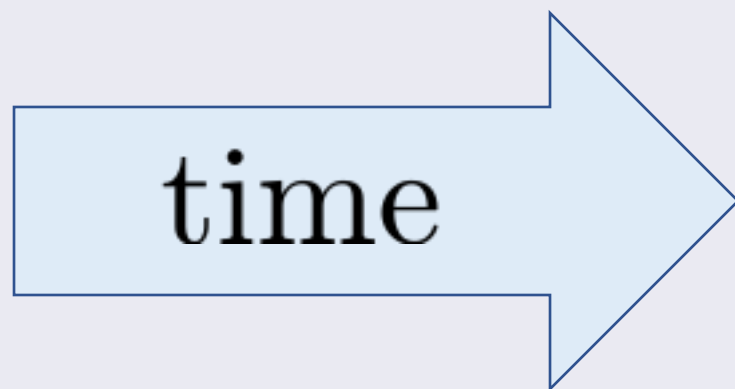
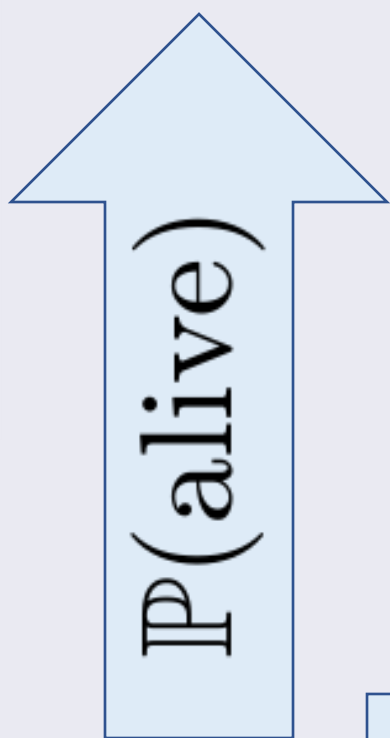


Survival curve-based uncertainty estimation for regression problems.

Sören Dittmer





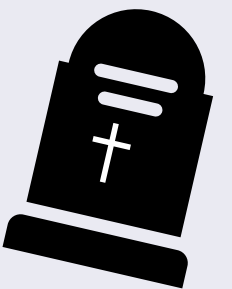
$P(\text{alive})$

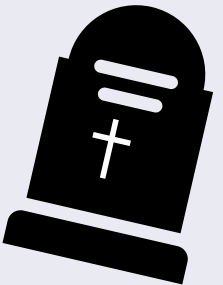
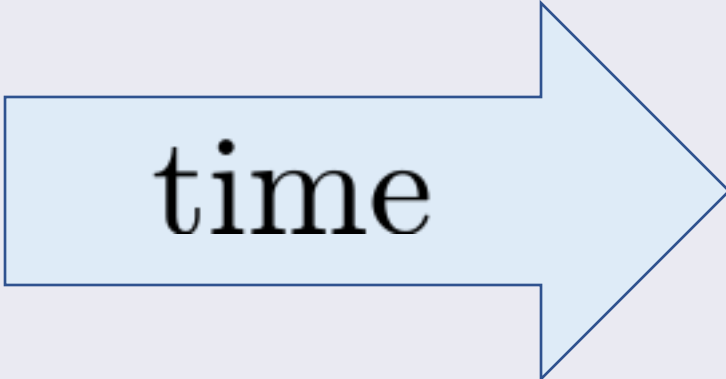
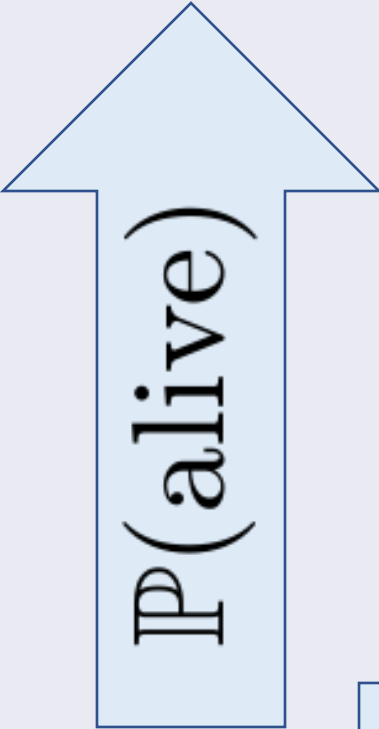
time

