Figure 1: A visualization of the survival prediction system. The system contains two stages. The first is a training stage, where radiomic features are extracted from a set of computed tomography liver scans. Variance inflation factor and hazard ratio ranking is then used to filter out low information yielding features. The remaining features are used to train a random survival forest prediction model. Once the survival model has been built, it can be exported to a real-time prediction environment, where liver scans of new patients can be fed as input to the survival model to obtain a predicted survival for the new patient. In this way, most of the computation required is done beforehand to build the model and prediction can occur in real-time for new patients.