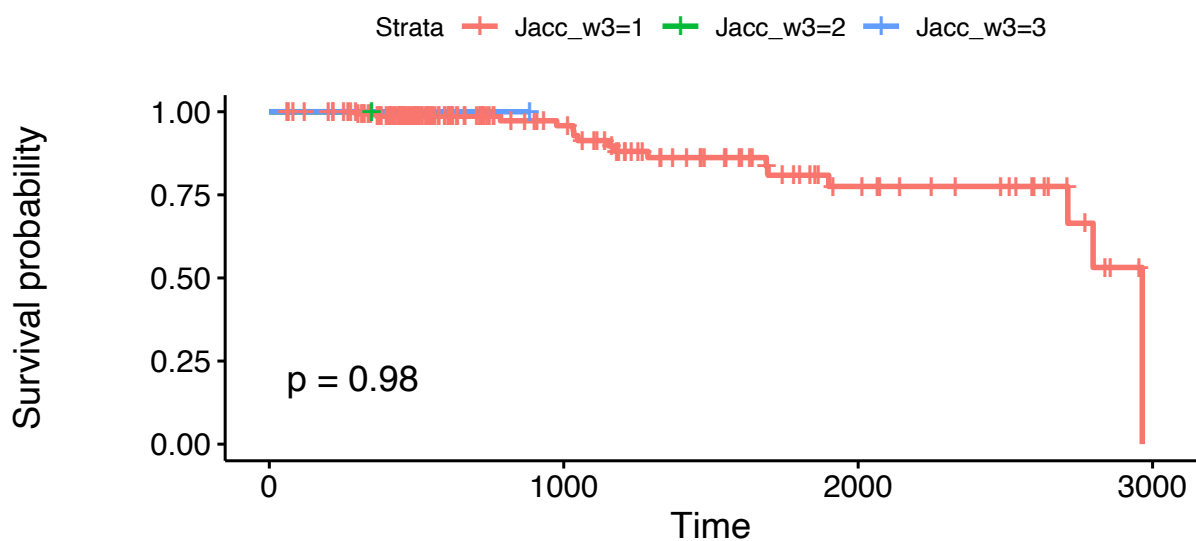


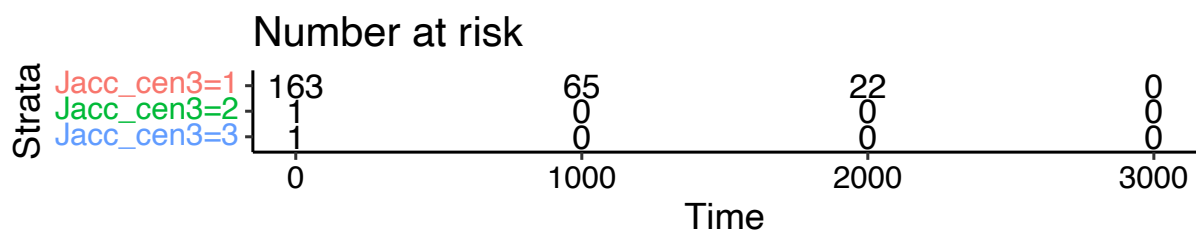
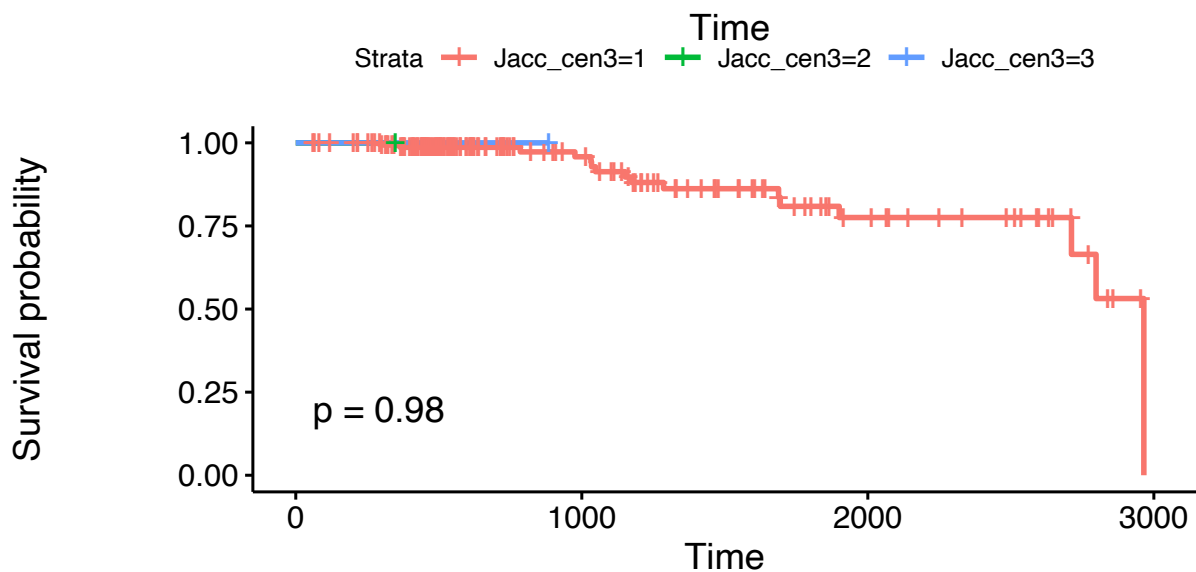
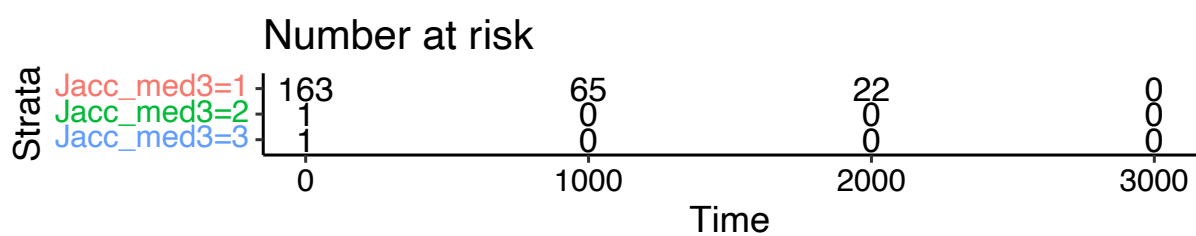
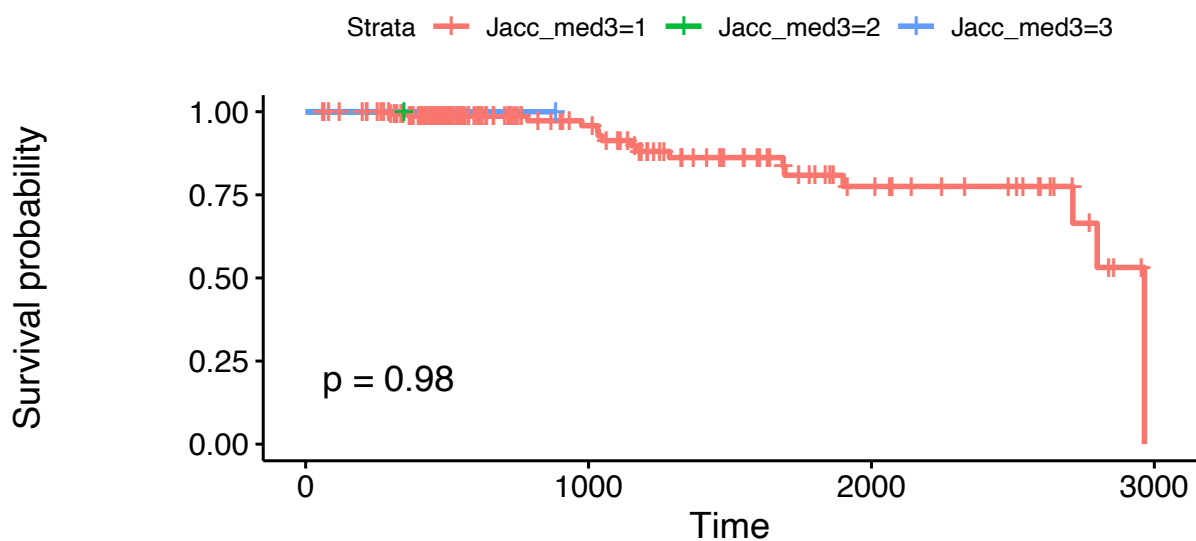


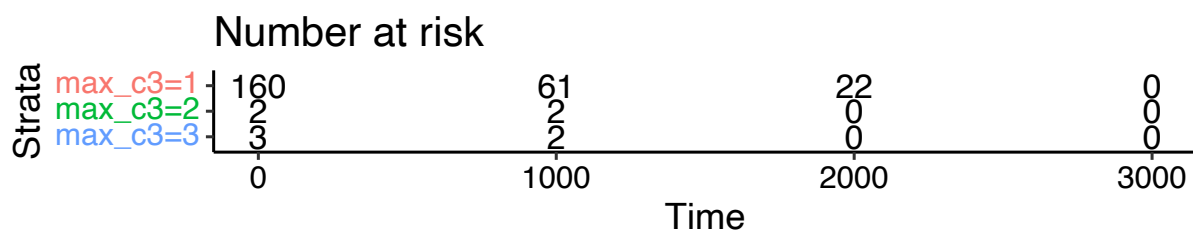
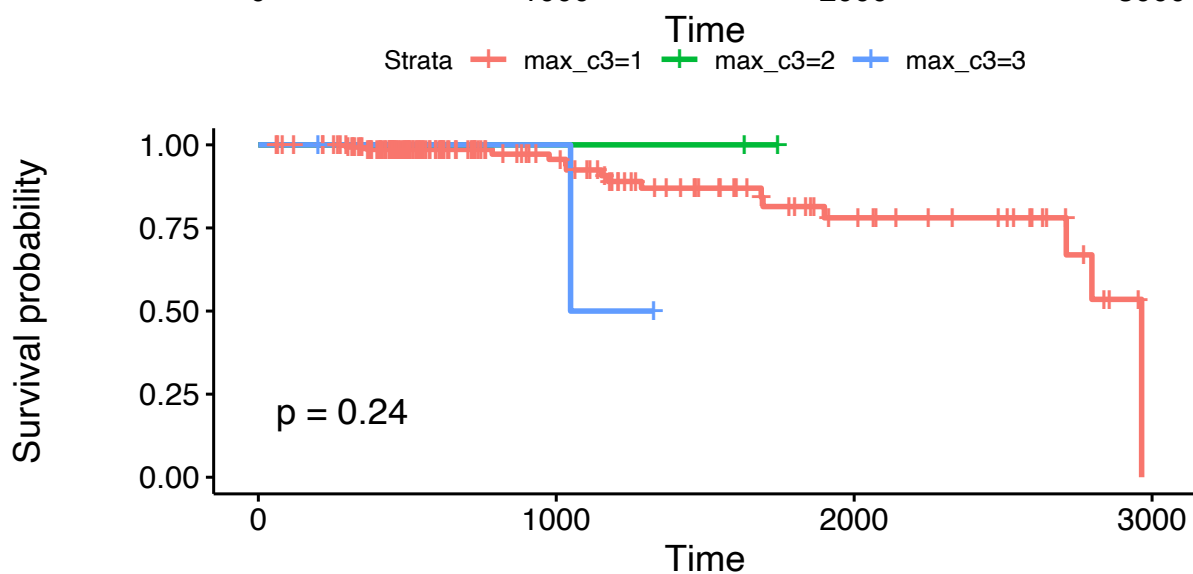
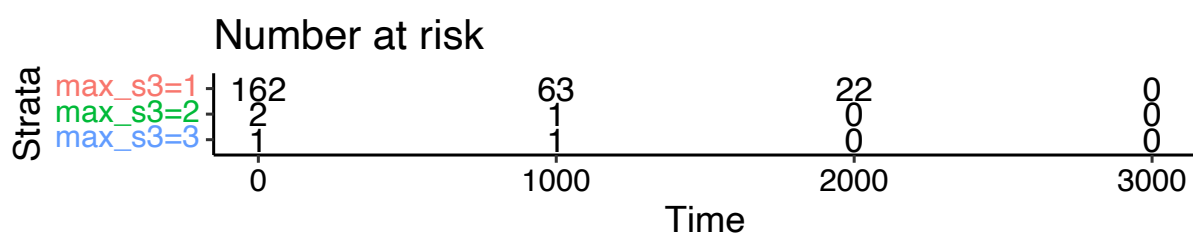
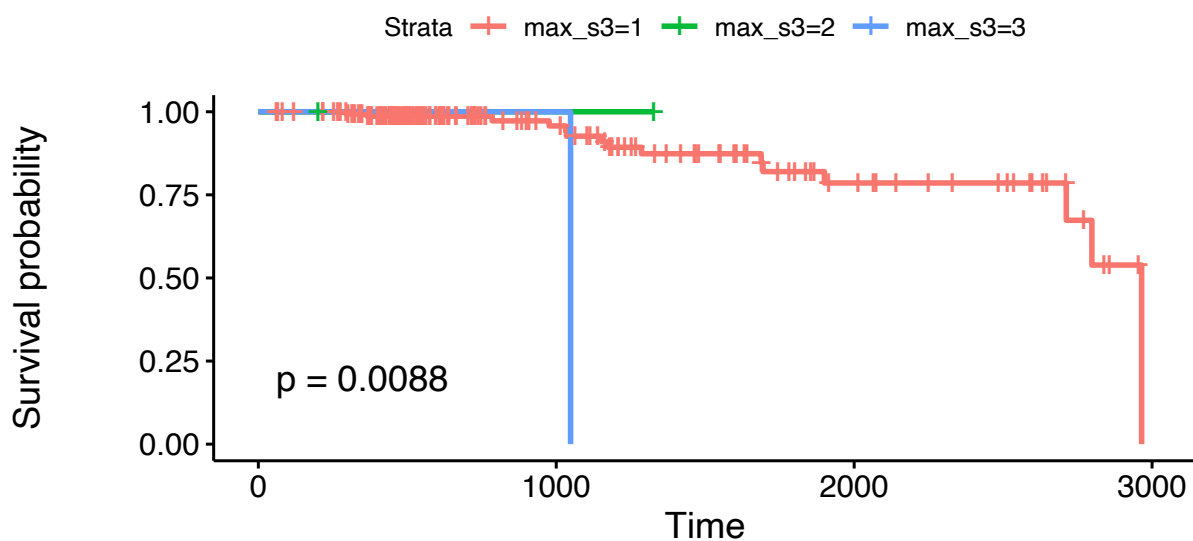


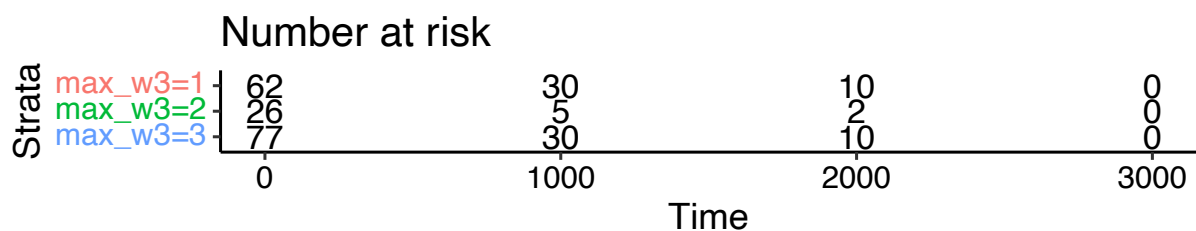
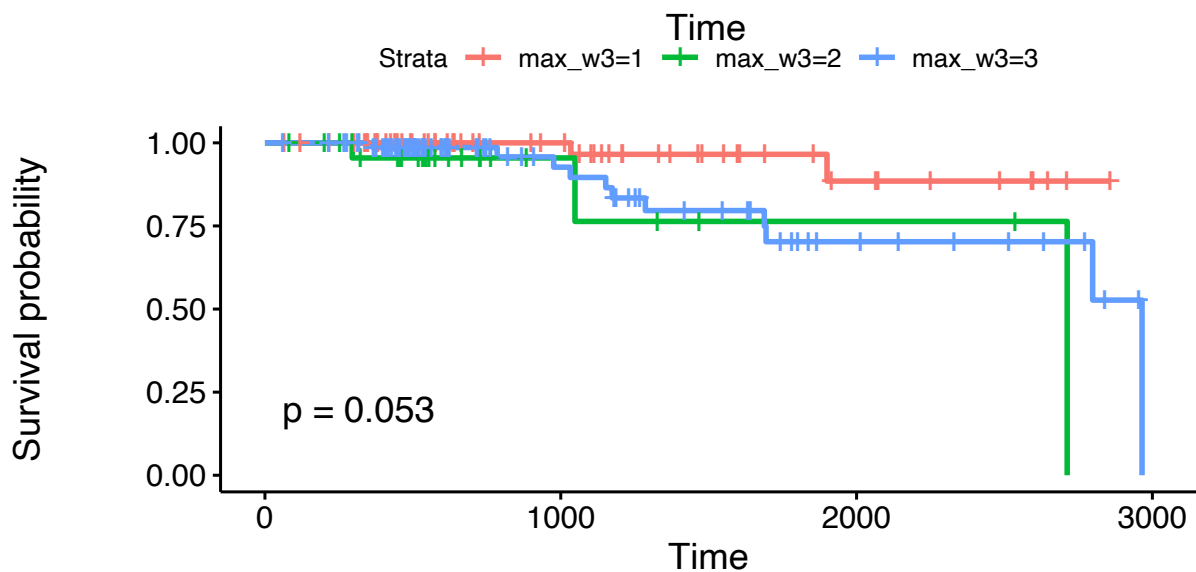
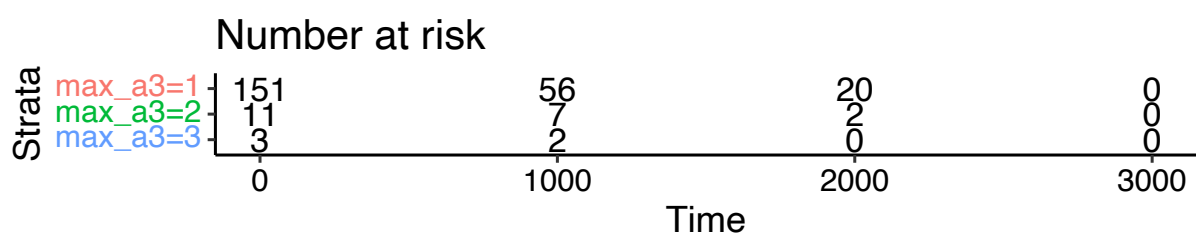
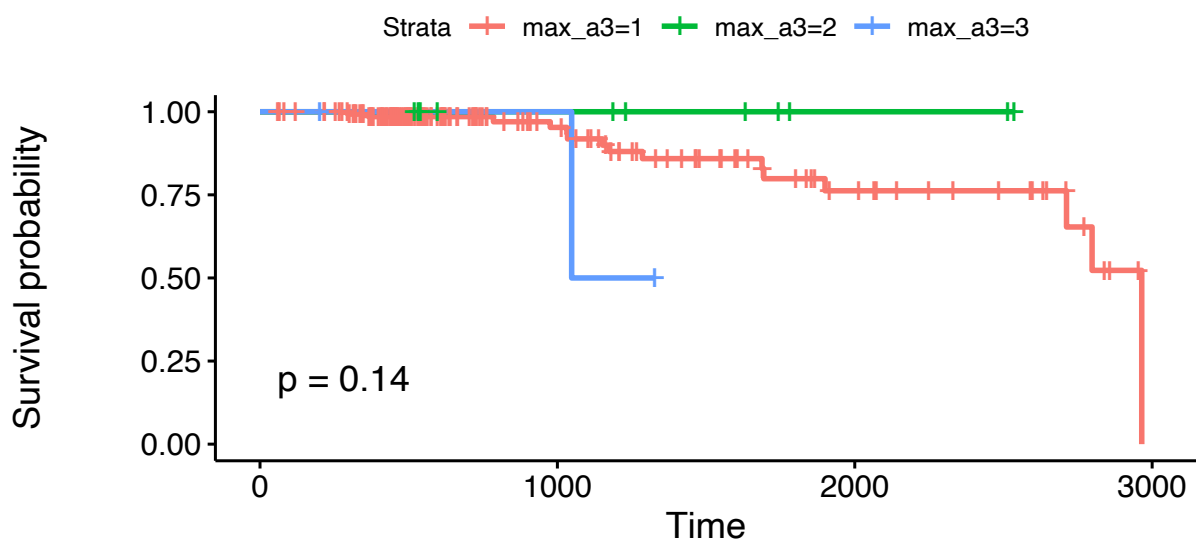


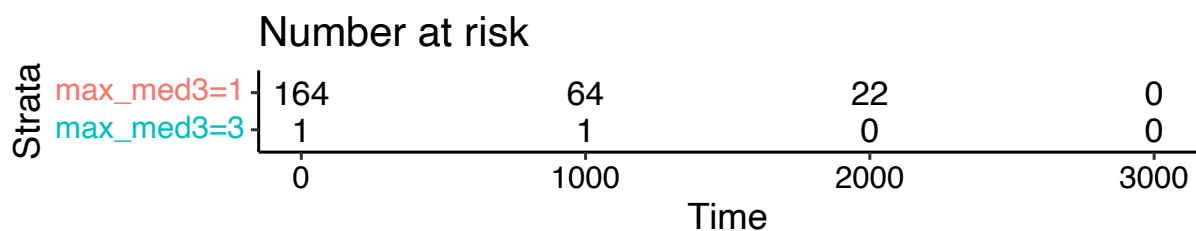
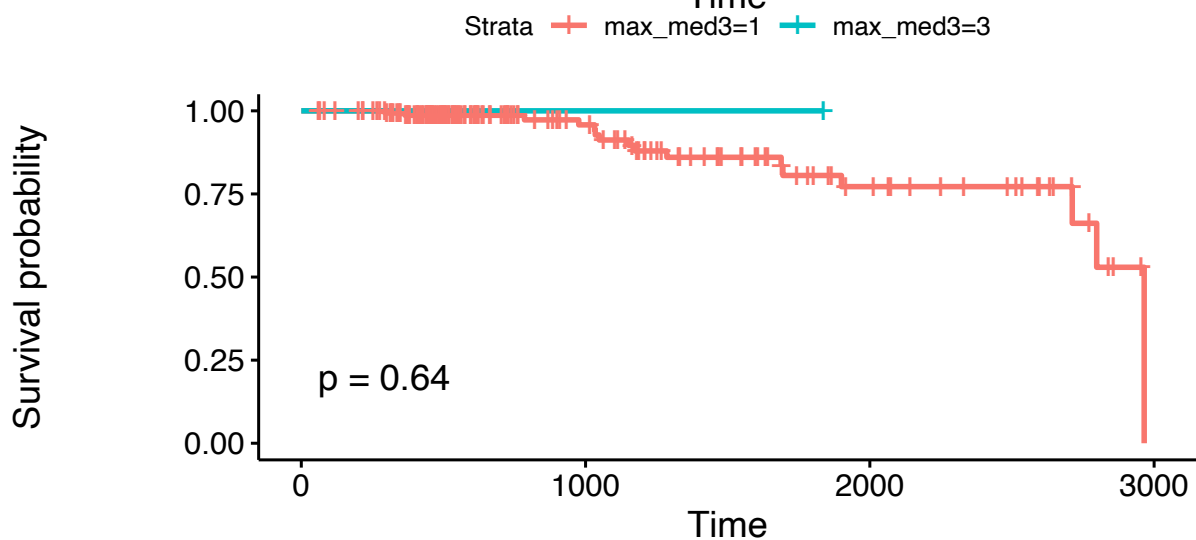
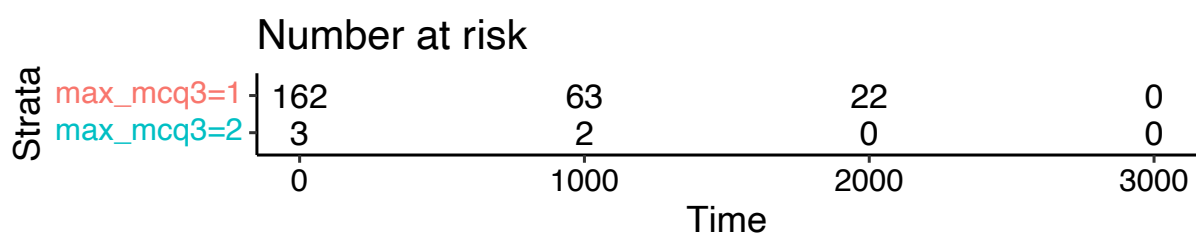
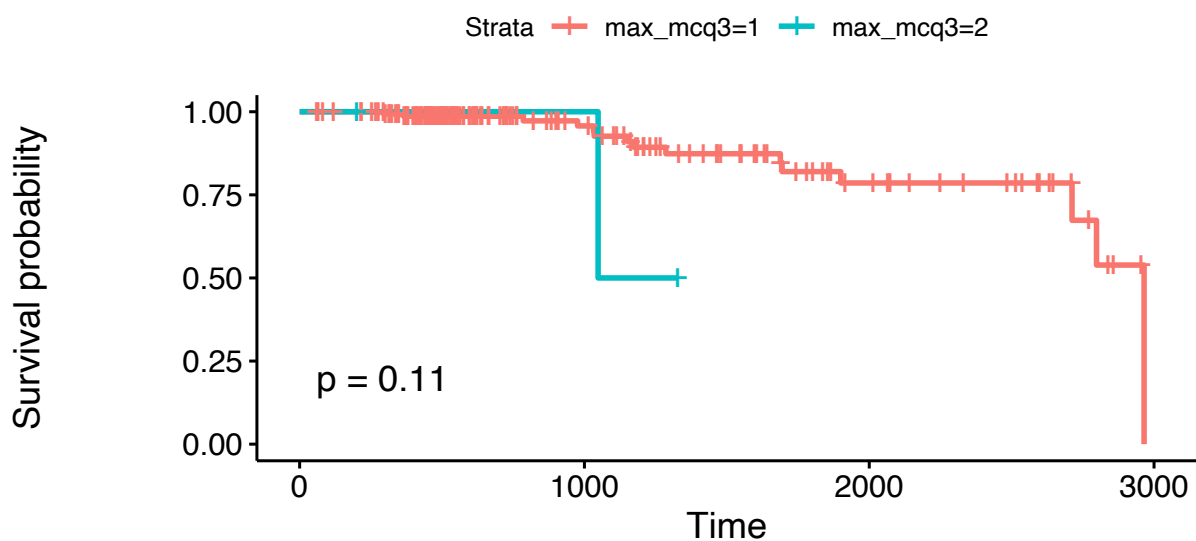