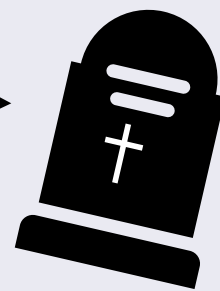
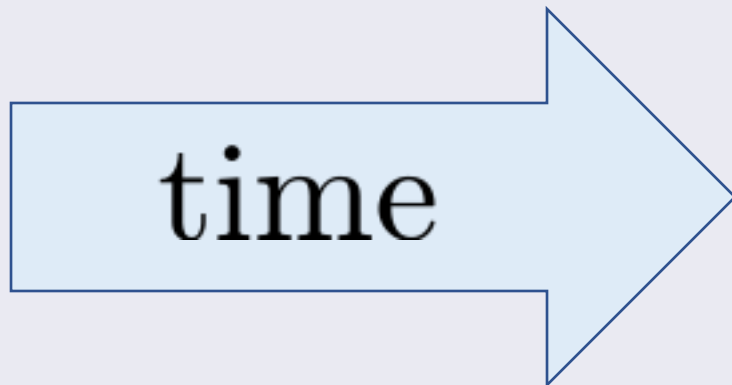
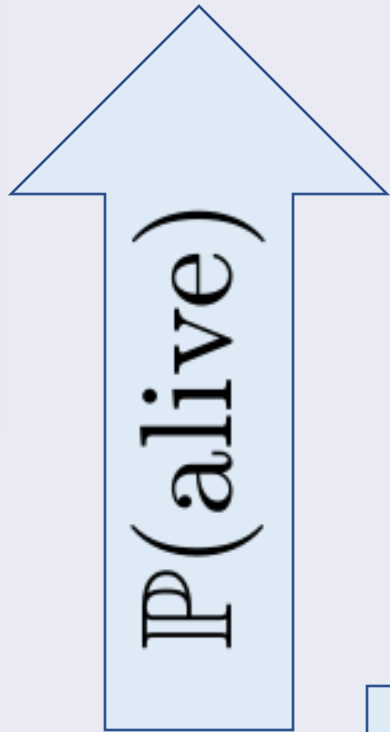
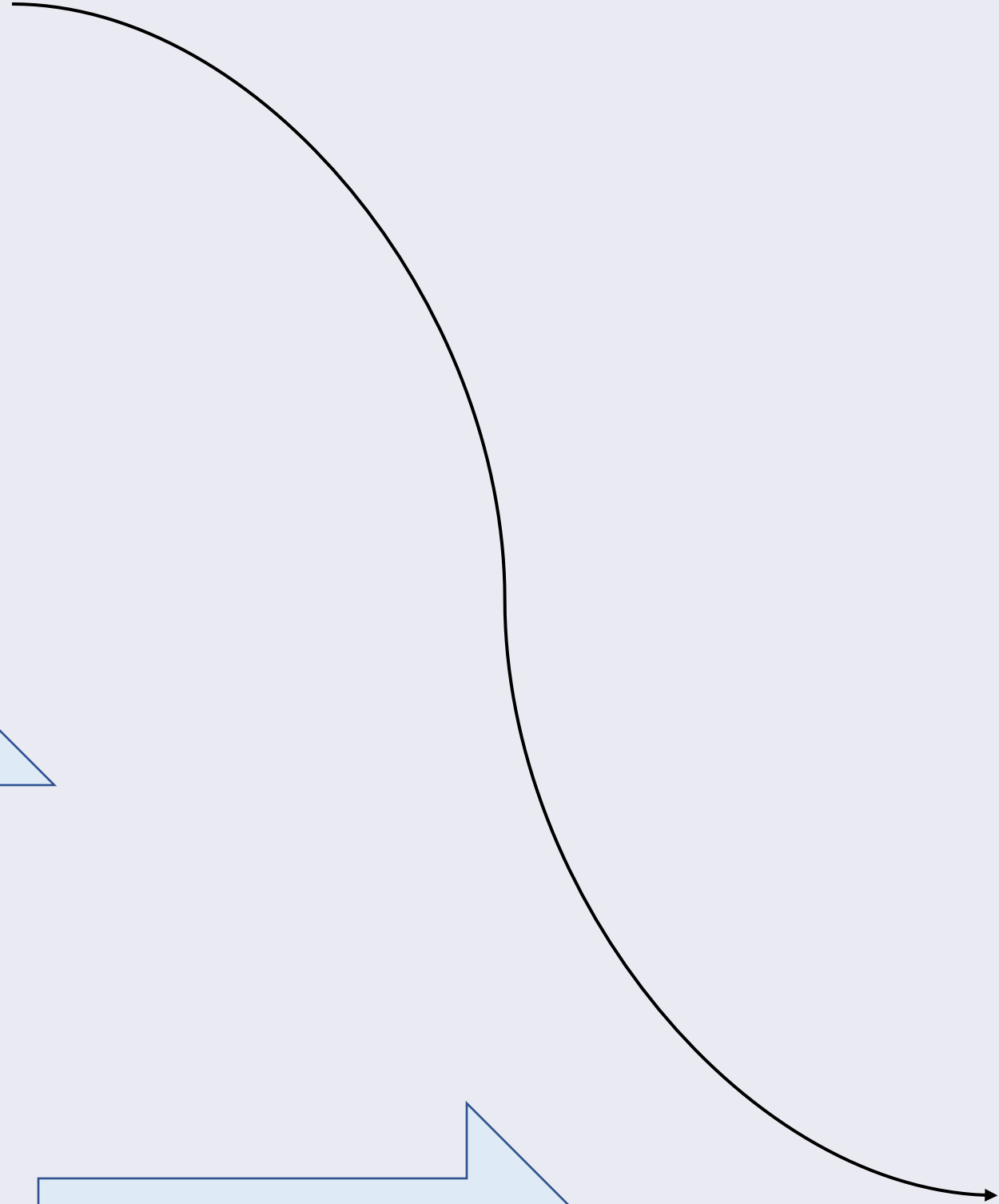


