

Assignment II for

EP16: Missing Values in Clinical Research

Multiple Imputation

13 – 17 May, 2019

Data

The **MI_{dat22}** data comprise data of 954 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
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)
sex	sex of the recipient (patient)
origin	patient's place of origin
bg_match	are the blood groups of donor and recipient equal? (<code>"factor(bg_don == bg_rec)"</code>)
bg_rec	blood group of the recipient (patient)
bg_don	blood group of the organ donor
age_don	age of the donor
age_rec	age of the recipient (patient)
isc_time	ischemic time (time the organ was outside the body)
year	year the transplant was performed
birth	year of birth of the recipient (patient)

Analysis model of interest

The analysis model of interest is a time-to-event model with event time `time` and event indicator `outcome` and covariates `year`, `bg_match`, `isc_time`, `age_don`, `age_rec` and `sex`.