

# Notes

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## 1 Reading Missing Data in R

```
read.table(na.string="") # => NA if ""
```

## 2 Cross Validation

- Fit the data using training set
- Evaluate the resultant model using test data

### 2.1 Steps

Goal:

- Predict whether an individual will be high / low risk
  - To validate our model
1. obtain a model using training data
  2. obtain cox model coefficients from that model
  3. obtain risk scores ( $e^{X\beta}$ ) for the subjects in our test data
  4. Dichotomize risk scores (high/low risk groups, by median) = predictions
  5. Compare predictions with reality (by plotting the KM curves for the two groups)

Further the 2 curves => better the model. Better distinguishing of two groups.  
Risk scores are hazard ratio.

### 2.2 R Code