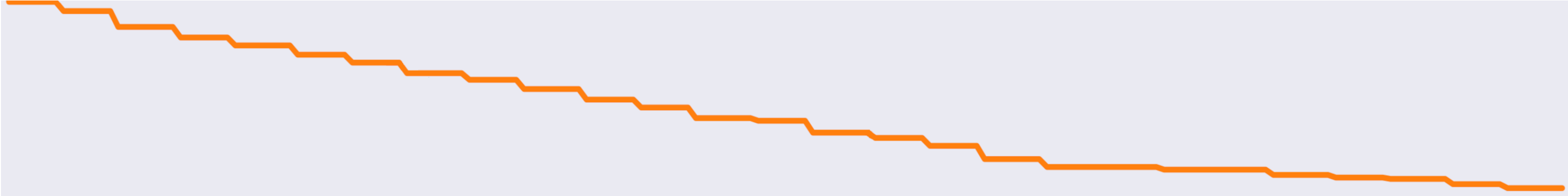
$P(\text{alive})$

time





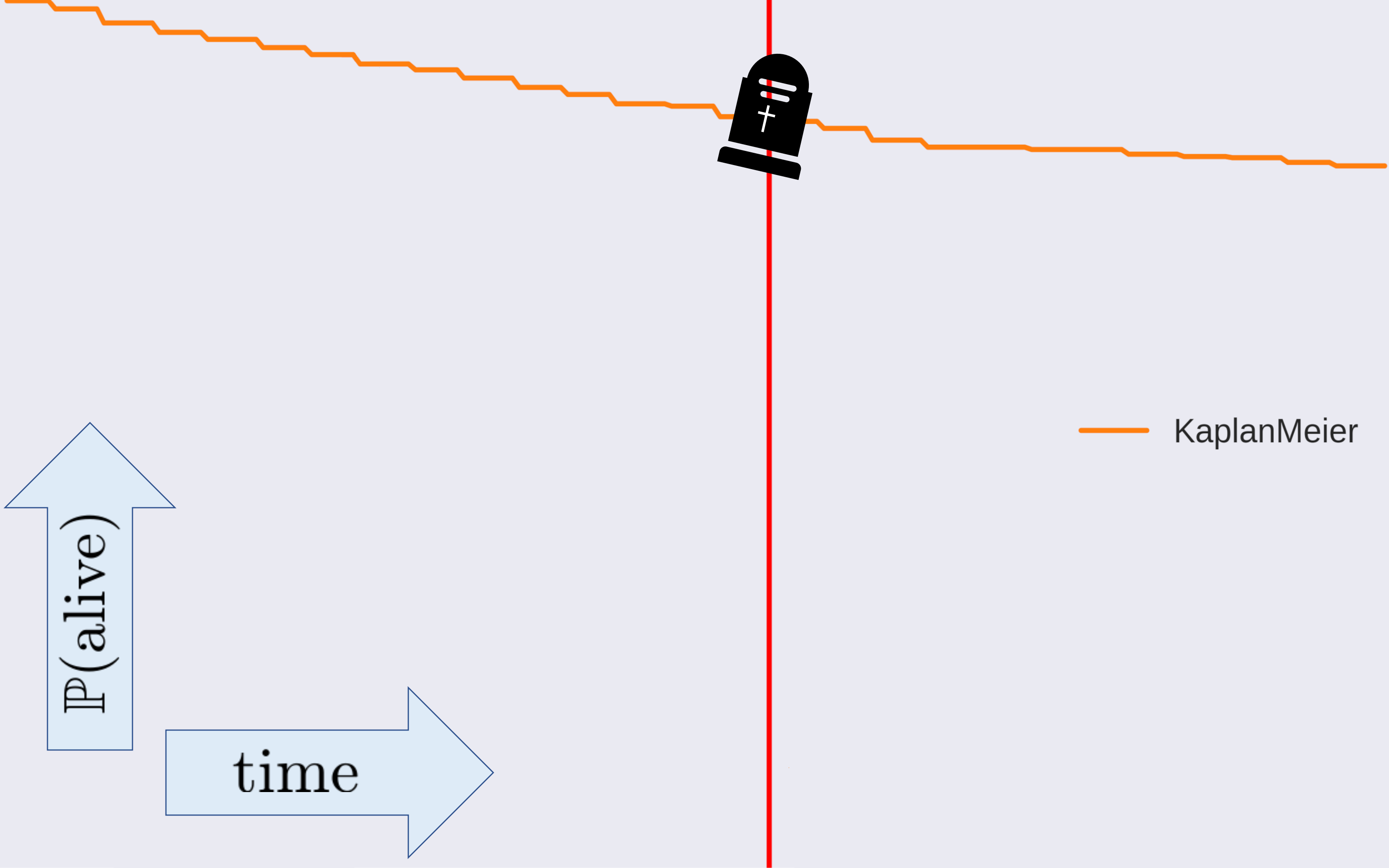




— KaplanMeier

$P(\text{alive})$

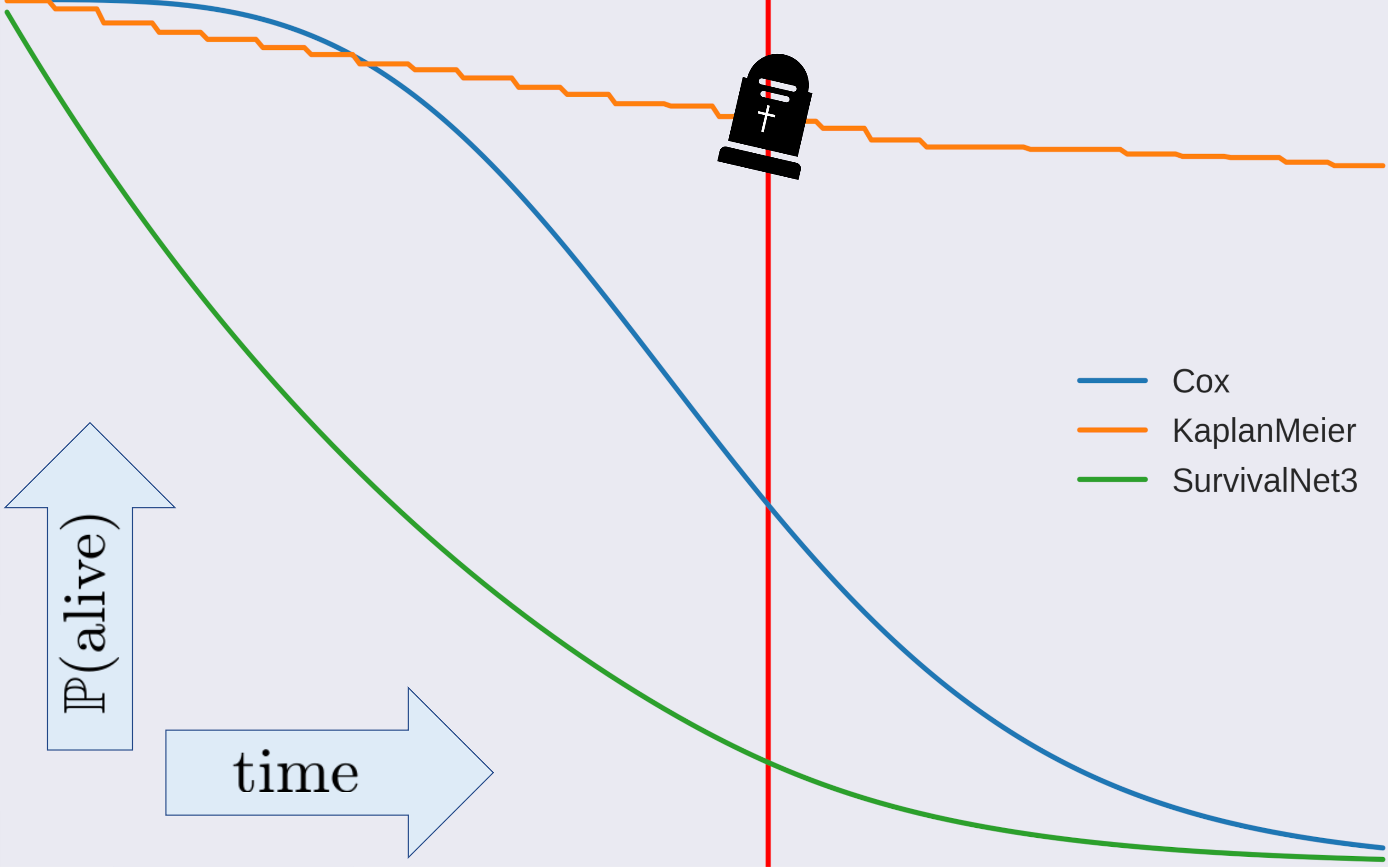
