A hierarchical Bayesian methodology to model spatio-temporal clustered survival data with possibility of cure is proposed. A continuous transformation class of survival curves indexed by a single parameter is used. This transformation model is a larger class of models containing as special cases two of the well-known existing models, the Proportional Hazard (PH) and the Proportional Odds (PO) models. The survival curve is modeled as a function of a baseline cumulative distribution function (cdf), cure rates and spatio-temporal frailties. The cure rates model uses a covariate link specification and the spatial frailties follow a Conditionally Autoregressive model (CAR) with time varying parameters. The likelihood function is formulated assuming that the single parameter controlling the transformation is unknown and full conditional distributions are derived. A model with a non-parametric baseline cdf is implemented. We obtain the usual posterior estimates, smoothed by regional level maps. Finally, we apply our methodology to a SEER’s data set of melanoma cancer patients diagnosed in the state of New Jersey between 2000 and 2007, and with follow up time until 2007.