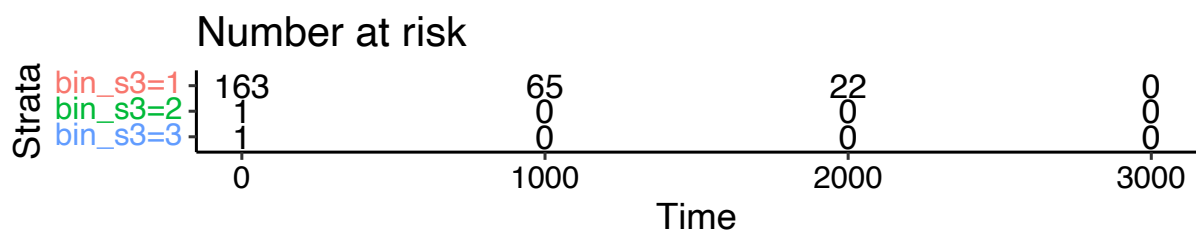
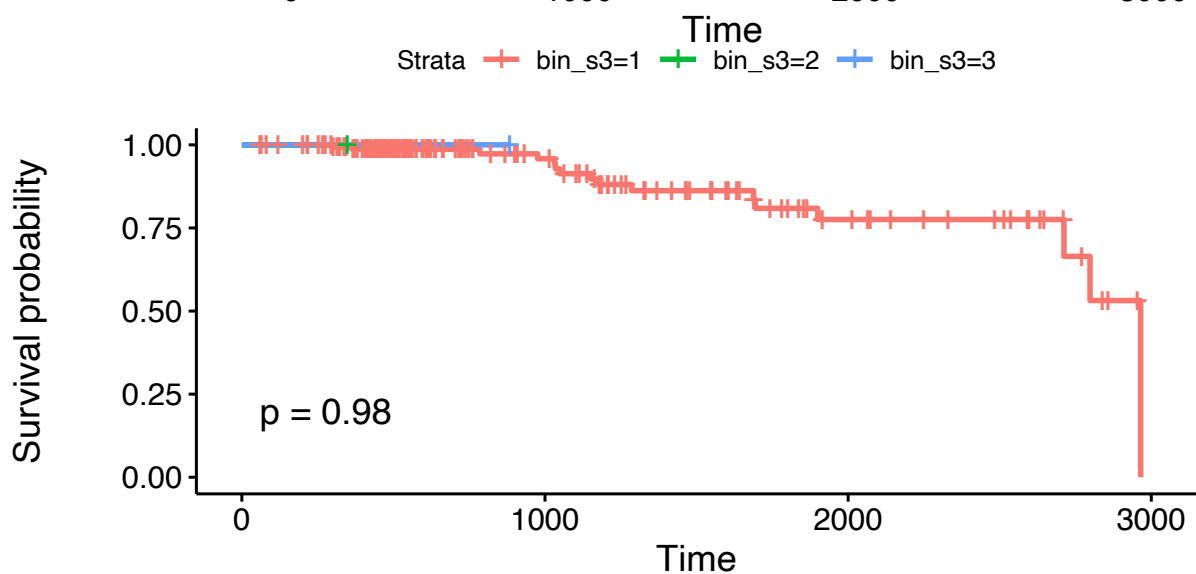
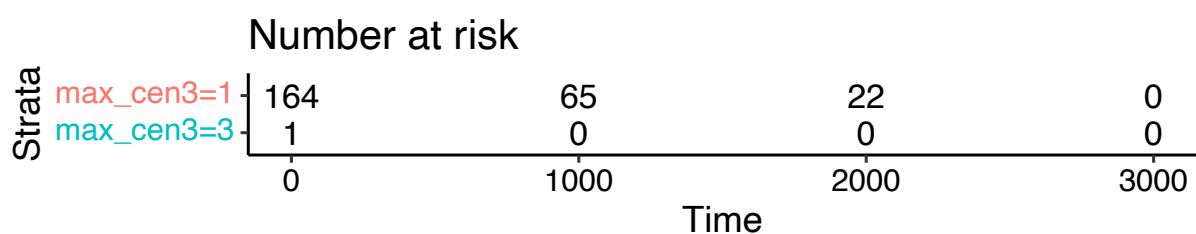
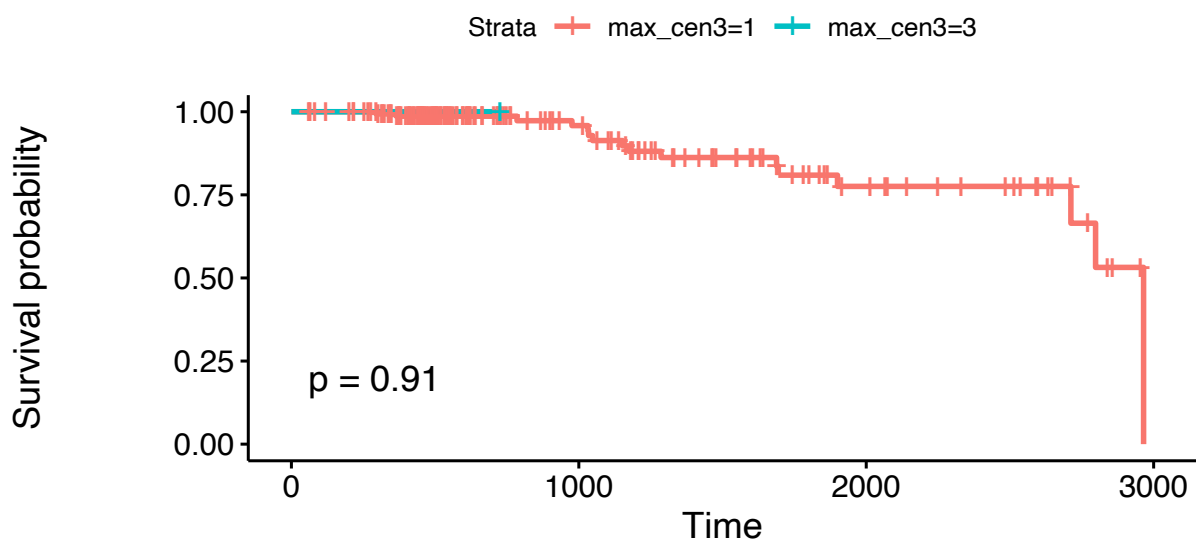


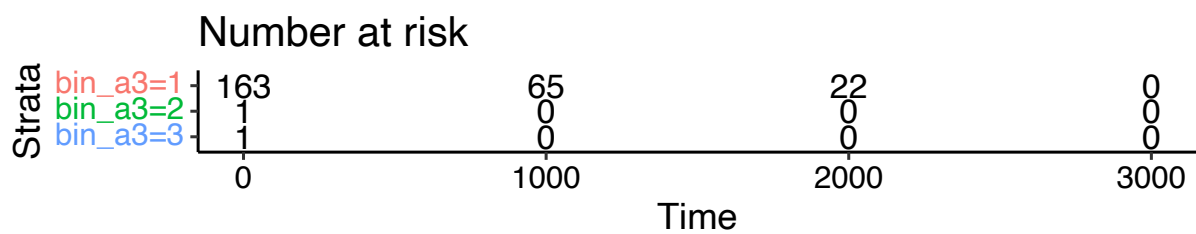
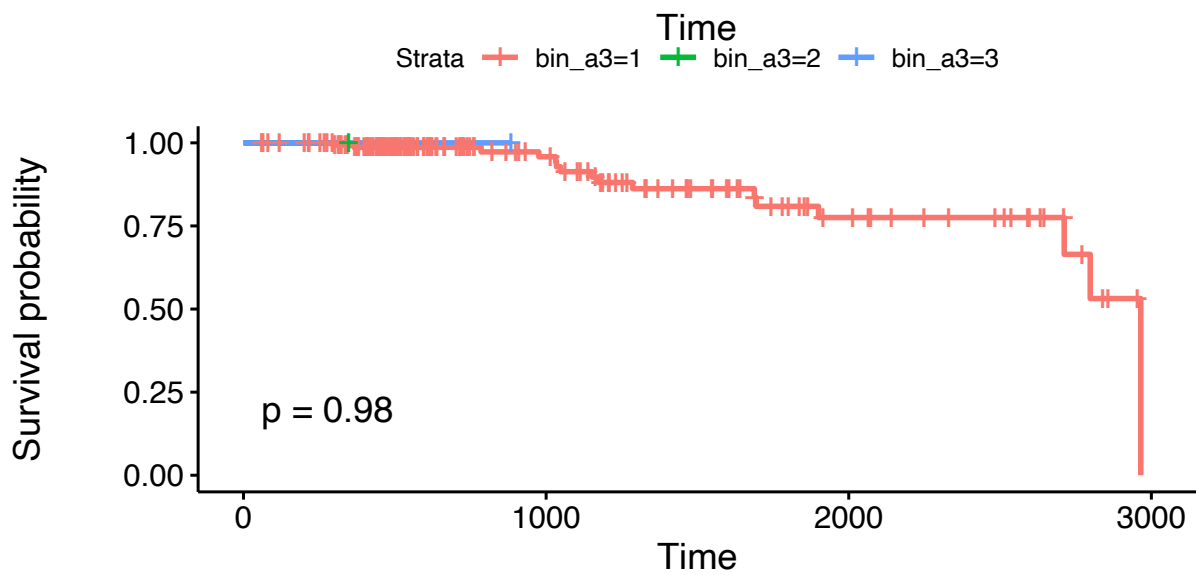
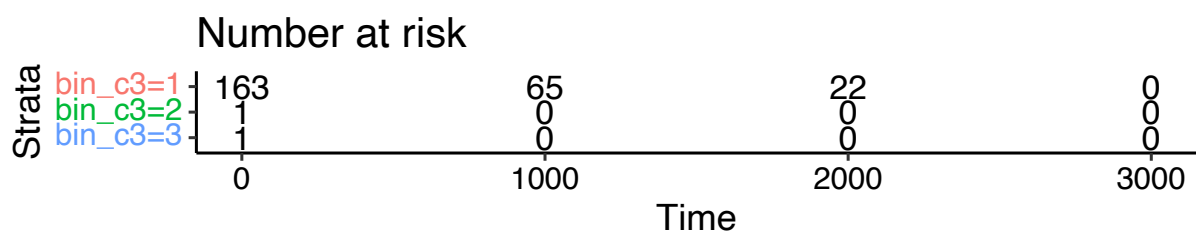
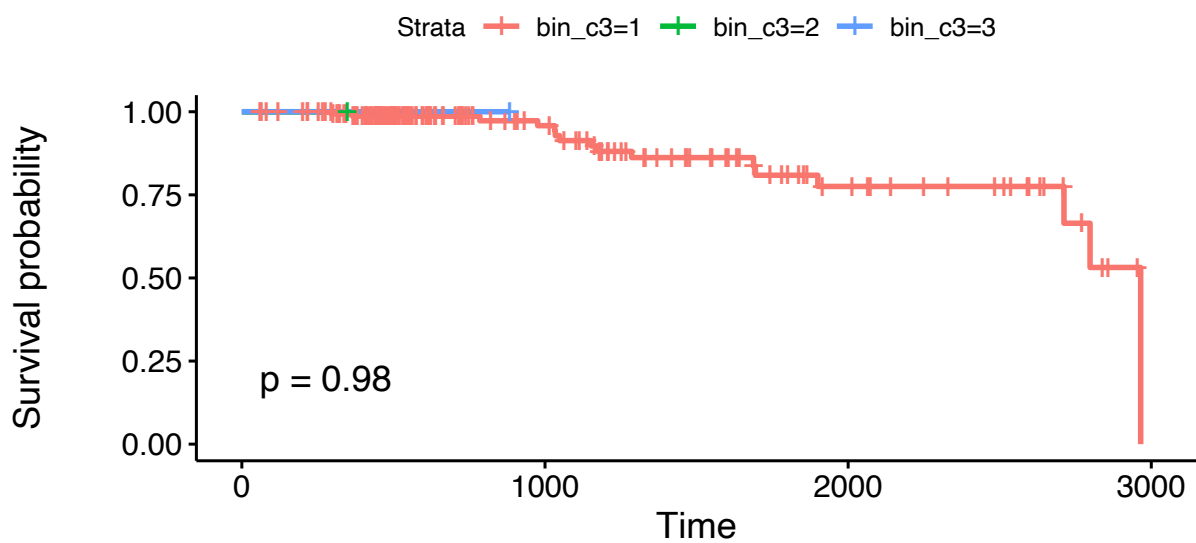


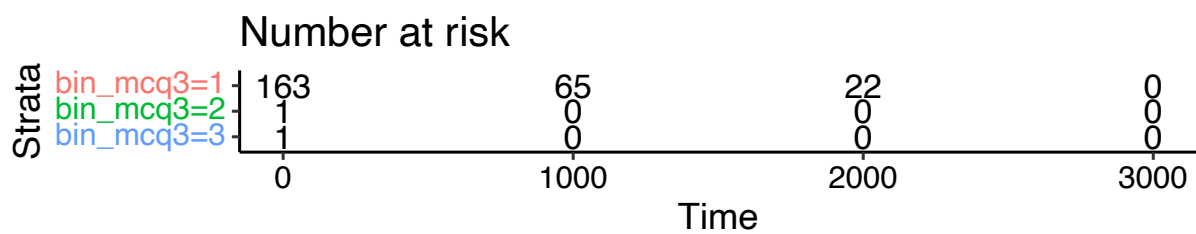
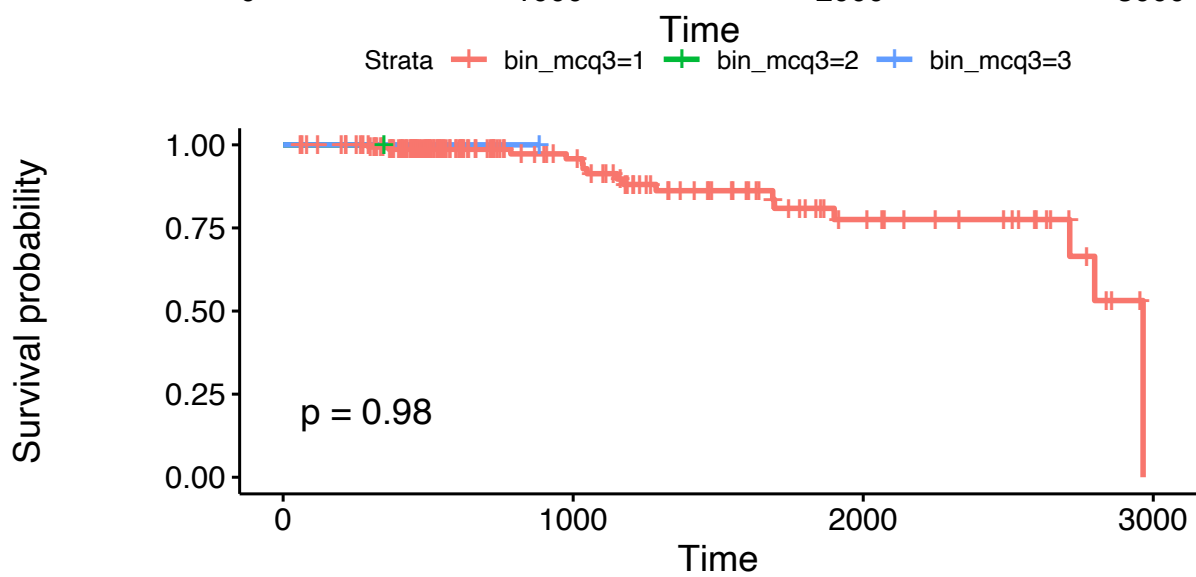
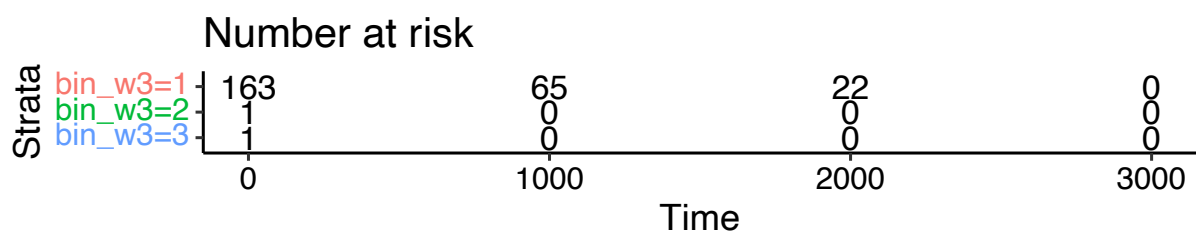
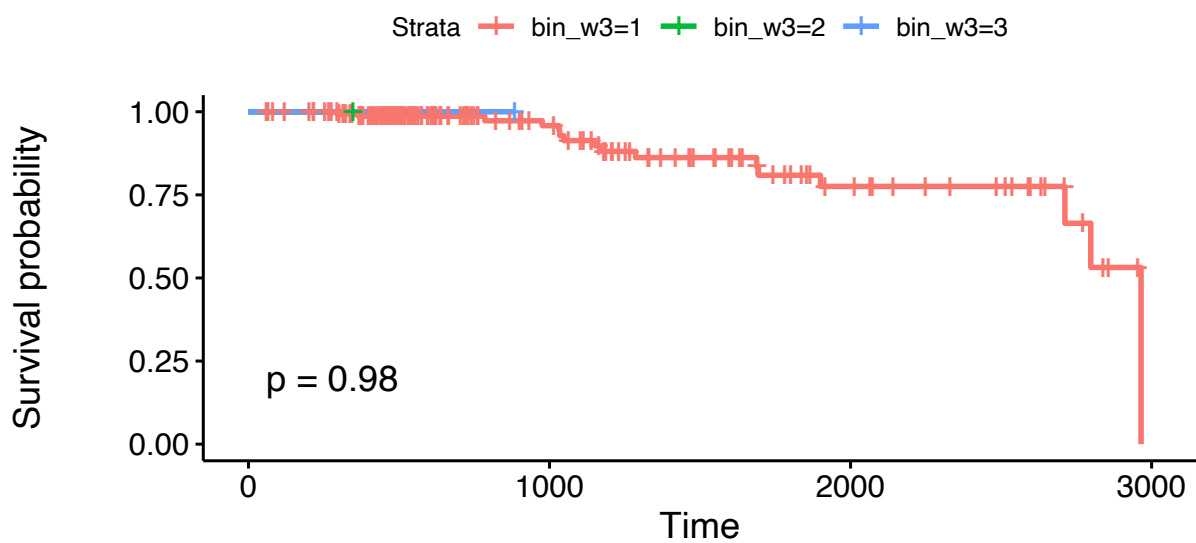




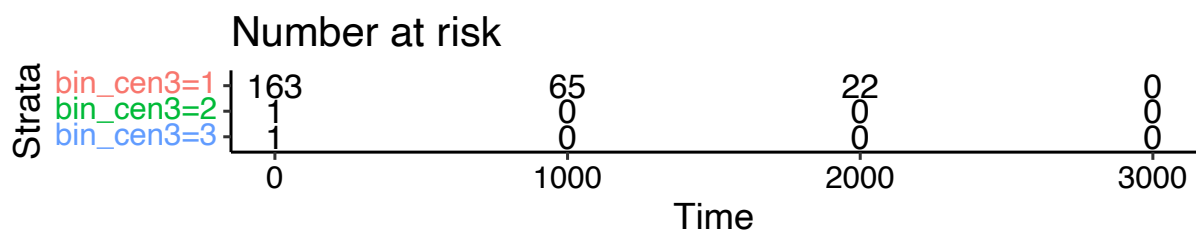
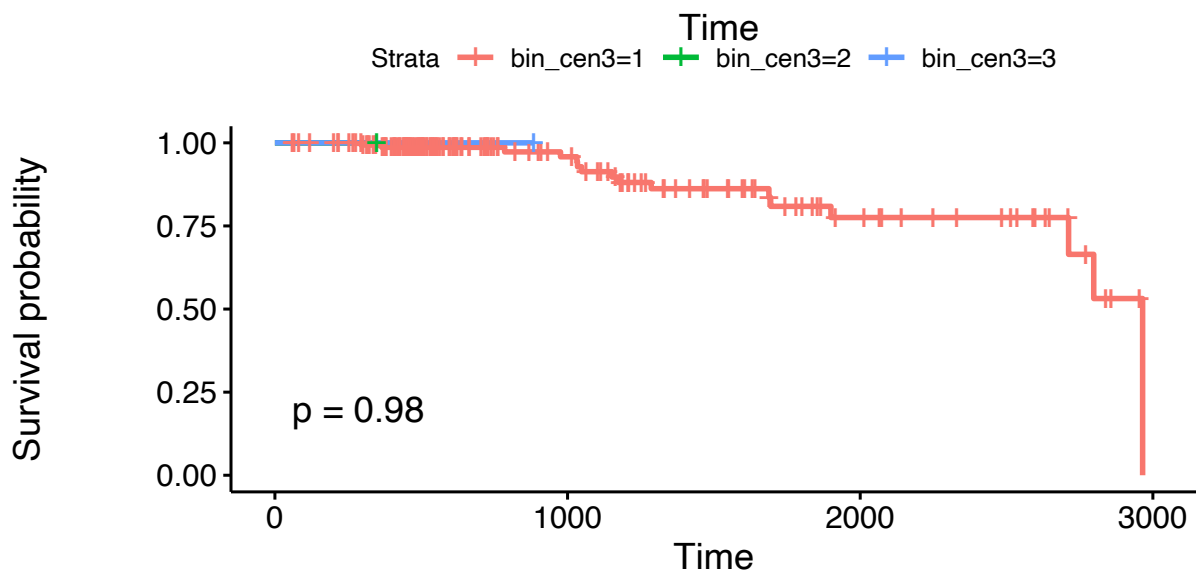
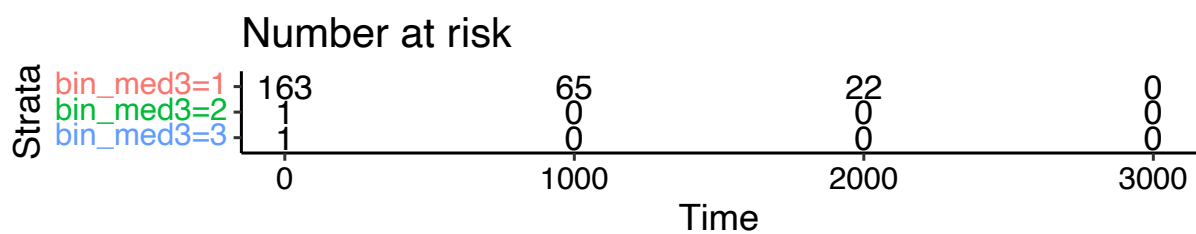
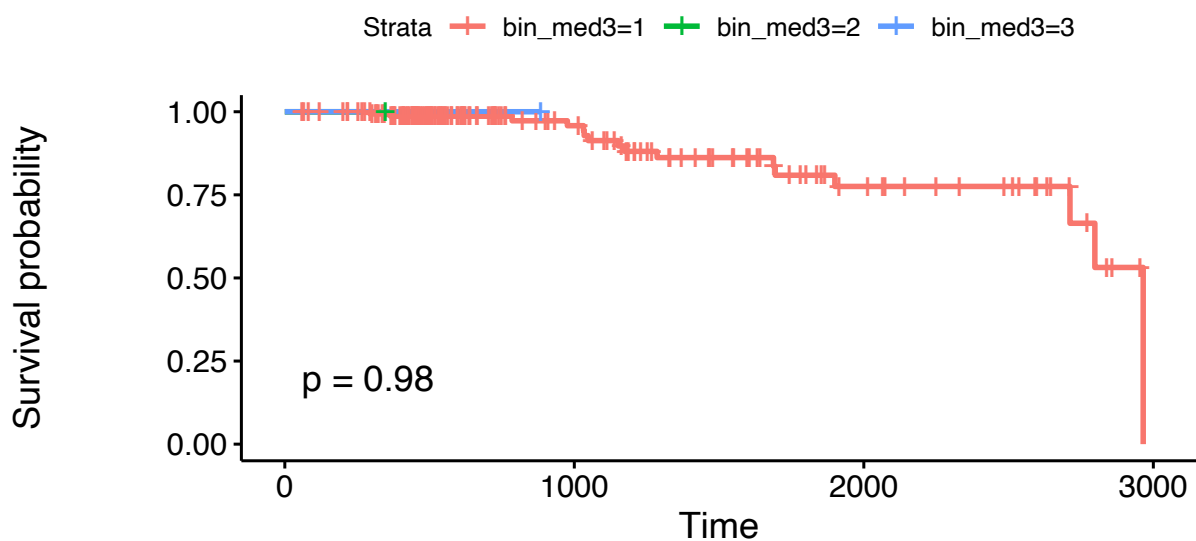