time



$P(\text{alive})$

time

— KaplanMeier



As good or better
than competitor
survival models

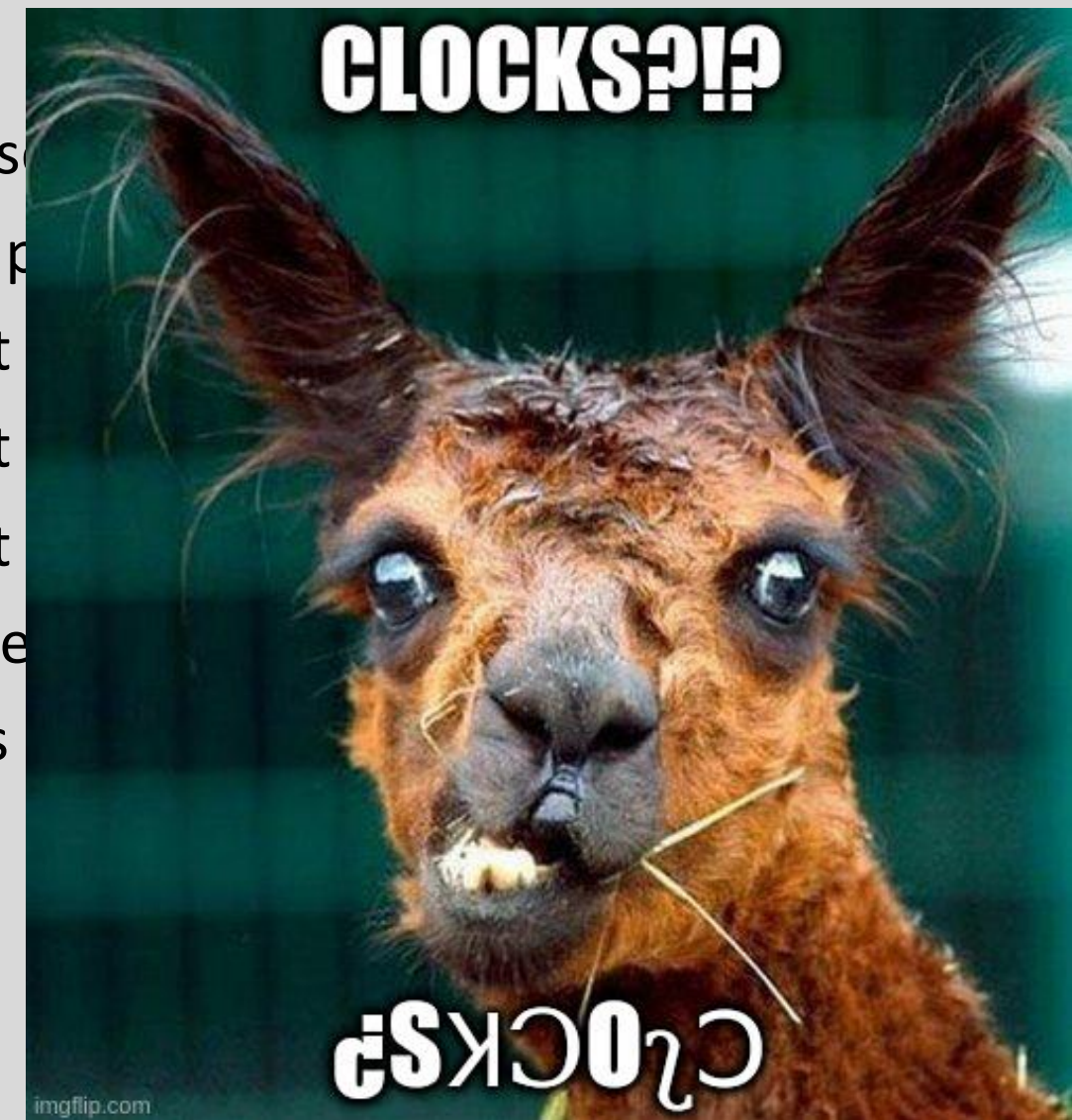
All datasets we tested on:

