## EMF-former: An Efficient and Memory-Friendly Transformer for Medical Image Segmentation(Supplementary material)

Zhaoquan Hao, Hongyan Quan<sup>(⊠)</sup>, and Yinbin Lu

School of Computer Science and Technology, East China Normal University, Shanghai, China hyquan@cs.ecnu.edu.cn

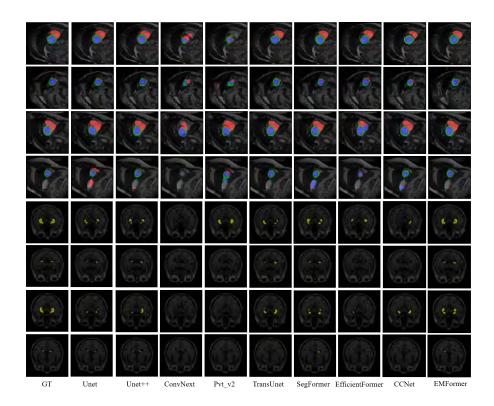
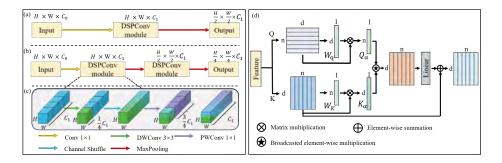
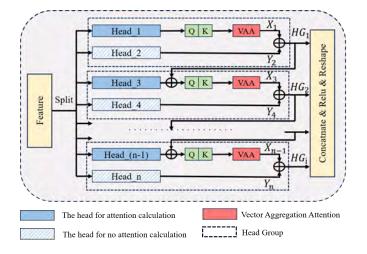


Fig. 1. Details of visual comparison. We selected two pairs of samples in both two dataset, each pair involving two segmentation results for large target and small target.



**Fig. 2.** Details of DSPConv Modules and VAA. (a) The DSPConv Merge structure is used in stage 2~4. (b) The DSPConv Stem structure is used in stage 1. (d) The query and key matrix are multiplied by the learnable weights to produce a vector. The two vectors are then element-wise multiplied after the broadcast.



**Fig. 3.** Details of S-MHA. Multi-head are split from the features (We set the maximum value of n equal to 8). The head for attention calculation and the head for no attention calculation together form a Head Group (e.g., head \_1 and head \_2 in the figure).