Assignment for
EP16: Missing Values in Clinical Research

Multiple Imputation

14 − 18 May, 2018

Data

The **MIdat22** data comprise data of 996 liver transplant patients that are followed up after receiving the transplant, from a multi-center study.

The dataset contains the following variables:

variable	explanation
ID	patient identifier
outcome	survival outcome
time	event time
birth	year of birth of the recipient (patient)
sex	sex of the recipient (patient)
bg_rec	blood group of the recipient (patient)
graft	type of graft (HF: heart beating donor, full liver; HP: heart beating donor, partial liver; DF: domino transplant, full liver; LL: living donor, split liver; NF: non-heart beating donor, full liver; HR: heart beating donor, reduced liver; NP: non-heart beating donor; partial liver)
age_rec	age of the recipient (patient)
year	year the transplant was performed
origin	patient's place of origin
isc_time	ischemic time (time the organ was outside the body)
age_don	age of the donor
bg_match	are the blood groups of donor and recipient equal? (`factor(bg_don == bg_rec)`)
bg_don	blood group of the organ donor

Analysis model of interest

The analysis model of interest is a Cox proportional hazard regression model with event time `time` and event indicator `outcome` and covariates `year`, `bg_match`, `isc_time`, `age_don`, `age_rec` and `sex`.