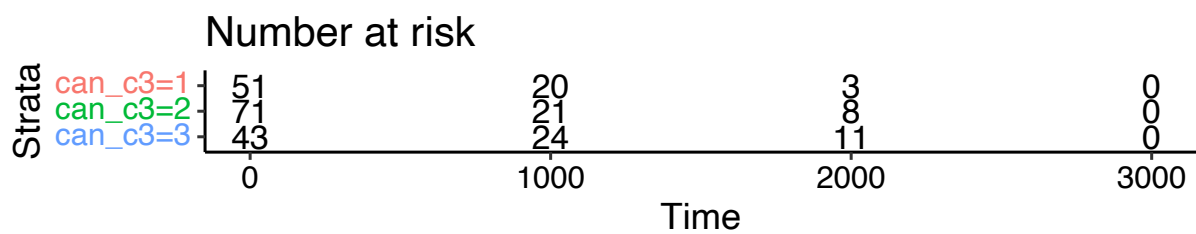
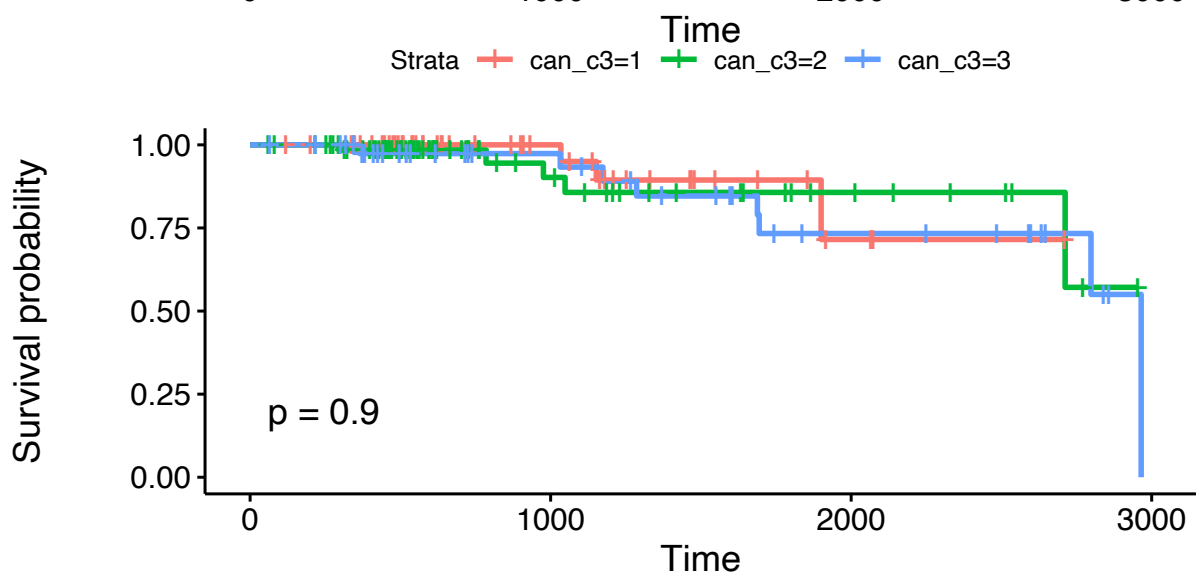
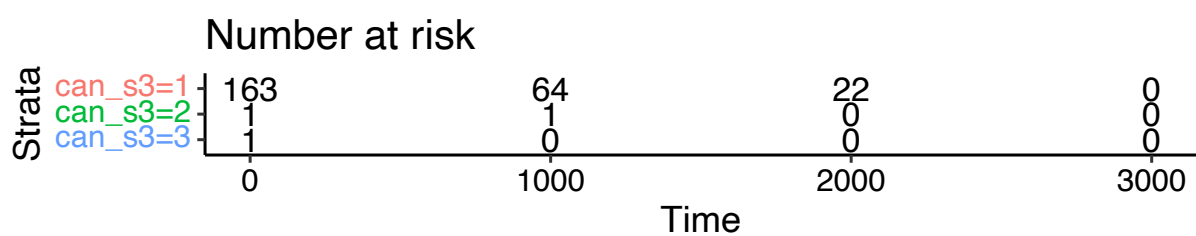
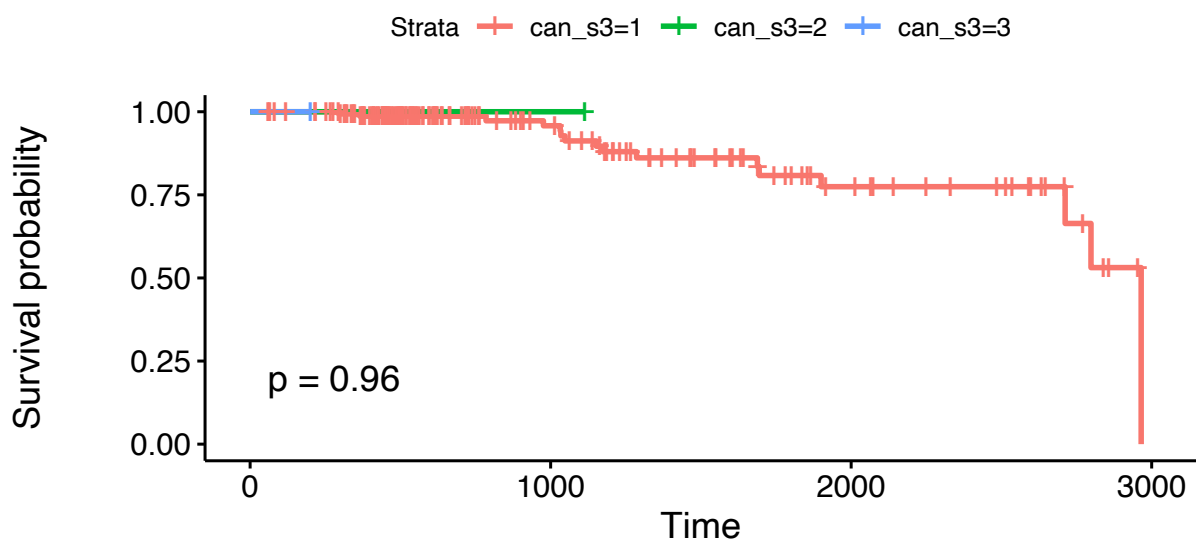


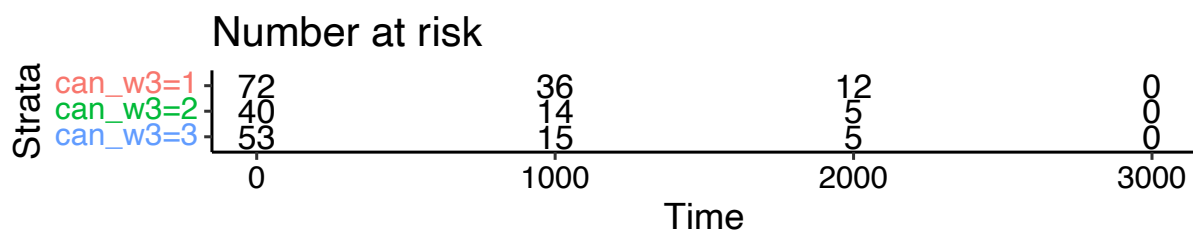
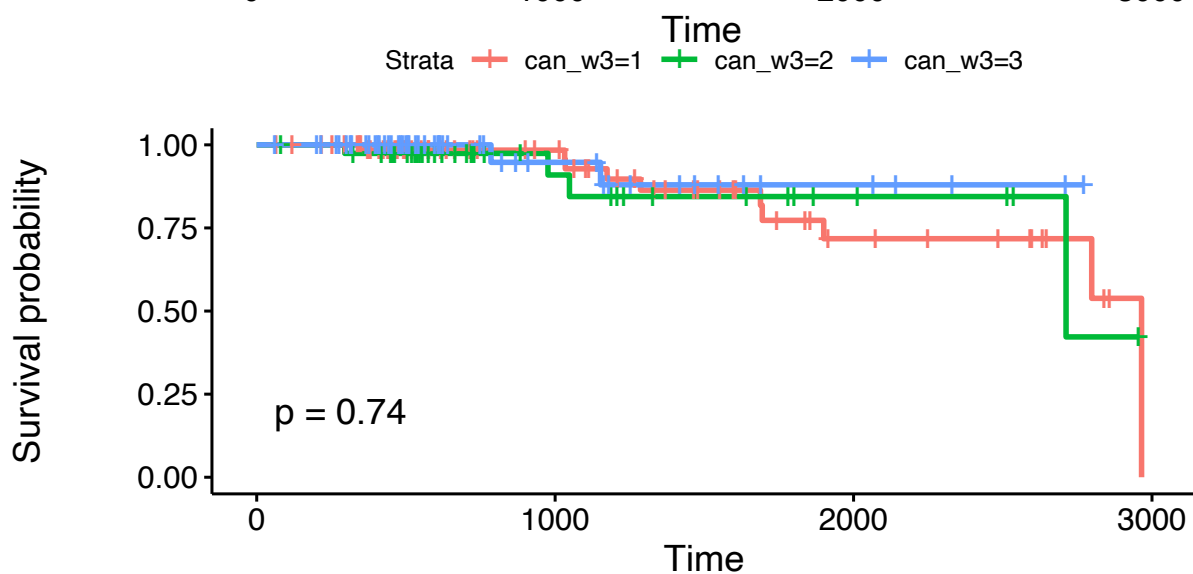
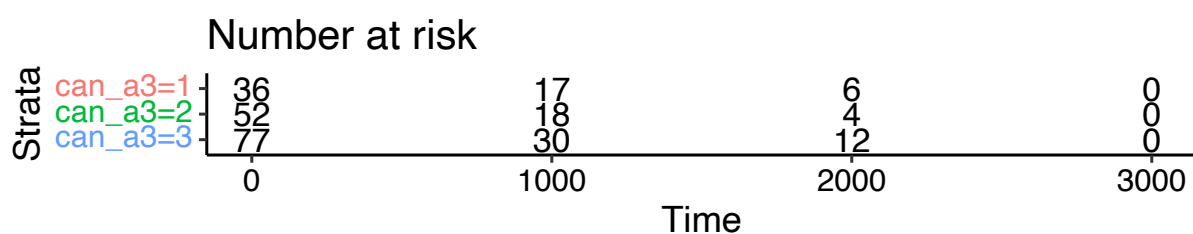
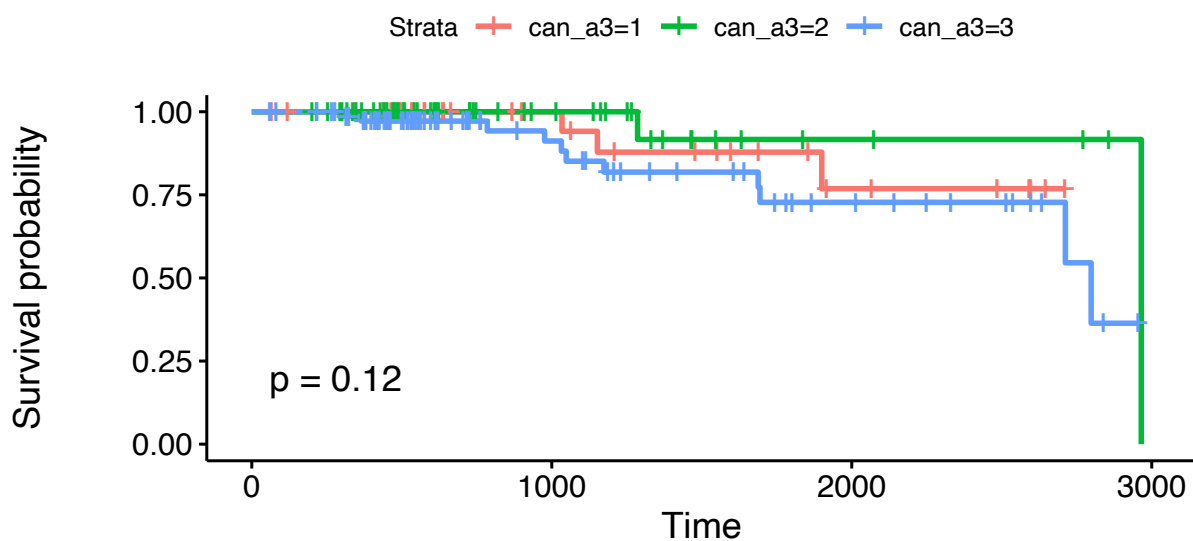


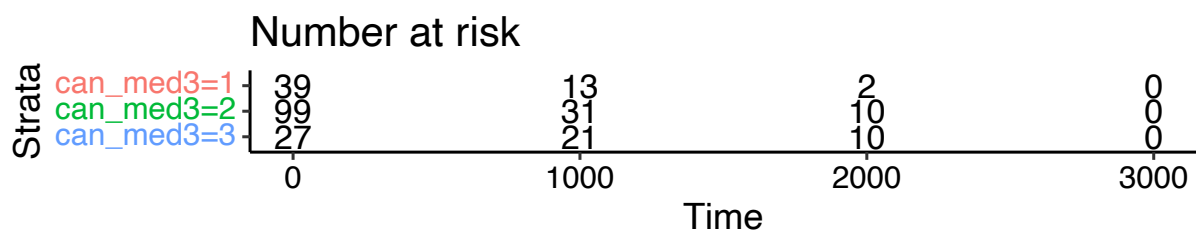
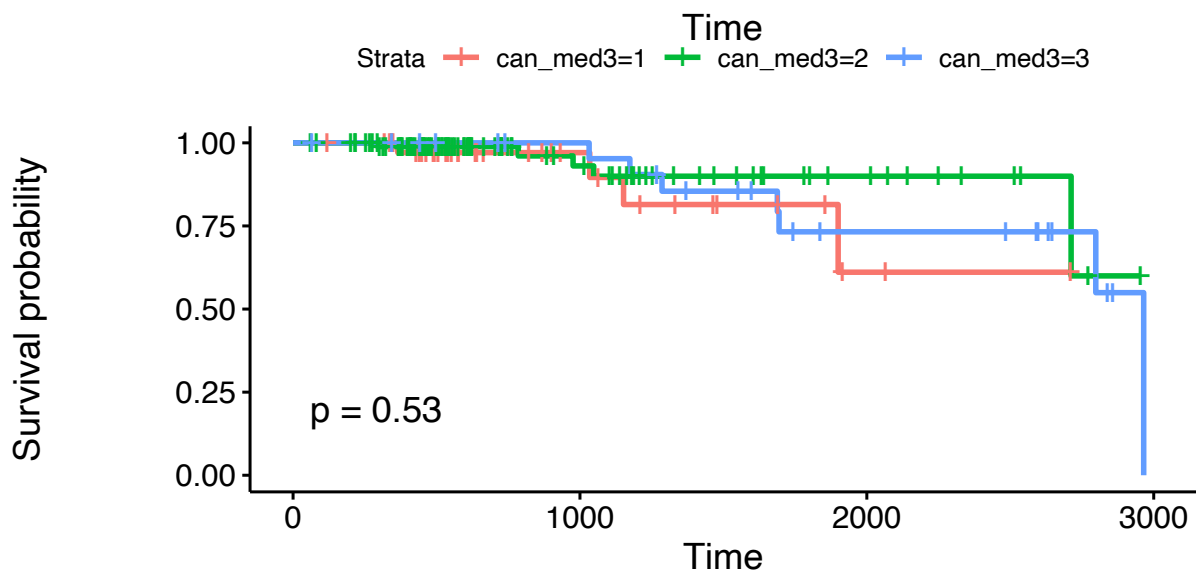
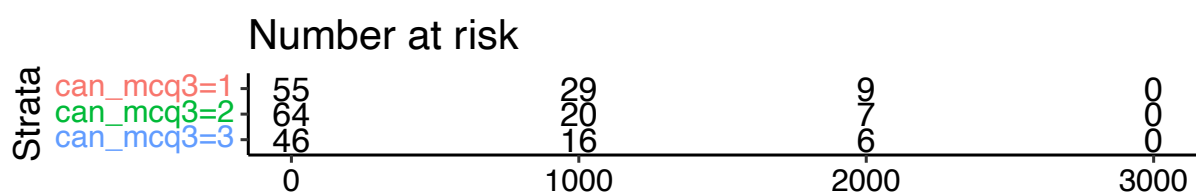
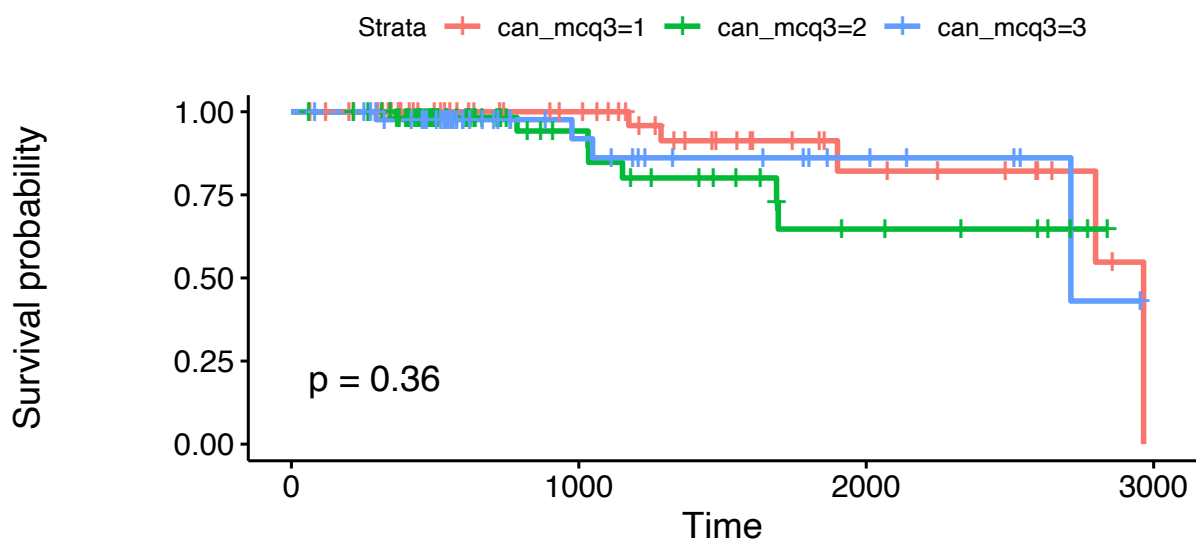


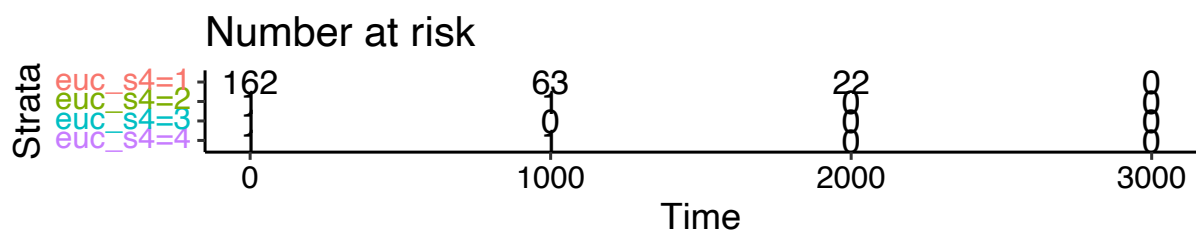
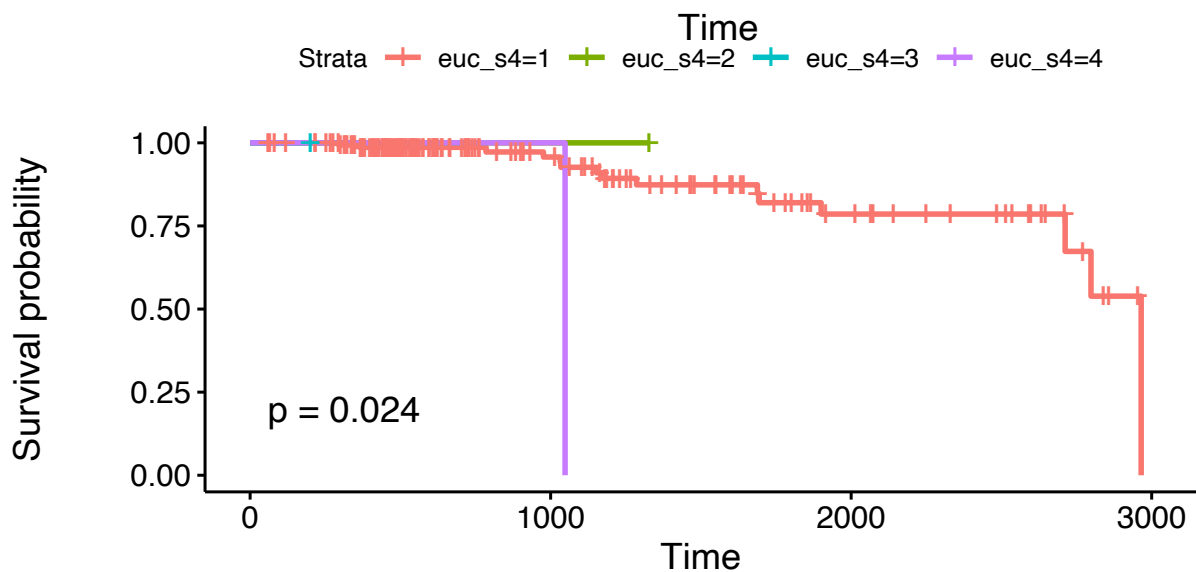
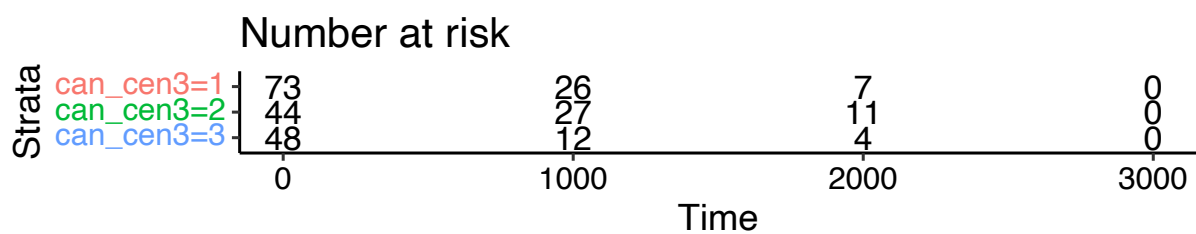
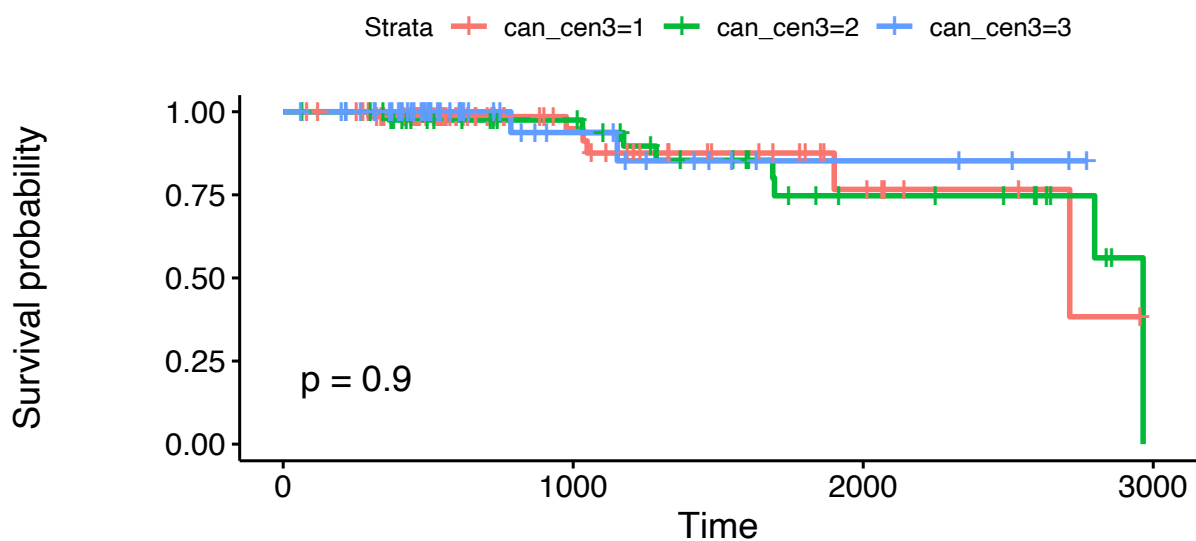


