

Masks and Manuscripts Supplementary Material

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Masking Ratio	AUC↑	F1↑	ACC↑
0.15	77.15	26.84	87.88
0.3	77.92	27.55	88.52
0.45	76.59	26.58	86.74

Table 1: Ablation study on masking ratios impact on text. Reported results on zero-shot setting. The dataset used is NIH Chest X-Ray.

Loss function	S	AUC-ROC↑	Z	AUC-ROC↑
$\mathcal{L}_{MVML} + \mathcal{L}_{ITM}$		89.91		87.43
$\mathcal{L}_{MVML} + \mathcal{L}_{ITC}$		90.95		88.11
$\mathcal{L}_{MVML} + \mathcal{L}_{ITC} + \mathcal{L}_{ITM}$	91.91		88.91	

Table 2: Loss function choice, using RSNA Pneumonia dataset. S AUC-ROC↑ after fine-tuning with all data. Z AUC-ROC↑ indicates the score in a zero-shot setting.

σ	RSNA	SIIM	NIH
5	81.55	85.59	73.71
10	88.91	91.15	77.92
12	88.89	91.17	77.91
15	87.41	90.89	76.68
20	85.51	87.72	73.91
25	80.55	81.81	71.48

Table 3: Evaluating the impact of the σ value on zero-shot performance.

In the main paper, we report the average edema severity only. Here, Table 5 presents a comprehensive comparison of various methodologies applied to the multiclass classification problem of edema severity. “0,1,2,3” in the table represents the severity level and final average scores are reported. For each level, the scores are calculated as one class vs all the other classes (example 0 vs 1,2,3). Final average scores are reported.

Filter	RSNA	SIIM	NIH
Meijering	88.91	91.15	77.92
Sato	88.87	91.13	77.91
Frangi	81.23	80.54	71.57
Hessian	83.34	83.96	74.11

Table 4: Filter choices.

Methods	0			1			2			3			AVG		
	AUC↑	F1↑	ACC↑												
ConVIRT	84.53	77.69	77.93	60.99	39.38	46.29	72.02	48.43	64.45	90.47	61.54	88.09	77.00	56.76	69.19
GLoRIA	83.04	75.77	75.20	62.08	39.91	49.22	73.39	49.58	70.37	92.46	66.67	91.02	77.74	57.98	71.45
BioVIL	80.34	73.78	71.48	60.35	39.12	45.70	68.60	44.97	67.77	92.29	65.00	91.60	75.40	55.72	69.14
MedKLIP	85.02	76.46	75.39	66.41	41.40	53.92	76.05	52.66	70.31	88.45	62.50	91.60	78.98	58.26	72.80
M&M	86.11	77.89	78.20	67.05	41.95	54.81	77.14	54.11	70.84	92.55	66.78	91.82	80.71	60.18	73.91

Table 5: Comparison of different methods using MedKLIP.

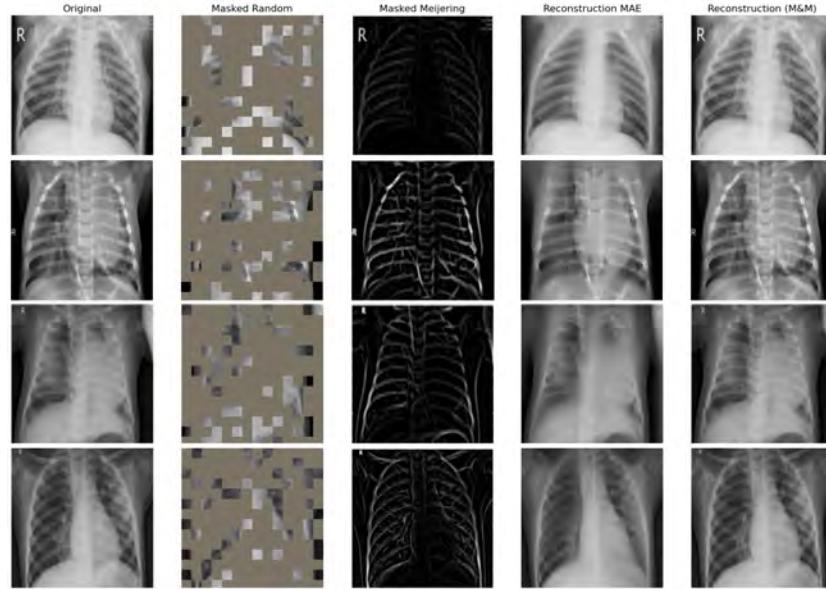


Fig. 1: Qualitative comparison of using Meijering masking vs random masking. Meijering filter helps keep the structure of the x-ray intact helping in a much more detailed reconstruction.

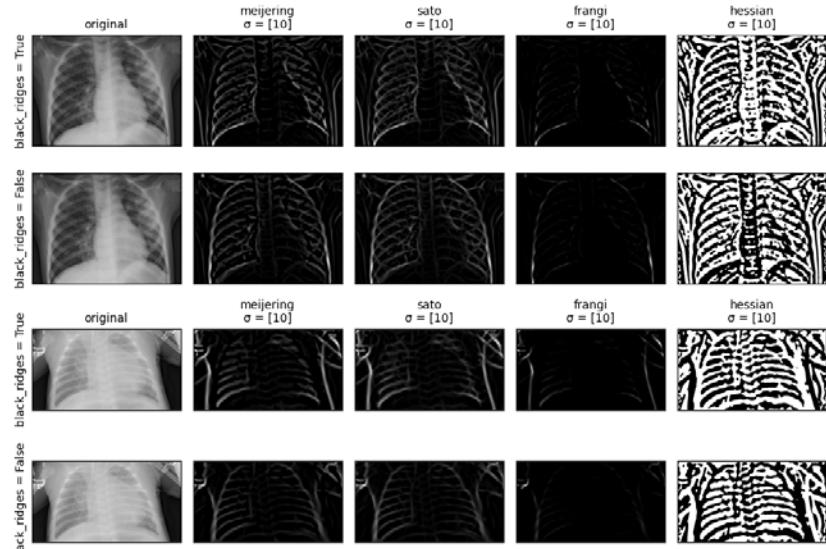


Fig. 2: Qualitative comparison of filter choices.