

INVITED TALK

Longitudinal dynamic models for progression of kidney function

Inês Sousa

University of Minho, Portugal, isousa@math.uminho.pt

Joint work with Peter Diggle and Ozgur Azar

Summary: We consider a dynamic regression longitudinal model to monitor progression of kidney function on primary care patients in order to detect incipient renal failure. Progression is characterised by a decline in eGFR. In the longitudinal model model proposed a subject's rate of change in eGFR, relative to the expected profile of eGFR for all subjects with the same values of explanatory variables, is modelled as a stochastic process, which is realised independently for each subject.