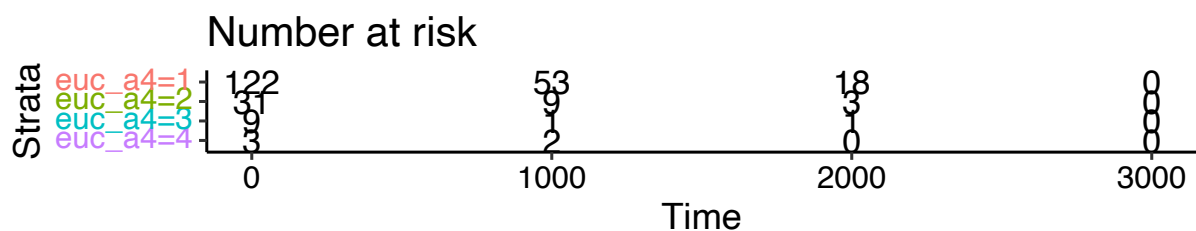
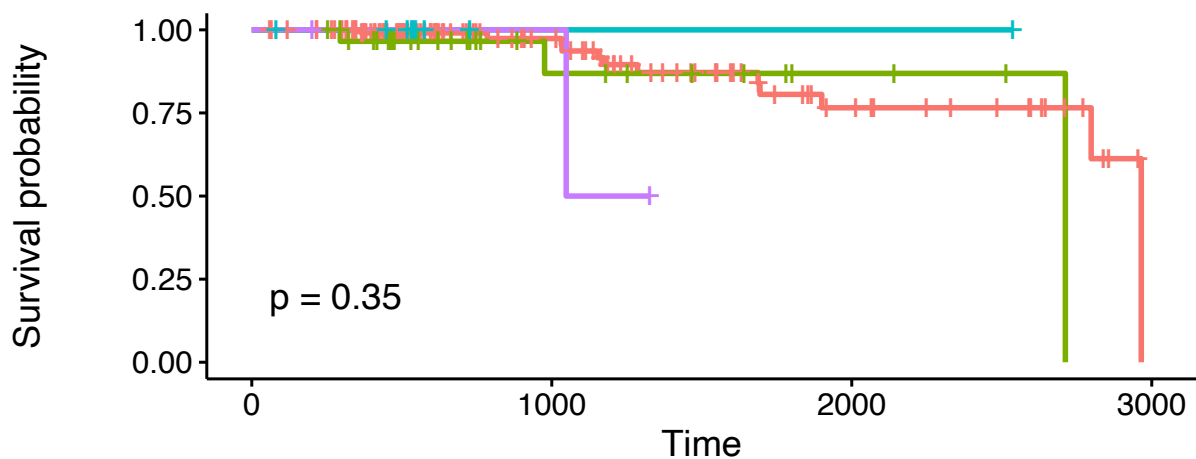
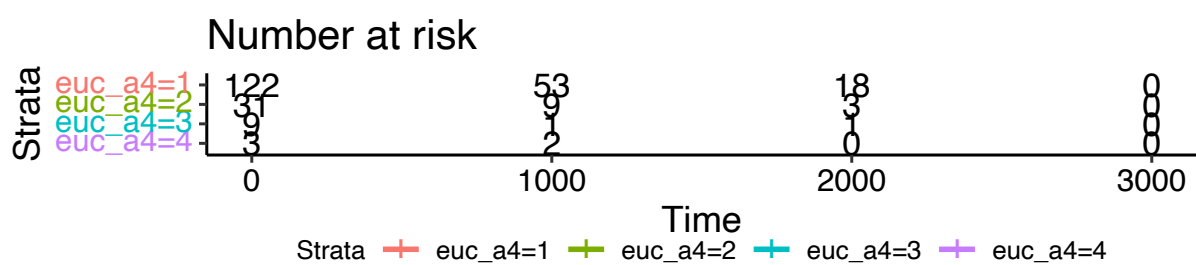
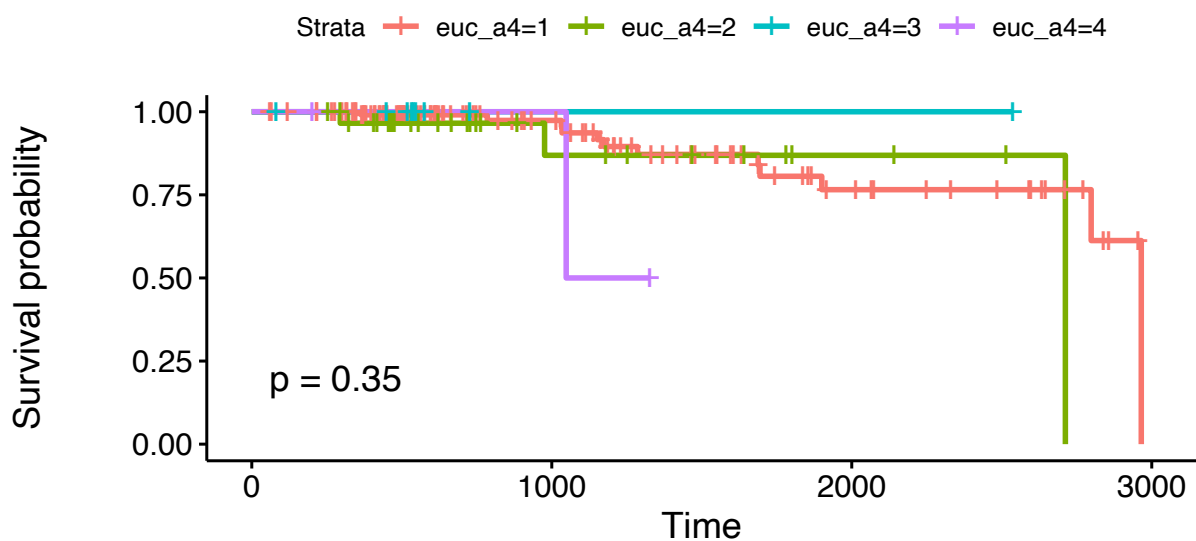


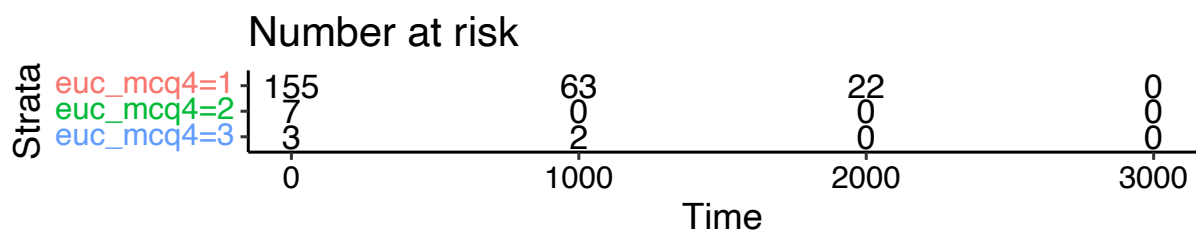
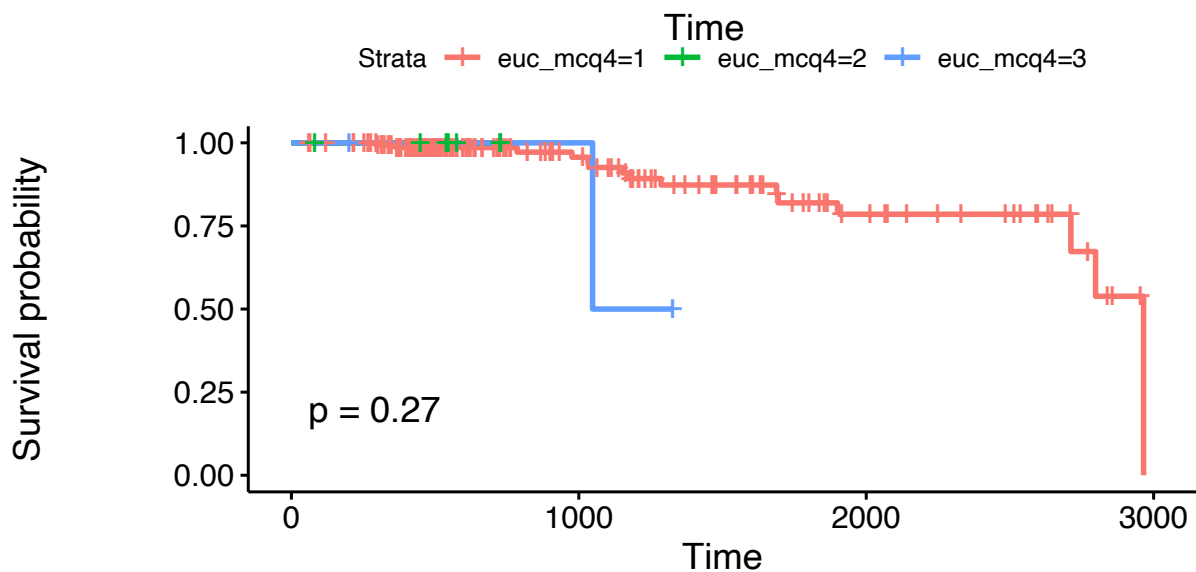
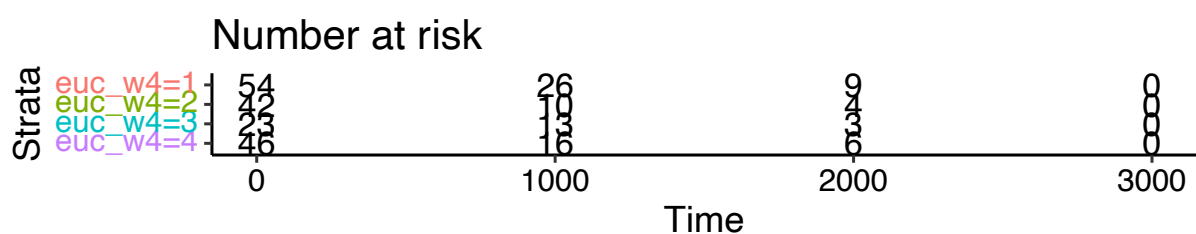
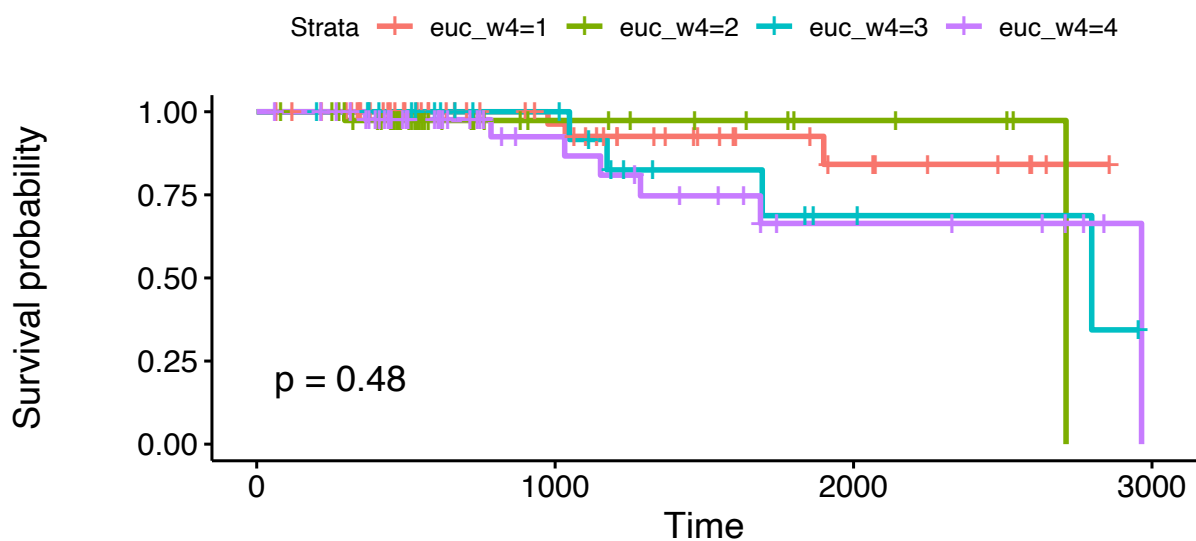


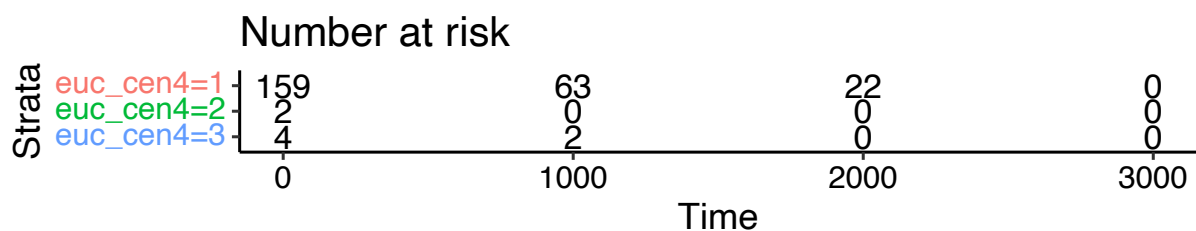
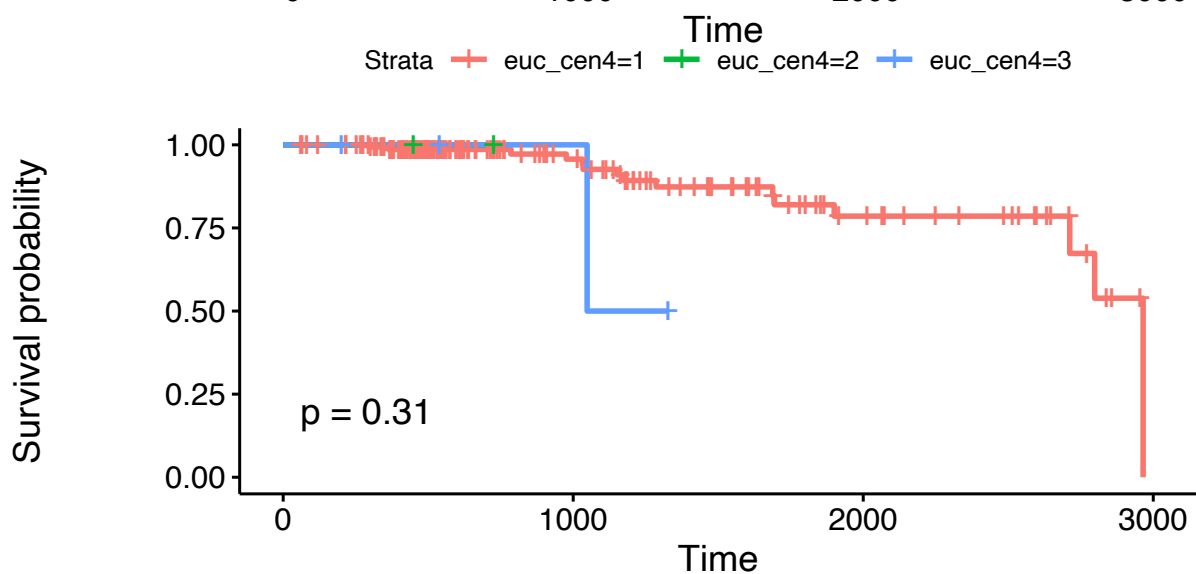
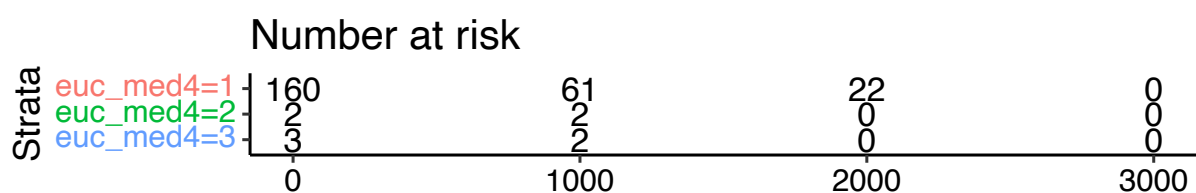
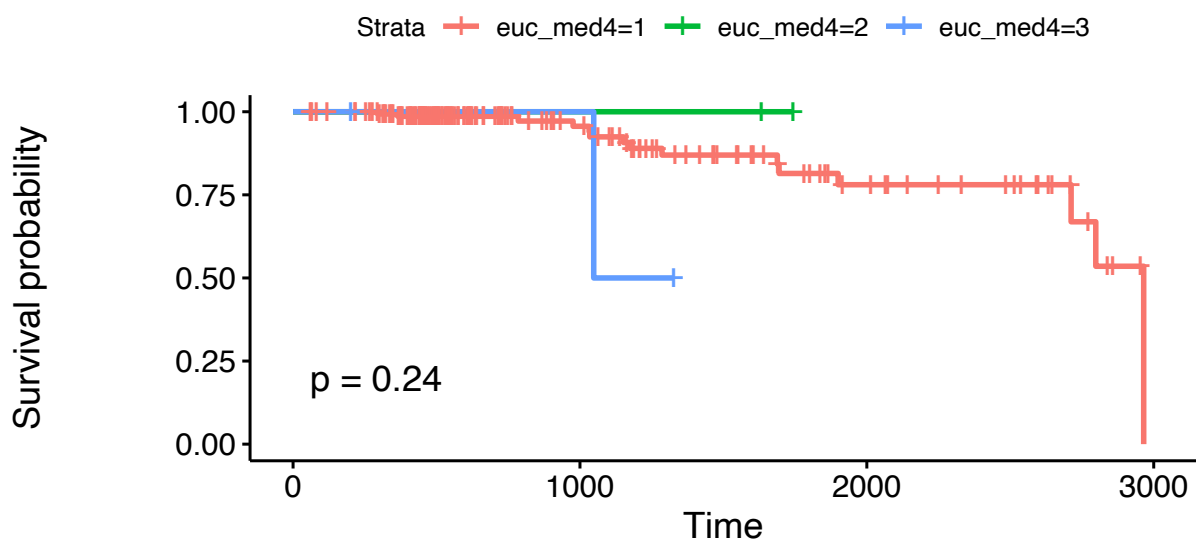




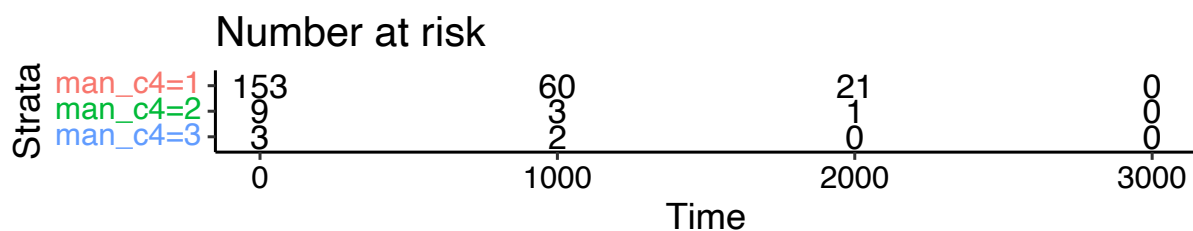
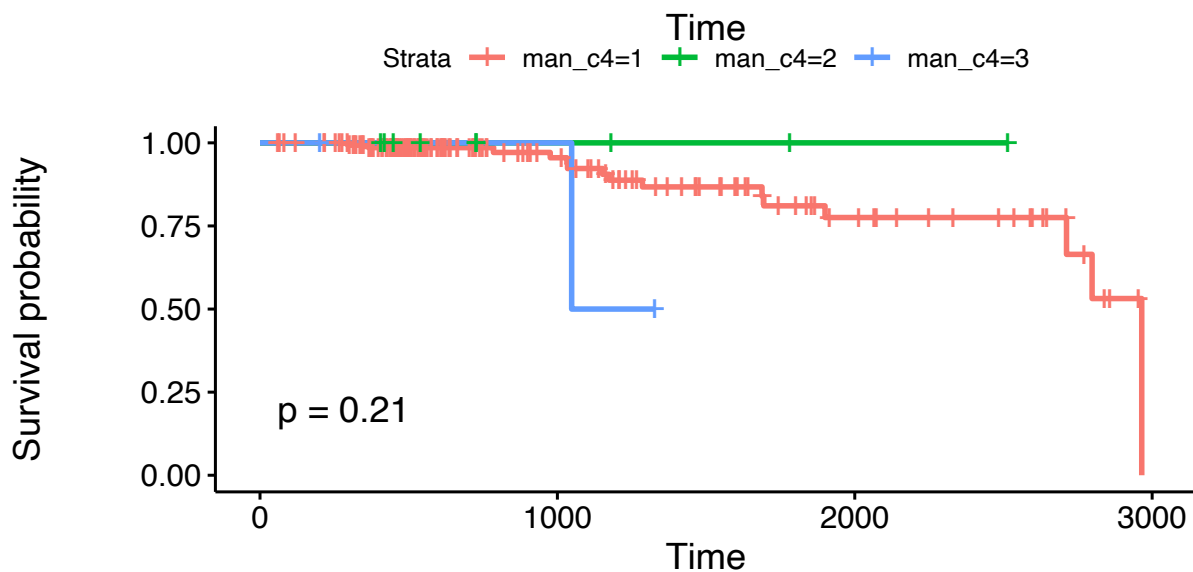
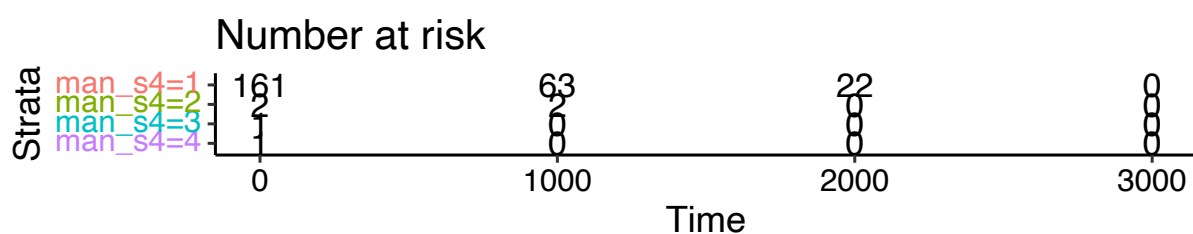
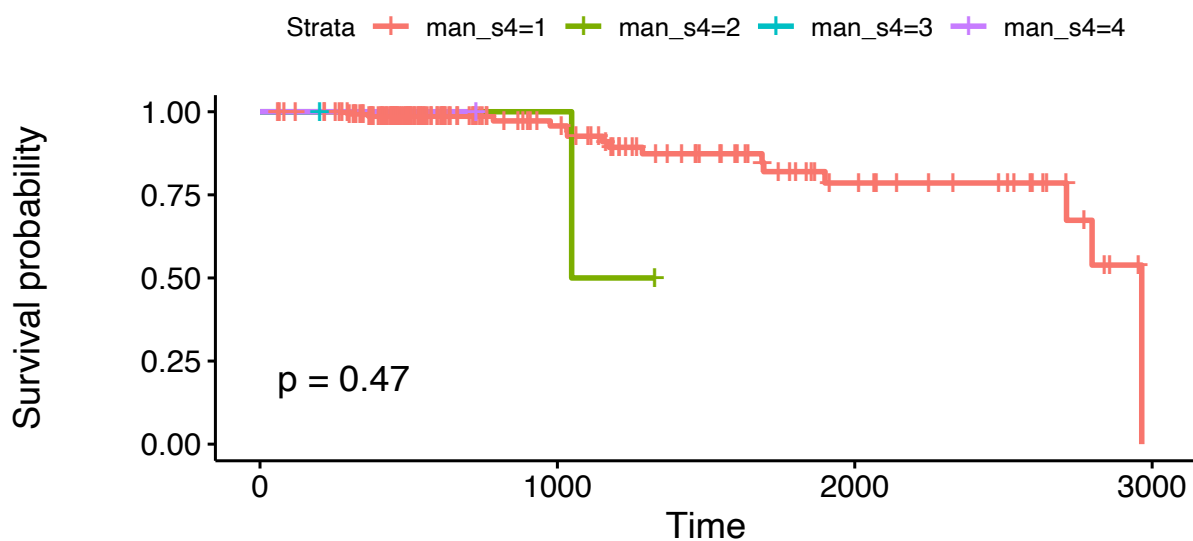


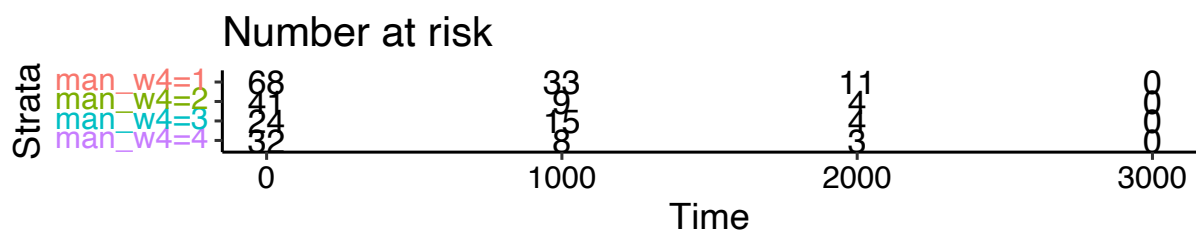
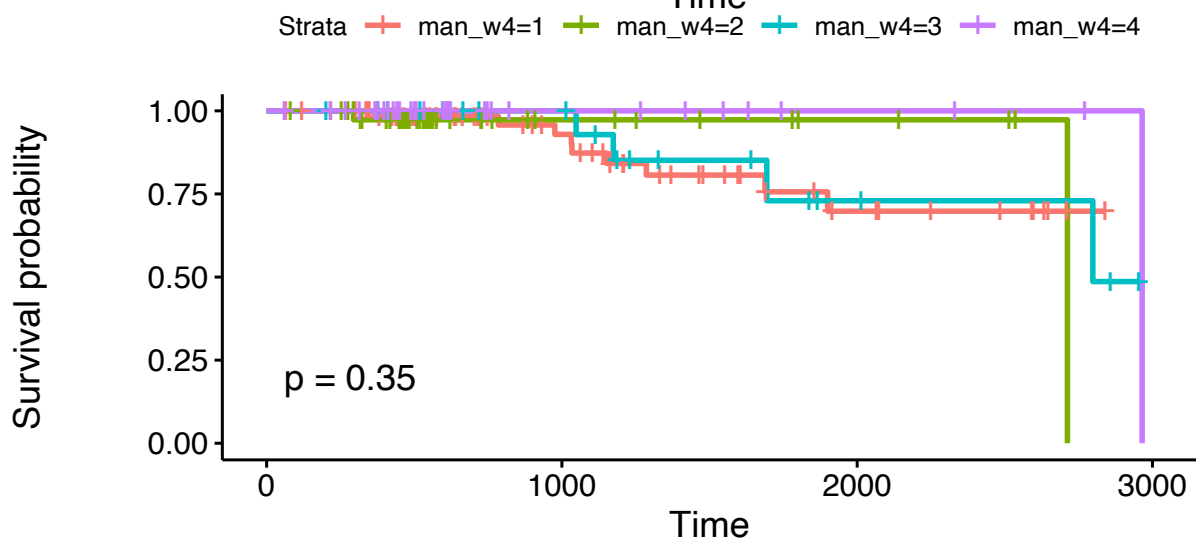
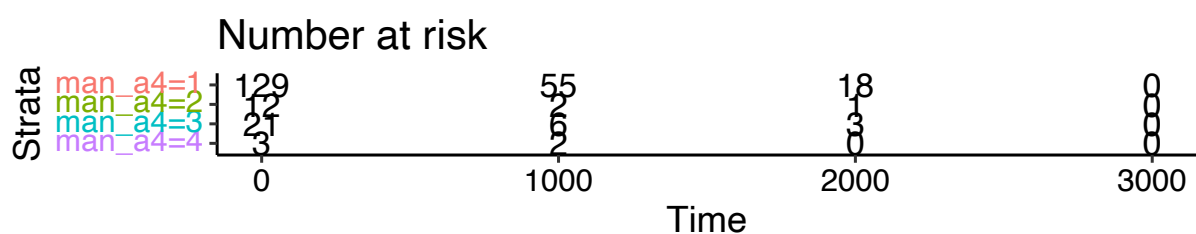
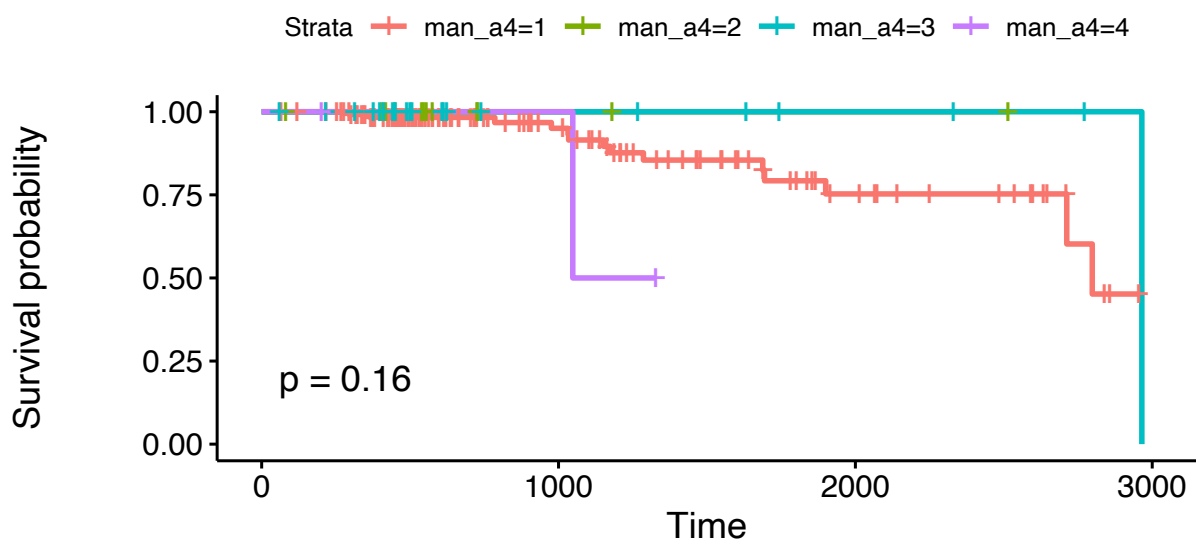


