Supplementary Material

More visual comparisons, including visualization of segmentation results on two medical image datasets, smoothened loss of training data on two medical image datasets, and consistency weight λ (see Eq. 9) during training, are provided as suggested by reviewers. In addition, the testing codes, the trained model and all results using our method can be found at `https://www.aliyundrive.com/s/9rGXTQiDtqA`.

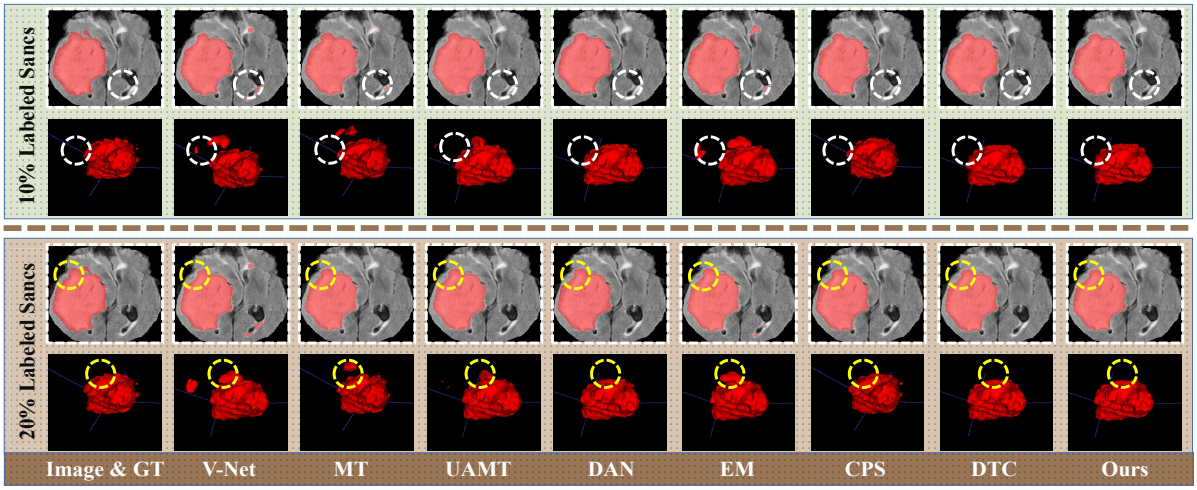

Figure 1: Visualization of segmentation results of brain tumor MR images obtained by our proposed RUPC and the other methods.

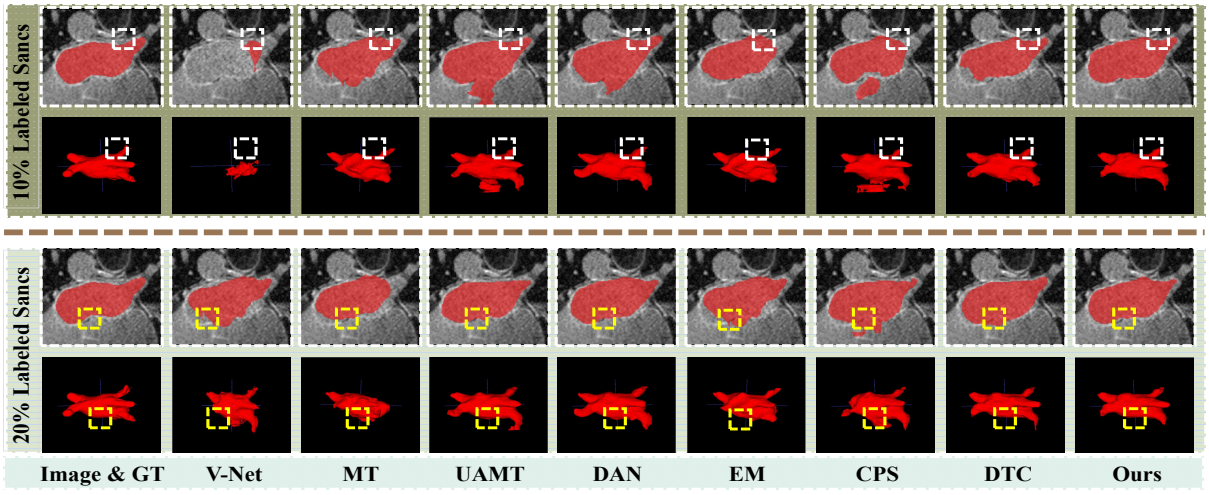

Figure 2: Visualization of segmentation results of left atrium images obtained by our proposed RUPC and the other methods.

