This thesis deals with processing of data obtained by DCE-MRI, which uses magnetic resonance to track the propagation of contrast agents in the bloodstream. Patient is given a contrast agent and then a series of images of the target area is taken. The output is a set of image data and perfusion maps. Work employs segmentation method which uses graph cuts to interactively look for the tumor, and evaluates it according to its shape properties. Study of whole data sets is simplified by image fusion methods.