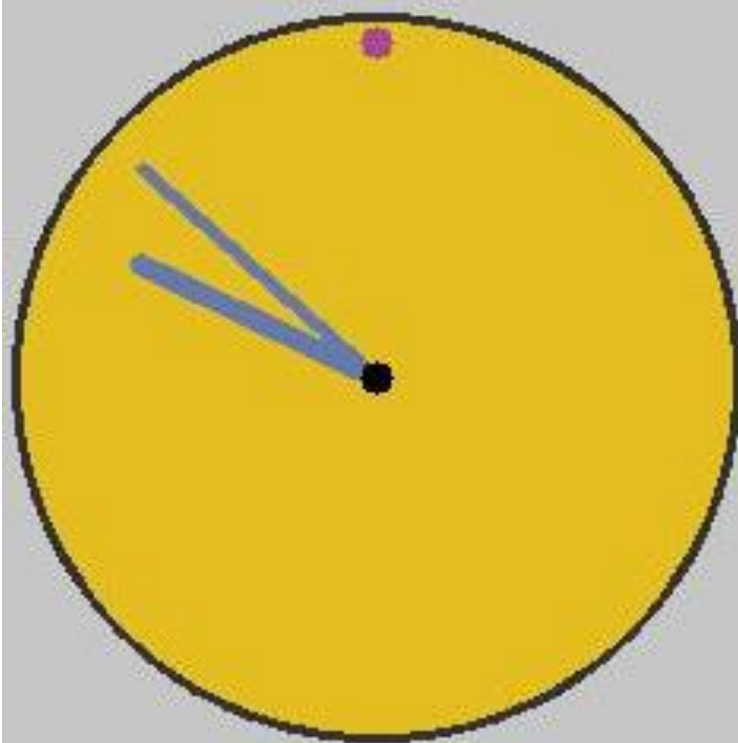
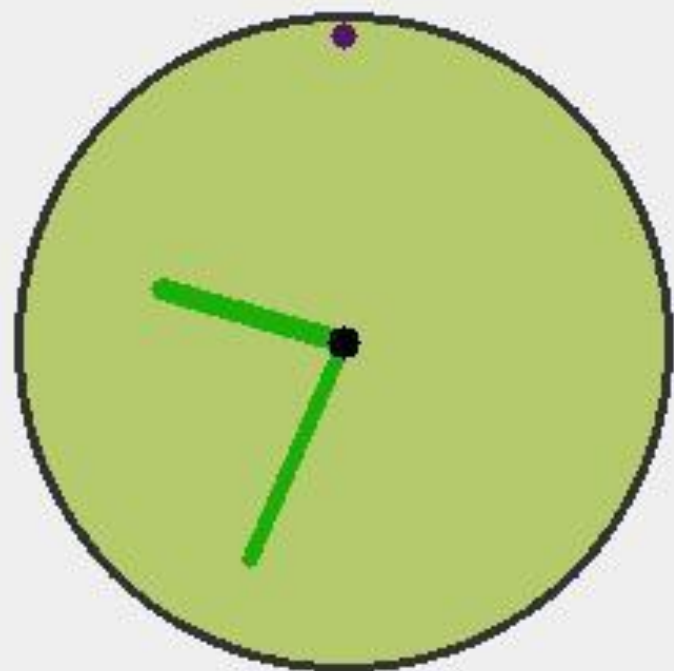
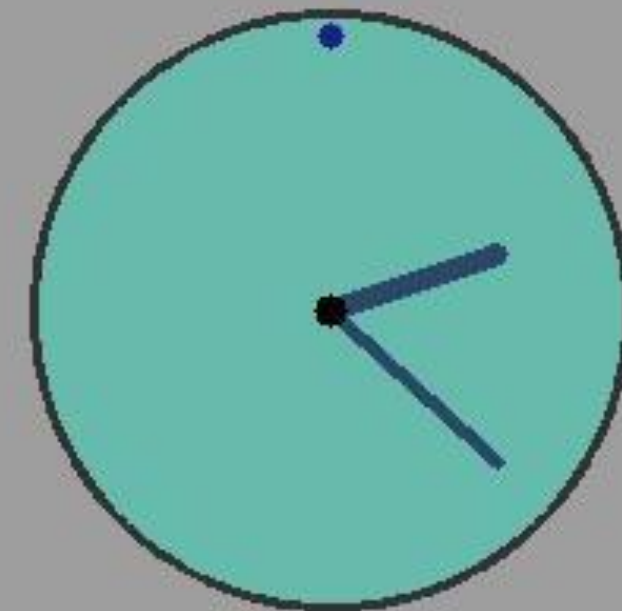
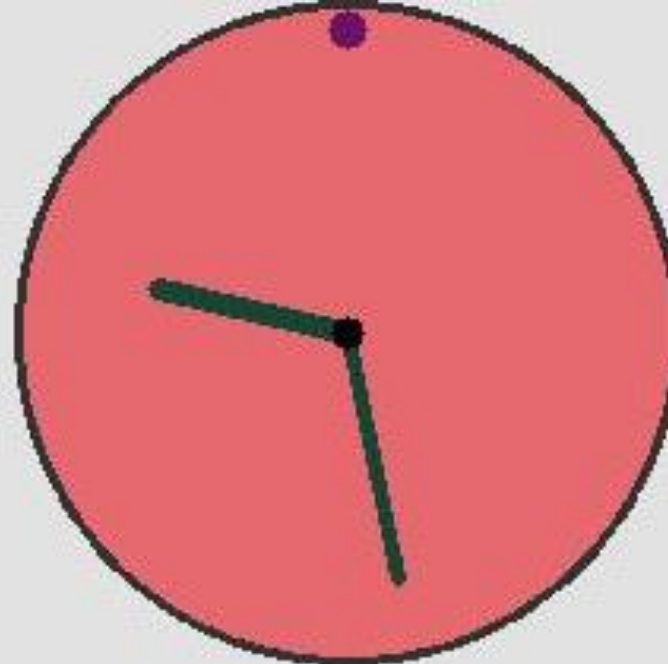
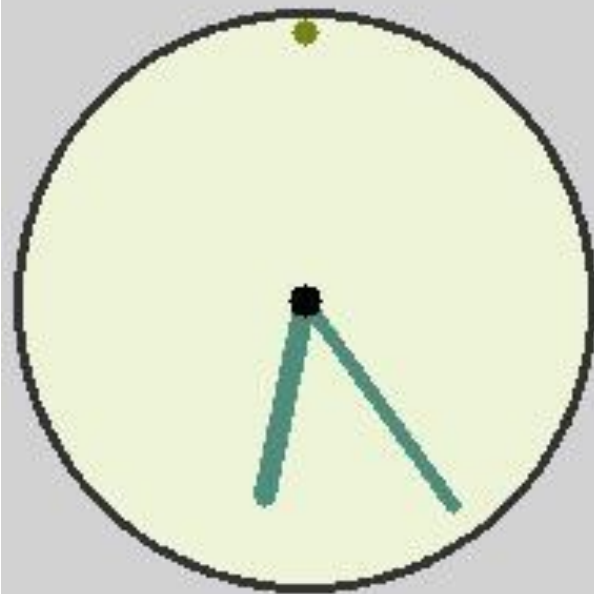
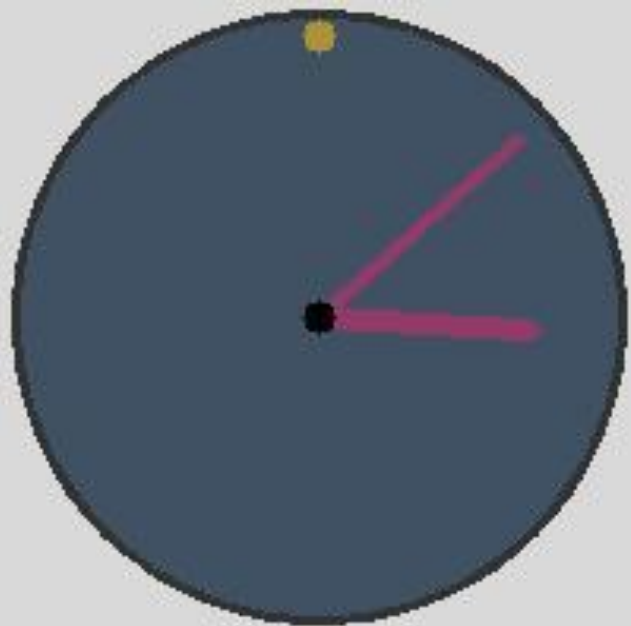
- Covid patients (Addenbrooke's)
- Breast cancer patients (3 datasets) [1, 2, 3]
- Muscle soreness patients [4]
- Clocks [5]

