



Supplementary Material

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Table 1. Detailed training implementations and hyperparameters.

Category	Description
Training Details	
Image Size	(2,848x4,288) to (512x512) patches for IDRiD, (960x1,440) for e-optha
Batch Size	4(2 labeled images and 2 unlabeled images)
Learning Rate	0.0001 for IDRiD, 0.001 for e-optha
Optimizer	AdamW with beta 0.9, 0.999, and weight decay 0.0005
Augmentation	Shift, Flip, Rotation
Weight Decay Strategy	Following the “Poly” method described in Wang et al. [19]
Random Seed Sampling Details	Exclusion of images without ground truth masks from the limited labeled dataset in the IDRiD dataset
Model Size	26.8MB for RiCo and Wang et al. [20] and 26.3MB for other models
Framework & GPU	Pytorch & Tesla V100 with 32GB
Hyperparameters	
β for exponential moving averaging	0.99
τ for accumulator	50
th for saliency map	0.25
Preprocessing for saliency map	Circular retina extraction via R-channel thresholding at 20

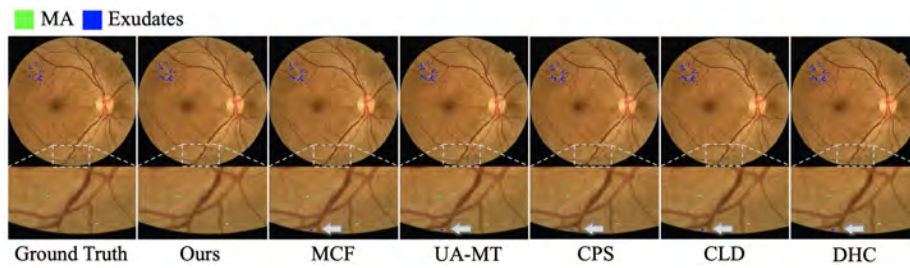


Fig. 1. Qualitative results at 10% e-optha dataset. The second row zooms in on the first row’s images. Gray arrows highlight subtle or challenging lesions.

Table 2. PRC for average, MA, HE, EX, and SE at 2%, 5%, and 100% labeled dataset proportions in the IDRiD dataset. **Bold** denotes the highest scores and underscores mark the second highest.

Prop.	Methods	Avg.	MA	HE	EX	SE
2%	Unet	18.90±11.36	4.93±6.68	21.35±10.93	34.82±9.23	14.5±18.59
	Unet++	20.36±13.58	8.9±10.24	21.09±11.54	34.1±14.39	17.36±18.14
	UA-MT	24.64±10.56	24.33±1.52	21.48±12.85	31.56±8.99	21.19±18.86
	CPS	26.9±8.86	27.0±1.29	26.89±10.10	31.81±3.65	21.89±20.38
	CLD	25.33±9.65	<u>24.99±1.55</u>	24.93±7.08	31.51±9.37	19.88±20.58
	MCF	28.04±10.19	<u>17.37±9.75</u>	<u>32.35±5.17</u>	<u>40.75±8.22</u>	21.71±17.63
	DHC	27.82±12.39	19.42±13.72	<u>25.99±8.12</u>	43.49±9.19	22.39±18.52
	Ours	33.51±12.6	17.82±12.92	34.61±9.22	50.6±5.5	31.01±22.75
5%	Unet	29.55±8.83	24.62±2.54	27.55±3.69	52.21±13.05	13.81±16.05
	Unet++	29.65±11.68	20.04±13.91	33.73±3.40	48.24±8.77	16.59±20.63
	UA-MT	32.57±14.58	27.47±7.09	39.12±5.69	46.75±23.12	16.96±22.44
	CPS	35.07±12.48	33.25±3.56	40.09±4.26	47.57±20.42	19.36±21.68
	CLD	35.28±10.99	28.06±4.91	43.18±3.01	53.54±18.10	16.34±17.93
	MCF	<u>38.72±10.77</u>	31.13±5.19	43.73±2.55	58.88±11.49	<u>21.13±23.85</u>
	DHC	36.01±11.72	35.21±2.51	40.92±3.55	47.62±18.71	20.30±22.10
	Ours	39.12±11.22	32.49±4.01	43.25±2.81	<u>55.41±15.48</u>	25.31±22.56
100%	Unet	60.56±2.70	41.33±0.73	59.44±1.55	77.21±1.62	64.24±6.89
	Unet++	60.2±4.50	44.18±1.07	57.16±1.28	74.61±10.01	64.86±5.63

Table 3. PRC for MA and Exudates at 10%, 20% and 30% labeled dataset proportions in the e-ophta dataset.

Prop.	10%		20%		30%	
	MA	Exudates	MA	Exudates	MA	Exudates
Unet	18.58±5.36	19.53±13.86	22.72±1.74	34.33±1.28	27.93±4.07	41.84±9.02
Unet++	22.13±5.24	17.06±11.25	24.01±1.92	35.95±1.91	31.44±6.98	42.77±1.81
UA-MT	27.22±4.81	28.58±14.43	30.28±1.99	36.92±7.43	30.52±4.09	45.54±8.83
CPS	27.67±4.20	27.70±18.23	31.24±6.79	38.81±5.97	28.99±3.11	47.97±6.45
CLD	23.88±3.23	24.68±14.66	25.34±3.39	37.11±4.25	23.87±3.67	44.60±10.32
MCF	29.36±3.22	<u>38.47±13.21</u>	35.57±5.81	<u>44.59±2.90</u>	<u>36.61±4.01</u>	<u>50.51±3.70</u>
DHC	26.30±2.04	30.24±15.36	31.34±4.55	41.49±9.51	30.37±3.76	45.82±9.40
Ours	30.31±2.33	39.01±12.32	<u>34.65±5.36</u>	46.30±4.70	37.24±5.83	52.26±4.29
Prop.	100%					
Classes	MA			Exudates		
Unet	34.03±1.84			52.69±1.04		
Unet++	37.21±3.40			51.28±3.40		