

In this work we deal with survival models, when we consider that with positive probability some patients never relapse because they are cured. We focus on two-component mixture model and model with biological motivation. For each model, we derive estimate of probability of cure and estimate of survival function of time to relaps of uncured patients by maximum likelihood method. Further we consider, that both probability of cure and survival time can depend on regressors. Models are then compared through simulation study.