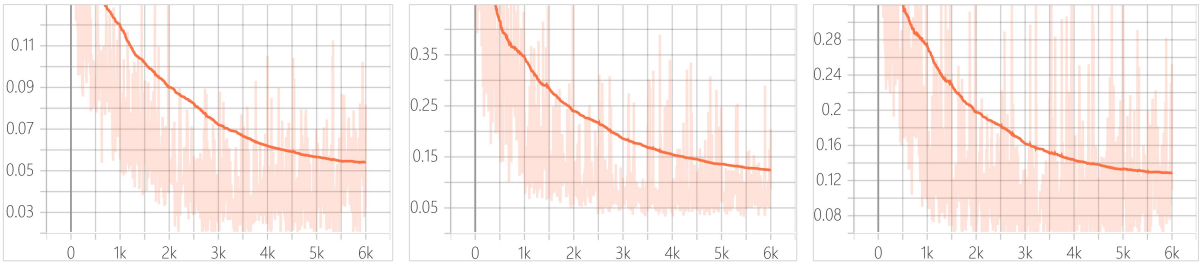

Figure 3: Smoothened loss of training data for our model A, model B, and model C on the LA2018 dataset.

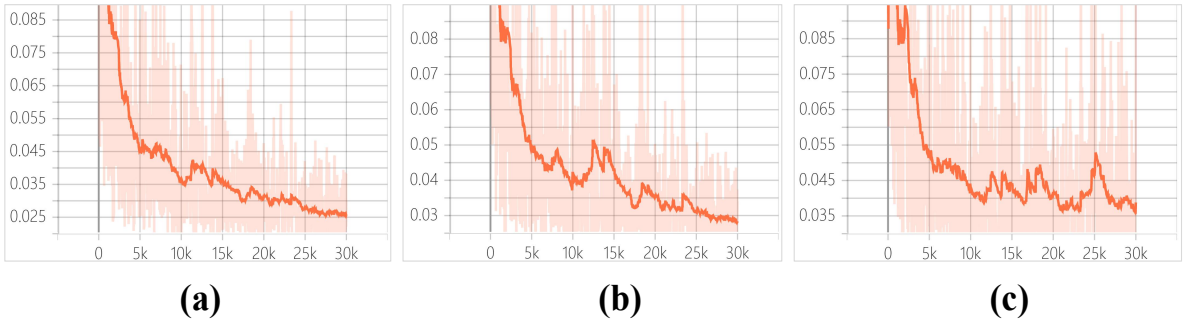

Figure 4: Smoothened loss of training data for our model A, model B, and model C on the BraTS2019 dataset.

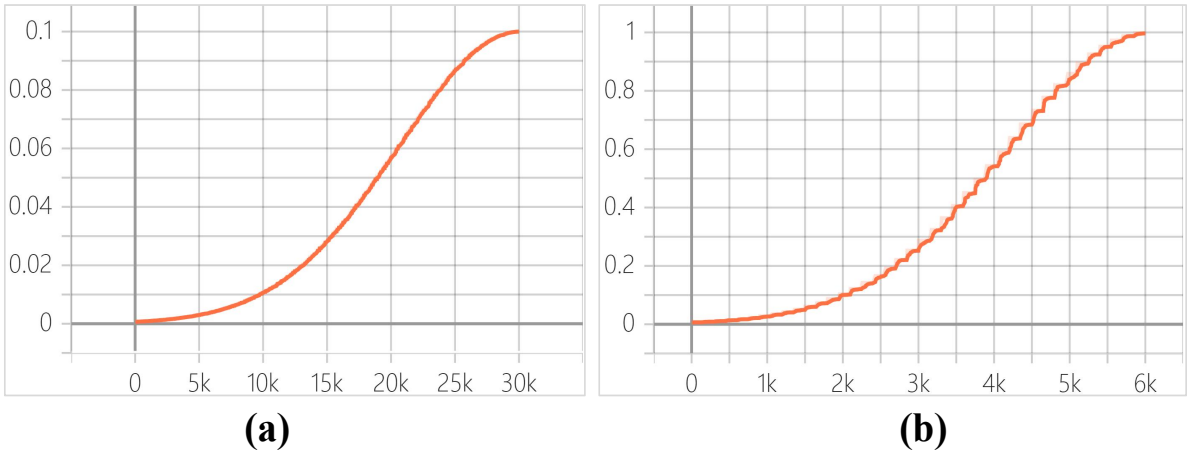

Figure 5: Consistency weight of our proposed RUPC during training. (a) Consistency weight of our proposed RUPC for brain tumor segmentation on the BraTS2019 dataset. (b) Consistency weight of our proposed RUPC for left atrium segmentation on the LA2018 dataset.