

# Learning Multi-Class Segmentations From Single-Class Datasets: Supplementary Material

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## Base model

Below are the details on the architecture of the base model.

	<b>Input</b>	
Encoder	Conv 2	
	DenseBlock 16x3 + MaxPooling	
	DenseBlock 32x3 + MaxPooling	
	DenseBlock 64x3 + MaxPooling	
	DenseBlock 128x3 + MaxPooling	
	DenseBlock 256x3 + MaxPooling	
	DenseBlock 512x3 + MaxPooling	
	TransConv 512 + DenseBlock 256x3	
	TransConv 256 + DenseBlock 128x3	
	TransConv 128 + DenseBlock 64x3	
	TransConv 64 + DenseBlock 32x3	
	TransConv 32 + DenseBlock 16x3	
	TransConv 16 + DenseBlock 8x3	
		Conv 32
	Conv 1	
	<b>Output</b>	

Table 1. Architecture details of the base model. We utilize 2D or 3D convolutional and transposed convolutional (*TransConv*) layers, depending on the experiment. Each *DenseBlock*  $X \times N$  contained  $N$  densely connected convolutional layers with  $X$  filters each.

## References

- [1] Tobias Heimann, Bram Van Ginneken, Martin A Styner, Yulia Arzhaeva, Volker Aurich, Christian Bauer, Andreas Beck, Christoph Becker, Reinhard Beichel, György Bekes, et al. Comparison and evaluation of methods for liver segmentation from CT datasets. *IEEE Transactions on Medical Imaging*, 28(8):1251–1265, 2009.
- [2] Roth Holger, Farag Amal, Turkbey Evrim, Lu Le, Liu Jiamin, and Summers Ronald. Data from pancreas – CT. *Cancer Imaging Archive*, 2016.