As good or better
than competitor
survival models

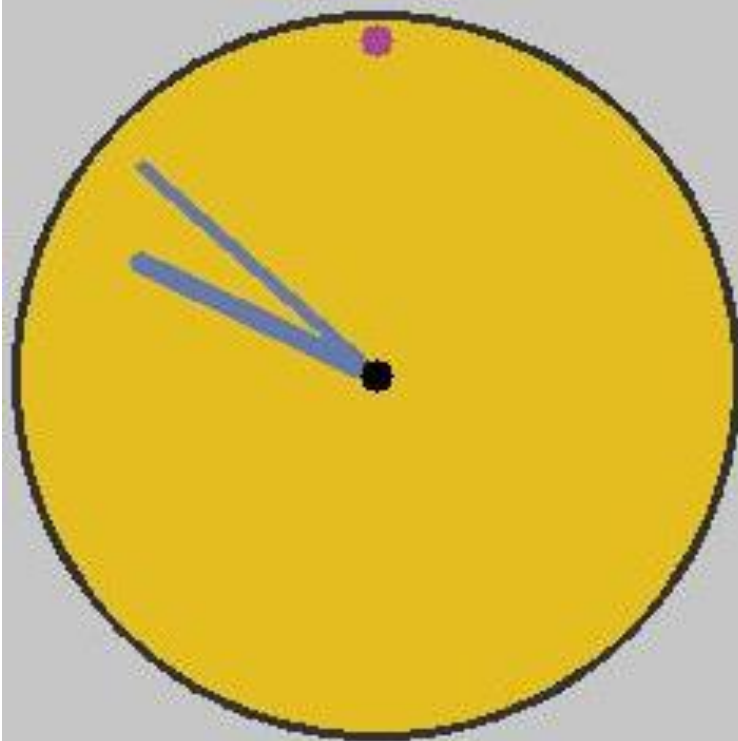
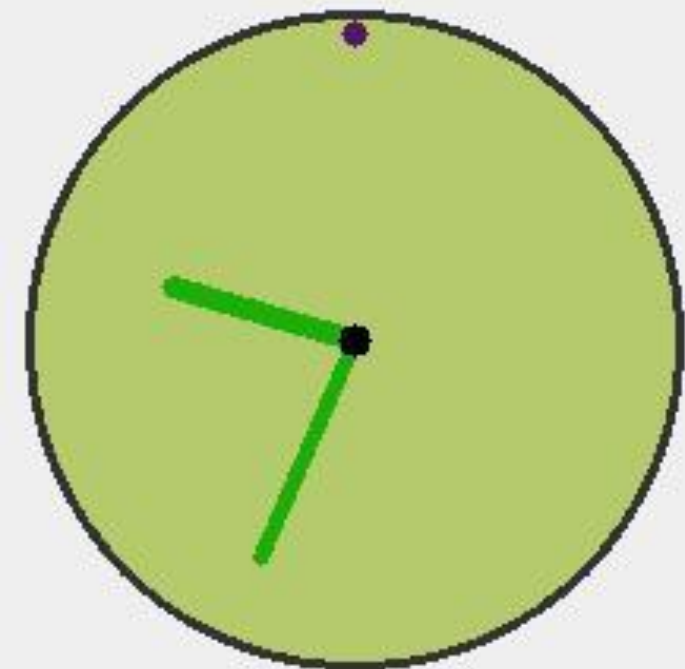
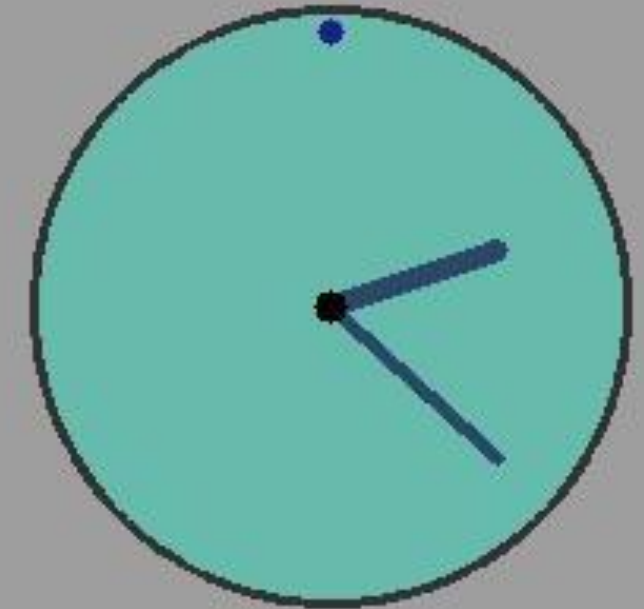
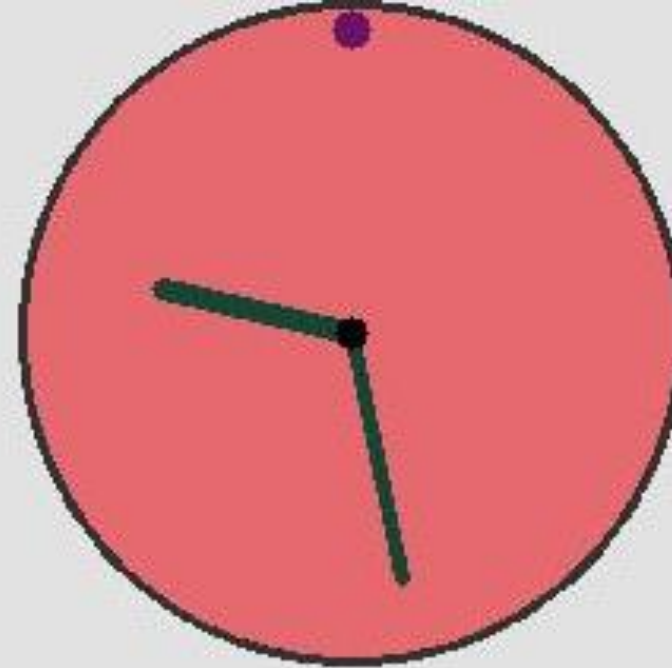
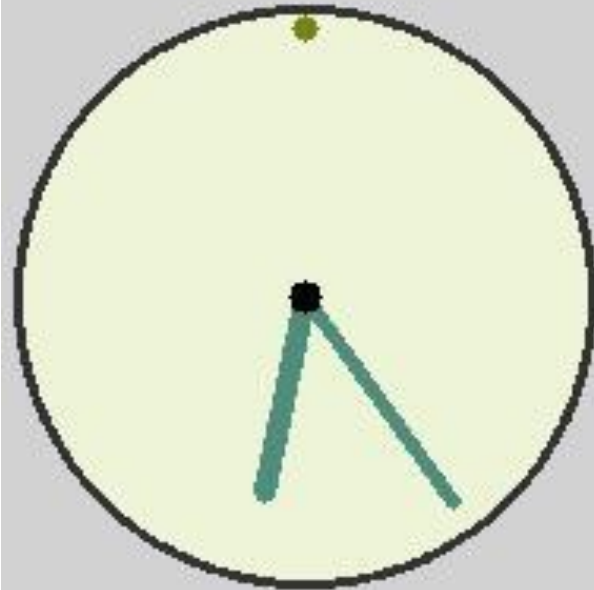
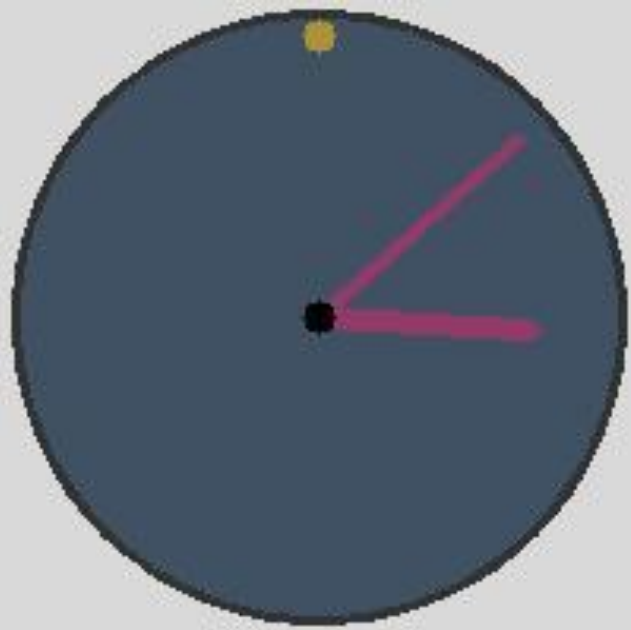
All datas