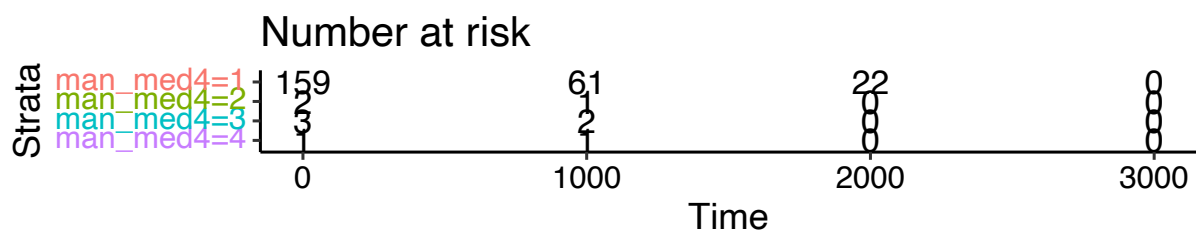
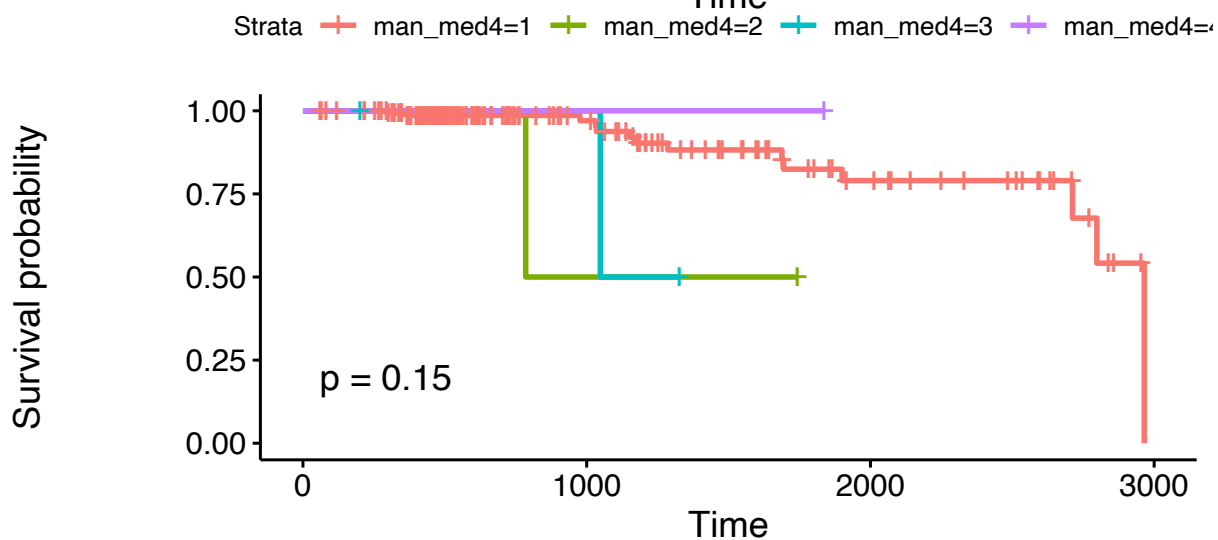
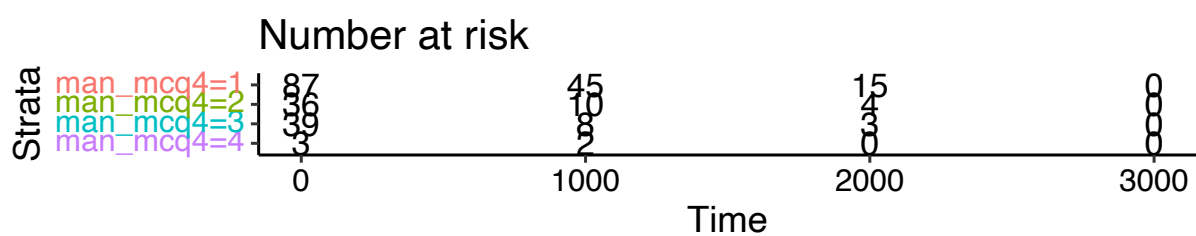
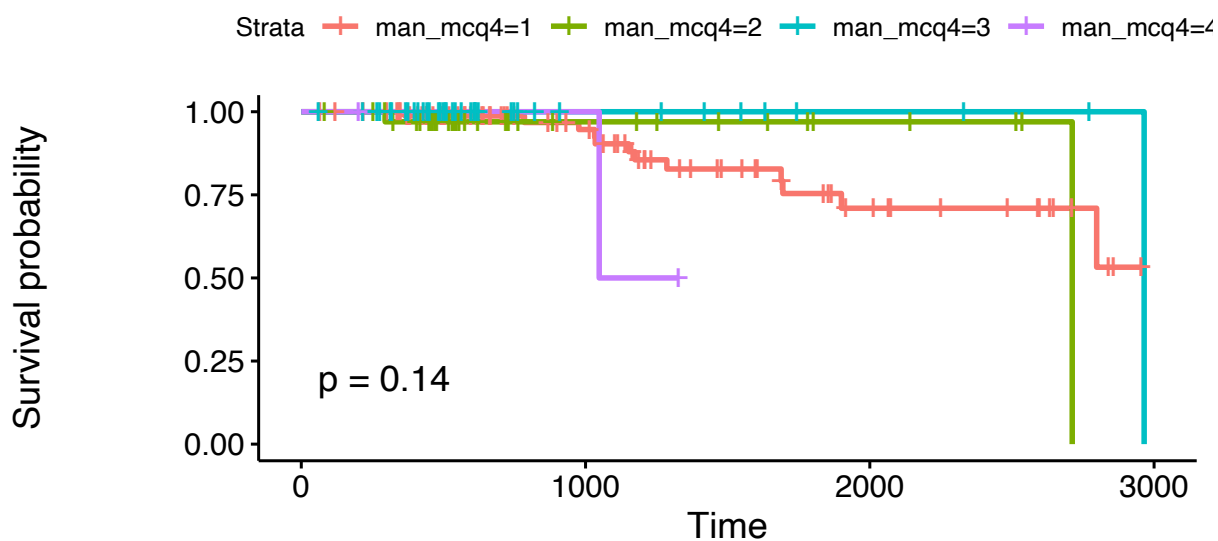


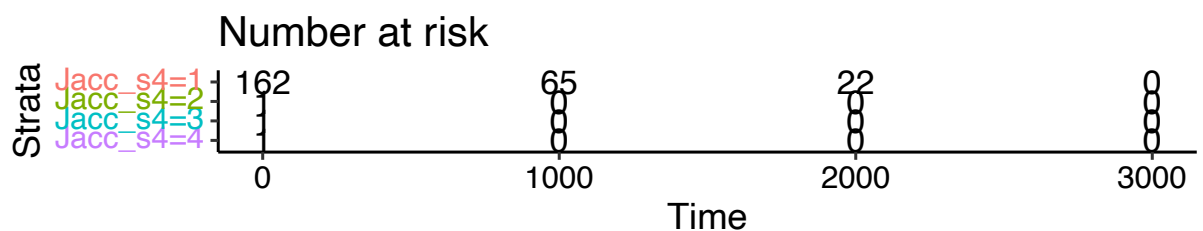
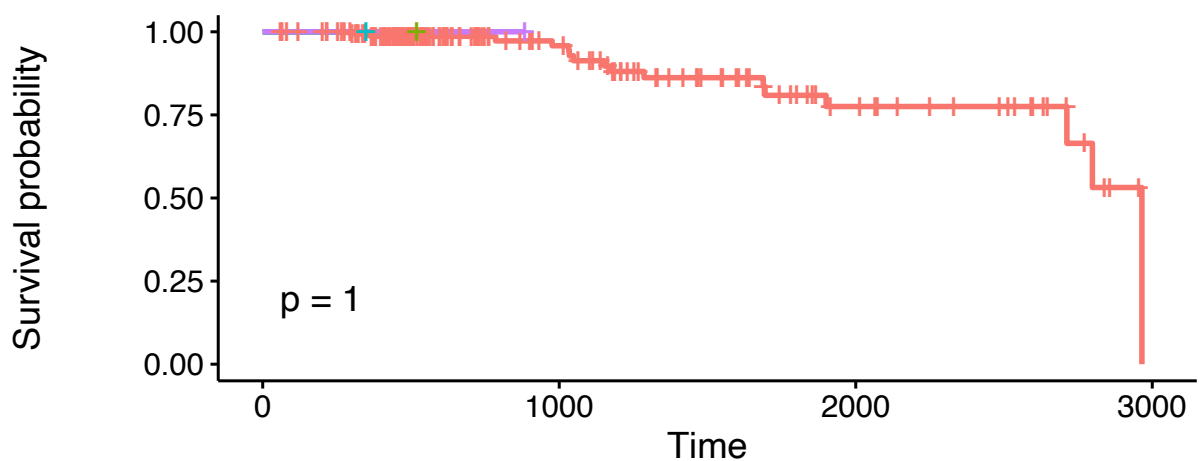
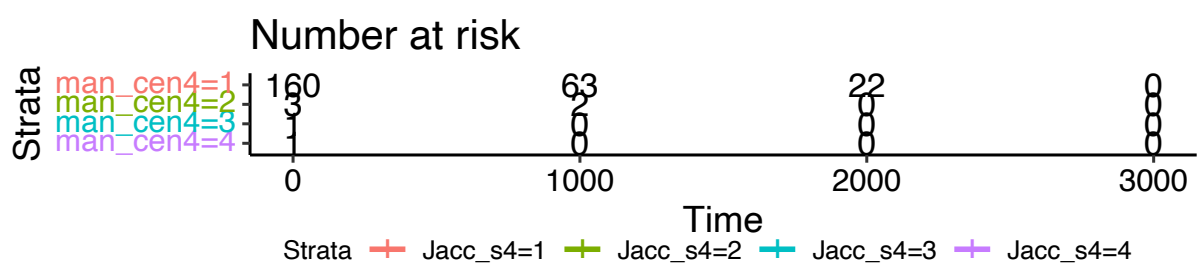
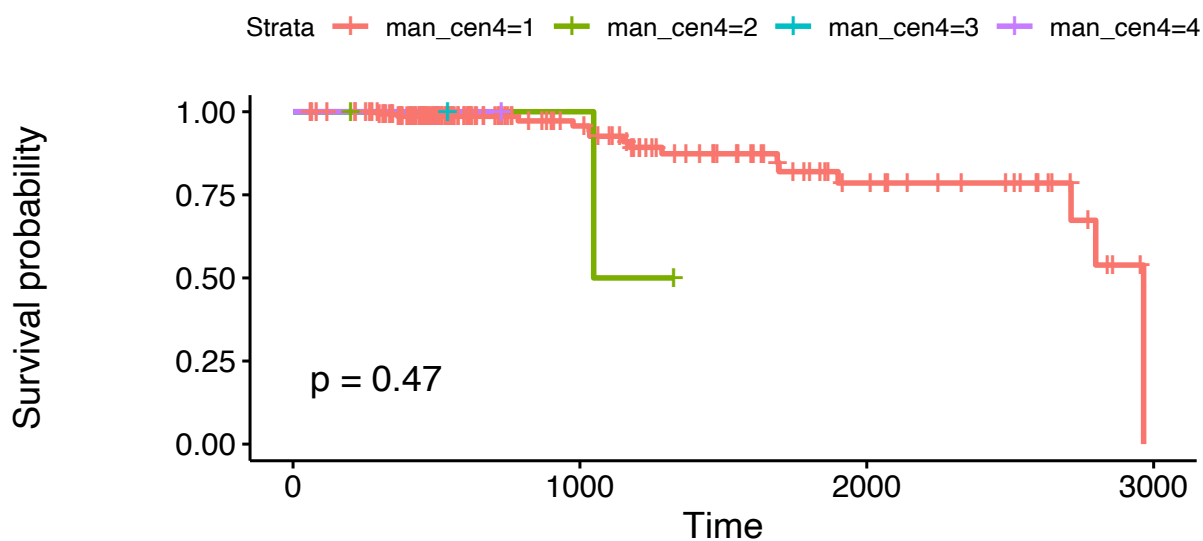


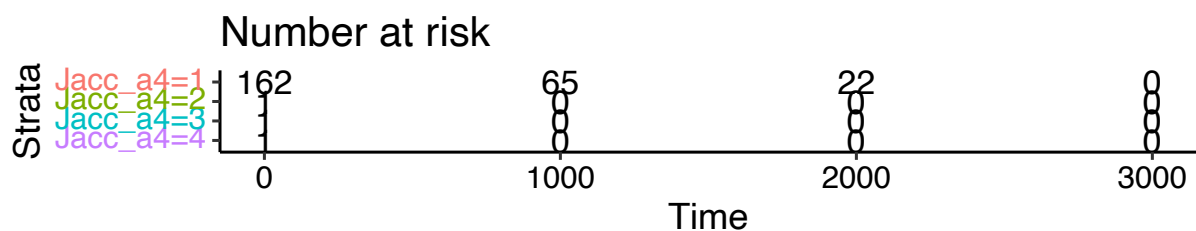
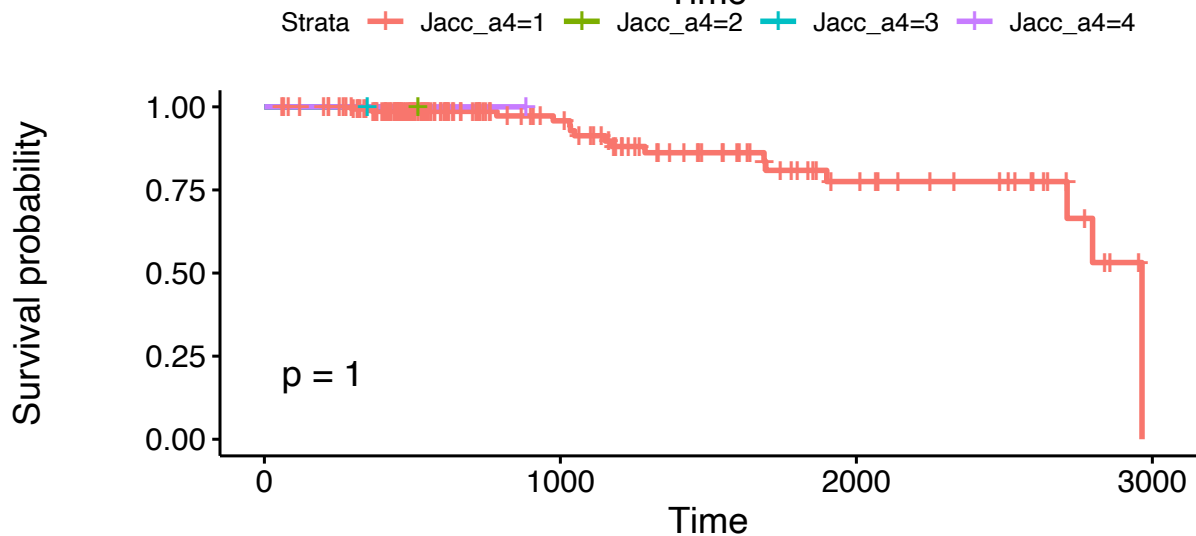
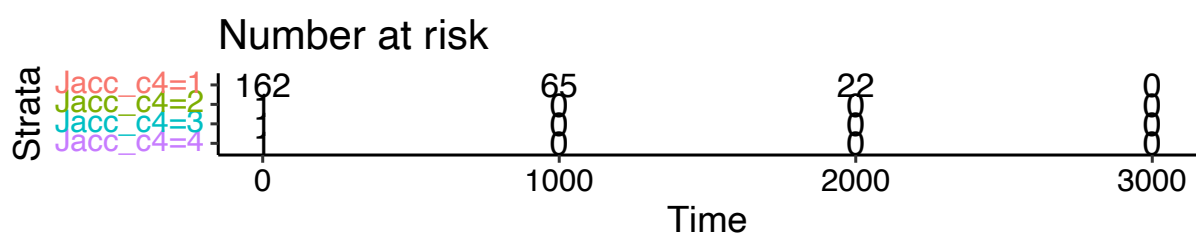
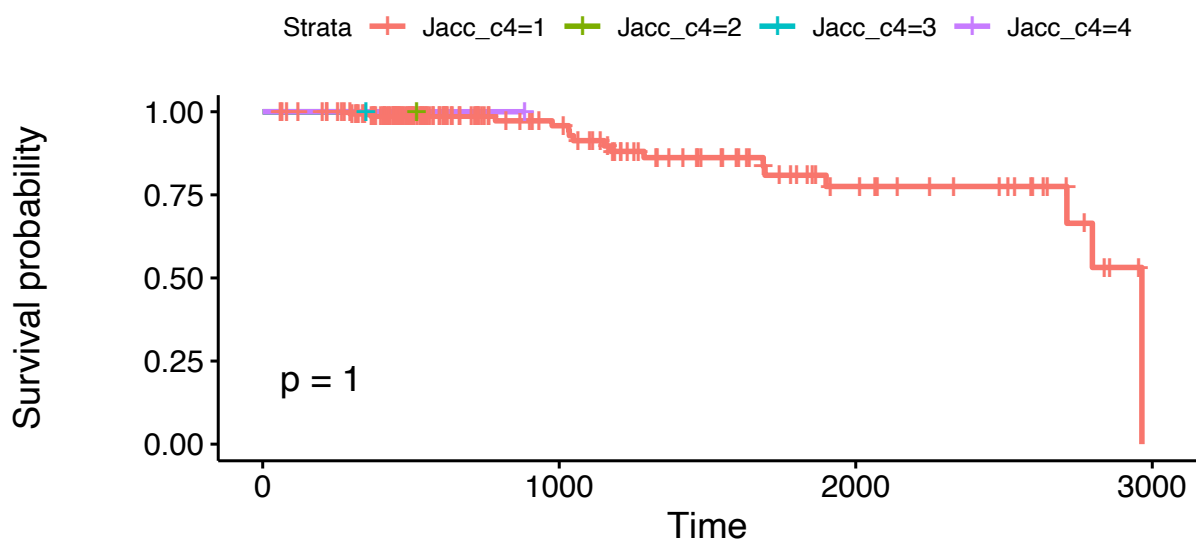


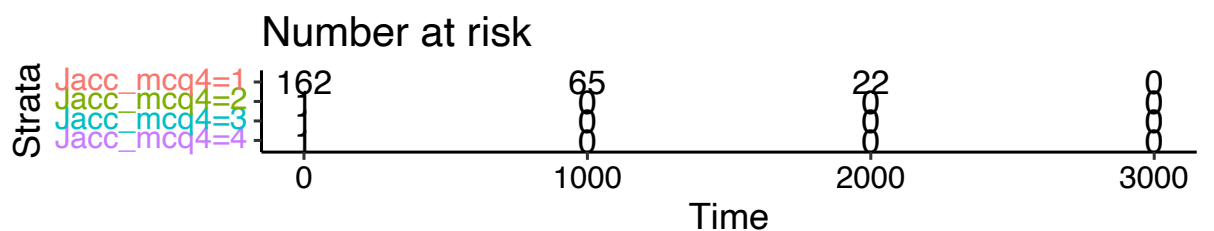
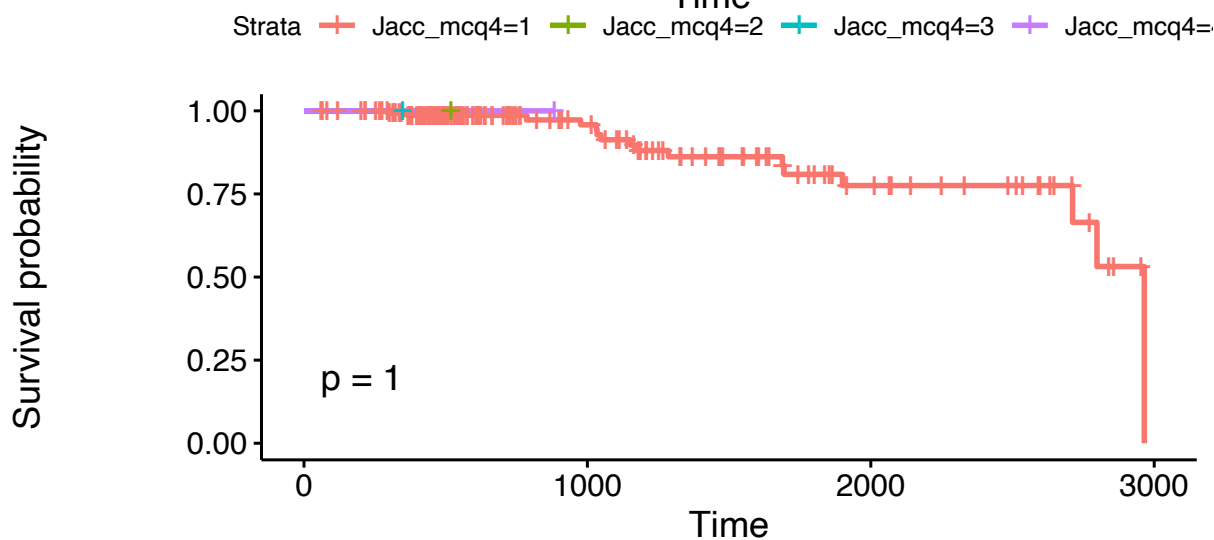
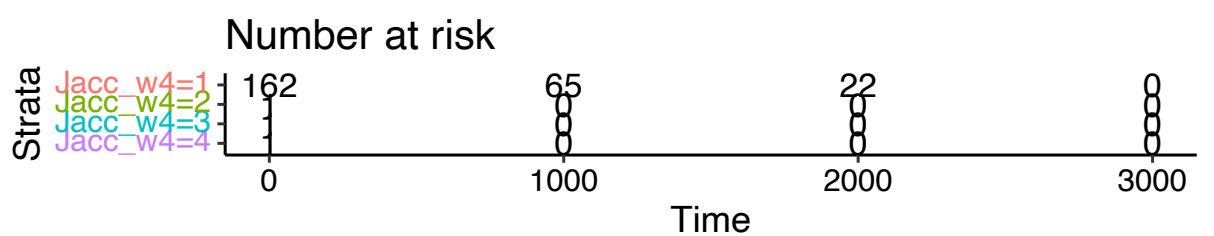
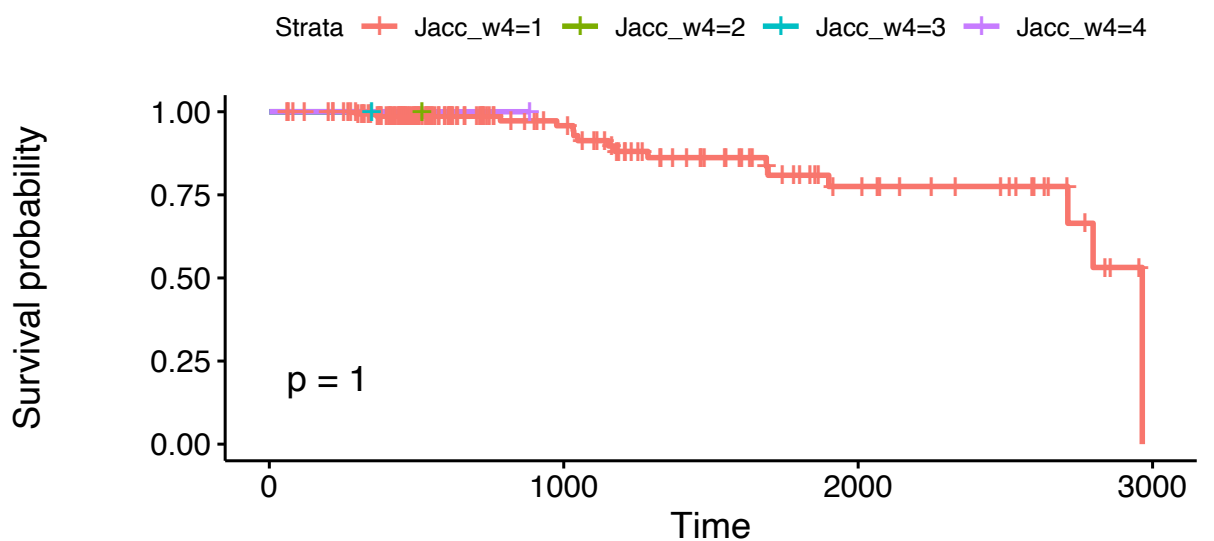


