

Lecture 02. Semiparametric Methods

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Main assumption of semiparametric methods

- Proportional hazards:

$$h_1(t) = \psi h_0(t)$$

- Proportional hazards can be extended to include covariates

$$\psi = e^{z\beta}$$

- The model then becomes:

$$h_1(t) = e^{z\beta} h_0(t)$$

It contains a non-parametric specification of the baseline hazard and a parametrized specification of the relationship between hazard and covariates.

Model estimation

Since the model has