- Covid p
- Breast
- Breast
- Breast
- Breast
- Muscle
- Clocks

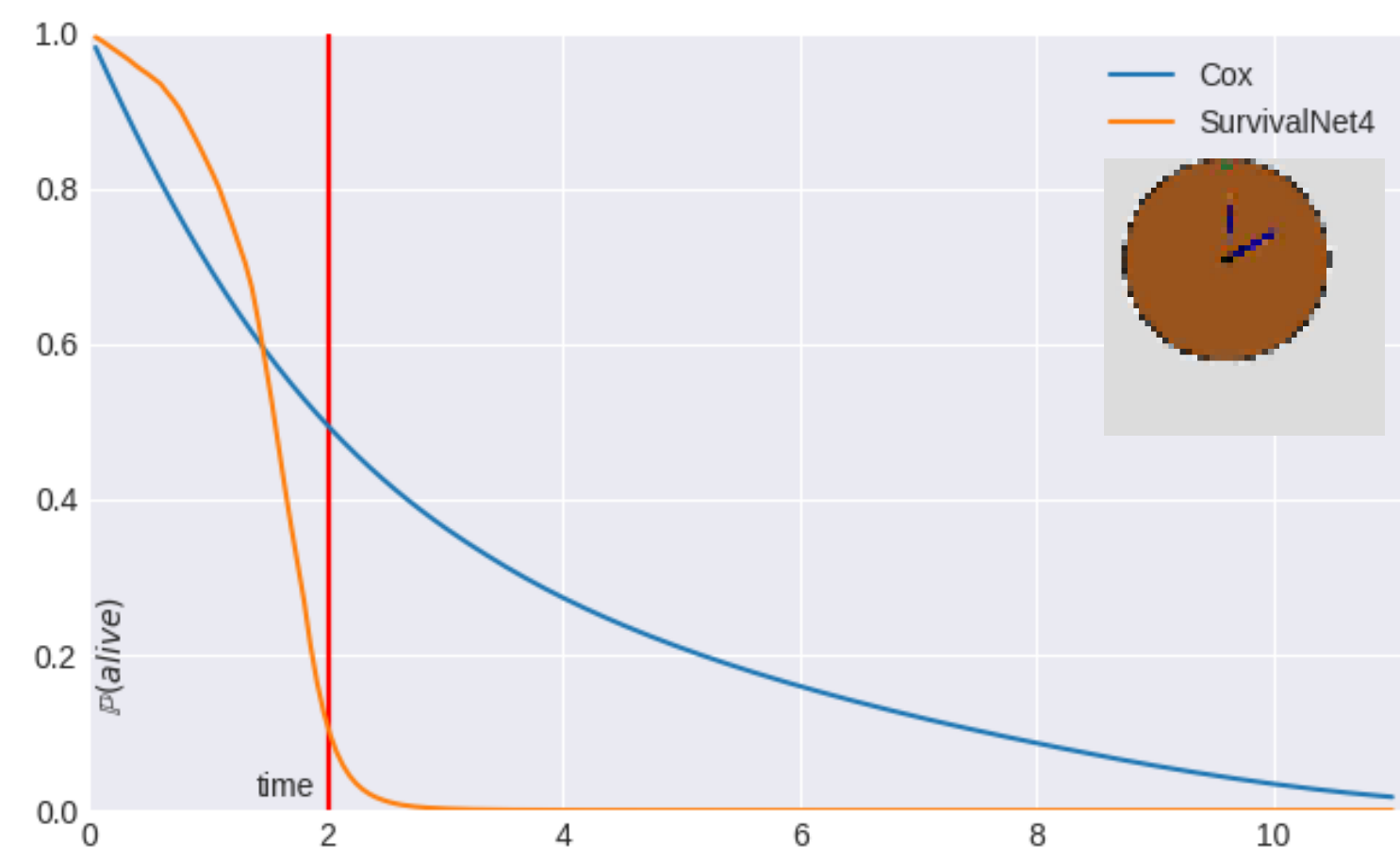
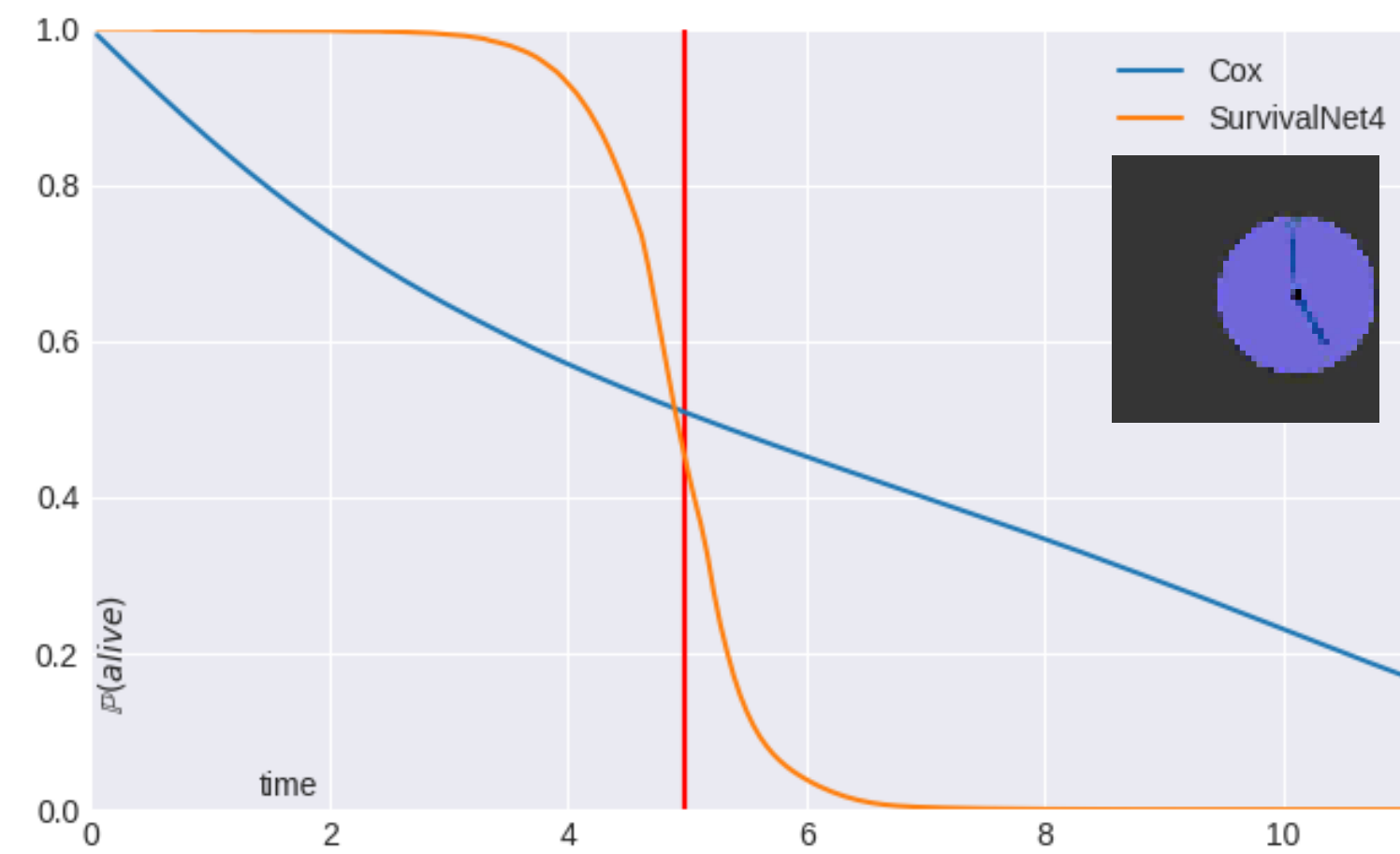
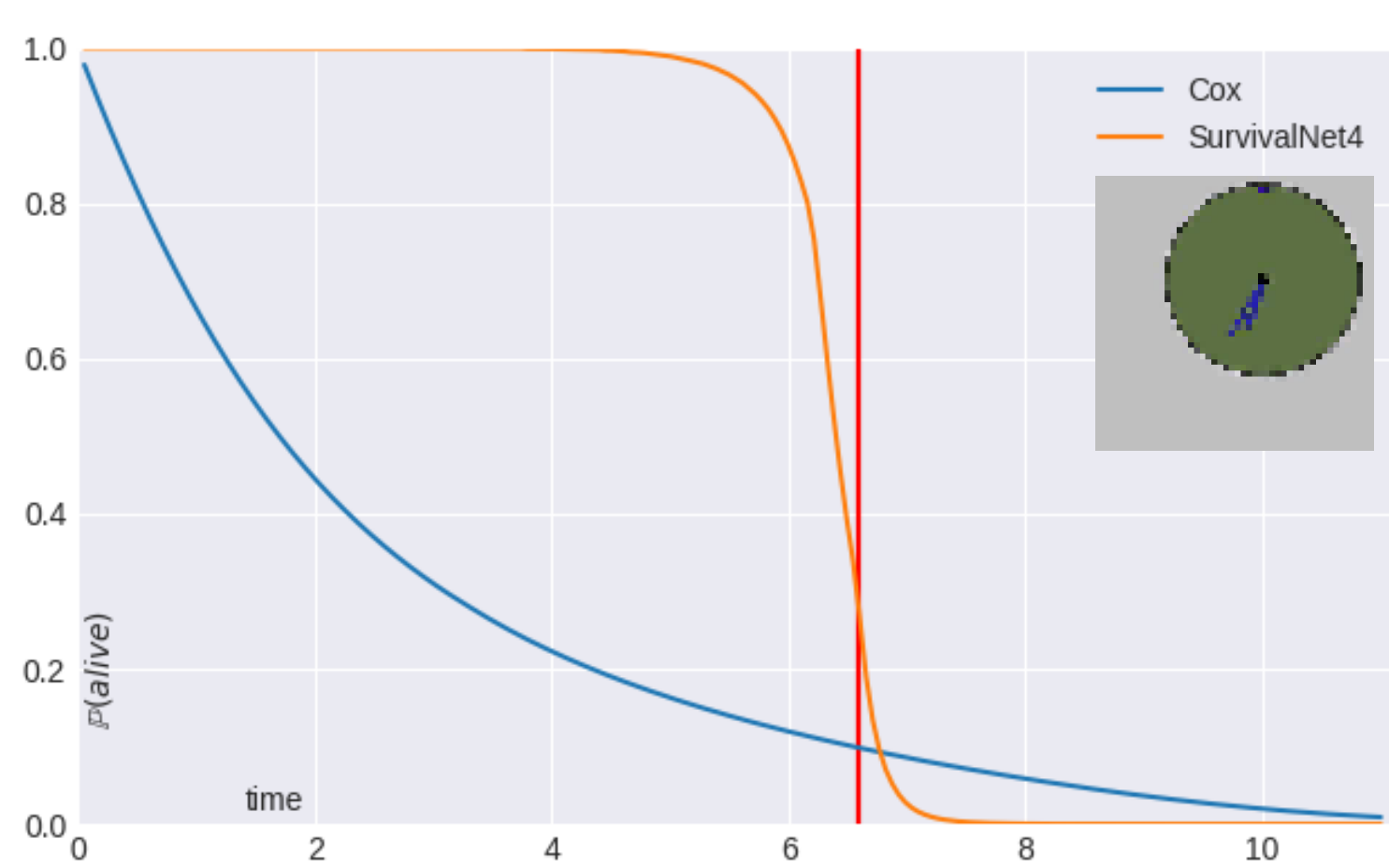
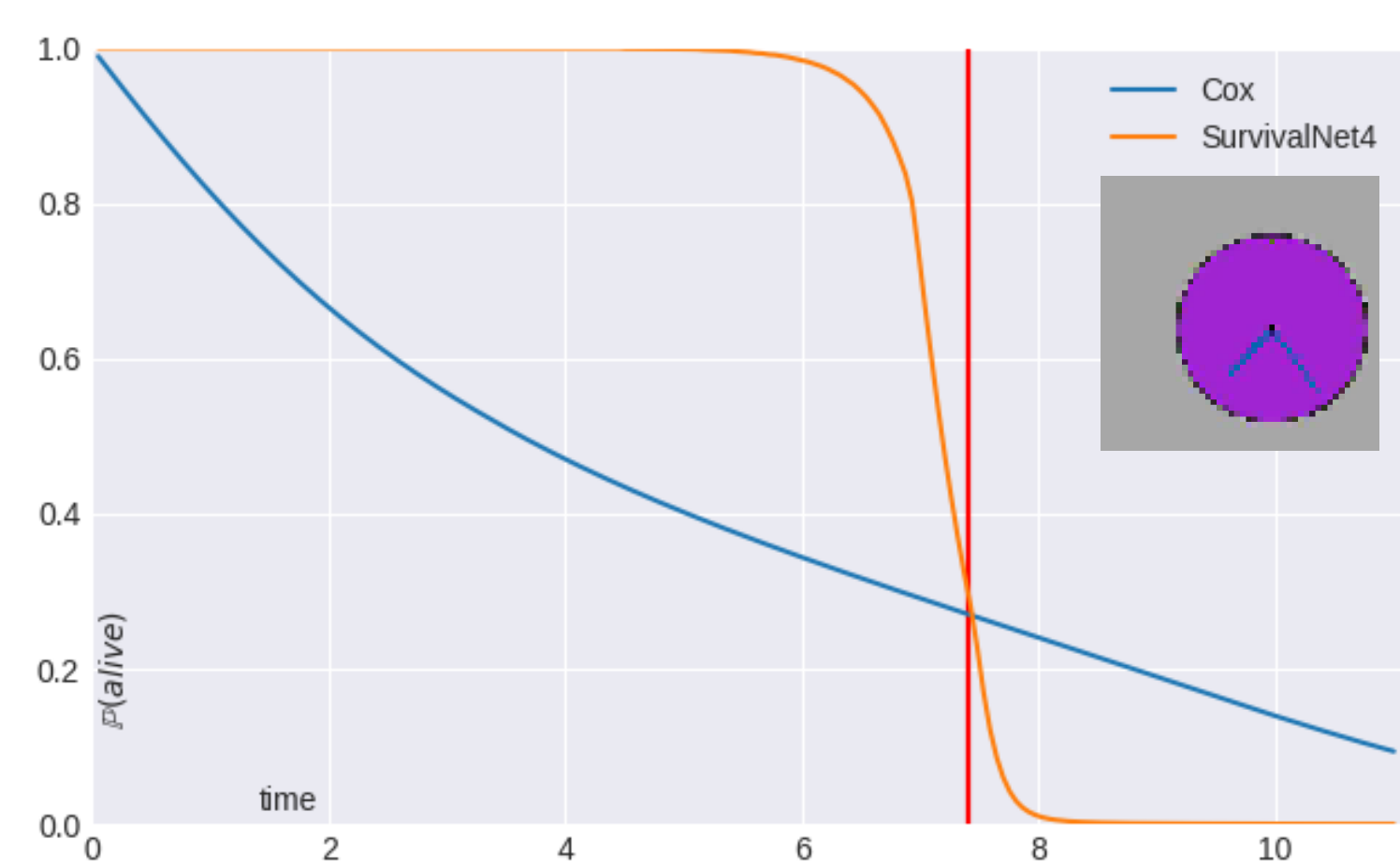




What time is it?



Is it that late
already?



References

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- [2] Sauerbrei, Willi, and Patrick Royston. "Building multivariable prognostic and diagnostic models: transformation of the predictors by using fractional polynomials." *Journal of the Royal Statistical Society: Series A (Statistics in Society)* 162.1 (1999): 71-94.
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- [4] Lemeshow, Stanley, Susanne May, and David W. Hosmer Jr. *Applied survival analysis: regression modeling of time-to-event data*. John Wiley & Sons, 2011.
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