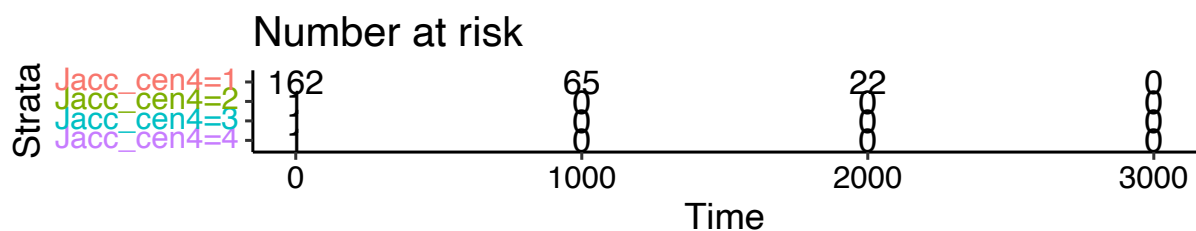
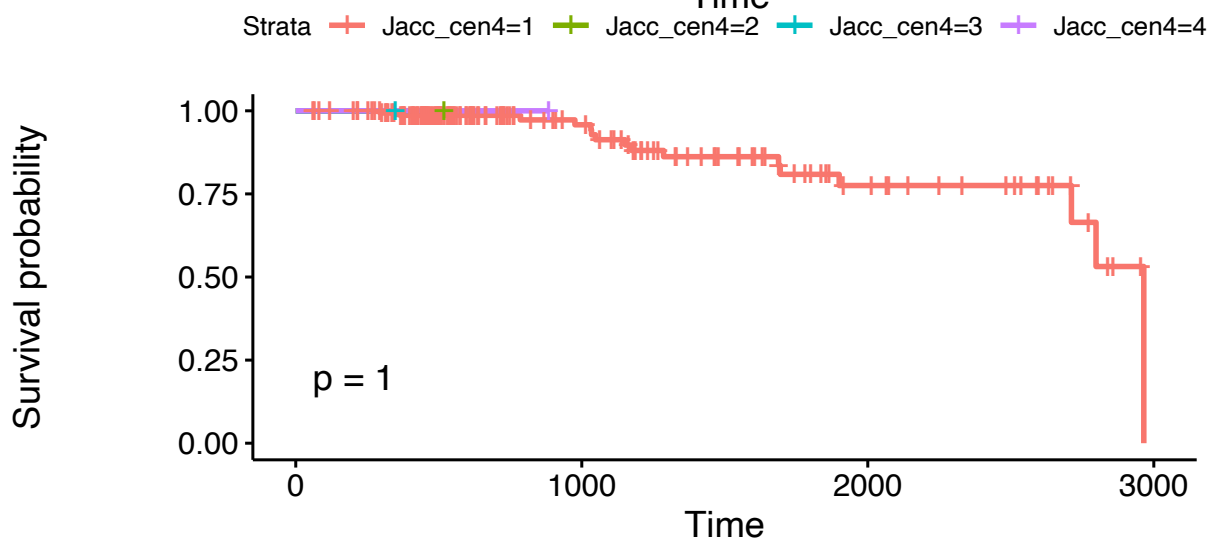
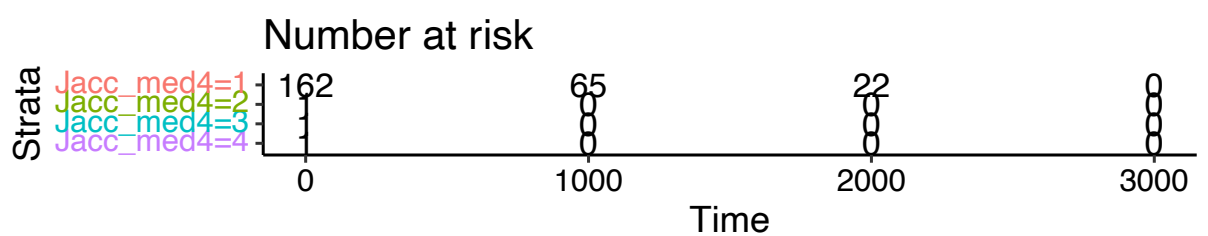
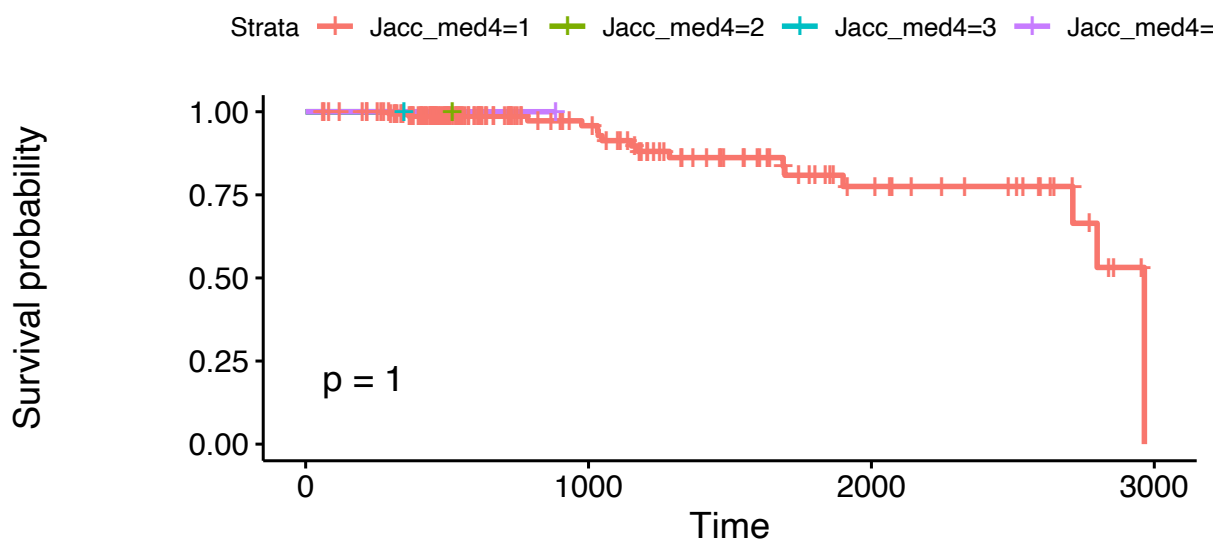


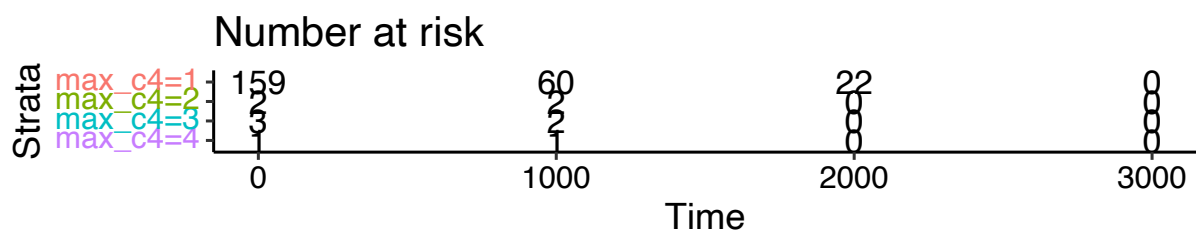
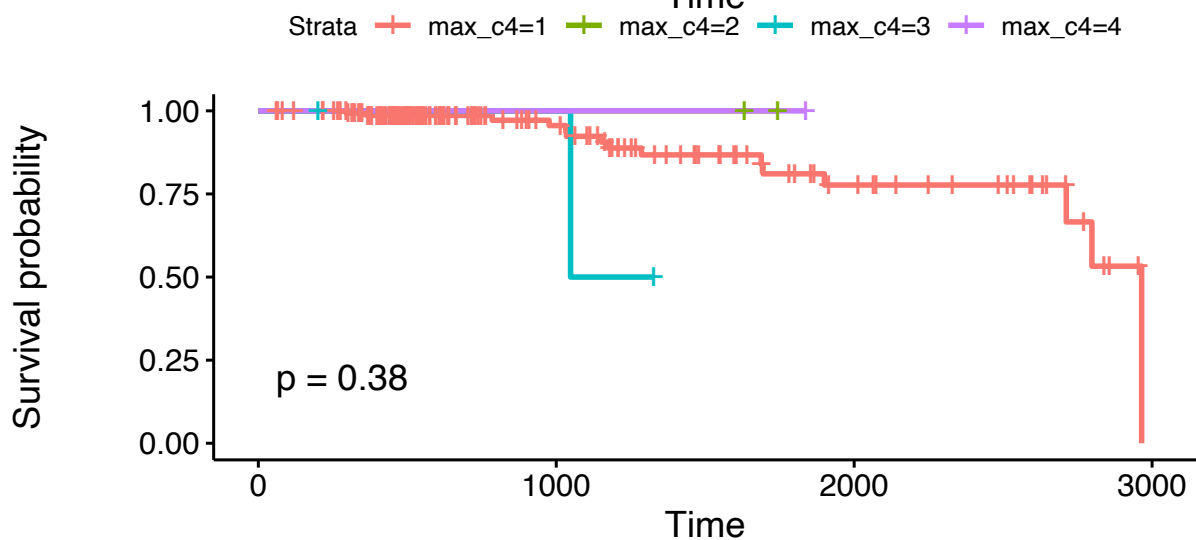
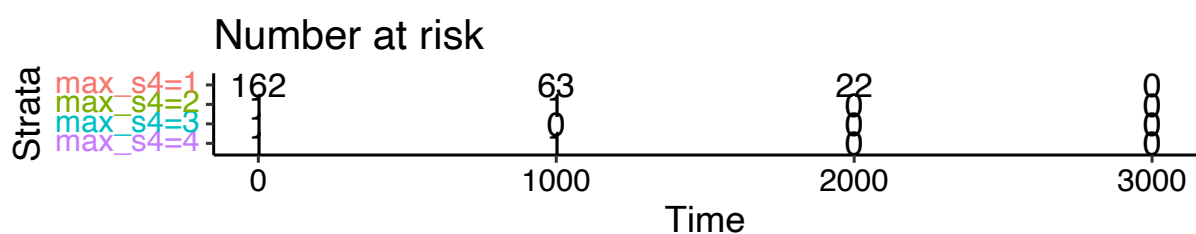
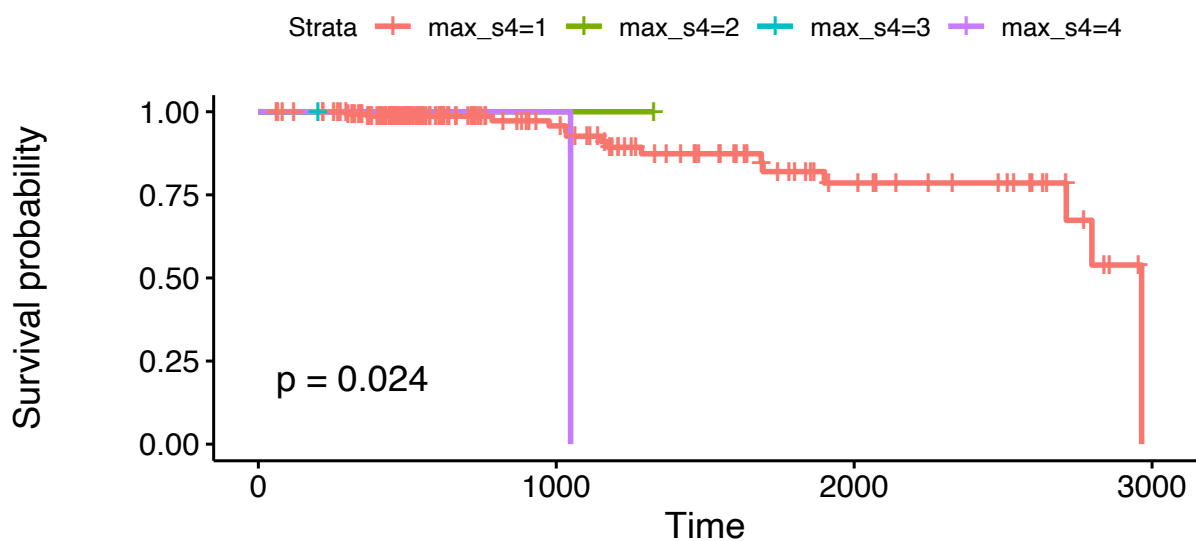




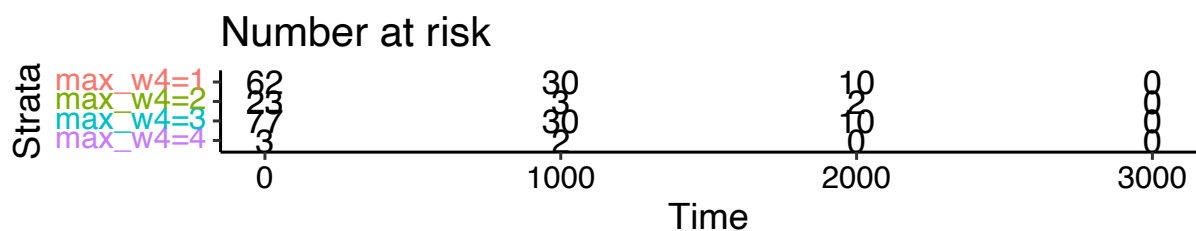
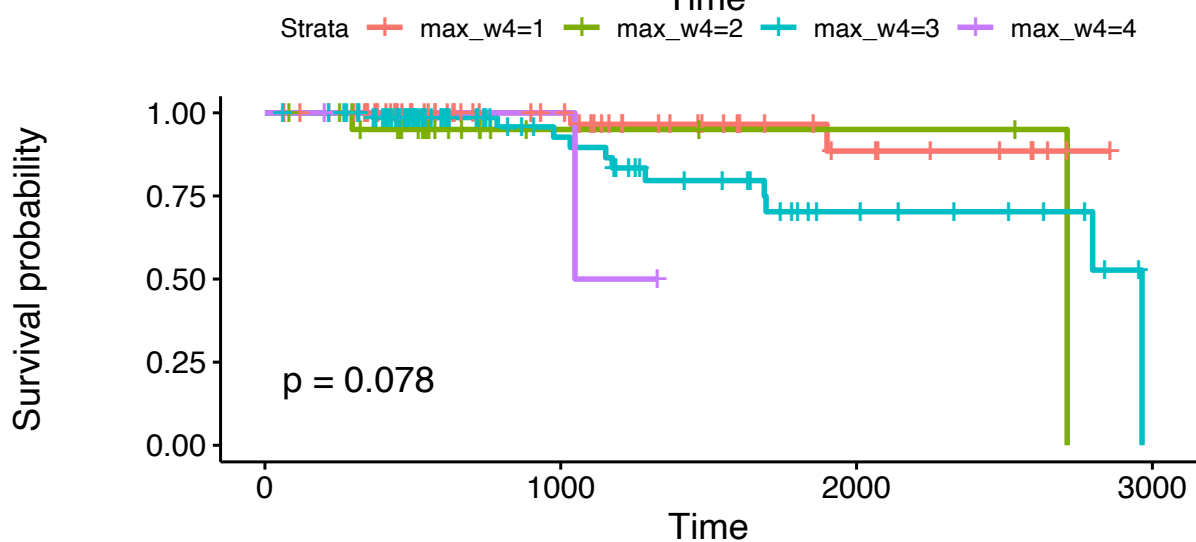
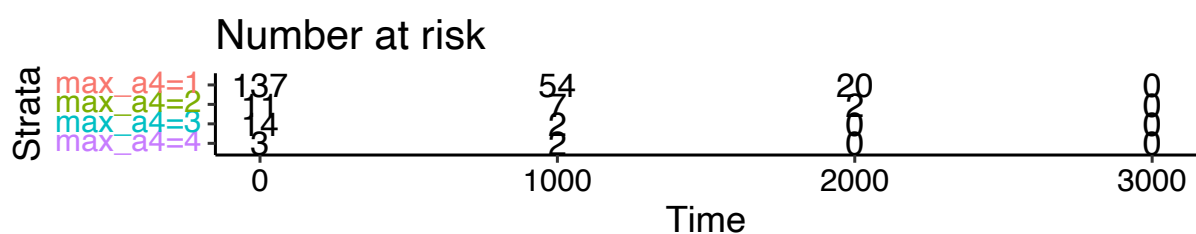
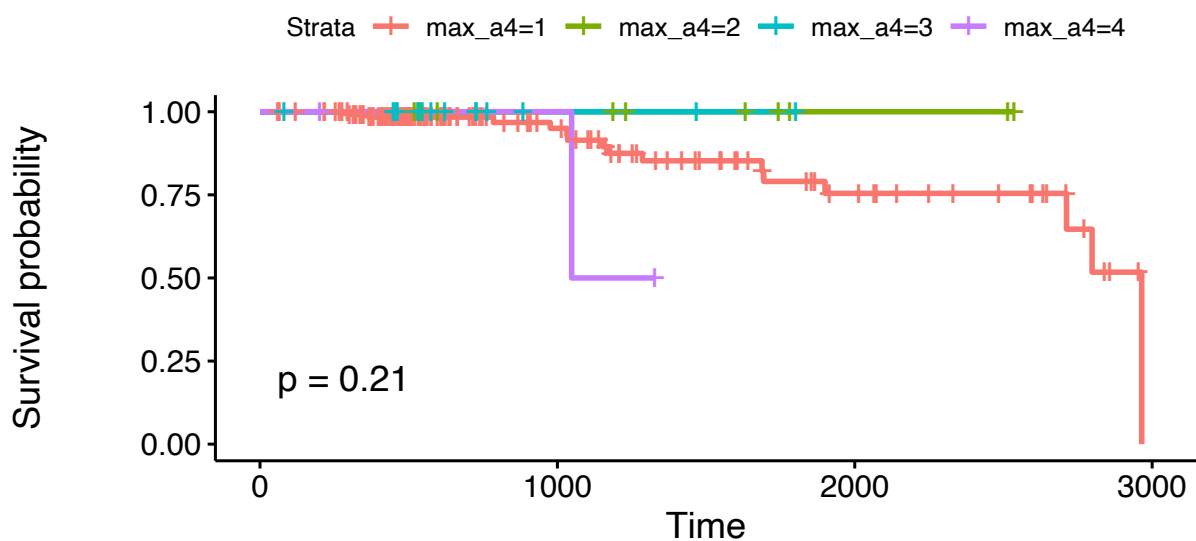


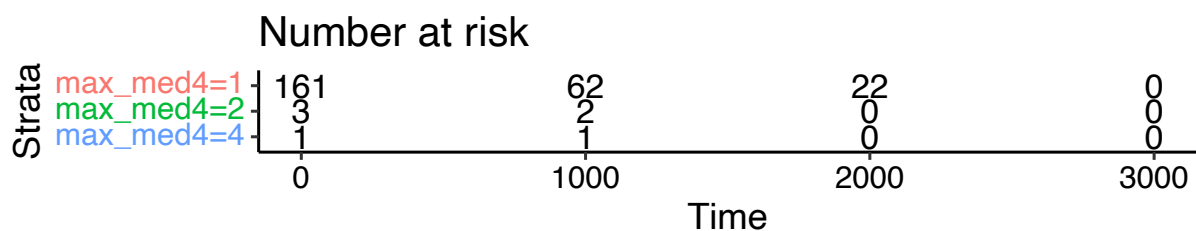
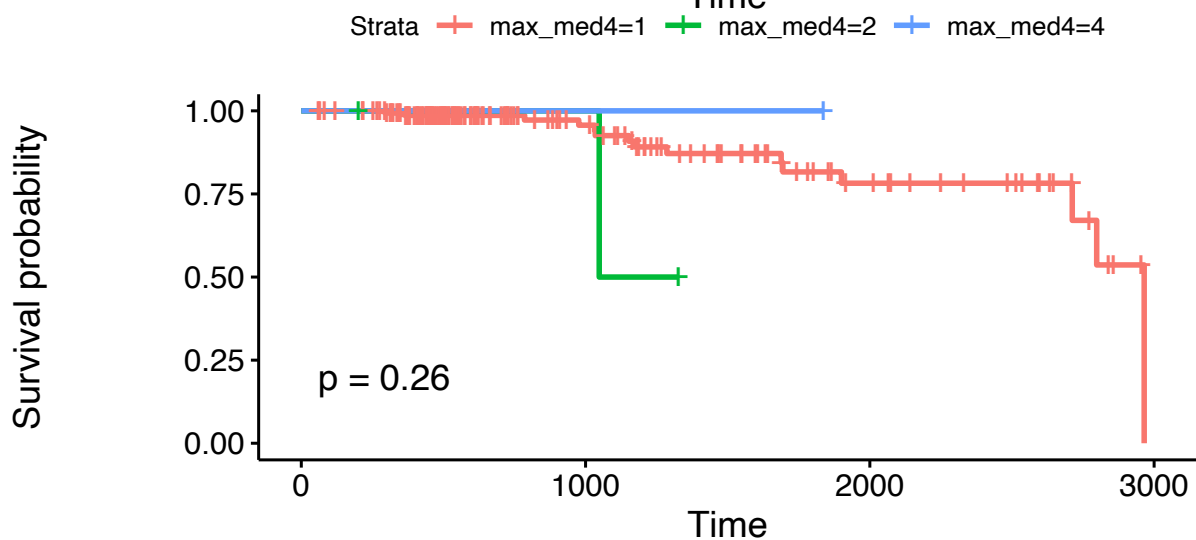
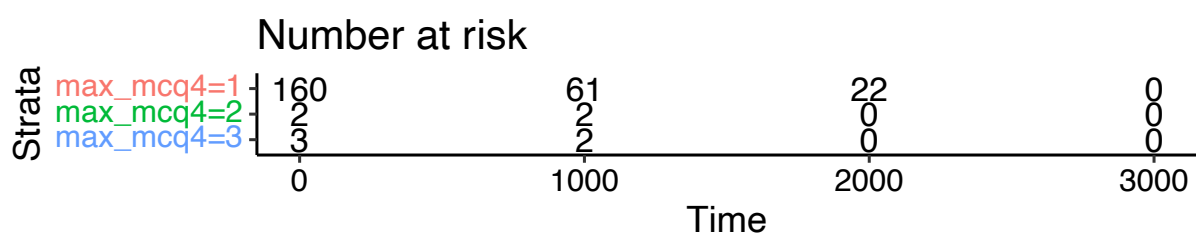
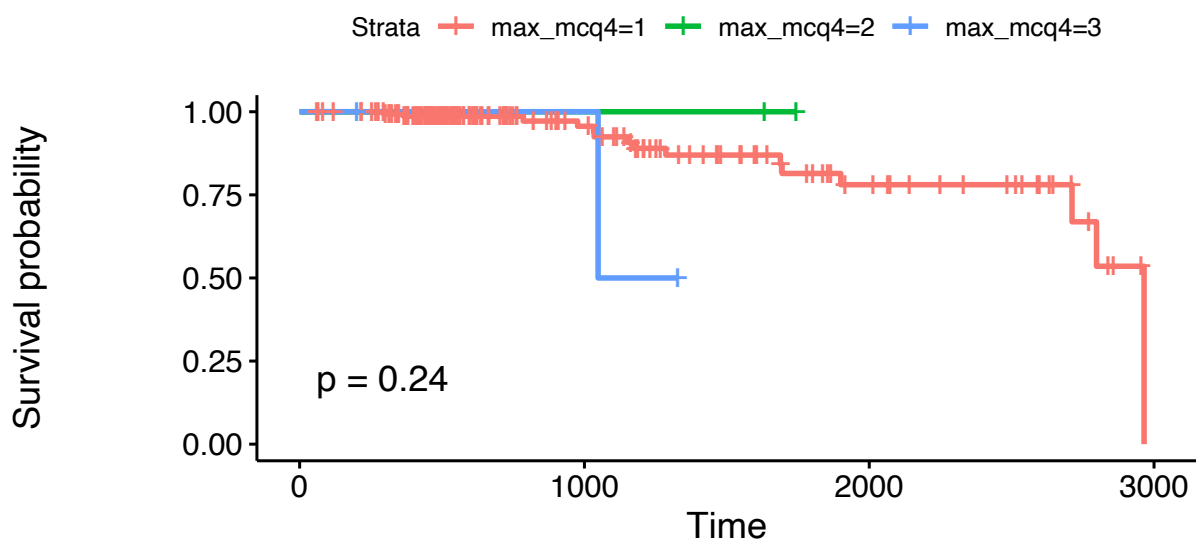


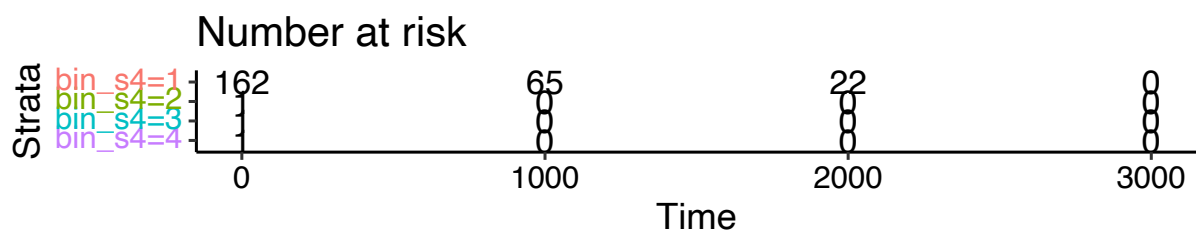
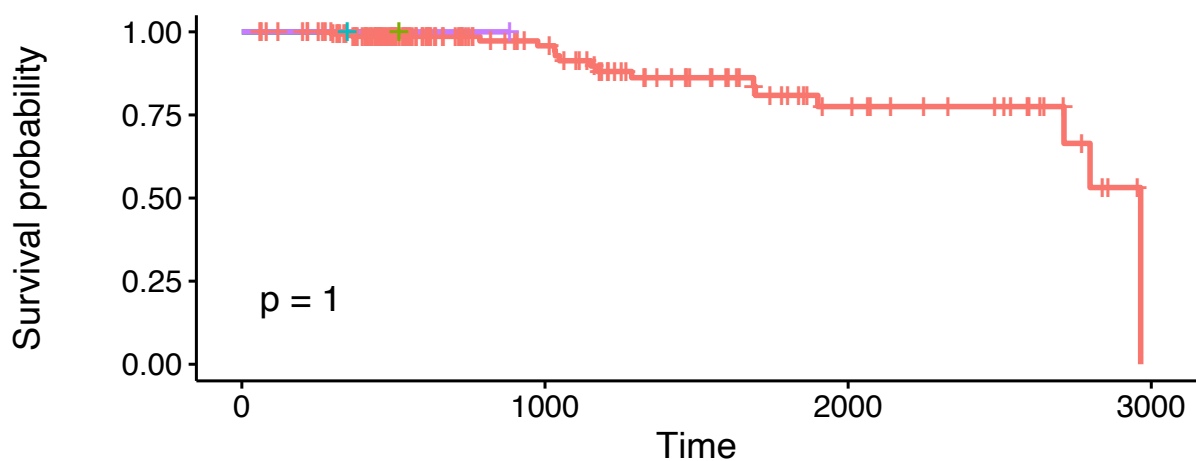
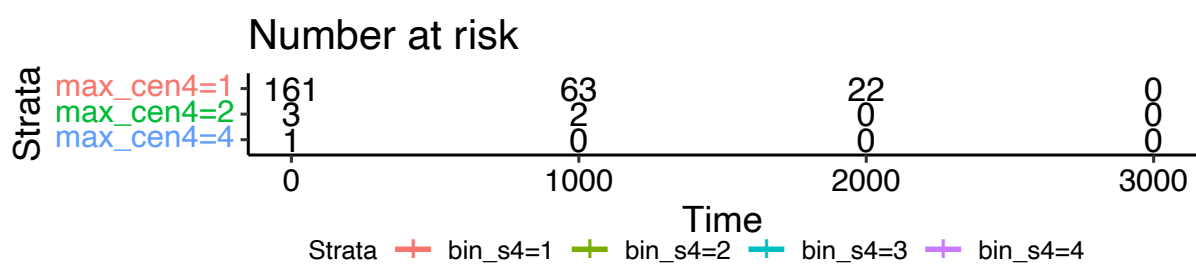
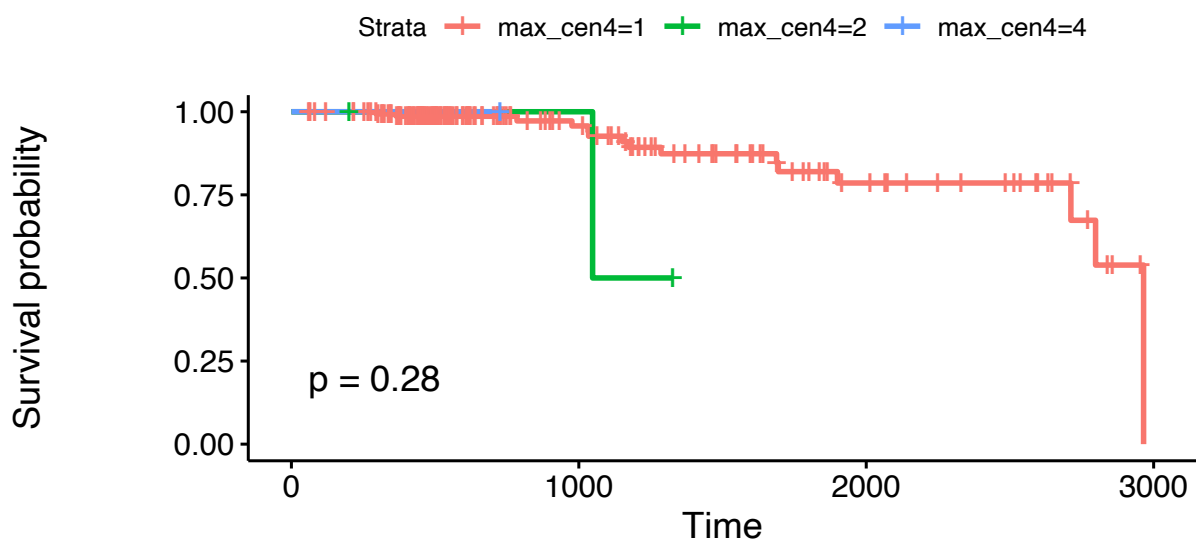


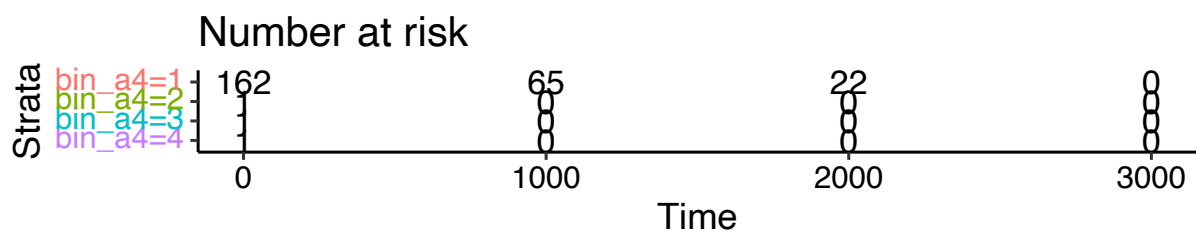
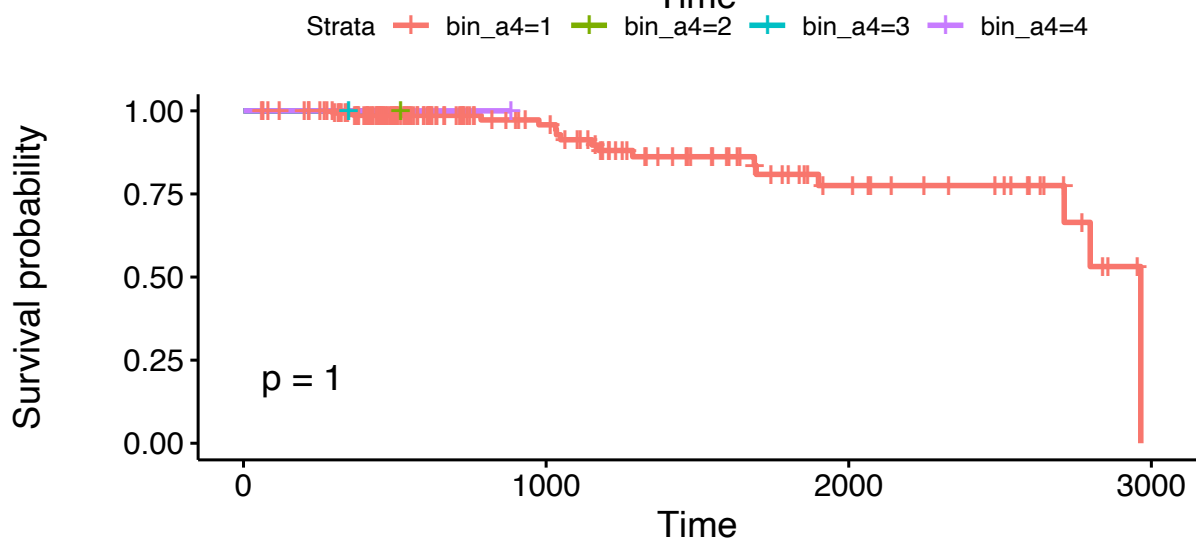
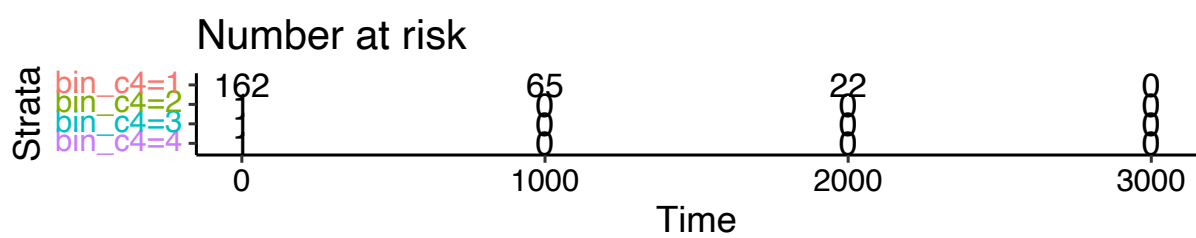
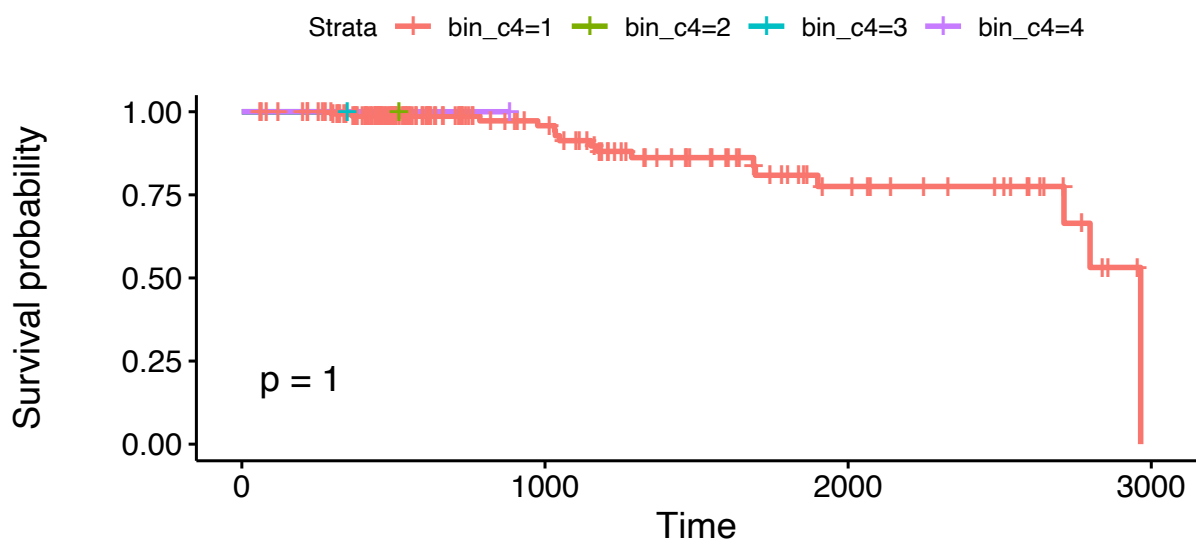


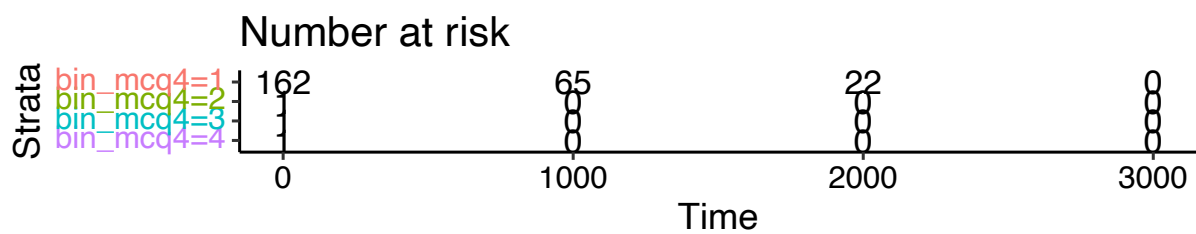
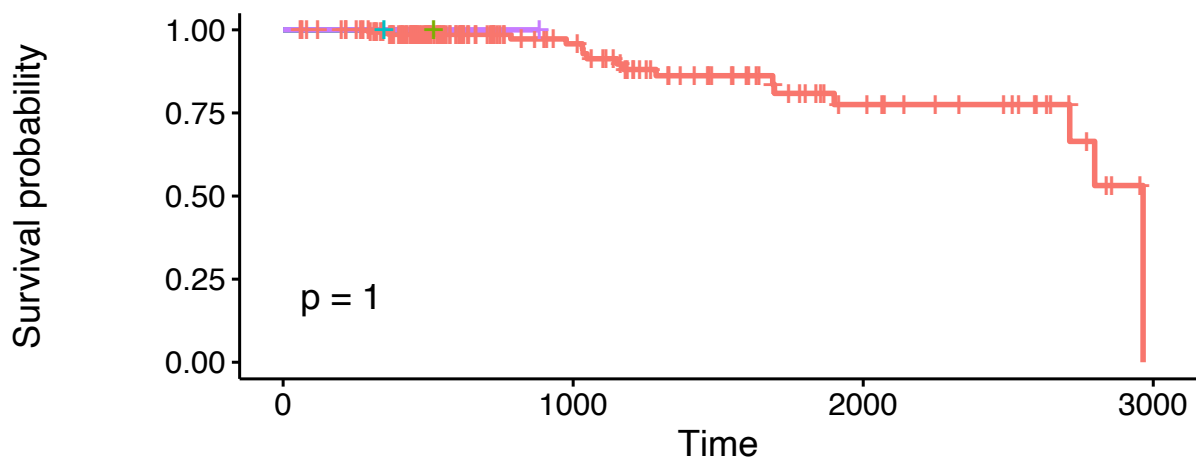
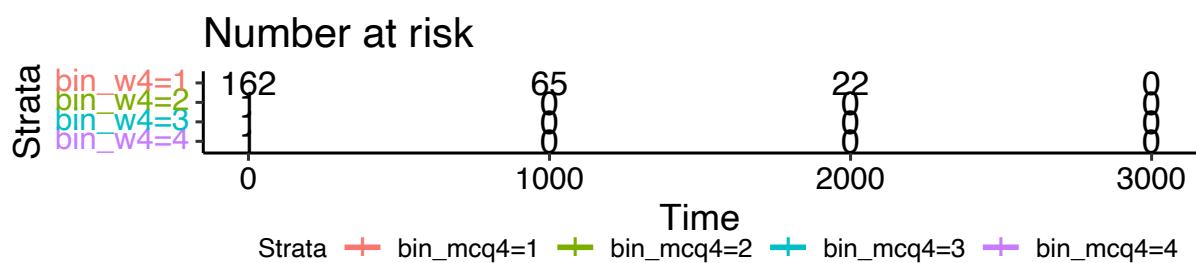
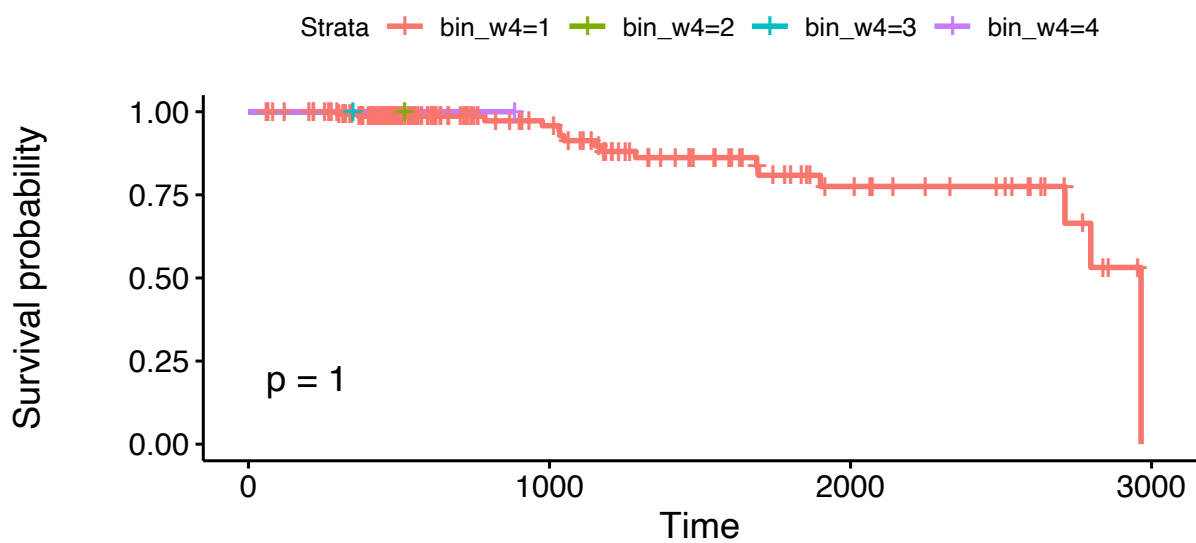


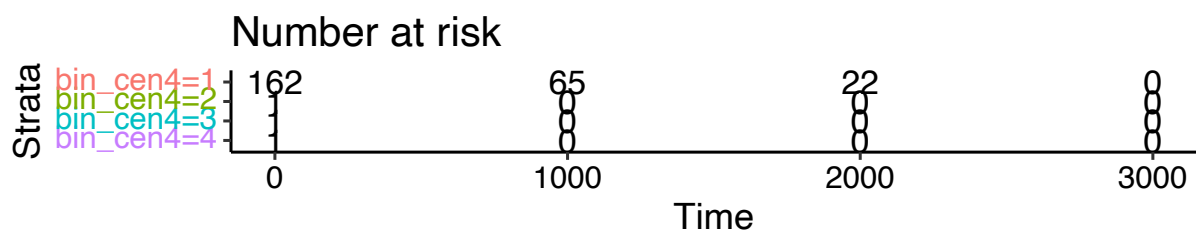
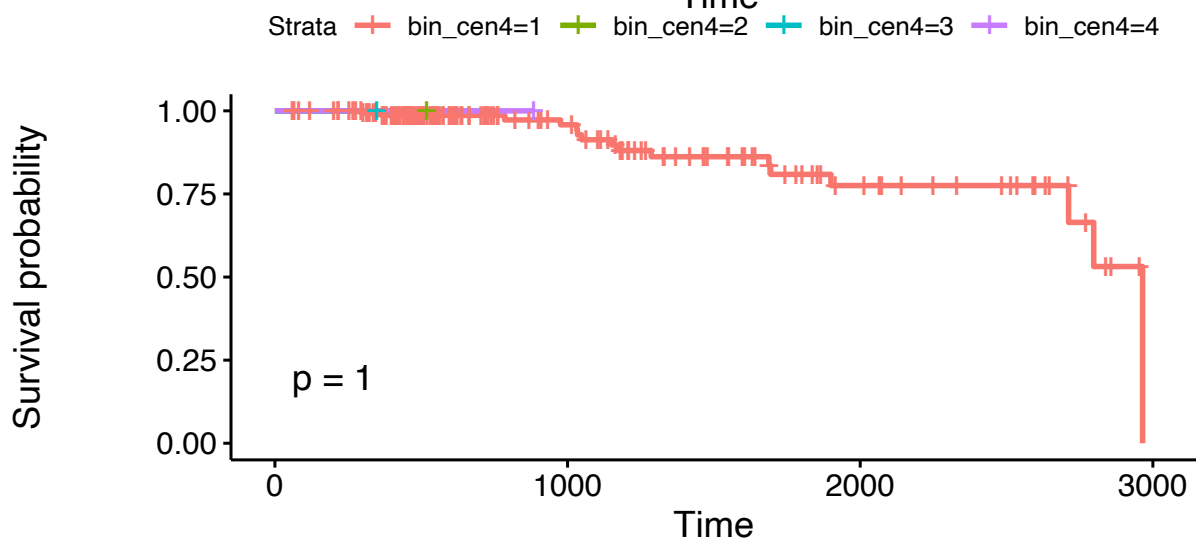
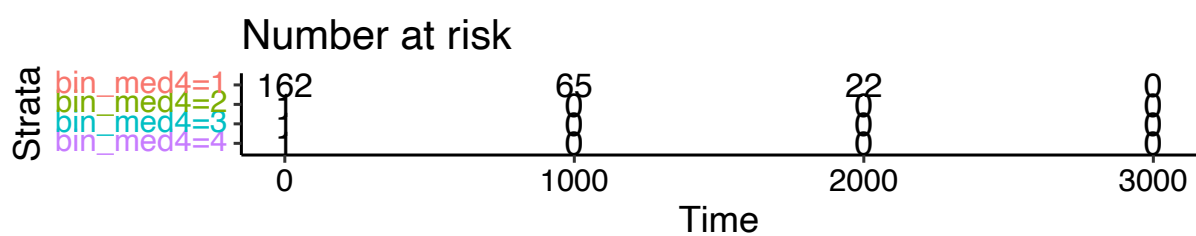
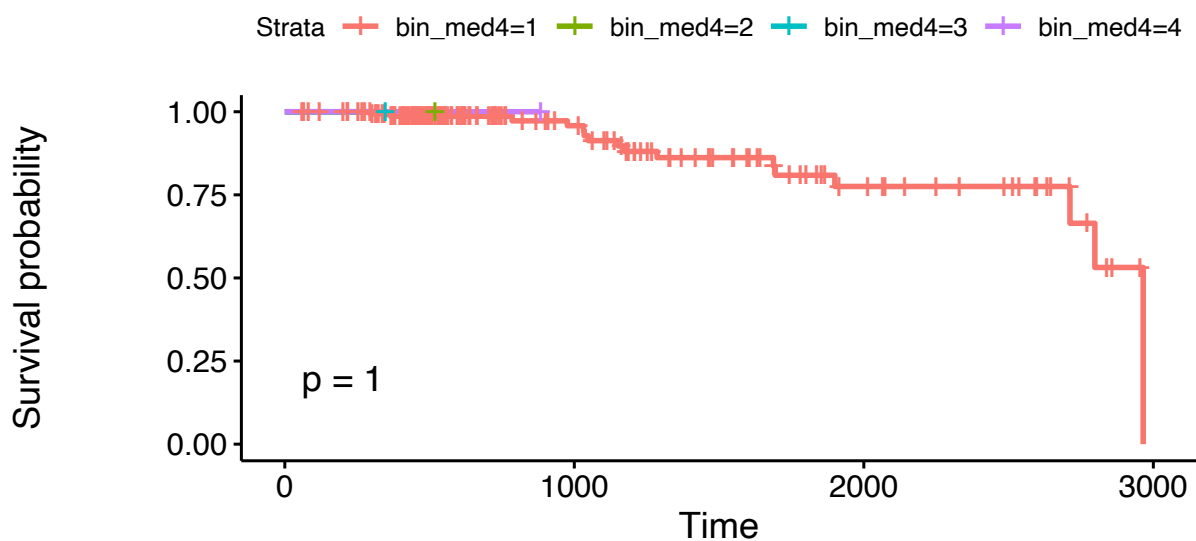


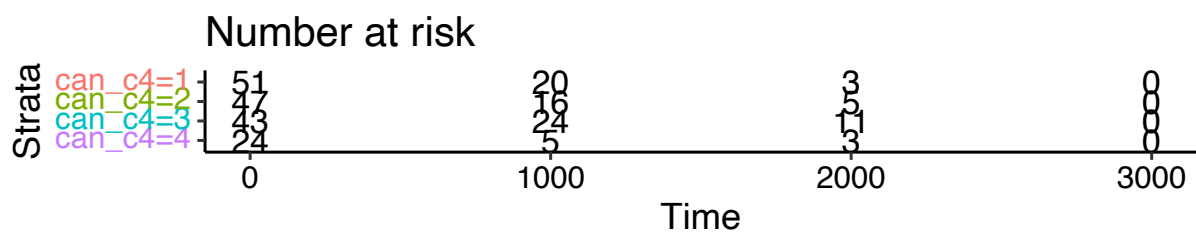
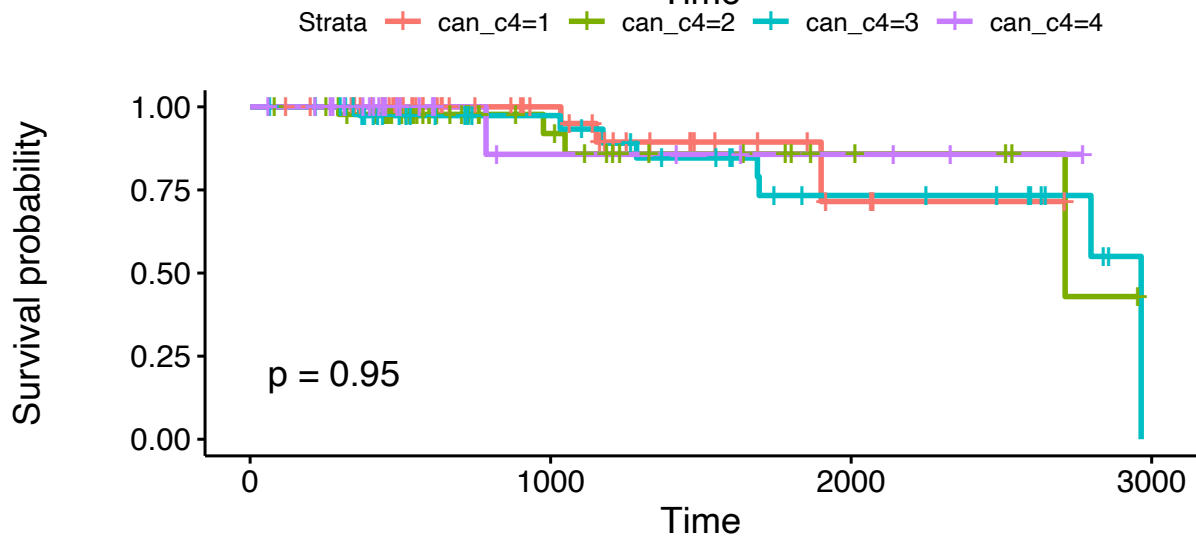
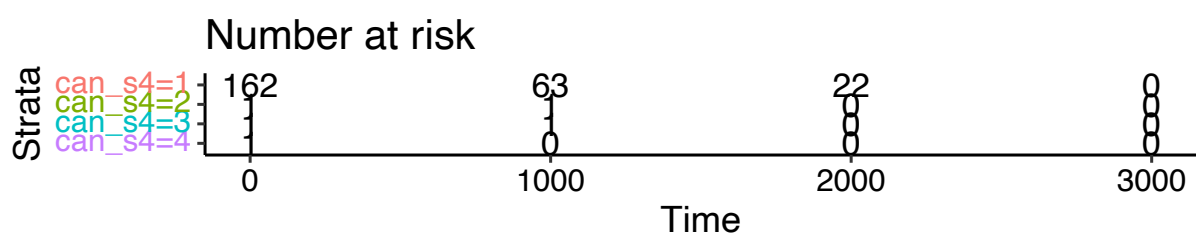
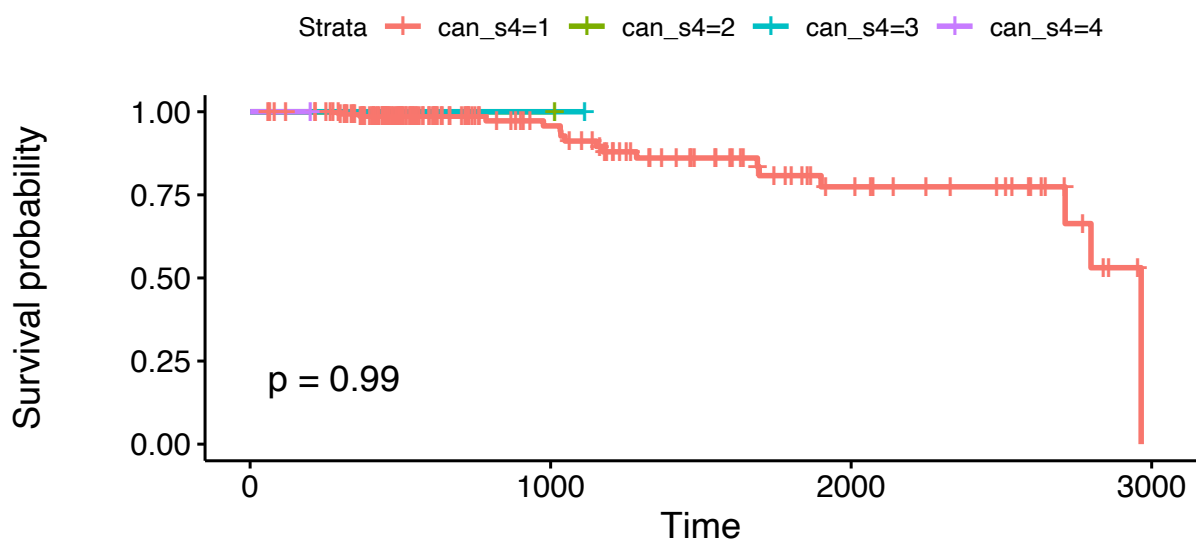


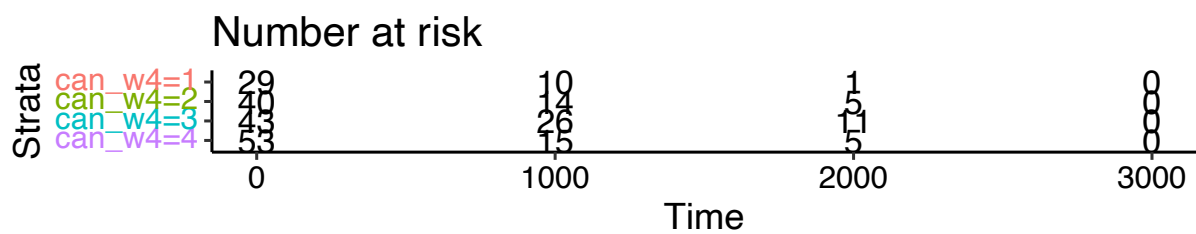
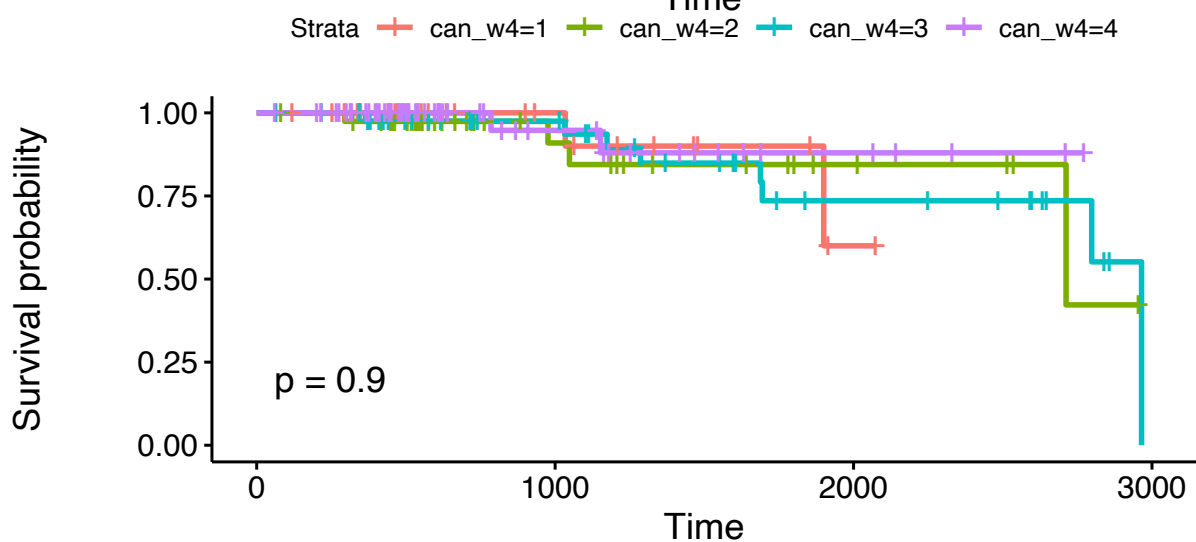
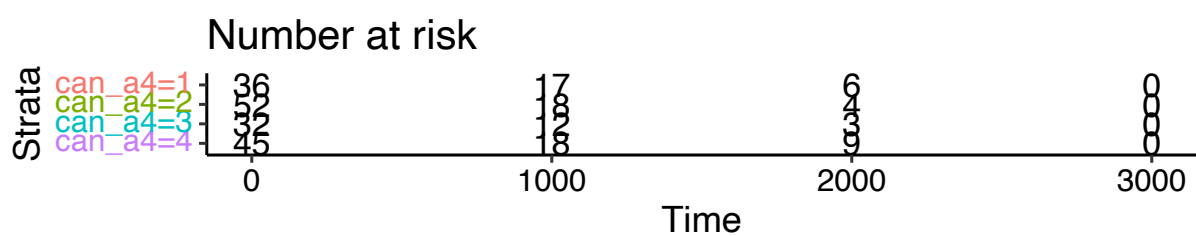
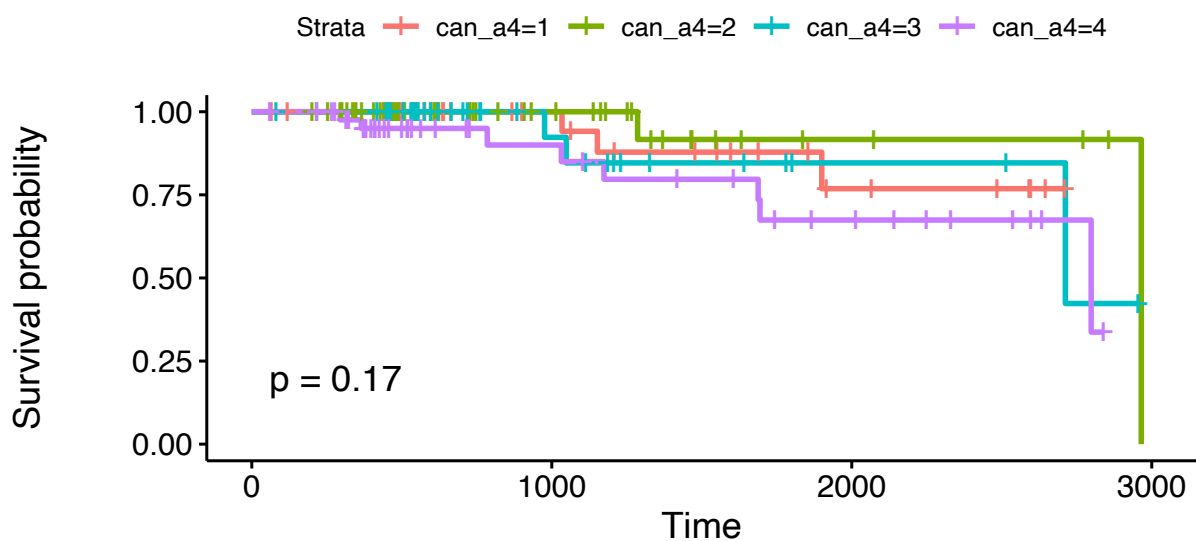




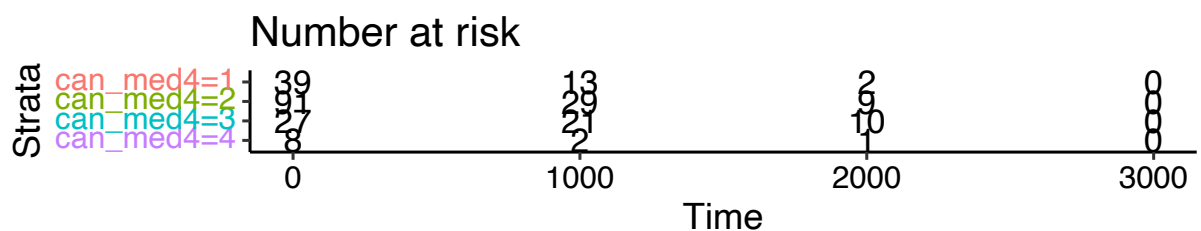
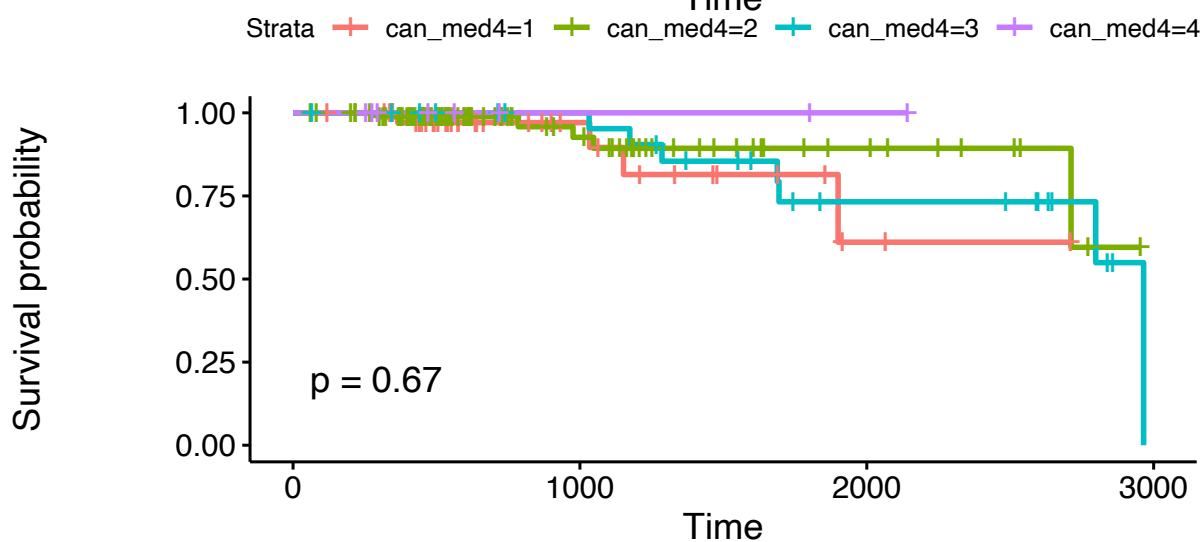
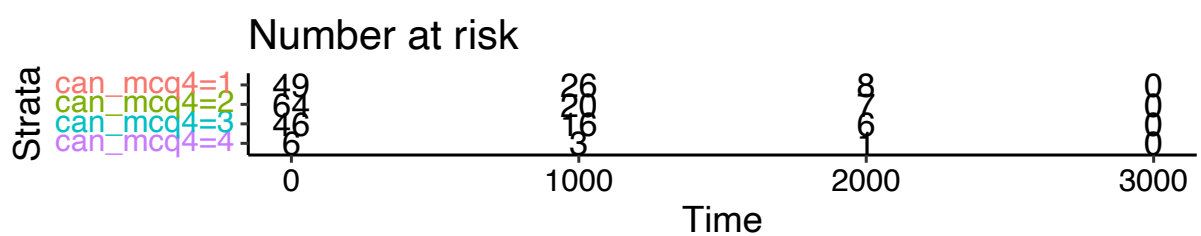
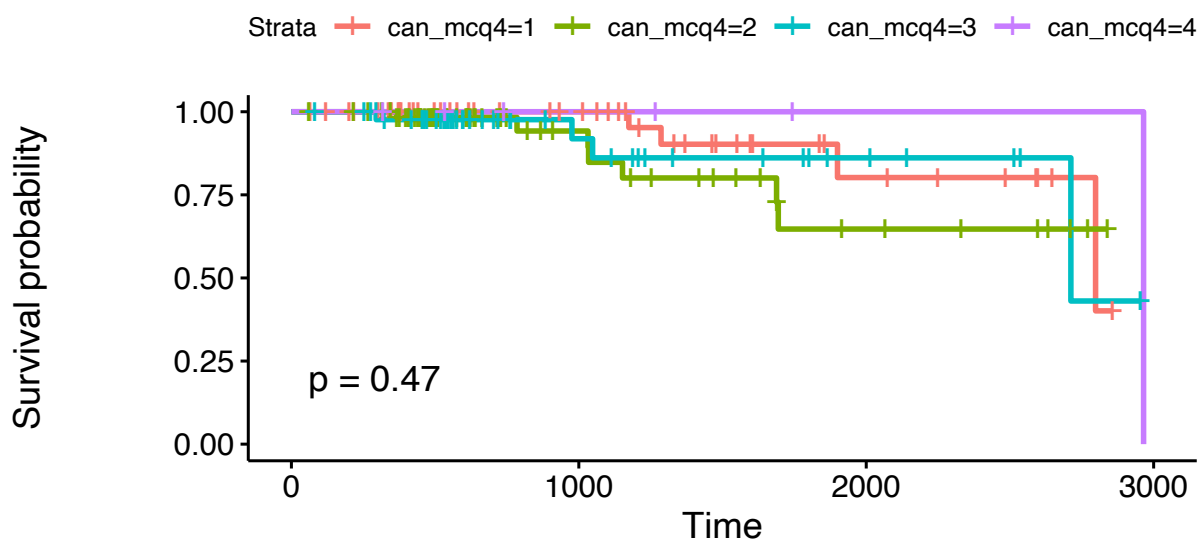


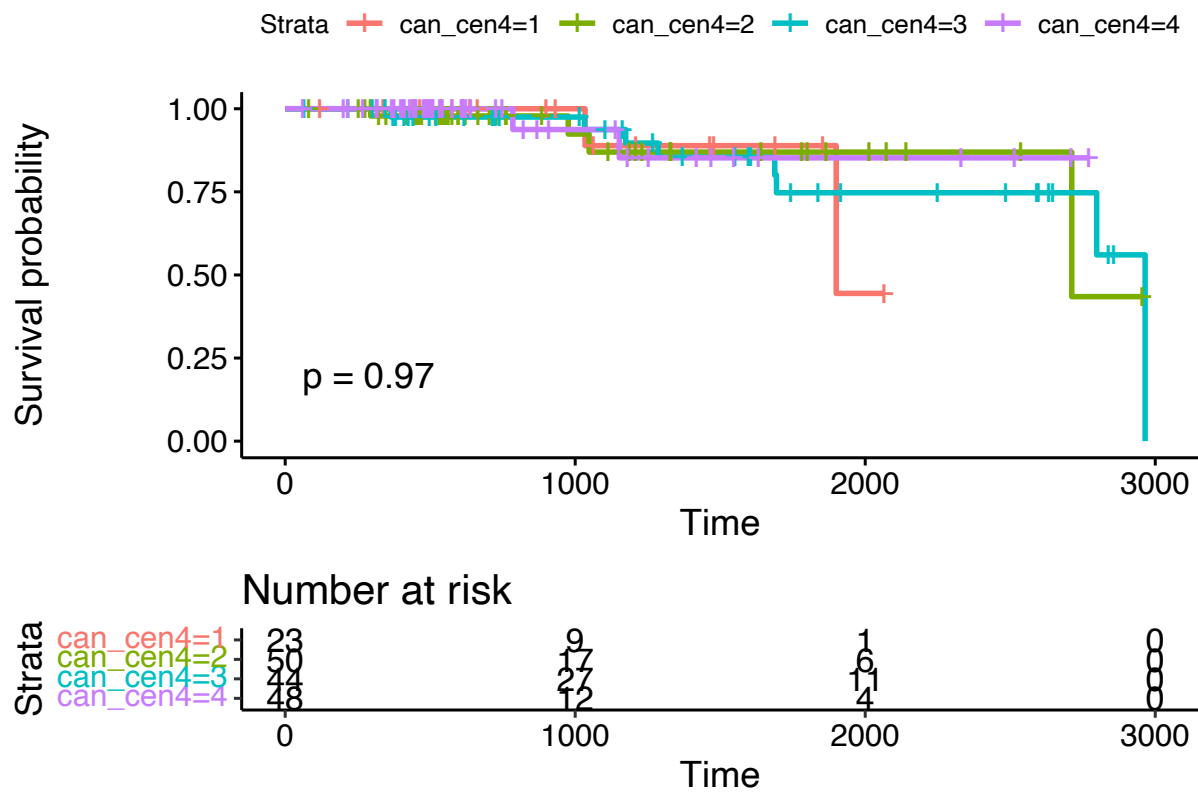






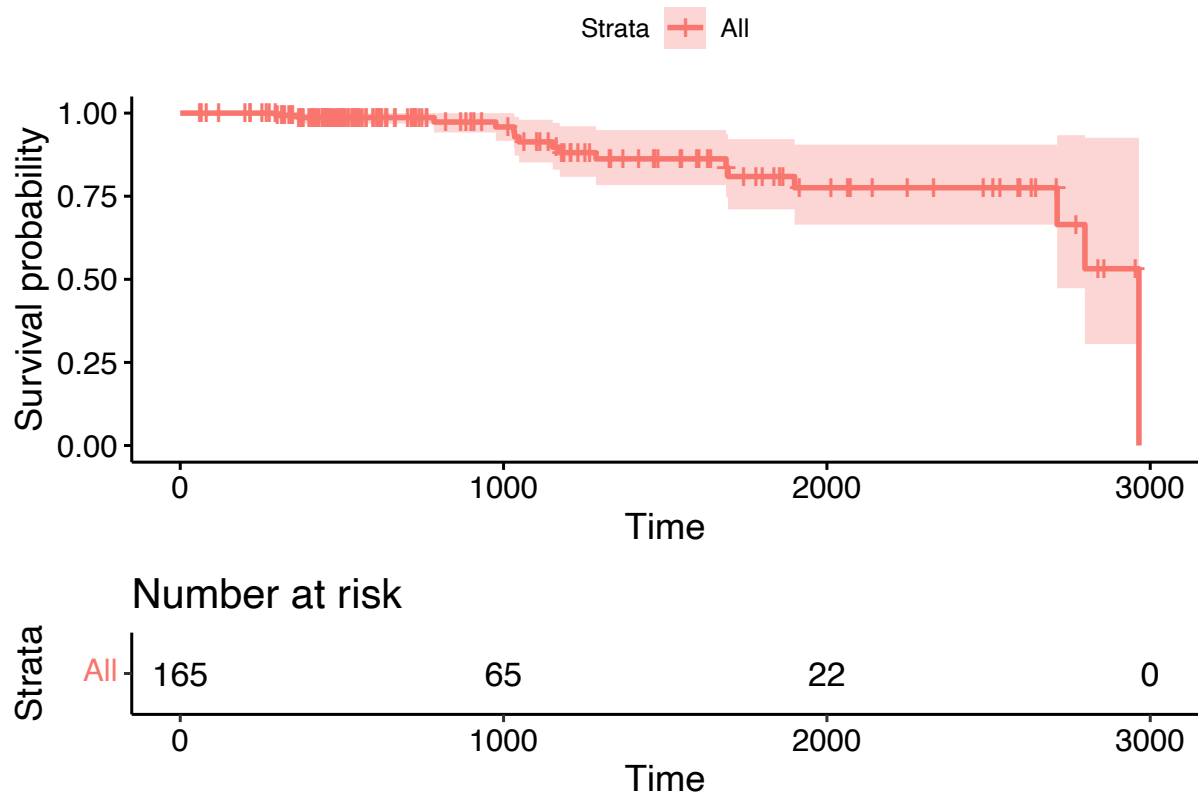




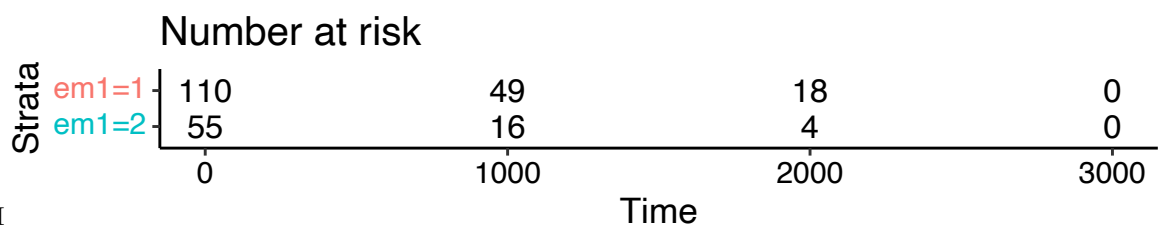
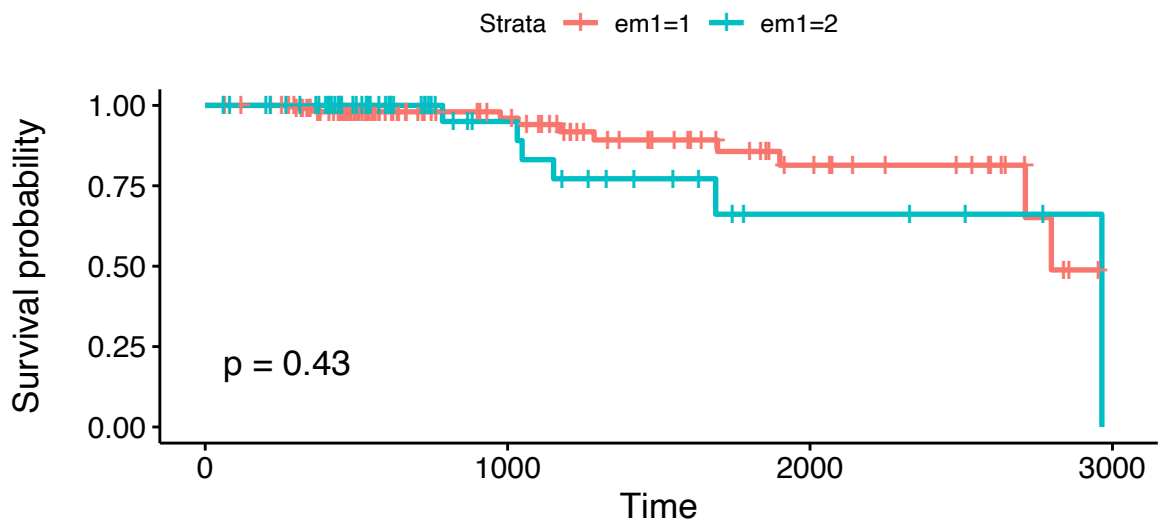
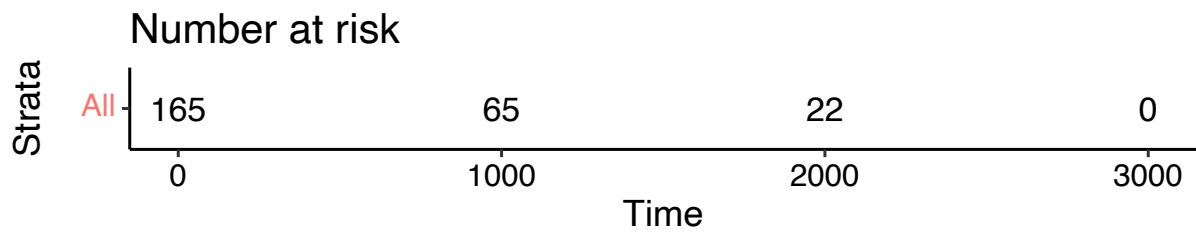
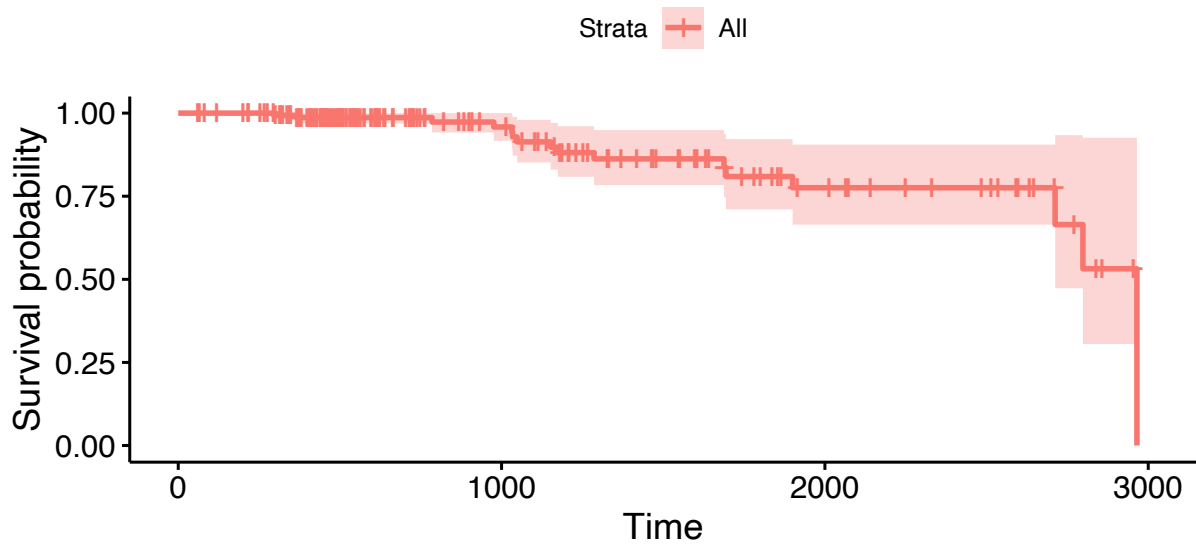


### 3. DBSCAN

```
## Warning in .pvalue(fit, data = data, method = method, pval = pval, pval.coord = pval.coord, : There a
## This is a null model.
```



```
## Warning in .pvalue(fit, data = data, method = method, pval = pval, pval.coord = pval.coord, : There is a problem with the null model.
## This is a null model.
```



4. EM

